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ECONOMIC CONSEQUENCES
OF
DIVIDED INDIA

A STUDY OF THE ECONOMY OF INDIA AND PAKISTAN

by

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VORA & CO., PUBLISHERS LTD.
8, ROUND BUILDING, KALBADEVI ROAD. BOMBAY 2.

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First Edition.

November 1950.

PREFACE

During the last generation, when the struggle for independence took a more determined form, the people of the country longed for a free United India. During this very period, however, the insistence on the theory that Hindus and Muslims formed two separate nations became more acute. The efforts of the Indian National Congress and the unusual sacrifices of its leaders and followers gradually met with a powerful obstacle in the form of this theory which obtained increasing support from the followers of the Muslim League. When at the end of World War II, the British authorities decided to hand over power to the representatives of the people, the dilemma was created that the two important political organisations in the country who could take over were not united. At each successive stage of the negotiations between the parties concerned, the demands of the Muslim League grew. At the same time the country witnessed a series of communal disturbances in different parts making life and property insecure and increasing the tension between the two communities. With the advent of the Labour Party to power in the U.K., the hopes of politicians in India were raised. These hopes received an impetus when after the failure of Sir Stafford Cripps and Lord Wavell to bring about an agreed solution of the problem, Lord Mountbatten was sent as Governor-General obviously with special instructions and a free hand. At last the dilemma took the form of independence with the partition of the country or a prolonged bitter internal fight with the continuation of British Rule in some form. To the surprise of the country, the leaders of the Indian National Congress who were wedded to the idea of a United India, agreed to divide the country as the price of independence. The joys of independence were thus tempered by the thought of the division of the country. This political decision could not, however, take note of its tremendous economic implications. In fact, these implications were pushed to the background for a time, because of the unexpected orgy of communal frenzy leading to mass massacres which took place in the Punjab on the eve of independence and after. It took some time for the new Governments in India and Pakistan to settle down and think of their normal functions.

In spite of this unfortunate episode, with the advent of independence a new era has started in the history of this country. The significance of this era from the point of view of the ordinary citizen is bound to be assessed in terms of economic benefits, such as a higher standard of life and better opportunities in all spheres. The subdued ideas of the dominant political party in the country for a rapid economic and social revolution found an opportunity for expression with the advent of power. The translation of these ideas into practice is being attempted in a new environment created by the partition of the country, which has brought about fundamental changes in our economic structure. It is imperative that those in authority should constantly bear in mind these structural changes in the economy of the country while attempting to forge new economic policies; it is equally imperative that the

public should have clear ideas about the nature of the change so that they might appreciate the circumstances under which efforts at economic and social reforms are being made and be able to take an intelligent interest in the same. The object of this volume is to analyse the more important economic consequences which have arisen because of the division of the country and to examine the nature of the changes which have been brought about in our economic structure. The current ideas and information relating to Indian economic problems either taught in well known standard books or assumed in public discussions have undergone radical changes because of the new situation created by the division of the country. It is intended to provide adequate material for those interested for a correct appreciation of these changes.

The success of any such attempt is limited by the paucity of detailed information on current events. Because of the circumstances under which the partition took place and the haste with which adjustments had to be made in the political and administrative sphere, we do not yet have that complete picture which is desirable for a full understanding of the economic effects of the division of the country. Subject to these limitations, however, it is possible to evolve a broad picture, correct in its general outline, with the help of published and unpublished material which has grown in the process of administrative arrangements. The Government of India have been publishing some information on some aspects of the problem from time to time. The unpublished material, however, is more important in some cases for a proper understanding of some of the problems. In order to have access to the available material published or unpublished on different aspects of the problem, as well as to obtain clear ideas on some current events, personal contact was established with different Ministries of the Government of India as well as those of the Governments of East Punjab and West Bengal. These personal contacts were supplemented by correspondence spread over a period of over two years, not only with the Ministries of the Governments but also with other parties in a position to help. It is from the mass of material thus collected that an effort has been made to select and analyse appropriate data with the object mentioned above, along with a continuous effort to be up-to-date as far as possible. It should, however, be noted that in some cases, we had to be satisfied with somewhat out-of-date figures, as the latest statistics were not available. The statistical information for Undivided India had to be recast for India and Pakistan in many cases for obvious reasons, and the latest available data included for the purpose of comparison. This effort will, it is hoped, enable the reader to have a realistic idea of the economic situation in each country.

In the case of Pakistan, after considerable correspondence, we were fortunate in getting several publications and replies to our inquiries on several points. It is possible that the statistical machinery in Pakistan is being developed, and comparative data in all cases may not yet be available. Thanks however to the courtesy of the Hon. Mr. Ghulam Mohammad, Finance Minister, Pakistan, we received encouragement and help in our work. If there is any deficiency in the data regarding Pakistan, it is hoped that opportunities will arise to remove the same in future.

So far as the scope of the volume is concerned, the distribution of area and population between the two countries, and allied problems have been dealt with in the first chapter. The partition was followed by one of the greatest mass transfers of population in the history of the world and involved more than seventeen millions. The size and magnitude of the refugee problem, which is one of the most direct and immediate consequences of the division of the country, and the colossal problems of evacuation, relief and rehabilitation of the displaced persons, the burning problem of evacuee property and the financial implications of the mass migrations form the subject matter of the second chapter. The economic impact of the Great Displacement, the inherent difficulties in the way of speedy rehabilitation, the dislocation and gaps caused in the economy by the uprooting of the normal economic activity of millions of people have been treated in the third chapter. The effects of the partition on land utilisation, the distribution of forest, cultivated and irrigated areas between the two countries, and the relative production in food and non-food crops have been dealt with in chapter IV. The partition has aggravated the problem of disequilibrium between the production of crops and the requirements of the growing population in the country. The effects of the partition, in this respect, have been more damaging to the economy of India than that of Pakistan, and for a proper analysis it has not been possible to escape discussion of internal policy regarding post-partition adjustments. The effects of the partition on the distribution of the mineral resources in India and Pakistan and the extent of mutual dependence in this respect have been discussed in chapter V, which concludes with a brief discussion of the problems connected with the mineral industry in India. The extent of the progress achieved in the generation of electricity in each country and the relative water wealth have been treated in chapter VI, which also gives an account of the plans of the Governments of India and Pakistan for the generation of electrical energy by multi-purpose projects.

Chapter VIII which deals with textile industries, begins with a general discussion of the distribution of industries and of industrial employment in India and Pakistan, and branches off into a discussion of one of the major problems which has arisen out of the partition, viz., the separation of the cotton and jute textile industries from the areas which formerly supplied them with raw materials. The effects of the partition on these industries, particularly the latter, have resulted in crippling the foreign exchange resources of India. The extent of India's dependence for these raw materials on Pakistan, the capacity of India to be self-sufficient in them and the dilemma in the way of achieving self-sufficiency have been examined in this chapter. Chapter VIII, which deals with non-textile industries, contains an account of more than forty industries. We have brought together here, for the first time, the latest data relating to almost all the large industries in India. The distribution of factories, installed capacity and production between India and Pakistan, the extent of mutual dependence, and the attempts of the Governments to expand each industry are treated in this chapter. In chapter IX, we review the transitional and long-run effects of the partition on industrial development in each country. The extent of recovery that has been achieved in the face of the initial and transitional shocks of the partition has also been indicated. The chapter also contains a

digression on the attempts of the Governments of India and Pakistan to evolve and plan a framework and a pattern for industrial development, and a poser as to whether economic development in each country could be based on mutual conflicts and contradictions.

The effects of the partition on the railway system of Undivided India, the attempts to overcome the initial inevitable dislocations, the problems of roads, shipping and ship-building and of ports as well as civil aviation in each country are dealt with in chapter X. Because of the partition, the internal free trade of Undivided India is no longer possible; we have the trade between India and Pakistan as two independent countries instead. Neither the quantum nor the value and composition of trade are the same today as they were in the past, and the devaluation controversy has widened the gulf between the two countries on trade policy. The post-partition foreign trade with third countries, and the difficult Indian foreign exchange situation are also considered in chapter XI. The internal financial situation and the inherent strength or weakness of either country from the fiscal angle form the subject matter of chapter XII. The structure of revenue, expenditure and public debt both of the Central and of the intermediary layers of Government namely the Provinces and States, during the post-partition years has been examined. In chapter XIII, the effects of the partition on the currency and banking systems of either country have been discussed, including an account of the price-trends in both the countries after the partition. The effects on insurance companies in both the countries have also been discussed. A Post-script brings the account up-to-date as far as possible.

In order to bring home the more important tendencies, we have tried to bring together the same in the form of certain conclusions, and these form the basis of the Introduction, which will enable the reader to get a connected idea and a broad general picture of the economic consequences of the division of the country. It is hoped that this will help the reader to view the problem as a whole, as well as to follow the details of any problem in their proper perspective.

Because of my preoccupation with growing current work in this School, it has been impossible for me to devote as much time and attention to this work as the importance of the task requires. I was, however, fortunate in getting the willing assistance of several young research workers associated with the School. Messrs. S. A. Pandit and T. M. Desai, Research Assistants visited New Delhi, Simla and Calcutta during the summer of 1948 for nearly two months, contacting different officers of the Governments of India and of East Punjab and West Bengal in order to obtain the necessary material on the subject. As in spite of subsequent correspondence with the parties concerned, it was thought desirable to have further personal contacts, during the summer of 1949 Messrs. T. M. Desai and V. R. Cirvante, Research Assistants again visited the same places and obtained valuable material. At various stages of the work, including the effort in putting the material into shape, Messrs. T. M. Desai, V. R. Cirvante and P. R. Brahmananda, Research Assistants, have rendered most valuable help. In order to indicate the special help given by each of them, their names have been shown in the Contents against the chapter in which each of them ren-

dered substantial help, though all of them have been closely associated with the work as a whole. It may be mentioned, however, that Mr. Desai was associated with the work at all its stages; and Messrs. Cirvante and Brahmananda worked hard to help in seeing the book through the press in record time and in the preparation of the index.

In conclusion, I must record my sincere thanks to various Government officers and others, who helped by personal discussions and/or by replying to frequent inquiries, and to the Directorate of Economics and Statistics of the Central Ministry of Agriculture for the maps included in this volume. I must also record my sincere thanks for the substantial research grant put at my disposal by the Government of India in the Ministry of Commerce and also by the University of Bombay, without which it would not have been possible to incur the heavy expenditure involved in undertaking this work. I am indebted to the University of Madras for permission to use the material which formed the subject matter of two lectures delivered by me to that University in October 1949 under the Sir Alladi Krishnaswamy Endowment.

I must also record my appreciation of the co-operation of the publisher and printer, who made it possible to get this book through the press in the record time of about four months.

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28th October, 1950.

C. N. VAKIL

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EXPLANATION OF TERMS USED

Notation

One lakh (1,00,000)	= One hundred thousand (100,000)
Ten lakhs (10,00,000)	= One million (1,000,000)
One crore (1,00,00,000)	= Ten million (10,000,000)

Unit of Measurement

One maund	= 82 2/7 lbs.
One bale (cotton)	= 392 lbs.
One bale (jute)	= 400 lbs.
One candy	= 784 lbs.
One long (U.K.)	= 2,240 lbs.
One short ton (U.S.A.)	= 2,000 lbs.
One metric ton	= .984 long ton

Exchange Rates

One Indian Rupee	= 1 sh. 6 d. or 21 cents
Rs. 1,00,000 (lakh)	= £ 7471 or $ 21,000
One Indian Rupee	= One Pakistan Rupee (prior to devaluation)
144 Indian Rupees	= One hundred Pakistan Rupees (after devaluation)

Provinces and States

Under the new Constitution, all constituent units are called States. This is likely to create confusion while discussing problems relating to the old Indian States and Provinces. We have therefore used the word 'Provinces' and their old names; the word 'States' having been applied to the former Indian States.

Old Names	*New Names*
United Provinces (U.P.)	Uttar Pradesh (U.P.)
Central Provinces (C.P.)	Madhya Pradesh
East Punjab	Punjab (I)
West Punjab	Punjab (P)
East Bengal	Bengal (P)
West Bengal	Bengal (I)

INTRODUCTION

I. TOWARDS THE WELFARE STATE

1. *Under the British Administration, India could not have a Welfare State.*

One of the fundamental weaknesses of the British Administration in India was that the functions of the State as then conceived were essentially those of law and order and the defence requirements of the country. The greater part of the resources of the State were utilised in these activities. Measures directed towards the material development of the country were few and had limited scope. This was inevitable in a regime in which the alien rulers wanted to be sure of their hold on the country in any case, in the first instance, and they therefore subordinated other issues to this primary consideration. Once this hold was secured, it was possible for the rulers to carry out their colonial economic policy subordinated to the needs of the United Kingdom. If incidentally such a policy helped the growth of certain activities in the country the authorities were willing to carry out the same. The arrested development in many spheres of economic life, which resulted from this policy was generally resented by educated public opinion in the country. Opinion was gradually growing in favour of a conception of the State as a Welfare State devoting its energies and resources for the welfare of the people. The impact of this feeling was reflected in the change in the attitude of the British Government after the First World War. They tried gradually to introduce economic measures intended to develop the country; but this could neither be comprehensive nor rapid, as the administration still functioned under the old *laissez-faire* ideas on the one hand and the domination of British interests on the other. The frustration of the people thus brought about was reflected in the increasing political unrest in the country during the inter-war period.

2. *A gradual change in the functions of the State took place in recent years.*

The Second World War led to increasing control of economic affairs by the State for the prosecution of the war. In the meanwhile, the conception of the Welfare State was to some extent given shape in the form of planning schemes formulated by several parties in the country. The National Planning Committee appointed by the Congress was still working. In the meanwhile, the Tata-Birla Plan was published. This was followed by several other plans. The Government of Lord Wavell tried to utilise the planning consciousness of the people by creating a Department of Planning and Development in the Government of India in 1944. This was intended to make schemes for reconstruction in the post-war period. One of the authors of the Tata-Birla Plan, Sir Ardeshir Dalal was invited to take charge of this department. It appeared for a time that efforts were being made to organise a Welfare State and hopes were raised that some tangible results would follow this step. Though several plans were drawn up both at the Centre and in the Provinces, a co-ordinated scheme could not be evolved because of various difficulties and the Planning Department was dissolved some time in 1946.

3. *The advent of Independence led to an effort to bring about a social and economic revolution in the country or to evolve a Welfare State.*

In the meanwhile, rapid political changes were taking place in the country, resulting in the independence of the country in August 1947. This fact was naturally hailed with joy by the people at large, because they felt that the many handicaps from which they suffered hitherto, would now disappear and that they would be in a position to achieve rapid economic progress. Independence meant to them the development of the resources of the country in the national interests and for raising the standard of living of the people, or in other words, the advent of the Welfare State. The hopes and aspirations of the people were raised further by the high promises held out by the Congress party. Sincere in their professions, the Congress party thought of achieving the millennium in their time by the quickest possible action in all fields of life. Their aims seem to be to bring about a complete economic and social revolution in the country by changing the existing order of things. In order to implement these ideas they have embarked within a very short time on a multiplicity of schemes. The proper examination of these schemes with a view to determining their effects would require elaborate research. For our present purpose, we may briefly indicate some of the more important aspects of the reforms that have been undertaken. We have in the first place, the introduction of adult suffrage in the new Constitution leading to the creation of the largest democracy in the world, in spite of the fact that a large majority of the voters would be illiterate.

In the field of education,—a complete overhaul of the system of primary education with efforts to introduce compulsory primary education as soon as possible; an organised Literacy Drive combined with schemes for adult education; changes at the secondary school stage such as a change in the medium of instruction, and changes in higher education by introducing a national outlook at the University stage including the creation of more Universities and more institutions, particularly scientific and technological institutions—are among the measures already initiated or about to be undertaken.

So far as social aspects are concerned, we find a distinct change. With the emergence of India as a Secular State and the assurance to minority communities of equal treatment, it is hoped to solve the communal problem. No one now hears about the Harijan problem in the acute form in which it was represented till recently. The caste system is officially dead and an elaborate reform of the Hindu Law has been attempted. Social services such as Health Schemes, Workers' Insurance Schemes, Co-operative Housing Societies and so on are being encouraged.

These social reforms have their counterpart in the ethical sphere. The determined efforts made by some provinces to bring about complete prohibition in a short time, and to abolish gambling by law are expected to raise the moral tone of the people, who it is hoped, may under the new economic and social environment, have higher ethical values, and at the same time be able to improve their economic condition.

In the economic sphere various agrarian reforms have been attempted or are being undertaken. Tenancy legislation, debt legislation, encouragement of the co-operative movement, abolition of the zamindari and such other measures are all directed towards making the position of the cultivator strong, giving him an inducement for better work, assuring him of adequate reward from his labour and making him feel that he is looked after. Reforms in the field of

labour such as minimum wages, improved conditions of work such as shorter hours, machinery for settlement of labour disputes in the form of Labour Courts and Industrial Tribunals, consideration of schemes for fair wages and profit-sharing, and above all the acceptance of labour leaders as equal partners in evolving policy with representatives of industry, have all created a new situation in which the labourer, now conscious of his importance, rights and privileges, is being assured of a decent existence and decent treatment.

In the field of industrial development, in order to minimize the evils of private enterprise and to bring about a rapid development, a new policy has been evolved by which the State would actively participate in certain industries by direct or partial control. A policy of nationalisation of some industries has also been indicated and the spheres of state and private enterprise have been earmarked. At the same time efforts have been made to regulate and control trade. In several countries Indian Trade Commissioners have been appointed with a view to developing Indian trade abroad. The growth of our external relations by means of Embassies and similar offices in different countries of the world has an economic counterpart. Wherever a separate Trade Commissioner has not been appointed, a Commercial Attache is appointed to the Embassy. We have entered into several trade agreements with different countries for exchange of goods. As members of International Organizations such as the United Nations, F.A.O., I.M.F., I.L.O., and the World Bank, we are trying to develop external economic relations as rapidly as possible.

Both the Central and Provincial Governments have embarked on large schemes of development. They are anxious to implement these schemes without delay but are faced with financial and technical difficulties. Among the more important schemes we may refer to the Damodar Valley Project, and the plans for a large steel plant, several irrigational projects like the Kosi River project, the Bhakra Dam project, etc., a fertiliser factory at Sindri, a scheme for the manufacture of locomotives at Asansol and reclamation of waste lands on a large scale by means of tractors and so on. To finance some of these schemes, the World Bank has been approached; some loans amounting to 45 million dollars have been already obtained; it is hoped to negotiate more loans in the future. The object is to achieve self-sufficiency in food and rapid industrialisation. The schemes are estimated to cost thousands of crores of rupees. It is hoped that by thus introducing a Development Economy, the advent of the Welfare State would be expedited.

4. *There are limitations to the capacity of the Government to undertake schemes of development.*

It is also necessary to realise that it is one thing to make big plans of development and another to be able to implement the same. Any scheme of development involves the diversion of real resources, in order to carry out the same, in the hope that it will lead to greater production or amenities to the people in some form. Such diversion can be done, if there is adequate saving in the country which could be utilised for the purpose. In the absence of adequate saving, any attempt at expenditure on such schemes may lead to inflation and consequent squeezing of the current resources of the people in the form of high prices. This can be avoided if foreign capital to the required extent is obtained. As there are natural limits to the extent to which current consumption standards could be reduced, particularly in countries, where the average income is low, it is obvious that implementation of schemes of development should be co-ordinated with the capacity of the country to invest, if

immediate hardship is to be avoided. Unfortunately this basic truth was not realised, and several responsible persons assumed that finance would somehow follow, and in their anxiety to achieve great things in a short time, they tried to push through grandiose schemes without due reference to our capacity to finance them. The realisation that this is a mistake is dawning gradually on the Government, and it is hoped that the Planning Commission will be able to bring about that balance between schemes and resources which has been lacking so far. It should be noted that this mistake has resulted in an inflationary trend as also in some waste, as the effort to retrench expenditure after schemes have been put into operation must result in some loss.

5. *There are limitations to the capacity of the people to absorb rapid changes in the social and economic sphere.*

This catalogue of measures indicates in broad outline the economic and social revolution that is sought to be implemented. Reforms of this character may be passed either by law or may be brought about by executive action. The realisation of the desired effects, however, depends on the large masses of the people who are sought to be reformed or for whose benefit these measures are taken. This can be done, therefore, only if the people are ready to absorb the new ideas and to carry them out in practice in an organized manner. People who are used to a particular way of life, however defective, do not easily change over to other methods unless they are provided with the necessary impetus. Such an impetus can come from a conscious understanding of the utility of a given measure and the need for carrying it out in an organised manner in the common as well as individual interest. Another way of achieving the same result is by a process of regimentation under which those in power may dictate certain measures which must be carried out under a sort of military discipline. In this latter method the conscious understanding to which reference has been made above does not become necessary. The former is the accepted democratic method; the latter is the totalitarian method supposed to be in operation in Soviet Russia. As it is not the intention of the Government of the day to introduce totalitarian methods, we have to accept the position, that they would prefer that their schemes of economic and social reforms are carried out by the people by a conscious understanding and in a spirit of conscious co-operation. This is inevitably a slower method; it presupposes some intelligence, and a desire to understand things and profit by them without delay, both of which presuppose a degree of education. The British people, for example, are gradually transforming a Capitalist society into a Socialist one. They are doing so in a democratic way after a full consciousness of what they are welcoming. The average British citizen is literate and intelligent enough to understand the relative merits of schemes which are suggested by different parties. By putting the Socialist Labour Party in power, the British citizen has consciously accepted the development of a Socialist Welfare State in the United Kingdom. He is willing to co-operate in bringing it about in a disciplined manner.

The question is whether the large masses of the people in our country are ready to absorb in practice in a conscious way the various schemes of economic and social reform, which have been already introduced and which are being implemented rapidly If the people are not ready to absorb these ideas, it is not unlikely that some of them may cause serious misunderstanding, some may lead to temporary deadlocks and frictions and some may create new problems not anticipated before. This would mean that the transition from the old order to the new one may be somewhat prolonged and more difficult, not always yielding those desirable results which the authors of the reforms expected.

At the same time such revolutionary changes are bound to disturb existing interests who would organise opposition to them or not co-operate in carrying out the same. This would increase the difficulties of the transition period. For example, the attitude of landlords and capitalists to some of the changes now contemplated is bound to be adverse, as they are threatened either with extinction or with reduction in their profits, power and influence. To some extent the country has been dependent on them for production, directly or indirectly, and the question arises whether their attitude has not come in the way of production in the immediate future. The proposed reforms appear to be comprehensive in character calculated to bring about a social and economic revolution in all spheres of life with great speed. Whereas the defect pointed out above, regarding the capacity of the people to absorb at short notice rapid schemes of economic and social reforms was inherent in the existing structure of the country, the difficulties were aggravated by other important events which made the background for the operation of these reforms weaker.

6. *The difficulties have been aggravated by the effects of the war and the partition of the country.*

In their natural zeal and enthusiasm to carry out their pet schemes, the Congress Governments seem to have ignored the fact that we inherited from the British a shattered economy, which had not yet recovered from the impact of the war, and which further received a severe shock from the partition of the country, which came as a corollary to independence. It is not necessary to go into details to bring home the fact that since the beginning of the war in 1939 and more particularly after the entry of Japan in 1942, the resources of this country were mobilised in all possible ways for the prosecution of the war. It is common knowledge that we had a deficit economy in this country, in which large masses of the people lived on the margin of subsistence, having a poor resistance power and, therefore, liable to succumb to any adverse circumstances, as was seen in the death by starvation of 1½ million people during the Bengal famine. The tightening of the belt, which can be practised in countries where the standard of life is high, is not possible in a country where the people have to live on the margin. The diversion of such limited resources of such poor people to war requirements must inevitably lead to under-nourishment, poor health and consequent reduction in productive capacity. It is well known that if people did not die in other parts of the country as in Bengal, they were still suffering from shortage of food, shortage of cloth and also of adequate shelter. These and similar shortages arose because of the war and the continually rising prices, which resulted from the war. The existence of the few rich who profited from the war need not blind us to these unfortunate facts. With our human resources brought to such a low level, we had also exhausted our productive capacity in the form of worn-out machines and equipment in factories and in railways. We found that our savings had been used up in forced war loans, and the average middle class investor had ceased to be an investor, because he found it difficult to make both ends meet with the prevailing high prices. The prevalence of black markets and consequent corruption in the country led to a deterioration of the moral tone of the public. The advent of independence happened to be a ray of hope out of these gloomy conditions, but before this hope could bring forth any tangible results, this shattered war-time economy had to undergo the shock of the partition. This has resulted in certain fundamental changes in the economic structure of the country. Before these changes could crystallise themselves and before their full significance could be grasped or realised, the National Government anxiously put into motion forces for

bringing about a new economic and social regime in the country by hasty legislation and action, introduced with bewildering rapidity, and by undertaking large schemes of development without reference to our capacity to meet the cost of the same.

7. *The dismemberment of a country gives rise to grave problems, the solution of which requires a transition period and tactful handling to suit the new national pride of each unit; vested interests and existing bitterness, however, provide powerful obstacles to a peaceful adjustment.*

In many ways the two regions of a country come to have a more closely integrated economy than is possible or desirable for two different States in the same physical and economic circumstances. Owing to common political sovereignty the conflicts inherent in the differing developmental needs of the two regions are not likely to come to the surface and obtrude themselves on popular attention. Till very recently little attention was paid to the problems of regional development within a State and the existence of the conflicts was seldom recognised. With greater attention now being paid to the regional distribution of economic activity and the greater powers that the State enjoys over industrial location, these conflicts have made themselves felt in public policy. Even then, the sharper edge is taken off this conflict by the redistribution of income and wealth that a progressive financial system achieves.

When, therefore, a country is dismembered many problems of grave dimension are likely to arise. The strategic needs of either or both of the new States may require a division of labour radically different from the existing one. The developmental needs of the more backward of the two may also work in the same direction. Instruments, by means of which these newly recognised needs may be sought to be fulfilled, lie now ready at hand. Differences in needs and ideology may lead to different labour, industrial, taxation and trade policies which may in their own turn lead to further conflicts. This must mean a great amount of adjustment in the economic activities of both countries. To speak more concretely, it is but natural that both on strategic and productivity grounds, Pakistan should look forth to the development of cotton or jute textile industries within her own borders, and that she should come to regard the capital of the residents of India as foreign capital and seek to lessen its role in relation to indigenous capital and enterprise. It is equally natural that India should seek to make both her jute and cotton industries more self-sufficient with respect to raw materials. It is best to recognise the legitimate aspirations of both the parties in this matter and take them as a *fait accompli*. It is only on such an understanding that the possibility of evolving a co-ordinated common policy rests.

Once, however, the inevitability of these adjustments is recognised, the question arises whether something could not be done to alleviate and smoothen this process without any harm to the fundamental needs and interests of both the parties. Development of industries and more so of raw materials is a time-consuming process. This has to be accounted for in terms of years, not months. There should, therefore, be a scope for a large amount of co-operation between the two parties with a view to so distributing the impact of the shock over time, as to make it easy to be absorbed. This aim may be sought to be achieved by a variety of means—trade and tariff agreements, currency policies, co-ordinated industrial policies, etc. For example, when the Phillipines was granted independence by the United States of America, the question of the inevitable adjustment in its economic activity which was so far predominantly

dependent on the U.S.A. arose. With a philosophy of non-discrimination, it was obvious that the U.S.A. could not grant the same trade privileges to an independent Phillipines as to a dependent one. But the difficulties of adjustment were distributed over a time period by the U.S.A. agreeing to practise a policy of preference towards the Phillipine exports for a short period of time. In this case, since the U.S.A. was a vast country compared to the Phillipines, the question of difficulties of adjustment in the United States' economy did not arise. But whenever two countries of any comparative size are involved or those whose economies were closely interlinked are concerned, such arrangements may be beneficial to both the parties.

Obviously, however, such arrangements are not very easy to make. It is seldom possible for a country to take a balanced view of the possibilities of its own development. It is often likely to take a rosy view of its own future prospects. It is even more difficult for it to resist all sorts of vested interests demanding discrimination against foreigners on grounds of patriotism. It is well known, for example, that the real core of difficulties in lowering the tariff policies at the World Economic Conferences of the inter-war period was not conflicting needs and national policies of different countries, but those of vested interests in them aided by the lack of any national economic policy. This is a special danger to which new countries are prone. When a parting has taken place in a spirit of anger the task of the vested interests becomes much easier, and it is only a firm grasp of the issues involved that can prevent secondary complications, which may make the task of adjustment well nigh impossible.

8. *In consequence, fundamental changes in the economic structure of the country have taken place.*

Whereas the nature of the economic and social revolution which is still taking shape, and its effects will have to be examined in due course by those who are competent to do so, the object of this work is to examine the more fundamental changes in our economic structure, which have come into existence as a result of the partition, which was superimposed on the shattered economy of the country due to the war. It is necessary to do so, because it is on the background of such an economic structure that the new reforms have to work and function. It is impossible to keep these reforms entirely out of sight while discussing the problem under consideration. But an effort will, however, be made to distinguish between the two as far as possible and indicate the recent trends. In order that the reader may have a connected idea of the changes that have taken place and be able to visualise the new economic structure, an attempt is made in this introduction to give, as it were, a preview of the conclusions of this study in the form of propositions, which will be explained broadly here, but for the justification and details of which, the reader must refer to the appropriate chapters of the volume.

II. AREA AND POPULATION

9. *The partition has led to an uneven distribution of area and population, India being burdened with a larger population in relation to its share in the total area. Though the overall density of population in Pakistan appears smaller as compared to India, the density in Eastern Pakistan is much greater than in India.*

As a result of the partition India has nearly 81 per cent. of the total population of Undivided India and nearly 77 per cent. of the total area. The density of population per square mile in India is 276 compared with 222 in Pakistan. The average density of Pakistan as a whole, however, does not give a complete and realistic picture because Eastern Pakistan, which covers about one-seventh of the area of that country, has four-sevenths of the total population in Pakistan. The density of Eastern Pakistan is, therefore, extremely high, *viz.* 774 compared with that of Western Pakistan where it is only 93. Similarly in India the density of population in the former States was smaller; the total area occupied by the States was slightly less than half, while the population was a little more than a quarter of the total for India.

10. *India has a relatively larger urban population than Pakistan. Within India, the Provinces are more urbanised than the States, and in Pakistan, Western Pakistan is more urbanised than Eastern Pakistan.*

The ratio of urban population to total population is higher in India than in Pakistan, because of the concentration of nearly all the major large-scale industries of Undivided India in the former. The States in India are less urbanised than the provinces; but even they have a relatively larger urban population than Pakistan. The percentage of urban to total population in Western Pakistan is nearly thrice as high as that in Eastern Pakistan. The distribution of population indicated above is bound to affect the production and distribution of the resources in the two countries in a different manner.

11. *The partition could not and has not solved the communal problem. In spite of the large-scale migration of minorities from both the countries, there are still a large number of Muslims in India and non-Muslims in Pakistan, mainly in East Bengal.*

The partition of the country was effected on communal considerations. The communal problem is, however, far from being solved. The large-scale migration which followed the partition, particularly in the Punjab, had the effect of making Western Pakistan a predominantly Muslim State. In spite of this there are still 37½ million Muslims in India constituting about 11 per cent. of its entire population. In Pakistan there are nearly 10 million non-Muslims constituting 13 per cent. of its entire population. India has declared itself to be a secular state and has taken steps to safeguard effectively the interests of minorities. Pakistan being an Islamic State, though it tolerates the non-Muslim population in Eastern Pakistan, such population is in practice in continuous fear as regards the security of life and property, as a result of which there are occasional migrations into West Bengal and Assam.

This tendency took an ugly form during February and March 1950, when following the disturbances in East and West Bengal, large migrations took place. Over two million non-Muslims from East Pakistan are reported to have migrated to West Bengal and Assam; and nearly one million Muslims from India to East Pakistan. The pact made between the Prime Ministers of the two countries in April 1950, for the protection of minorities as well as the Interim Trade Agreement that followed it may be expected to reduce the incidence of refugee movement.

III. THE REFUGEE PROBLEM

12. *The mass migration following the partition has resulted in a net influx of 2½ million displaced persons into India.*

Instead of reducing communal passions, the partition fanned the flames to such an extent that people in the Punjab lost control over themselves on the eve of independence, and indulged in mass massacres. This resulted in the migration of nearly 6 million non-Muslims from West Pakistan to India, and of 6.5 million Muslims from East Punjab, Delhi and the border States in India to Pakistan. Similar disturbances in East Bengal resulted in the migration of 2 million non-Muslims from there. Besides, since the recrudescence of disturbances in February 1950 in Bengal, over two million non-Muslims came over to India. As against this migration of non-Muslims from East Bengal only about one million Muslims seem to have migrated from West Bengal to East Bengal since the partition, most of them during 1950. Thus there has been a net influx of nearly 2½ million displaced persons into India.

13. *The evacuation, relief and rehabilitation of more than 16 million displaced people—of 12 million within 5 months—has resulted in a refugee problem which is unparalleled in history both in its origin and in its magnitude.*

When the partition deed was being signed in Delhi no body could have imagined that within a short period of less than six months more than 12 million persons would have to cross over the borders of either country. The mass migration came as much a surprise to the parties affected as to the governments themselves. Never before in the history of the world did such a large-scale transfer of population take place, under such adverse conditions and within such a short time. More than 16 million persons (including the migrations that took place in the early months of 1950), *i.e.* more than twice the population of Australia, or more than the entire population of Canada, were involved in the post-partition Indo-Pakistan migrations. The suddenness of the event made all attempts towards a planned exchange of population an impossible task. With the partition, a vast section of people in both the countries were filled with fear and threat to their way of life, their property and their very existence. The country which had borne the strain of war, and had not yet fully recovered, was forced to divert a large portion of its economic resources in men, money and transport for the purposes of speedy evacuation. The evacuation arrangements met with commendable success. But the problems of providing immediate relief, of dispersing the displaced persons in different parts of the country, of providing them enough wherewithal to sustain themselves, until they could stand on their own legs, and finally of securing them employment and a tolerable standard of living became the responsibility of the Government.

14. *While the displaced persons from West Pakistan have been spread over in East Punjab and other Provinces in India, those coming from East Bengal have mostly gone over to the already overcrowded province of West Bengal, and particularly to the City of Calcutta.*

The concentration of refugees in the boundary province of East Punjab for a time created serious administrative problems for the Government of East Punjab, which was a new Government arising out of the partition. In order to alleviate congestion, the Government of India organised dispersal of the refugees throughout the country by allocating quotas of displaced persons to

the different provinces and states. Partly on account of this and partly on account of the fact that an almost equal number of Muslims had left the province of Punjab and the adjoining States, there was not much of over-crowding in this area, although cities have suffered to some extent on account of the preference of the incoming refugees for urban areas. While the number of incoming refugees from West Pakistan has been more than offset by the number of outgoing refugees from East Punjab and the bordering states, the migration of four million non-Muslims from East Pakistan has been only partially offset. The problem created by the influx of refugees from East Bengal into West Bengal has therefore been very serious. Over 90 per cent. of the refugees from East Bengal have migrated to West Bengal which is the most densely populated province in India. Further, a majority of the refugees have settled in greater Calcutta in view of their aversion to go to rural areas, and this has meant a severe strain on that already over-crowded city. Over-population and economic frustration have grave social and political implications and these factors seem to be at the bottom of the unsettled state of affairs in West Bengal.

15. *While the transitional problems of evacuation and relief have been to a large extent satisfactorily solved, the problem of rehabilitation of displaced persons in India presents greater complications from the long range point of view, because of the disparity in the occupational distribution and standard of living of the incoming and outgoing refugees.*

In view of the net influx of 2½ million refugees, India has now to look after a larger population than before the partition. Besides, the incoming refugees have left behind in Pakistan wealth and property which is several times more valuable than that left behind by the outgoing refugees. The difficulties of obtaining compensation for the loss of their property by the evacuees are well known. It should also be noted that the incoming refugees came mainly from the trading and landowning classes, while the outgoing refugees consisted mainly of cultivators and artisans. It is obviously more difficult under our existing conditions to find suitable occupations for such large numbers of trading and landowning classes, and also to find an equivalent number of artisans in place of those who have left India. This has seriously affected the country's economy. The problem of providing suitable housing particularly for urban refugees has been difficult, because of the acute housing shortage and the comparatively inferior condition of houses left behind by Muslims. Illegal occupations of residential and business premises during the post-partition disturbances made a rational allocation based on priorities virtually impossible. Ambitious housing schemes will take years for their completion. Occupational disparity between the incoming and outgoing refugees has proved a formidable barrier in the way of their rapid rehabilitation. In order to enable the refugees to fit into the economic structure of the country, the Government has embarked on schemes of technical training and has encouraged them to form co-operative societies for undertaking small-scale industries. The Government of India has also made provision for the grant of small loans to refugees in order to give them a start in their professions. Besides, it has started the Rehabilitation Finance Administration to arrange for the grants of loans to large industries and businesses. The Employment Exchanges have been geared to the requirements of unemployed refugees. On the whole, however, it seems that the rehabilitation problem could not be tackled very successfully as a result of the various difficulties encountered by the Government.

16. *The problem of rural resettlement has been rendered difficult as the immigrants who came to India left behind them a larger area of land, most of which was provided with irrigational facilities, than the emigrants who went from India to Pakistan.*

The immigrants who poured into India left behind them large tracts of land in West Pakistan. It is well known that areas in West Punjab and Sind were amply provided with a network of irrigational facilities. The Muslims who migrated from East Punjab, PEPSU and surrounding areas owned less land and that too land which depended upon the vagaries of rainfall. Thus the problem of rural resettlement has been rendered very difficult, until the Bhakra Project in East Punjab materialises. This project is expected to bring into cultivation nearly 3.5 million acres of land.

17. *Speedy urban resettlement has not been possible as most of the refugees have tended to concentrate in and to stick to cities like Delhi, Calcutta and Bombay, which unfortunately cannot suddenly provide the needed economic opportunities, sufficient living space and adequate utility services and facilities.*

The occupations followed by the incoming refugees show a strong urban tendency. According to the figures given by the Census of Displaced Persons (1948), more than 50 per cent. of the total earners among refugees followed urban professions in West Pakistan. Similarly, large numbers of emigrants from East Pakistan had followed professions connected with trade, business and services. Naturally the refugees tended to concentrate and stick to the cities in India. Delhi, Bombay and Calcutta became heavily overcrowded with refugees. Owing to the acute shortage of building materials, there has not been any notable expansion in the building activities in the cities. The problem of accommodation has persisted with equal rigour in Delhi, Calcutta and Bombay. The capacity of these cities to provide adequate urban services like transport, water supply and medical facilities is also limited. Such services in the cities are over-burdened and over-strained. The influx of refugees has added to this strain and has resulted in frictions between the refugees and the original residents of these cities.

18. *The prevalence of stagnation in industry, the threat of inflation, acute shortage of essential materials, paucity of financial resources, the unwillingness of refugees to evenly distribute themselves, the apathetic attitude of some of the provinces and states, the existence of large scale corruption and political instability and the lack of co-ordinated policy have all been responsible for the slow progress of rehabilitation.*

The mass migration of refugees unfortunately coincided with a period of stagnation in industrial activity in India. In fact in the year 1947 there was an all round decline in industrial production. The paralysis in the investment market created difficulties in the way of the provision of more employment. The private sector on which falls the major responsibility for the provision of employment, therefore, could not satisfactorily cope with the huge task of rehabilitation. The refugee movement also coincided with a situation when any attempt to embark upon schemes involving large-scale expenditure for purposes of relief and rehabilitation might, it was feared, aggravate the inflationary trends in the country. The government's financial resources were limited. Diversion of funds from productive activities for purposes of relief and resettlement would have resulted in short-term decreases in production. Some of the Provinces and States were not very anxious and helpful in the

matter of resettlement of the refugees. The apathetic and indifferent attitude of some sectors in the country created difficulties. Some of the refugees also added to these difficulties by expressing unwillingness to disperse and distribute themselves in other parts of the country. In the Provinces of West Bengal and East Punjab, where the main burden of the refugee problem was being shouldered, the prevalence of large-scale corruption and the frequent changes of ministries contributed towards the slow progress of rehabilitation. In the Centre itself various departments were dealing with different branches of the refugee problem. Proper co-ordination between the activities of these different departments and also between the activities of the Centre and the Provinces was lacking.

19. *A scientific solution of the refugee problem will have to take note of the absorbing capacity of the different Provinces and States; the rehabilitation programme needs to be properly dovetailed into the plans of the Governments for general economic development.*

It is necessary to view the problem of resettlement of refugees as part and parcel of the general problem of economic development of India. The Rehabilitation programmes should be carefully dovetailed into such plans. A planned system of dispersal and resettlement should be evolved taking into note the absorbing capacity of the different Provinces and States. Various considerations like the ability and willingness of the displaced persons to move into any assigned area or region, the measures necessary to introduce greater mobility among the displaced persons, as well as to make the provinces and states and their inhabitants take an 'interested' attitude towards resettlement of refugees, and steps necessary for providing facilities for the speedy assimilation of refugees should be taken note of. Such a planned scheme of rehabilitation could be brought into operation, only if rapid surveys were undertaken about the resource potentialities of the different Provinces and States of India.

20. *A harmonious solution of the refugee problem is necessary not merely for maintaining a state of peace between India and Pakistan, but also for the harnessing of the energy, resources and talents of a significant proportion of the population in either country, which have been rendered dormant on account of the atmosphere of fear and uncertainly that existed after the partition.*

A harmonious solution of the refugee problem is a pre-condition for maintaining a state of cordial relationship between the two countries. A discontented refugee carries a tale of woe and misery, and generates hatred. The desire for retaliation and vengeance is easily developed. In fact, one of the important reasons for the continuance of disharmonious relations between India and Pakistan has been the existence of large sectors of discontented refugees in both the countries. The minority community has been looked upon with indifference and suspicion and the potential contribution of large sections of people to economic prosperity has been checked. In order that the dormant energy, resources and talents of a significant proportion of population in both the countries are harnessed for nation-building purposes, measures to create confidence and a feeling of security are very necessary. If India and Pakistan make sincere efforts to work in a spirit of co-operation, such measures will bear fruit. The Nehru-Liaquat Pact of April 1950 and the atmosphere of good will that has prevailed in both the countries after the Pact are expected to improve the position for the better.

21. *The solution of the problem of evacuee property has proved intractable so far because of the vast difference between the relative size and value of the evacuee property in both the countries; but permanent rehabilitation and resettlement of a large number of refugees in either country is not possible unless the evacuee property question is satisfactorily solved.*

The value of the evacuee property left behind by non-Muslims in Pakistan is very much larger than that abandoned by Muslims in India. The Government of Pakistan disagreed with the Government of India on the question of valuation of evacuee property and also on the basis on which exchange of property should take place. The Karachi Agreement, which was in the nature of a compromise, was stillborn because an exchange of thousands of properties on an individual basis was a sheer impossibility. In spite of this, the Government of Pakistan has persisted in its refusal to accept the policy of exchange of property on a government-to-government basis as advocated by India. While a permanent solution is thus far from sight, the immediate situation has been worsened by the indiscriminate seizure of properties of non-Muslims in Pakistan by the application of Evacuee Property Legislation to them. This had repercussions on the property of Muslims in India. The solution of the evacuee property question is necessary, if permanent resettlement of refugees is to take place. Unless the refugee who occupies a property is assured of permanence of ownership, it is very difficult for him to take personal interest and to show initiative and enterprise in his work. It is hoped that recent efforts at finding a satisfactory solution will meet with success.

IV. AGRICULTURE

22. *The loss of the best irrigational facilities in the world to Pakistan has made Indian agriculture poorer; their concentration in Western Pakistan means assured increased agricultural output in that region, while the increased dependence on monsoons in India has introduced elements of uncertainty in agricultural production from year to year.*

Undivided India used to irrigate every year over 70 million acres of land, the largest irrigated area in any country of the world. The irrigated area was three times that of the United States, the next most irrigated country which is twice as extensive as Undivided India. The area irrigated in Undivided India was more than the combined total irrigated area of any other ten countries of the world.

Of the 70 million acres of irrigated land in Undivided India, the new Republic of India has 48 million acres or 68 per cent. and Pakistan 22 million acres or 32 per cent. The proportion of irrigated area to net sown area is larger in Pakistan than that in India. That is not the whole story. Excepting perhaps in the United Provinces, the irrigation works in India are largely of a protective character, that is, they are meant more to ward off famine conditions than to produce a significant increase in yield per acre. This is particularly true of irrigation in Southern India especially in Bombay, Deccan, Mysore and Madras. As contrasted with this, the Lloyd Barrage in Sind is the largest barrage in the world with 7 canals and an aggregate capacity of over 40,000 cubic feet per second. Nearly the whole cultivated area of Sind and the State of Bahawalpur enjoy irrigational facilities. Of the total irrigated area of Undivided Punjab, West Punjab has been blessed with 65 per cent. Nearly 76 per cent. of the

total net sown area in West Pakistan enjoys irrigational facilities as contrasted with 22.5 per cent. in Indian Provinces and 13.6 per cent. on an average in the Indian States. Because of irrigational facilities the yield per acre of various crops in Western Pakistan is higher than that in India. Whereas the yield per acre of rice in India is 650 to 750 lbs. and that of wheat 550 to 650 lbs., in Pakistan the yield is 850 to 900 lbs. per acre of rice and 750 to 850 lbs. of wheat. The production of cotton tells a similar story. Though the yields per acre of cotton both in India and Pakistan are the lowest in the world, the yield in Pakistan is 170 lbs. per acre as compared to 100 lbs. per acre in India. It is because of the fact that of the total irrigated area under cotton in Undivided India, Pakistan accounted for nearly 66 per cent. in 1938-39 and 80 per cent. in 1946-47, that she produces 40 per cent. of the total raw cotton crop of the Indian sub-continent.

From this it follows that the larger size of irrigated area in Pakistan and particularly its concentration in Western Pakistan assures her an assured agricultural output, while the increased dependence on the vagaries of rainfall in India accounts for the fluctuations from year to year in the production of food and commercial crops.

23. *The partition has aggravated the problems of food shortage in India; while Western Pakistan is surplus in wheat, Eastern Pakistan is deficient in rice supplies.*

India imported 2.8 million tons of foodstuffs in 1948 at a total cost of Rs. 130 crores, and 3.7 million tons in 1949 at a total cost of nearly Rs. 150 crores. Imports of food account for more than 60 per cent. of India's deficit in her balance of payments with foreign countries on current account. Because of high prices the food shortage has also aggravated the inflationary conditions in the country. Even before the war India used to import food particularly rice from Burma. During the war and post-war years, despite the Grow More Food Campaigns, so earnestly launched by the Government of India as early as 1942, the aggregate output of food crops has remained more or less stationary, while the population has increased from 318 millions in 1941 to 347 million in 1950.

The partition has aggravated the food problem of India. Looking to the average position for the years 1936-37 to 1939-40 it appears that Western Pakistan under ordinary circumstances had an exportable surplus of .5 to .7 million tons of wheat and over 150 thousand tons of rice. As against these surpluses Eastern Bengal normally had a deficit from 200 to 400 thousand tons in rice. While the rice surplus in Western Pakistan fluctuates and is often non-existent, the rice deficit of Eastern Bengal is more or less constant. But for the partition these surpluses would have been consumed in India. Because of the partition the internal food shortage in India has increased by half a million tons.

24. *The partition has aggravated the problem of disequilibrium between agricultural production and requirements of food and commercial crops in India. Crop planning and systematic land utilisation have therefore become all the more inevitable.*

As indicated above, the partition has increased India's food shortage by .5 to .7 million tons per annum. This would necessitate a larger area under cultivation being given to the production of food crops, an increase in the yield per acre by intensive farming and double cropping of land. Of these three alter-

natives, because of practical difficulties, the Grow More Food Schemes have had to rely more and more on the extension of cultivation as a means of increasing food production. If food shortage was the only problem in Indian agriculture, it could have been solved fairly easily. But the partition has created two other problems for India. India has become a heavy importer of raw jute to the extent of nearly 3 to 5 million bales, and of cotton to the tune of nearly a million bales. Imports of these commercial raw materials from Pakistan were free and easy in the past. Recent difficulties in this connection, and the desire for achieving production of textiles to the fullest installed capacity, have necessitated programmes of self-sufficiency in these raw materials too. As a result, there has now arisen a competitive demand on available culturable area. The partition has therefore aggravated the problem of disequilibrium between the supply of available culturable land and the demand for essential requirements of food and commercial crops in India.

To strike a proper balance between these competitive demands calls for careful crop planning. It is possible that an acre of land given to the production of raw jute or raw cotton may prove more profitable economically than the same land given to the production of food crops like rice or jowar. It would then be desirable to extend the cultivation of commercial crops and import food. But this cannot be pushed too far. Under modern conditions, it would be dangerous for any country to be continuously dependent on the outside world for its food supply. The prospects of solving the food problem in India, however, are not so bleak. It needs to be emphasized that the Indian food problem is not merely one of deficit supply, but also that of defective organisation both in procurement and the distribution machinery. Great care is necessary in seeing that land released for food production through a reduction of area under commercial crops is used for food production and does not remain uncultivated. In the past this care has not been taken. But more recently the Government have shown themselves alive to the problem. In the production of commercial crops Indian economy has shown amazing resilience since the partition. Without serious adverse effects on rice production, the production of jute in India has increased from 1.6 million bales per annum in 1947-48 to nearly 2.8 million bales in 1949-50, and it is hoped that in 1950-51 production will show a further increase. Similar trends can be noticed in the production of raw cotton.

25. *Compared to India, Pakistan has better livestock resources. Her cattle population abounds in improved breeds and yields more milk.*

The cattle population of Undivided India was the most numerous in the world. Of the total bovine population of 206 million cattle in Undivided India, the Republic of India has 176 million and Pakistan 30 million. In India the density of cattle works out at 205 cattle per square mile, 65 cattle per hundred acres of cultivated area and 53 cattle for 100 persons. In Pakistan the density of cattle per square mile is only 83..1, whereas the number of cattle per hundred acres of cultivated area is 73.3 and 42.6 per 100 persons. The quality of cattle in Pakistan is much better. The Sahiwal, Red Sindhi and the Tharparkar breeds known for their high milk yields are all in Pakistan. In India 41.1 million cows and 10.5 million buffalo cows produce about 38,600 million lbs. of milk per annum, while Pakistan with 19.5 million cows and 3.2 million buffalo cows produces about 12,845 million lbs. of milk per annum. Thus with less than 22 per cent. of India's milch cattle Pakistan account for nearly 34 per cent. of the estimated milk production of the Indian sub-continent.

V. MINERALS AND ELECTRICITY

26. *In spite of only a partial survey of resources in mineral wealth, Undivided India compared favourably with leading countries of the world; after the partition India still enjoys the same position, while Pakistan will have to depend on other countries for most of her mineral requirements.*

No country in the world is self-sufficient in respect of all mineral resources that are necessary for its development. It is significant to note that Undivided India was rated as a leading producer in the world for minerals like iron ore, mica and manganese. She had important exportable surpluses in respect of minerals like titanium, thorium, beryl, gypsum, bauxite, magnesite, silica, granite, abrasives, refractory minerals and corundum. She had enough supplies in minerals like coal, gold, glass, building stones, felspar, zircon, barytes, chrome ore, etc., to meet her present and immediate requirements. As most of the resources were situated in areas now forming India, the position which Undivided enjoyed falls to India. Pakistan on the other hand has been rendered relatively deficient in respect of mineral resources, particularly coal, iron and mica as well as manganese.

27. *Hitherto regions that now constitute India used to meet most of their requirements of gypsum, salt, antimony and sulphur from Pakistan. After the partition India has discovered its own internal supplies of gypsum and salt.*

India used to depend upon Pakistan for supplies of gypsum, salt, antimony and sulphur. But after the partition India has been able to discover supplies of gypsum in Saurashtra and Rajputana. She has also discovered extensive supplies of rock salt at Mandi in Himachal Pradesh. Only in antimony India has to depend upon other countries like Bolivia and Mexico for her supplies. The supplies of sulphur which she got from Pakistan used to meet her needs only to a limited extent. She now depends to a great extent upon other countries for supplies of sulphur as a result of the partition.

28. *The total coal resources of India are abundant.*

India's total coal resources are put at more than 60,000 million tons, and workable resources amount to nearly 16,000 million tons. At the rate of present utilisation in India, about 30 million tons per annum, India's resources can last for more than five centuries. But India's resources in high grade metallurgical coal which is absolutely necessary for iron and steel and coke ovens are only of the order of about 500 to 700 million tons. Great care is necessary to conserve these resources and to see that they are utilised only for the purposes of iron and steel manufacture. Recent researchs have indicated that the total high grade coal resources of India can last for a longer period than was formerly estimated provided proper precautions are taken towards blending and washing.

29. *Deficiency of coal in Pakistan will considerably retard her prospects of industrial development. Substitutes like gas, oil and water power if sufficiently developed may to some extent compensate for the shortage of coal.*

Pakistan is highly deficient with respect to coal resources. Her total coal resources are estimated to be of the order of 300 million tons. But according to the latest estimate prepared by a British Expert Committee the workable resources are of the order of only 165 million tons. Her coal resources are in West Punjab, Baluchistan and Sind. But it will take a long period for Pakistan

to make arrangements for increasing the indigenous production of coal. Pakistan used to get nearly two or three million tons of coal from India per year to meet the requirements of her railways, steamer services and industries. But the trade deadlock that ensued since September 1949 put Pakistan into difficulties when the export of coal to Pakistan was stopped. Pakistan entered into trade relationship with South Africa in order to get coal from that country. But supplies of coal from countries other than India, like Poland and South Africa, will be much more costly. Until substitutes like gas, oil and water power are developed, the pace of industrial development in Pakistan will be handicapped if trade relations with India are not carried on in a co-operative spirit.

30. *Hitherto some of the most important minerals of India were being exported in raw form and finished products of the same were imported. In future, conservation and intensive internal exploitation and development, and not exports, should guide policy.*

Hitherto careful attention was not given to the question of developing a mining industry in India. .Most of the minerals were exported in raw state to other countries and Undivided India was receiving in return imports of finished products from the same minerals. After independence, the Government of India has realised the importance of conservation of mineral resources. A Bureau of Mines has been created to look after all matters connected with minerals, and the export of strategic minerals has been stopped.

31. *As regards water power resources, Undivided India ranked second only to the U.S.S.R.; after the partition India enjoys the same position. But these have not yet been fully utilised, though recent progress is significant.*

Undivided India had large water power resources. But only a small portion of these was harnessed for purposes of power generation. The water power potential in India has been calculated at somewhere between 30 to 40 million kilowatts, but the existing exploitation is not more than half a million kilowatts. The total water power resources of Pakistan have been unofficially put at half a million kilowatts. But only about 10,000 kilowatts have been harnessed for power production. A greater portion of the water power resources in Pakistan falls in N.W.F.P. which does not offer large scope for industrial development.

As India's coal resources are not equitably distributed among all the regions and the water power resources are fortunately well spread out, it is in the interests of the country to concentrate on the building up of hydro-electric stations. It is heartening to note that the Central Government and the various Provincial Governments have embarked on large scale hydro-electric development. Among these may be noted the Damodar Valley Scheme, the Bhakra, the Nangal and the Hirakud projects. These multi-purpose projects are designed on the T.V.A. model. Within two years after the partition, India more than made good the loss in generating capacity that occurred on account of the partition. In fact in the production of electricity India reached a new peak in 1949, and the consumption for industrial purposes has also shown significant increase.

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As most of the good sites for the development of water power resources in Pakistan are in Kashmir, the future development of Pakistan will depend to some extent upon the position of Kashmir. Almost all the rivers that flow from

India to Pakistan flow from Kashmir, East Punjab or Assam. There is already a major water power dispute between India and Pakistan on account of the fact that the East Punjab Government wants to develop the Bhakra project for purposes of irrigation and electricity. The complaint of Pakistan is that if the Bhakra project is started the result will be that the flow of water for irrigation in West Pakistan will be less. As East Punjab emerged out of the partition a relatively backward province, and had also lost the major portion of the irrigational facilities to West Punjab, it has been pointed out by India that there is great necessity to develop irrigation and electricity in East Punjab. A mutual investigation for water resources in both the countries has been suggested by India, while Pakistan desires that the dispute be settled by the International Court of Justice.

VI. INDUSTRIES

33. *More than 70 per cent. of the raw jute produced in Undivided India is now grown in Eastern Pakistan. Raw jute produced in East Bengal is superior to Indian raw jute for industrial use.*

Undivided India had a world monopoly in the production of raw jute. The total production of countries outside Undivided India like Japan, Formosa, China, Manchuko, Mexico, Brazil and others has been estimated at 40,000 tons per annum or only 2 per cent. of the world supply. Raw jute has been described as the Golden Fibre of Undivided Bengal. East Pakistan grows between 73 to 80 per cent. of the total production of raw jute of Undivided India. From the point of view of colour of the fibre or its staple length, raw jute produced in Eastern Pakistan is superior to the major portion of the Indian crop. The difference in Pakistan and Indian varieties is largely due to differences in the available facilities for retting and climatic conditions. The type of water used in retting gives it white or dark colour; while retting in India is done in the muddy waters of the Ganges, and still waters of lakes and ponds, retting in Eastern Bengal is done in the clear waters of the Brahmaputra and numerous fast flowing rivulets. This gives the East Bengal fibre a fair colour as a result of which bags produced out of it are liked by Americans. The American choice for hessians produced out of East Bengal raw jute is largely due to the fact that because of its fair colour, stamping and marking on bags becomes easier. East Bengal raw jute is useful not merely in the production of hessian but also in giving warp strength to sacking cloth largely made out of Indian raw jute. On an average the Indian jute mills consume about 6 million bales of raw jute. Of this quantity East Bengal raw jute constitutes nearly 3 to 5 million bales. Recently the quantity of raw jute produced in India has been increasing. At the same time attention must be given to its quality because of the reasons stated above. It is not true to say however that Indian raw jute is entirely useless even for hessian production. Some portion of it is even now used in making hessian cloth. By chemical processes and double warping, as is done in the Dundee mills, it would be possible for Indian mills to produce more and more hessian cloth out of Indian jute.

34. *Though East Pakistan produces the major portion of the raw jute supplies of the world its main market is in India. The problem of raw jute trade in Eastern Bengal is not simply one of Pakistan's monopoly but that of a bilateral monopoly between India and Pakistan.*

Though East Bengal produces a major portion of the world supply of raw jute it has no jute mills. India with 57 per cent. of the jute looms of the world is the main buyer of East Pakistan raw jute. East Bengal has only one port *viz.* Chittagong. The export capacity of Chittagong is limited and under the present conditions its maximum export level is not more than 1.5 million bales. As a result of this limitation, the remaining crop which amounts to more than 5 million bales must either go to other countries through India or has to be sold to the Indian jute mills. In consequence, the prosperity of East Bengal farmers in the marketing of this most important cash crop hinges on and fluctuates with the fortunes of the Indian jute mill industry. The problem of raw jute trade in East Bengal is thus not simply one of Pakistan's absolute monopoly as is popularly imagined, but that of a bilateral monopoly between India as the main buyer and Pakistan as the main seller. Under conditions of bilateral monopoly the price of raw jute in the absence of compromise and institutional factors can only be indeterminate. Recent experience of the Indo-Pakistan trade deadlock between September 1949 and April 1950 has borne out the truth of this statement. To the extent that India succeeds in increasing her internal supply and Pakistan fails to restrict its production, or increase internal consumption, India may enjoy a somewhat superior bargaining capacity.

35. *Pakistan grows more than* 40 *per cent. of the long and medium staple cotton of Undivided India; but has only a few cotton textile mills.*

The cotton textile industry is by far the largest industry in India and provides employment directly for 700,000 workers and indirectly for 80,000 power loom weavers and 250,000 handloom weavers. The total value of the output excluding handloom cloth is estimated at over Rs. 600 crores annually. Of the 394 cotton textile mills in Undivided India, 380 are located in India and only 14 are in Pakistan. But with less than 5 per cent. of the cotton textile mills of Undivided India, Pakistan produces 40 per cent. of the raw cotton crop. As in the case of raw jute, Pakistan produces some of the best varieties of Undivided India's long and medium staple cotton of the American types. During the war, while the area and yield per acre of cotton declined by 50 per cent. in India because of the application of the Growth of Food Crops Acts, in Pakistan both area and yield were more or less unaffected. The decrease in area in India occurred mainly in the case of short-staple cotton which could not be exported because of Japan's entry into the War. As has been noted earlier, the high yield of cotton in Pakistan is due to the larger irrigated area. The mills in India ordinarily consume about 4 million bales of raw cotton. Of this quantity, according to the estimates of the Indian Central Cotton Committee, Pakistan used to supply half a million bales of the long staple cotton, and nearly .7 million bales of medium staple cotton. Since the partition Pakistan's raw cotton arrivals in India have decreased from time to time. In the year 1948-49 mills in India consumed only .4 million bales of Pakistan's raw cotton, while foreign long and medium staple cotton consumption went up from .3 million bales to nearly .7 million bales. The Government of India with the help of the Indian Central Cotton Committee is making determined efforts to grow more and more long and medium staple cotton in India. The limitations are determined by the extent to which such extension comes in conflict with the schemes to grow more food. In the cotton season 1949-50, because of the controversy over devaluation the mills in India have not been

able to import any cotton from Pakistan. And even in the Interim Agreement which is to be operative between April and end of July 1950, no provision has been made for raw cotton imports from Pakistan. Russia, United Kingdom, Japan and China have now become rival purchasers of Pakistan cotton. Since the partition, except for the cotton season 1949-50, the raw cotton production in Pakistan has been lower than the average. It can be expected that in future Indo-Pakistan Trade Agreements, Pakistan would agree to supply more and more raw cotton in exchange for India's cotton piecegoods. Both cotton textiles and jute manufactures are important export industries of India; but while the jute industry is a valuable dollar earner, Indian cotton piecegoods have their most profitable markets in the sterling and soft-currency areas. Since the partition until the devaluation of the Indian rupee in September 1949, exports of cotton cloth were on the decline. In 1943-44 Indian mills exported 870 million yards; in 1944-45, 380 million yards; and in 1948-49 exports amounted to only 340 million yards. Since September 1949, however, exports of cotton cloth have reached higher levels and in 1949-50, the total exports amounted to 6.9 million yards. Prior to the partition, Pakistan was an important consumer of India's cloth; in fact the average *per capita* consumption in Western Pakistan was higher than that in any other Province in India. Since the partition, however, exports to Pakistan have declined and Pakistan has been importing more and more cloth from China, United Kingdom and the European Continent. In the Interim Agreement operative between April to end of July 1950 Pakistan has agreed to import 54,000 bales of Indian cloth and 5,000 bales of yarn.

Looking to the size and population of the country, India's mill cloth production is hardly sufficient for internal requirements when judged by Western standards. Besides mill production, cloth is produced extensively both by cottage and small-scale industries. The total handloom production of India is estimated at 1,300 million square yards and represents over one-fourth of the internal supply and gives employment to nearly thrice as many workers as are employed in the mills.

36. *Both India and Pakistan are world exporters of tea. But Pakistan has to export inferior tea and import superior tea for her internal use.*

Of the total production of 990 million lbs. of tea in the world, Undivided India accounted for more than 60 per cent. Of this quantity India's share was 557 million lbs. or 93 per cent. and Pakistan's 43 million lbs. or 7 per cent. The immediate effect of the partition on this important industry was not to lessen production but to dislocate marketing because of transport bottlenecks. Prior to the partition the two ports of Calcutta and Chittagong now in India and Pakistan respectively, used to handle the bulk of the export. Tea grown in Assam excluding the Sylhet area used to be exported through the port of Chittagong, while tea grown in Sylhet and the Northern districts of Bengal came down to Calcutta for export. The partition disturbed for a time these transport arrangements. Because of the absence of a rail link with Assam tea chests in sufficient numbers could not be sent there; nor were the transport facilities through railways particularly along the East Bengal route satisfactory. Within a very short time however, the Indian tea industry has more than recouped its position. In 1949 the production of tea in India reached the peak level of 595 million lbs. and thereby showed an increase of output over 1947 equal to the total output of Pakistan. Of the total output in 1948 internal consumption

in India amounted to 125 million lbs. or 22 per cent. while that in Pakistan was 95 million lbs. But while almost all the tea consumed in India is produced internally, Pakistan has to import tea from outside for internal consumption. This is because the quality of tea produced in Pakistan is inferior and the Sylhet tea cannot be consumed by itself unless blended with Indian or Ceylonese tea. Pakistan therefore normally imports about 12 million lbs. of tea from the tea exporting countries of the world, and exports nearly 35 million lbs. As a result of the devaluation of the Indian rupee, exports of tea from India are at an advantage as compared to the exports from Pakistan. More than 60 per cent. of the Indian tea is purchased in bulk by the United Kingdom Ministry of Food. For the future while in Pakistan the very foundation of the industry is to be strengthened and the quality improved, in India the problem is one of consolidating the war-time gains.

37. *The partition has affected the interdependent economy of India and Pakistan. While Pakistan has important raw materials like raw jute, raw cotton, wool and hides and skins, India has the corresponding manufacturing centres.*

The interdependent relationship between Pakistan and India was largely that of the former as the supplier of raw materials and the latter as the industrial producer. As we have already seen more than 70 per cent. of the raw jute grown in Eastern Pakistan used to go to the jute mills in Calcutta. Similarly much the larger portion of the long and medium staple cotton grown in Sind and Western Punjab used to go to the cotton mills of Ahmedabad, Bombay and Cawnpore. The paper mills of Western Bengal used to consume the bamboos from the Eastern Pakistan forests. Raw wool produced in the cold regions of West Pakistan and N.W.F.P. were turned into finished cloth by East Punjab, U.P. and Bombay mills. Mineral oil and antimony mined in the hilly tracts of Chitral in N.W.F.P. went to Bombay for refining and gypsum of Sind and Punjab was used by cement and fertiliser factories all over India. Soda ash from the Khewra works was used by the glass factories of the U.P., potassium nitrate of West Pakistan was carried to the glass factories throughout the subcontinent. The tobacco of Eastern Pakistan went to the cigarette factories of Calcutta. Large quantities of raw hides suitable for the production of chrome leather went to the tanneries of Madras and Cawnpore. The sheep and goat skins of Eastern Pakistan were used at Calcutta. The barley of Western Pakistan was used in the distilleries of U.P. For the industrial establishments and commercial services like the railways in Pakistan large quantities of coal from Bihar and West Bengal to the extent of nearly 2.5 million tons used to be sent. More than 70 million kilowatts of electrical energy was used for industrial and domestic purposes in West Punjab from the Jogindernagar power station of East Punjab.

Since the partition the free flow of these raw materials from Pakistan to India and the movement of coal and electrical energy into Pakistan has suffered. The Government of Pakistan through various trade and fiscal measures diverted supplies of some important raw materials like raw jute, raw cotton, hides and skins and wool to countries other than India. Trade and industrial interests in India with the co-operation of the Government have therefore been driven either to increase the internal supplies of these raw materials and/or to import available supplies from other countries so as to supplement the ever reducing supplies from Pakistan.

38. *Industrial planning in the country has hitherto been conceived on a locational pattern suited to Undivided India. Economic, strategic and commercial conditions created by the partition necessitate important modifications in industrial planning.*

The emergence of large-scale industries in Undivided India was more or less a by-product of British commercial policy particularly after 1850. Whenever conditions of trade in raw materials like raw jute and raw cotton indicated a slump and stocks accumulated at the ports like Bombay and Calcutta alternative uses had to be found for them. British and European enterprise partly helped by Indian financiers ventured into industrialisation at the ports. With the development of the cotton and jute industries at Bombay and Calcutta, other industries also came to be established at the same places, because of the economic advantages offered by concentration of industries in urban areas. As a result, prior to the Second World War, nearly 60 per cent. of the industrial population of the country was concentrated in the three cities of Bombay, Calcutta and Madras. Through the efforts of the Department of Planning and Development of the Government of India, comprehensive schemes were envisaged to change the traditional locational patterns so as to distribute evenly further progress in industrial growth among all provinces. The partition must change the outlook on locational pattern for the new Republic of India. Any further concentration of industries in a border province like Eastern Punjab would involve strategic disadvantages. More than East Punjab, however, the fact that nearly 22 per cent. of the industrial population is concentrated in the Province of West Bengal, particularly round the overcrowded city of Calcutta, is most disturbing. Ever since the partition, any political tussle with Pakistan has had harmful economic effects in West Bengal and industrial production has suffered in consequence. It is desirable that gradually more and more industries shift towards the hinterland of India. The integration and merger of hundreds of erstwhile small Indian States into sizeable economic units affords great scope for industrial development in those areas.

39. *Pakistan does not have a contiguous area; Eastern and Western Pakistan are separated by over one thousand miles of Indian soil and coastline. For Pakistan this will give rise to peculiar problems of location and planning which may even involve a duplication of industrial units, particularly those that produce consumer goods.*

As indicated earlier four-sevenths of the total population of Pakistan has been concentrated in one-seventh of its area in Eastern Pakistan. The fact that Eastern and Western Pakistan are not contiguous, but are separated by Indian soil extending over 1,200 miles has divided Pakistan for all practical purposes into two economic units. The limited capacity of the port of Chittagong has made optimum commerce between the two regions impossible. In deciding the locational patterns of various industries the Government and the people of Pakistan will have to face this geographical limitation. In order that most of the essential consumer goods may be available in plenty and at cheap prices in both Eastern as well as Western Pakistan, the Government of Pakistan must see that a sufficient number of consumer goods industries are located in each of the two parts. The necessity for the dispersal of industries in each part means the duplication of industrial units and the reduction of the size of firms to some extent.

40. *The regions that now constitute Pakistan were important consumers of industrial products manufactured in India; the partition has created a*

transitional gap in demand which can be made good by encouraging the vast internal potential demand through an increase in the standard of living of the masses and by developing alternate markets in South East Asia, the Middle East and the soft currency areas of the European continent.

In exchange for the raw materials that the Pakistan areas used to send to industrial centres of India they used to get consumer goods. This sort of free internal trade in Undivided India conducted behind the advantages offered by protection had great economic significance. Sugar produced in the U.P. and Bihar, cigarettes of Calcutta and Bombay, boots and shoes and other leather goods of Cawnpore, Calcutta and Madras, paper from West Bengal and U.P., mill cloth from Bombay, Ahmedabad and Madhya Bharat, *lungi* cloth and other handloom fabrics of Southern India, iron and steel products of Jamshedpur, tea chests from Madras and Bengal plywood factories, gold and silver threadware of Surat, soap and matches from Bombay and Calcutta used to find a ready market in Western and Eastern Pakistan. Particularly during war and post-war years when as a result of high prices the farmers and landlords of Sind and Punjab became prosperous the consumer goods produced by industries in India even though high priced were in great demand in Western Pakistan. The peasantry of East Bengal was entirely dependent on the port of Calcutta and the consumer goods produced in that city for their requirements of finished goods. It is estimated that in Undivided India this kind of internal trade was much more important than the foreign trade, as in terms both of quantity and value the former was estimated to be fifteen times as large as the latter.

Since the partition the free flow of consumer goods to Pakistan has been disturbed both consciously and unconsciously. This has created a transitional problem of a sizeable gap in the demand for industrial goods produced by India. Between August 1947 and December 1948 to some extent the pessimistic outlook and reduced production of the textile industry in India was the result of this gap in demand. Since June 1948, however, the industries in India are slowly recovering from these effects on demand for their production. With the gradual improvement in the standard of living of the masses and by developing alternate markets for consumer goods in South East Asia, the Middle East and the soft currency areas of the European countries, the gap in demand created by the partition may be more than made good.

41. *With the partition the responsibilities of the Indian export industries have increased, as the war and postwar pattern of exports of manufactured goods in place of raw materials, will have to be maintained and expanded notwithstanding disadvantages of the partition.*

Prior to the war the major items of exports in Undivided India's foreign trade were those that could be grouped under the category of raw materials, while the major items of imports comprised consumer goods. As a result of severe restrictions on imports since the war, India's foreign trade has undergone radical changes. Today manufactured consumer goods constitute more than 53 per cent. of Indian exports. The partition has reduced India's capacity in the export of raw materials like raw jute and raw cotton in which she herself has become one of the chief importers. To be able to purchase our import requirements, the export trade has to be extended and to do so the chief export industries like jute and cotton textiles, the leather and tanning, and the tea industries will have to play a major role. Apart from increased production, for purposes of export promotion great care is necessary in maintaining and

improving the quality of Indian manufactured goods. Exporters and manufacturers should be exhorted, and if need be, coerced by the Government in their own enlightened self-interest to produce goods of a standardised quality readily saleable in foreign countries.

42. *The future trend for industrialisation in India would be towards the fostering and development of capital goods industries: Pakistan will, however, have to begin with the consumer goods and processing industries.*

As compared to the advanced Western countries of the world like the U.S.A. Great Britain, Belgium and Germany both India and Pakistan are relatively backward areas. There is great scope therefore for industrialisation in both the countries. Within the last thirty years, however, Undivided India has made remarkable strides in the process of industrialisation. Almost all the major industries of Undivided India are located in India. Most of these consumer goods and other industries of India, however, depend for their machinery and other plant requirements on foreign countries. The future trend towards industrialisation in India would be towards the fostering and developing of capital goods industries for which there is a sizeable internal demand from existing industries. Efforts in this direction are being made ever since the partition. Among the major developmental schemes of the Government of India are the establishment of a machine tool industry and a power plant manufacturing concern.

Industrial development in Pakistan has however yet to make its beginnings. Pakistan possesses excellent raw materials for the cotton textile and leather tanning industries. With the surplus food in Western Pakistan, rice and flour mills can also be encouraged. The woollen industry too has great scope in Western Pakistan. In East Bengal jute and paper mills can also be established.

43. *The business community remaining in Pakistan is largely commercial in outlook and has little experience of industrial enterprise and technique. On the other hand, the business community in India apart from its traditional enterprise, technique, efficiency and a developed money market has also the privilege and facility of a large number of expert, research and technical institutions.*

At the time of the partition the areas now forming Pakistan were backward in industrial development. Even the few industries that existed in Pakistan were due to the enterprising spirit of non-Muslims, who have largely migrated to India. India on the other hand has got all the advantages and facilities by way of enterprise, technique and a developed money market. The expert technical institutions that existed in Undivided India at the time of the partition are mostly located in the Republic of India. The attempts made by the Government of India to start new laboratories and other research bodies will further help industrial development in India.

44. *To foster industrial development in Pakistan the Government will have to take up greater and greater initiative and direction. In India on the other hand, it is feared that there is too much state intereference in industrial development.*

On account of the highly backward state of industrial development in Pakistan the major role in fostering development will devolve on the Government. This has become necessary as there is a lack of a well developed invest-

ing and manufacturing class in Pakistan. After the partition all those who wanted to start industries asked for state assistance in one way or another when the Pakistan Government attempted to formulate targets for development. In India, on the other hand, there is great apprehension that the State may interfere too much in the field of industry. In fact this is said to be one of the causes for the shyness of capital in India. The Government of India had therefore to formulate an industrial policy resolution by which definite boundaries have been ear-marked indicating the scope of private and Government sectors in industrial development. Any attempts at large scale industrialisation in India will have to proceed on the basis of greater Governmental initiative as well as encouragement. The delicate task of planners in India will be to see that the efforts of the Government and the attempts of private enterprise are properly coordinated.

45. *In order that the rapid growth of industries may not adversely affect the existing low consumption levels, the entry of more and more foreign capital in either country is essential and suitable atmosphere for the same must be created.*

Large-scale industrialisation at a rapid pace both in India and Pakistan can take place only if there is a free and greater flow of foreign capital. The standard of living in both the countries is already low. The scope for starting industrial ventures by mobilising savings is extremely limited. There is also a limit to which the already low consumption standards of the public can be further reduced for the sake of increased investment. But if foreign capital has to supplement indigenous capital, a suitable atmosphere in both the countries is necessary. The long drawn out strained political relationship between India and Pakistan will eventually lead to a lesser flow of foreign capital into either country. The entry of foreign capital creates misgivings in the minds of indigenous industrialists. Both the Governments therefore formulated definite policy statements on foreign capital and the conditions under which it could be allowed to function. In India it was made clear that foreign capital would be allowed subject to the same restrictions as Indian capital. But precautions would be taken to see that local talent was trained in technical fields. In Pakistan the statement in her industrial policy resolution that 50 per cent. interests in all foreign capital should be controlled by Muslims did not have a favourable effect on the flow of foreign capital, and rules were subsequently modified.

Foreign capital can flow through two main channels, viz. at Governmental level and/or on private account. According to figures revealed by the Indian Finance Minister, private American investment in India in the year 1949 amounted to only Rs. 5½ lakhs. Until political relations between India and Pakistan are settled in a peaceful manner, and until such time as either Government takes steps to keep official announcements on industrial policy sufficiently concrete, private foreign capital may not flow to any significant extent. It is possible, however, for either India or Pakistan to import foreign capital at a Governmental level. India has been able to borrow from the International Bank for Reconstruction long term loans to the extent of $62 million upto the end of April 1950. A part of the loan is for railway development, a part is meant for agricultural development, while the remaining amount will be used for the Bokaro Thermal Plant of the Damodar Valley Project.

46. *India has a diversified economy capable of facing problems both of unemployment and under-employment. Pakistan being mainly an agricultural country may face serious under-employment and problems created by fluctuations of income when the terms of trade go against agricultural countries.*

Both India and Pakistan are dependent to a great extent on exports of important raw materials and finished products for earning foreign exchange. The commodities in India's export trade are numerous. Along with raw materials like raw jute, oilseeds, mica, manganese, raw hides, lac, etc., industrial products like cotton, jute, rayon and silk textiles, tea, soap and tanned hides and skins, leather goods, etc., are also exported. On the other hand Pakistan's foreign trade is to a major extent dependent upon the exports of raw jute, raw cotton, tea, raw hides, wool, etc., mainly agricultural products. Whenever a trade recession occurs in the importing countries the demand for the goods that are exported from both these countries will suffer. But the economy of Pakistan will be subject to violent fluctuations as her exports consist mainly of agricultural commodities. India may be able to withstand the crisis to some extent as she has a diversified economy.

VII. INDUSTRIAL POLICY

47. *The post-partition period witnessed stagnation in the investment market.*

In the first few months after the partition, the Government of India was engaged in the problems arising out of the partition. Meanwhile, owing to the inadequacy of transport, the unsatisfactory relations between management and labour, the shortage of raw materials and defects in their procurement and distribution, the difficulties in obtaining capital goods and constructional materials, the limitations in the supply of imports of machinery and the paucity of technical personnel, an industrial crisis was slowly developing in the country. The Industries Conference which was convened in Delhi in 1947 noted that there was an all round decline in productive activity. Owing to the confusing and often mutually contradictory statements issued by the spokesmen of the Government and of the party in power, the investing class in India was faced with doubts and misgivings about the economic policy of the Government. The air was full of uncertainty. The report of the Congress Economic Programme Committee indicating a strong bias towards nationalisation and towards equal distribution of incomes created a panic in the minds of the industrialists. All this resulted in a virtual stagnation in the investment market. Even Government loans had to be supported heavily by the Reserve Bank. In order to lift the country out of the morass and to create a feeling of confidence, a clear-cut statement by the Government about the demarcation of roles of private and Government enterprise became essential; such a statement was issued in April, 1948.

48. *The Government's Industrial Policy Statement was characterised by its faith in mixed economy as the proper institutional frame-work for India.*

The underlying approach both in the industrial policy statement and in the activities pursued by the Government was both economic and social. On the one hand there was a desire to increase production rapidly and to provide incentives and facilities for increasing investment from the private sector. But at the same time there was a desire to control the capitalistic organisation and to bring about a form of institutional framework which may be called 'mixed

economy'. Mixed economy is a *via media* between a *Laissez-faire* economy and a Socialistic economy. The Government looks after certain specified fields of activity and leaves the rest to private enterprise, but retains the power to control and direct the private sector. The Policy Statement of 1948 demarcated industries with respect to state and private ownership. There were four categories. In the first category were named the industries which would be subject to state ownership. In the second category were mentioned industries in which new concerns could be started only by the State. The existing industries in this field would be allowed full scope for a period of ten years after which the position would be reexamined. In the third category were given industries which would be subject to varying degrees of control. The rest of the industries were included in the fourth category; these were presumably allowed full scope for development by private enterprise. The Policy Statement was followed by the introduction of a Bill in 1949 for the regulation and control of industries.

49. *It is far more difficult to operate a mixed economy than to operate a socialistic economy or a free private enterprise economy.*

One of the most difficult tasks is to see that a mixed economy functions without frictions. The problems that confront a mixed economy are very intricate. The activities of the private and the Government sectors have to be very carefully coordinated. The competition for scarce resources by both the sectors will necessitate a cautious allocation of resources. An elaborate machinery for the purposes of control will become necessary. These controls themselves will result in bottlenecks and frictions. From the point of view of providing incentives, mixed economy presents delicate problems. Labour-capital disputes will always loom large in such economy. In a large country like India, with the framework of a federal polity, the activities of one unit of Government have to be coordinated with those of another. Otherwise, the objectives followed by the Central Government may be defeated by the actions of the Provincial Governments. To enforce a national point of view requires great tact, propaganda and perhaps some degree of coercion. The demarcation of spheres as was done in the Industrial Policy Statement of the Government of India, will result in keeping out private enterprise from some sectors on the assumption that Government would be in a position to bring about development in those fields. In other fields the Government retains the right to compete with private enterprise thus introducing an air of uncertainty for such enterprise. The ten years' time limit that was given for certain industries might not result in creating the proper atmosphere for development, as these industries would feel the Damocles' Sword hanging over them.

50. *The Governments of India and the Provinces in their sincere desire to bring about economic development formulated and embarked upon various ambitious projects.*

At the first flush of freedom the Central and Provincial Governments formulated and embarked upon various projects for nation-building activities. In order to harness the vast water resources of India various irrigation schemes, electricity schemes and some multi-purpose schemes were formulated. Among these the Damodar, the Bhakra and the Hirakud are important. In respect of industrial development, the Central Government invited the cooperation of foreign technical missions for preparation of project reports. Two iron and steel plants with a total capacity of a million tons costing over Rs. 180 crores,

a machine tool factory, a locomotive factory, a telephone factory, a power plant manufacturing concern, a synthetic petrol factory, a factory for producing sulpha drugs and one for manufacturing prefabricated houses were among the proposed industrial ventures to be initiated by the Central Government. The Provincial Governments also drafted plans for starting industrial concerns. The C.P. Government supported two paper mills and an aluminium concern and took over certain mines. The Bombay Government sponsored a cement concern. The U.P. Government planned the starting of cement, precision tools and rayon factories. The Assam Government also thought of starting a good number of factories. Some of these projects and schemes were part of the Post-war Reconstruction Plans which had been formulated at the end of the war by the previous governments.

51. *Both the formulation and the execution of the Industrial Policy of the Government of India are characterised by serious defects resulting in unnecessary diversion of resources and much waste.*

Some of the projects and schemes were formulated at a time when India was undivided and still under British rule. The Post-war Reconstruction Plans of the different Provincial Governments had been drafted on very ambitious assumptions of generous financial aid from the Centre. These projects had not been based on proper economic surveys; nor did they have a national outlook. The Governments persisted in these schemes even after independence. As was noted earlier, the post-partition period was characterised by industrial crisis and stagnation. The resources at the command of the different Governmental units were scarce and limited. In such an atmosphere, planning, uncoordinated with real resources, was bound to result in dispersal, diffiusion and diversion of such resources. Large extravagance and waste was bound to result. Besides, the various planning schemes and programmes were not drafted on the basis of a system of priorities. The Government of India reminded the provinces that first things should be dealt with first. They, however, never laid down what the first things were. Even with respect to nationalisation, conflicting policies were being followed. The different Provincial Governments were nationalising electricity and motor transport. The Centre itself was undertaking the establishment of factories disregarding the appeal from private enterprise for financial help in the same sphere. It was also competing with private enterprise in some respects. Such a programme was bound to result in confusion and uncertainty in the minds of private investors. The Government's policy with respect to multi-purpose projects was subjected to ebbs and flows. Such fluctuating policy was highly uneconomical and was not likely to inspire confidence in the capacity of the Government to handle industrial and developmental schemes. No attempt was made to frame a resources budget and to chalk out projects on the basis of the availability of financial and material resources. Grandiose projects were formulated whose practical utility in the near future was highly questionable. The Government of India was putting enormous faith in administrators by placing them at the head of industrial projects, though at the same time they repeatedly affirmed their desire to establish Public Corporations in India. The tradition of red tape and inevitable delays of administrative departments also crept in industrial projects. The absence of proper accounting resulted in repeated upward revision in cost estimates of proposed state ventures, thus leading to added burdens on the tax payer. The Government's policy with respect to controls was also highly fluctuating. Controls have been administered by Government in an apologetic mood. This shows that the Government is not fully aware that so long as

shortages of essential goods persisted controls were necessary. It is hoped that the establishment of the National Planning Commission would act as a check on such tendencies and pave the way for a coordinated economic development in India.

52. *Private enterprise in India has not been quick enough to adapt itself to the changed environment.*

The high profit levels to which the capitalist class in India was accustomed during the war, could not naturally continue in the post-war period. The partition also seriously affected the possibility of such high levels of profits. The advent of Independence meant a change in the outlook of the State and its active participation in the economic development of the country. Evidently private enterprise could not be expected to have scope for unlimited profits under the changed circumstances. In order to satisfy the clamour for bringing about equality of incomes, the Government was forced to adopt a progressive tax policy. The sphere of activity of private enterprise had also to be circumscribed. The capitalist class in India was very slow in adjusting itself to these changes. On the other hand, there was greater concentration on speculative activity and short term gains and profits were the motivating forces. The larger interests of the nation were pushed to the background. The existence of large scale blackmarketing and hoarding was a stumbling block in the way of the proper administration of controls. The general public got an impression that the capitalist class in India was fighting a ceaseless war of nerves with the Government. In such an atmosphere and when socialistic ideologies were gradually spreading among the labourers and workers, attempts on the part of the Government to grant more safeguards and liberal concessions to the capitalist class, were likely to lead to serious misunderstanding. The capitalist class has to readjust its outlook and methods to the new environment, and prove that it is willing to fall in line with the new policy and help in the nation's progress while helping itself.

53. *The Pakistan Government also made attempts to set up a planning organisation and to formulate development schemes.*

Pakistan emerged out of the partition as a relatively undeveloped country in respect of industrial development, the areas of Pakistan being mainly suppliers of raw materials to industries situated in India. Pakistan has rich resources in raw jute, raw cotton, raw wool, hides and skins and bamboos. Lack of capital, of capital goods and of technical personnel are the main difficulties in the way of industrial development. The dislocation which followed the partition was responsible for the migration of the enterprising class from Pakistan. Undeterred by these handicaps, the Government of Pakistan made earnest efforts to exploit internally the indigenous resources. A Development Board consisting of officials of the Government of Pakistan was appointed. In order to advise the Development Board, a Planning Advisory Board consisting of officials and non-officials was also set up. A separate Ministry of Economic Affairs was instituted with the object of coordinating the different plans and the day-to-day activities of the other Ministries. The Development Board and the Planning Advisory Board worked as part of the Ministry. The Development Board prepared estimates for nearly a hundred schemes, costing over Rs. 100 crores. An Industrial Finance Corporation with a capital of Rs. 3 crores was set up for providing assistance in the establishment of certain large indus-

tries for which sufficient private capital was not forthcoming. The Government also invited several technical missions for the preparation of project reports in respect of leading industries. A Tariff Commission was also set up.

54. *Large economic gains may be secured in the long run, if each country formulates and executes economic plans on the assumption of the existence of harmonious relationship with the other. On the other hand, a policy in either country, which is based on the lack of response from the other, will drive the economic systems, which were made complementary by nature, towards self-sufficiency at high cost.*

The plans for industrial development in both the countries can be undertaken either on the assumption of cooperation from the other or on the assumption of non-cooperation or no response from the other. Nature has made both India and Pakistan complementary in the economic field. If either country plans on the basis of self-sufficiency the pace and pattern of industrial development will be different from what it would be if complementary economy were to be assumed. The maintenance of a certain degree of economic co-operation between India and Pakistan will certainly result in large gains to both the economies. It will avoid the diversion of resources in area, capital, foreign exchange, raw materials and man-power, which would necessarily have to take place (and has been taking place), if each country tries to do without the other. There is a large scope for mutual assistance by way of exchange of technical personnel. The transport systems in both the countries will gain substantial advantages by the atmosphere of co-operation. The large amounts that are being spent on defence and refugees can be diverted for nation-building activities. The psychological atmosphere of fear and uncertainty that has engulfed the border areas will vanish and normal economic life will be resumed. In many ways the national wealth of both the countries will tend to increase if both of them co-operate. The economic conjuncture will then be more suitable for the flow of foreign capital.

VIII. TRANSPORT

55. *For some time after the partition the railway systems in India and Pakistan were disorganised and transport bottlenecks were created.*

Out of a total route mileage of 41,149 in Undivided India the railways in Pakistan accounted for 6,982 route miles or 17 per cent. and those in India 34,157 or 83 per cent. Classified according to gauge, Pakistan railways represented 24.5 per cent. broad gauge, 9.3 per cent. metre gauge and 12.1 per cent. narrow gauge route miles of Undivided India. 7 out of the 9 major railway systems went intact to India, while the remaining two, namely, the Bengal Assam Railway and the North Western Railway were divided according to their location within the physical boundaries of each country. The total capital at charge of the railways in India on the eve of partition amounted to Rs. 667 crores, while that of those in Pakistan was estimated at Rs. 136 crores.

Immediately after the partition difficulties of railway staff arose in either country. About 73,000 non-Muslims from Pakistan opted for India while 83,000 Muslims went to Pakistan. Though numerically the transfer appears more or less equal, the effects were significant. The non-Muslims that came from Pakistan particularly from Western Pakistan used to work in the railways mostly as clerks, ticket collectors, guards, etc; while the Muslims who opted for Pakistan were working as drivers, foremen, workshop technicians blacksmiths, coppersmiths and tinsmiths on the E.I., G.I.P., B.B. & C.I., and B.N.

Railways in India The categories of persons who left being different from those of persons who came in, a problem of surplus staff in Pakistan and that of lack of skilled workers in India was created. Particularly on the East Indian Railway, one of the largest railway systems in India, operating in Bengal, Bihar and U.P. and despatching coal throughout the country, the shortage of drivers and firemen amounted to about 45 per cent. of the total requirements. Coal loadings from mines to the railways were therefore reduced to half. Whereas during the first half of 1946 the toal quantity of coal despatched from the coal fields by the railways was approximately 2.4 million tons per month on an average, during the second half of 1947, particularly in the months of September and October, the despatches sank to 1.9 million tons per month. Because of the slow movement of despatches by rail there was accumulation of stocks at the collieries. In the meanwhile, because of shortages of coal, industrial production was considerably hampered. Occurring as they did at the time of decontrol, these transport bottlenecks aggravated the inflationary situation in the country.

A few months both before and after the partition, the traffic movement all along the North Western Railway in Pakistan and along the East India Railway in India had to be confined to the transport of millions of refugees. In India during the two months after the partition, the railways moved about three million refugees representing the capacity of a thousand passenger trains. The heavy load on the East Punjab Railway generally affected its rolling stock, while the fact that the railways were confined to refugee movement meant that the movement of goods was hampered.

Before the partition, Karachi used to be the main supply port for areas now lying in East Punjab, Rajasthan, Delhi and Western U.P. After the partition the port of Bombay had to take over the place of Karachi and traffic along the Bombay/Delhi route increased. This created serious congestion and goods could not move freely.

So far as Pakistan was concerned, the railways felt an acute deficit of coal supply and incurred increased operational costs. The surplus railway technical staff could not all be employed.

56. *The Assam and the Northern districts of West Bengal had no direct rail connections with the rest of India. The completion of the Assam rail link six months ahead of the target has retrieved the situation.*

In Undivided India, Assam and North Bengal were connected with the rest of India through the Bengal Assam Railway, a major portion of which was transferred to Pakistan. Though North Bengal and the rest of India were connected by the Darjeeling Himalayan Railway Company Tramway line, because of the fact that it was two feet in gauge and slow in pace, its capacity both for trade and passenger movement was very limited. Districts of North Bengal and Assam supply mills in Calcutta with large quantities of jute and are also responsible for the greater part of the production of tea in India. The absence of a direct rail link between Assam and the rest of India hampered trade and the free movement of goods. Considerations of commercial, strategic and political nature rendered inevitable the establishment of a rail link between Assam and the rest of India through North Bengal and Bihar.

The work of construction of a metre gauge railway link 142.5 miles long was started in January 1948 and completed in December 1950, six months ahead of the scheduled time. A number of difficulties were met in the process of

construction. A major portion of the area under construction is located in regions liable to heavy monsoons which last for more than six months in a year. In the two years of the period of construction, the actual working time available was only 11 months. It is commendable that the Railway Board has been able to complete this project in record time.

57. *The financial working of railways in India after the partition has shown satisfactory results.*

Prior to the war the railway systems in India used to operate at a loss. During war time because of the phenomenal increase in goods and passenger traffic receipts, the railways had become productive, *i.e.* the gross receipts used to exceed the working expenses plus interest charges on the capital at charge. In the first interim budget after the partition both Indian and Pakistan railways showed deficits. Thereafter the situation has once again improved. The railways in India showed a budget surplus of nearly Rs. 20 crores in 1948-49, over Rs. 11 crores in 1949-50 and are expected to show a surplus of over Rs. 40 crores in 1950-51. Railways in Pakistan too showed surplus budgets; Rs. 80 lakhs in 1948-49, Rs. 3 crores in 1949-50 and Rs. 4 crores in 1950-51. The financial position of railways in India is, however, much more sound than what these figures reveal. The Government of India have accumulated over Rs. 104 crores in the depreciation reserve fund, over Rs. 10 crores in the railway revenue reserve fund and over Rs. 19 crores in the development or betterment fund. All these funds have been built up through budget surpluses in the past. The depreciation fund is meant for replenishing the railways with the expenditure necessary to replace worn out materials. The revenue reserve fund is meant for expansion activities, irrespective of annual financial consideration of profits and losses; while the development or betterment fund will be used for providing passenger amenities and financing labour welfare schemes. Though Pakistan has a depreciation fund it has no revenue reserve fund or a betterment fund. To some extent the fact that a portion of the North Western Railway has been constructed only for strategic purposes and is commercially unprofitable, accounts for the lesser level of profits of railways in Pakistan. Prior to the partition even the Bengal Assam Railway, the major portion of which has gone to Pakistan, was not remunerative.

58. *The railway transport situation in India has completely recovered from the effects of the partition.*

During the year 1949-50 the Government of India imported about 447 broad gauge and 51 metre gauge locomotives from abroad and these have now been put into operation. The difficulties arising out of lack of technical personnel on account of the partition have been more or less made good. The train mileage on goods and services now exceeds the pre-war level by 3.73 per cent. while the passenger miles per route mile have increased from 590 thousand in 1938-39 to 1,613 thousand in 1948-49 along the broad gauge. The turnround of wagons has improved from 12.97 days in November 1948 to 10.87 in November 1949, while the actual tonnage moved in the first eight months of 1949-50 was 16 per cent. more than what was moved in the corresponding period during 1948-49. The coal loadings along the E.I. Railway have considerably improved and transport bottlenecks are now more or less a thing of the past.

Since the year 1949-50 the Government of India have taken over all Indian State Railways. As a result the total mileage of Indian railways has increased by 2,560 and the entire railway system in the country has become a completely

nationalised concern. From the budget year 1950-51, there has been a slow modification in the convention governing the financial relation between the general budget and the railway budget. The general budget of the Government of India has been guaranteed a minimum dividend at 4 per cent. on the total capital at charge. As the interest charges on the loan capital with which the railways were constructed are less than the amount of the dividend, a net contribution from the railways to the general revenue would accrue.

IX. FOREIGN TRADE

59. *The partition has aggravated the postwar problem of deficits in India's balance of payments with foreign countries.*

Prior to the war and even during the war years, Undivided India enjoyed a favourable balance of trade with the outside world. By March 1946, India had accumulated sterling balances to the extent of nearly Rs. 1,733 crores, besides the repatriation of the pre-war sterling debt of Rs. 426 crores. As a member of the Empire Dollar Pool, India had a surplus credit to her account of the order of dollars worth Rs. 115 crores. Since March 1946, however, events took a different turn. Large imports became necessary to satisfy pent up demand, to replace worn-out machinery and to provide for various schemes of development and above all to make good the growing deficits in food supply. The era of surplus trade balances was over, and there followed a series of continued trade deficits which were financed by periodical releases of sterling balances by the United Kingdom. The net dis-investment, due to deficits in the balance of payments on current account, amounted to Rs. 29 crores in 1946, Rs. 100 crores in 1947, nearly Rs. 68 crores in 1948 and Rs. 218 crores in 1949. The deficit in the balance of payments in 1949 showed the full effects of the partition on the foreign trade of India. By the partition, India's capacity for the exports of jute manufactures was considerably hampered because of the higher prices that had to be paid to Pakistan for her raw jute. During the first half of 1949, because of a tendency for price recession in the dollar markets, the physical volume of exports of jute manufactures fell by nearly 30 per cent. India's export capacity was considerably reduced in quantum by the partition, the production of some portion of tea and good quality hides and skins having gone to Pakistan. The demand for cotton piecegoods was also reduced. This was partly due to high prices, caused by the necessity of having to import long and medium staple cotton from Pakistan at higher prices, and partly to the policy of decontrol in 1948. While the partition thus reduced India's export capacity, it did not decrease her import requirements. On the contrary, as a result of the partition, India had to import more food from outside. As most of the industries were located in India, the quantum of imports of capital goods remained unaffected by the partition. Further, the quantity of long and medium stapled cotton which could not be imported from Pakistan, because of high prices, had to be imported from other countries. In short, the partition by reducing India's export capacity and by increasing import requirements aggravated the post-war problem of India's deficits in her balance of payments.

60. *As a result of continuous deficits in balance of payments, the transfer to Pakistan of her share in the sterling balances, and the remittance to U.K. of the capitalised value of stores and pensions, the sterling balances of India were reduced by half between March* 1946 *and March* 1950.

As indicated earlier, India's total deficit in the balance of payments since the beginning of 1946 up to the end of 1949 amounted to Rs. 415 crores. These deficits were financed by periodical releases from the sterling balances and the purchases of dollars from the International Monetary Fund to the tune of nearly $100 million. As per the terms of the Pakistan Monetary System and Reserve Bank Order 1947, the State Bank of Pakistan was entitled to a share in the assets of the Reserve Bank of India, which was determined in proportion to the latter's return of 'India' rupee notes and the proportion that these notes showed to the total amount of notes in circulation in Undivided India. As a result of the return of 'India' rupee notes between August 1947 and end of June 1949, the State Bank of Pakistan was given, as her share in the sterling assets of the Reserve Bank of India, Rs. 101 crores in the Issue Department and Rs. 86 crores in the Banking Department. In July 1948 an agreement was reached with the Government of the United Kingdom, regarding the payments to be made to the latter for the military stores and pensions due to British subjects that had served with the Government of Undivided India. The total capitalised value of Central and Provincial pensions and the value of utility stores was estimated at Rs. 296 crores. This amount was paid by a corresponding deduction from the sterling assets of the Reserve Bank of India. As a result of all these financial operations the sterling balances which stood at Rs. 1,733 crores in March 1946 came down to the low level of Rs. 776 crores in the first week of September 1949. In short, within a period of four years India's sterling balances were reduced by half. Since then as a result of the devaluation policy and the improvement in trade conditions, sterling began to accumulate, and on the 31st March 1950, the sterling balances were estimated at Rs. 859 crores.

61. *Indo-Pakistan trade is an expression of the complementary character of the economy of India and Pakistan. Though essential to economic development of both the countries, Indo-Pakistan trade in terms of value represents the bulk of the foreign trade of Pakistan, but not of India.*

The total value of India's foreign trade with all countries including Pakistan in 1948-49 is estimated at Rs. 1,122 crores. Of this, Indo-Pakistan trade accounts for Rs. 193 crores or less than 20 per cent. Indo-Pakistan trade accounts for 18 per cent. of India's imports and 16 per cent. of her exports. The total value of Pakistan's foreign trade in 1948-49 is estimated at Rs. 468 crores. Of this, Indo-Pakistan trade accounts for Rs. 193 crores or 41.2 per cent. For Pakistan, Indo-Pakistan trade is much more important in relation to her export trade than import trade. Imports from India account for 37 per cent. of the total imports of Pakistan, while exports account for as much as 61 per cent. It is obvious from these figures that in terms of value Indo-Pakistan trade accounts for the bulk of Pakistan's foreign trade, but not of India.

This is not to say that Indo-Pakistan trade is the less important to India's economy as compared with her trade with third countries. On the contrary, two of the most important industries of India are considerably dependent for their raw material supplies on Pakistan. The number of commodities sent by Pakistan to India are few, namely, raw cotton, raw jute, hides and skins, fish and bamboos among others. The commodities exported by India to Pakistan are too many to be so enumerated and include all kinds of consumer goods, like cloth, medicinal goods, leather goods, mustard oil and coal and iron and steel goods. The few commodities sent by Pakistan to India are relatively more inelastic in demand than the exports from India to Pakistan.

This, however, is not true of all commodities. Even among the commodities sent by India, there are quite a few like mustard oil, *lungi* cloth, coal and iron and steel goods which, though small in value, are relatively in inelastic demand in Pakistan.

62. *Ever since the partition, the Government of Pakistan have tried to divert foreign trade away from India.*

Indo-Pakistan trade to some extent replaces what was at one time free internal trade between regions that now constitute Pakistan on the one hand and those that comprise the Republic of India. Due to motives of nationalism, sentiments of pan-Islamism and political prejudices the Government of Pakistan, from time to time, through various acts of commission and omission have tried to reduce the quantum of trade between the two countries and increase trade relations with third countries. In the pre-partition year 1946-47, mills in India used to consume more than 9 lakh bales of various types of raw cotton of Pakistan varieties. In 1947-48 the consumption of Pakistan cotton by Indian mills fell to 6 lakh bales, while in 1948-49 only 3.7 lakh bales reached India. Though to some extent raw cotton production in Pakistan has declined in recent years, there is evidence to believe that Pakistan has diverted some of her raw cotton exports to countries which did not formerly consume her cotton. Though in 1948-49 mills in India could get only 3.7 lakh bales of raw cotton the total exports of raw cotton from Pakistan amounted to nearly 9 lakh bales. From the monthly figures of sea-borne trade of Pakistan it appears that Soviet Russia, United Kingdom, Italy and Spain have become important consumers of Pakistan raw cotton. As in the case of raw cotton, the supplies of raw jute from East Bengal are continuously declining. Whereas in 1947-48 jute mills in India consumed about 5 million bales of Pakistan raw jute, in 1948-49 India imported only 4.1 million bales, while in 1949-50 only 6 lakh bales came by September 1949, after which arose the devaluation deadlock. The Government of Pakistan has assigned to India the last priority as a consumer of her goods. Exports from Chittagong to countries other than India have been assigned Priority No. I, while exports of jute in transit *via* Calcutta have been assigned priority No. II and India has been left to buy up the remaining quantity. Prior to the partition exports of raw jute from Chittagong were insignificant. In 1947-48 exports of raw jute from Chittagong amounted to over 7 lakh bales while in 1948-49 raw jute exports are estimated at nearly 12 lakh bales. Besides in 1948-49 Pakistan sent about 7 lakh bales of raw jute through the port of Calcutta. Belgium, Italy, Germany and the United Kingdom have become serious competitors of India in the purchase of raw jute from East Bengal. So far as imports from India are concerned, there has been positive discouragement and discrimination. Before the partition, regions that now occupy Pakistan used to consume more than 500 million yards of cloth produced by Indian mills, and in the First Inter-Dominion Agreement, India had agreed to export to Pakistan 450 million yards of cloth. Actually the quantum of exports in 1948-49, however, amounted to only 174 million yards. Time and again there are reports that in Western Pakistan particularly in Karachi cloth merchants even started a movement for the boycott of Indian cloth. Instead of buying from India, Pakistan has purchased more and more cloth from the United Kingdom, Netherlands, China and the United States. Prior to the partition the people of Pakistan used to consume over 2 lakh tons of Indian sugar. But in 1948-49 imports of sugar by Pakistan were insignificant. It was only after March 1949 when supplies from Cuba and Brazil could not be procured that the merchants of Pakistan purchased during August 1949, about 50,000 tons

of Indian sugar. As contrasted with the attitude of the Government of Pakistan, the Government of India kept an open door policy with reference to imports from Pakistan. Even in relation to exports, the Government of India tried to fulfil both in letter and in spirit the terms of the Indo-Pakistan trade agreement concluded in May 1948. Even though India was herself deficient in iron and steel goods, she imported large quantities from hard currency areas so as to satisfy the requirements of such goods by Pakistan. As compared to other countries she sold her coal to Pakistan at cheap rates.

63. *In September 1949 when the Indian rupee was devalued along with other currencies of the sterling area, the Government of Pakistan decided in favour of non-devaluation.*

Towards the end of July 1944 the gold and dollar reserves of the sterling area declined to a level below the safety mark of £500 million. The pound sterling was devalued in September 1949. Along with the United Kingdom and other countries of the sterling area India also devalued the rupee. For India devaluation was not a matter of choice; it was the necessary consequence forced upon her as a result of large scale devaluation in the sterling area. Once the pound sterling was devalued, India with more than 60 per cent. of her foreign trade with sterling areas, could not have stood apart. Had India not devalued, Indian piece-goods would have failed in their competition with Lancashire piecegoods. Ceylon tea would have become cheaper than Indian tea. East and South African groundnut and manganese would have hampered India's exports and Dundee jute goods would have enjoyed better advantages in the American market. Next to the United Kingdom in recent years India makes the biggest demand for dollars upon the Central Reserves of the sterling area. When the pound sterling was devalued, loyalty to the sterling area of which it had become a fullfledged member enjoined a similar action on India. As a result of the necessity to import larger and larger quantities of food and capital goods from the dollar areas, India had been faced for some time past with a dollar problem. Devaluation would stop the diversion of Indian exports to sterling and soft-currency areas by making Indian goods once again saleable in the American market. Lastly, if India had decided to wait and see while countries of the sterling area had devalued, India's action would not have been taken very seriously in the International financial world. With the expectation of devaluation at a later date, trade would have been disorganised as orders and payments for exports would have been withheld.

In the short run, it appears that most of the adverse effects of devaluation have been avoided. The trends in industrial production show a remarkable recovery. Indian exports have risen to higher and higher levels. Actually the exports in the last quarter of the calendar year 1949 are the highest as compared to each of the previous three quarterly periods. During the months of November and December 1949, exports actually touched a record level of Rs. 50 crores per month, as compared to an average level of Rs. 30 to Rs. 35 crores prior to devaluation. During the six months between July and December 1949, the dollar receipts of India had actually exceeded the dollar payments by nearly 13 million. Though this is a temporary phase, it is encouraging to note that the sterling balances which had declined to Rs. 776 crores in the beginning of September moved up to Rs. 859 crores by 31st March 1950. Even if the seasonal demand for imports goes up in the summer months after March 1950 it will be possible for India to get all the necessary imports within the limit set by the sterling balances agreement. Even the price levels in India

have not moved up to any significant extent between September 1949 and March 1950. On the contrary there is a fall of 5 to 10 per cent. in the case of food and cotton textiles.

While the Indian rupee was devalued the Government of Pakistan decided to maintain its old rate of exchange. The Finance Minister of Pakistan has explained the non-devaluation measure of his country as a step based on purely economic objectives. According to him non-devaluation would (1) serve export interest, (2) bring in cheaper imports and (3) help the Government to bring down price levels. The main items of Pakistan exports are industrial raw materials like raw jute and raw cotton. As the quantum of exports could not be immediately increased, devaluation would not bring in any significant advantage. On the contrary, by devaluation the total earnings of foreign exchange would be reduced to the extent of devalution if prices did not rise. The Government of Pakistan was keen on industrialisation. By devaluation capital goods would be much more costly and there would be danger of over-capitalisation in the case of new industries in Pakistan. Of these three objectives, experience has shown that the second and third have been achieved in some measure at the cost of the first. Experience has shown that though imports have been maintained and prices have gone down, both these results have been obtained at the cost of the export interest. The Government of Pakistan have undermined the importance of Indo-Pakistan trade and have thereby disorganised export trade. As a result of the trade deadlock with India it appears that despite her low crop of only about 23 lakh bales of jute during the season 1949-50 there would be a carry over of at least over a million bales. Similarly in West Pakistan not all the raw cotton produced has been lifted. For the countries that have devalued, Pakistan's raw cotton, raw jute and hides and skins went up in price by nearly 40 per cent. In spite of the adjustments in export duties in the case of raw cotton and hides and skins, it appears that in foreign markets, Indian has a competitive advantage in tea, hides and skins, and Ceylon in tea. Between September 1949 and March 1950 the sterling assets of the State Bank of Pakistan went down by nearly Rs. 50 crores. The foreign exchange spent in 9 months is equal to the total expenditure for financing deficits for the previous two years between August 1947 and August 1949. Imports have thus been maintained by drawing heavily on sterling balances. Larger imports have not resulted in industrialisation. From press reports it appears that imports of as much as Rs. 50 crores are due to military stores from countries like Canada. So far as the reduction in price levels is concerned, it should be remembered that prices had started falling ever since the end of 1948. The general index of price levels in Pakistan which stood at 374 in November 1948 had already gone down to 342 in June 1949, before they came down to 314 after devaluation. If anything, devaluation only served to continue the process of reduction in price levels. To some extent the fall in prices may also be due to the reduction in money incomes of farmers of Pakistan because of stock piling and reduced exports; this has affected adversely their effective demand for consumer goods. The improvement in the food position particularly in Western Pakistan, where a food surplus stock of nearly 8 lakh tons has been accumulated may also account for the reduction in price levels.

64. *With the non-devaluation decision of Pakistan, Indo-Pakistan trade came to a stand-still; in April* 1950 *an Interim Agreement operative upto the end of July* 1950 *was made.*

Pakistan's exports to India in terms of Indian rupees went up in price by 40 per cent. because of the non-devaluation of the Pakistan rupee. Since the

cost of raw jute amounts to 70 per cent. of the cost of production of jute manufactures, if these increased prices of raw jute were paid, all the advantages of devaluation would have been lost in the case of hessian cloth exports to U.S.A. Already in the first half of 1949, the volume of Indian jute goods exports to dollar areas had fallen by 20 per cent. mainly because of high prices. The Indian Jute Mills Association and the Government of India therefore decided not to pay such heavy prices for East Bengal raw jute. Because India stayed off the market, the price of raw jute went down by 28 per cent. between the middle of September 1949 and the end of October 1949. At this stage the Government of Pakistan instituted price control. A price difference of 12 per cent. per bale therefore remained; but in the meanwhile, the Government of India had raised the export duty on jute manufactures from Rs. 80 per ton to Rs. 350 per ton. The raising of the export duty on hessians reduced the capacity of the industry to pay high prices for raw jute. It was estimated that if the 12 per cent. increase in East Bengal raw jute prices was paid, and at the same time, the Government of India kept up its new duty on jute manufactures, hessian cloth would be dearer as compared to the predevaluation price. .Indo-Pakistan trade under these circumstances could not be resumed. At the same time, the Government of Pakistan raised serious difficulties and obstructed the import into India of raw jute bought and paid for prior to devaluation. The Government of Pakistan also caused serious impediments in the way of raw jute from Assam in transit through East Bengal towards Calcutta. The Government of India considered this as a serious infringement of the Indo-Pakistan Trade Agreement and placed a ban on the export of coal to Pakistan. Thereafter, Indo-Pakistan trade virtually came to a standstill.

When India stayed off the market, stocks of raw jute began to accumulate in Pakistan, and in spite of increased purchases on behalf of non-Indian buyers and the support of the Pakistan National Bank, which bought some jute at control prices, stocks remained unsold. As in the case of raw jute, India also did not buy raw cotton from Pakistan after September 1949. Cotton exports from Pakistan, however, continued because of alternative demands. Even after the devaluation controversy, the Government of India continued to sell coal to Pakistan and the latter made maximum purchases of coal. But as explained above, the Government of India had ultimately to place a ban on the export of coal to Pakistan.

Since the beginning of January 1950 large exodus of refugees from East Bengal towards Calcutta had begun and over 15,000 refugees per day from East to West Bengal and 10,000 refugees from West to East Bengal started migrating. Towards the end of April 1950, the Prime Ministers of the two countries met and agreed on a Minorities' Pact so as to create peaceful conditions and reduce to the minimum the large-scale exodus of refugees. This was followed up by an Interim Indo-Pakistan Trade Agreement. It was agreed that the Agreement was to remain operative for a period of three months from the beginning of May to the end of July 1950.

65. *The post-devaluation interim trade agreement between India and Pakistan is based on a balanced exchange of commodities in money terms.*

The Interim Agreement is mainly centred round the export of raw jute by Pakistan in exchange for cotton cloth, jute manufactures, mustard oil, steel and cement from India. By July 1950 India will get 8 lakh bales of jute—19 lakh maunds of cuttings at Rs. 28 per maund, 1 lakh maunds of *Hubbi Jubbi* and Ropes at Rs. 30 per maund and 20 lakh maunds of Rejections at Rs. 34

per maund. The prices are for delivery *c.i.f.* Calcutta and will be paid in Indian currency and credited to the account of the Pakistan Jute Board at the Reserve Bank of India. The total cost of raw jute is estimated at Rs. 12.42 crores in Indian currency, i.e. the average price would be Rs. 30-0-10 per maund. If the overhead charges of Rs. 8 per maund including the Jute Export Duty were paid in Pakistan currency the price of raw jute would be nearly Rs. 14 per maund in Pakistan rupees. If the steamship companies accept Indian rupees, the price would be nearly Rs. 16 per maund in Pakistan rupees. The price of raw jute is thus less than the minimum controlled price of the most inferior raw jute in terms of Pakistan currency and is also lower than the maximum controlled price in India. It should be remembered that a major portion of the supply of inferior quality is consumed in India. It is highly desirable that the imports from Pakistan, do not slacken India's self-sufficiency programme in raw jute, but are used to build up stocks for the coming season. In the meanwhile the Indian Jute Industry should carry out the necessary changes, and use both chemical means and the processes of double warping so that they can consume more and more Indian raw jute for the production of hessian cloth.

In the Interim Agreement raw cotton exports from Pakistan and coal exports from India do not find a place. This may be due to differences of opinion with reference to price and/or prior commitments of Pakistan raw cotton to the United Kingdom Raw Cotton Commission and Indian coal to Australia. If the Interim Agreement works out satisfactorily, there is no doubt that both these will be included in future agreements. Pakistan has agreed to supply 150,000 tons of wheat to India and the question of the price to be paid is being negotiated. If India succeeds in getting this supply it will reduce the necessity for her to import food from hard currency areas to that extent. The agreement will help Pakistan to rehabilitate its internal economy and stem the tide of price recession. The agreement bears out the complementary character of the two economies particularly with reference to the exchange of certain goods such as East Bengal raw jute, Indian *lungi* cloth, mustard oil and steel. If the agreement provides the material support to the moral hopes and aspirations expressed in the Nehru-Liaquat Ali Pact, it will go a long way in reducing the influx of East Bengal refugees into West Bengal. This in itself has an economic advantage which should not be ignored. It is to be hoped that future agreements will be wider both in the range of commodities and the quantities to be traded in.

X. PUBLIC FINANCE

66. *The combined per capita revenue of Central, State and Provincial governments in India is higher by a third than that in Pakistan.*

During the year 1950-51 the total combined revenues of the Central, State and Provincial Governments of India are estimated at Rs. 707 crores, i.e. Rs. 20-14-0 per capita. During the same year the combined Central and Provincial Revenues of the Government of Pakistan have been estimated at Rs. 125.5 crores or Rs. 15-9-0 per capita. Excluding taxation by local authorities, for which upto-date statistics are not available, it appears that the *per capita* taxation in India is higher than that in Pakistan by nearly a third. In other words, Governmental authorities in India can shoulder the responsibility of relatively larger public debts and can undertake developmental schemes, which in the neighbouring country would seem extravagant. The larger *per capita* taxation in India is due to larger taxable income because of the existence of large scale industries

67. *The budget of the Central Government of Pakistan is largely a defence budget; to strengthen the financial position of the Centre greater centralisation of tax resources in Pakistan was found necessary.*

Of the total revenues of Pakistan of more than Rs. 77 crores in the year 1950-51 the Government has budgeted for a defence expenditure of Rs. 50 crores. Besides, even on capital account the Government of Pakistan has made a provision of Rs. 25 crores for defence expenditure. Ordinarily the defence expenditure currently incurred should not be taken over to the capital account. Thus intrepreted, it appears that of the total revenue of nearly Rs. 77 crores, defence expenditure by itself would amount to Rs. 75 crores. The Pakistan Central Budget should, therefore, be viewed mainly as a defence budget.

In order to be able to finance such heavy defence expenditure, the Government of Pakistan had to change the pattern of financial relationship which existed before the partition between the Government of Undivided India and the Provinces under the Act of 1935. After the partition the Provinces of Pakistan had to give up 50 per cent. of the receipts from sales tax, their relative share in the divisible pool on taxes on income other than corporation tax, foregoing of rights of sharing estate duties which are to be levied and so on. The Government of Pakistan gives very little by way of grants to Provinces for developmental purposes. Whereas the Government of India could spare nearly Rs. 25 to 30 crores a year as grants to the Provinces for reconstruction and developmental programmes, till recently, the Government of Pakistan has given an amount of Rs. 1 crore only in the year 1950-51. The Government of Pakistan gives no statutory subvention to any provincial government except the N.W.F.P.

68. *As a result of the partition and the fiscal integration of States the structure of federal financial relations in India has also undergone a change.*

Under the British rule all attempts at bringing the whole subcontinent of India under a uniform federal financial structure had failed because of the existence of nearly 650 small and large Indian States, many of which had their own independent tax systems. A common company law for India, a common banking law, a common code of legislation and copyright and trade marks, a common system of communications, or uniformity in fiscal policy in such circumstances were unthinkable. As a result of the integration and merger of these States since the partition into sizeable economic and administrative units, the Government of India have now placed the various States and State Unions on an equal financial footing with the Provinces. As a result, the States and State Unions have been deprived of their rights to levy taxes on income and inland customs. The Government of India has recompensed these States and State Unions as well as the Provinces with which some State areas have been merged with some portion of the financial loss incurred on account of financial integration. During the year 1950-51 the Government of India has given a total amount of more than Rs. 1.5 crores as grants-in-aid to State Governments to fill up their revenue gap on account of this.

With the separation of Pakistan, the system of sharing revenues from taxes on income other than corporation tax between the Centre and the Provinces became outmoded and it had to be revised to suit the new constitution. Up to the financial year 1949-50 the Government of India had made some *ad hoc* arrangements. In November 1949 the Government of India asked Sir C. D. Deshmukh to give an Interim Award for the distribution of the

divisible pool between various Provinces. The Award is to be operative until such a time as it is finally revised on a long term basis by the Finance Commission to be appointed under the New Constitution. Sir C. D. Deshmukh redistributed the lapsed quota of provinces and areas which have now gone to Pakistan between the provinces of India on a population basis. If the income returns of the year 1943-49 were considered, it is surprising to find that all provinces except West Bengal, Bombay, Assam and East Punjab get as their share in the divisible pool several times the amounts collected within their individual boundaries. The New Constitution of India forbids the provinces from levying any sales tax on articles of inter-provincial trade, and to a great extent repeats the financial provisions of the Government of India Act of 1935. That Act heavily relies on sharing numerous tax resources between the Centre and the Provinces. For some taxes initial central legislation and collection is necessary before the receipts are entirely given over to the Provinces. As the Centre has no financial interest in these latter taxes, in the past it has rarely legislated for them. Hitherto in India, grants to Provinces either as statutory subventions or for developmental purposes given at the discretion of the Centre, have been distributed on short term grounds of expediency rather than on any scientific basis. In future, some impartial institution like the Australian Grants Commission will have to be instituted, if the Provinces are to undertake comprehensive planning schemes, without being involved in an atmosphere of uncertainty with reference to the provision of funds and central assistance.

69. *Since the partition the borrowing policy of the Government of Pakistan appears to have been more successful than that of the Government of India.*

Ever since the partition political uncertainty, indecisive governmental industrial and economic policy, competitive market demand for loanable funds for private investment and speculation in stocks, shares and commodities have increased the liquidity preference among investors in India, for whom the lower interest rates of Government securities, because of the cheap money policy of the Government of India, have been rather unattractive. In each of the years 1947-48, 1948-49 and 1949-50 the discharge of permanent debt and other liabilities have exceeded the total borrowing from the market. Whereas during the latter years of the war, the British Government of Undivided India was able to borrow from the market sizeable amounts, which on an average amounted to more than Rs. 300 crores a year, the annual borrowing after Independence has gone down to less than Rs. 60 crores.

As contrasted with India, the Government of Pakistan have been more successful in their borrowing policy. Within a period of thirteen months between Steptember 1948 and end of March 1949, the Government of Pakistan were able to borrow Rs. 70 crores from the market which may be contrasted with Rs. 40 crores borrowed as new loans by the Government of India during the financial year 1949-50. To some extent the circumstances of Pakistan are different. The investors of Pakistan who are mainly commerical classes, because of the absence of any large scale industries, have been attracted by Government securities. Further, many banks and insurance companies in Undivided India, which had their head offices in India have now been asked by the Government of Pakistan to establish new head offices in Pakistan itself and maintain a prescribed portion of their assets in Government securities. This too might account for the increased borrowing by the Government of

Pakistan. Lastly, the enthusiasm of Muslims for their new State must be considered above all as the most important factor in the successful borrowing programme of the Government of Pakistan.

70. *On the whole the financial position of Provinces in India is more sound than that in Pakistan. Within the last four years they have undertaken comprehensive planning schemes and spent considerable amounts on them.*

The *per capita* revenue of provinces in India is Rs. 10-14-3, which is nearly 40 per cent. more than that in Pakistan where it is Rs. 6-6-0. The Government of East Bengal has a *per capita* revenue of only Rs. 3-14-3 which is less than that of the poorest provinces of India like Assam, Orissa and Bihar. To a great extent the reduction in revenue in the provinces of Pakistan after the partition is due to the changes in the structure of financial relations with the Centre. While in India the expenditure on refugees is more or less the sole responsibility of the Government of India, in Pakistan the Government of West Punjab has undertaken the burden of this expenditure.

Though no uptodate statistical data are available, it appears that the provinces in Pakistan have not been able to undertake any comprehensive developmental programmes. The Provincial Governments in India, however, have continued to spend sizeable amounts even after the partition. Between the years 1946-47 and 1949-50 they have spent an aggregate amount of Rs. 230 crores, of which Rs. 104 crores or 45 per cent. have been spent on capital account and Rs. 126 crores or 65 per cent. on revenue account. Provincial schemes financed from the capital account include electricity, irrigation and roads, while those on revenue account are largely extensions of normal work with reference to the social services like education, medical and public health and the economic activities in aid of production like agriculture, industries, etc. Though the Provincial Development programme is not adequate from the point of view of the needs of a poor country with the large size of India, it must be said that it represents an impressive effort. Unfortunately progress reports from all provinces indicating actual achievement of such vast expenditure have not been issued, and it is not therefore possible to evaluate the success of provincial development programmes. The inflationary conditions which arose after the partition are bound to have created a wide gap between the high targets aimed at and the actual achievements due to increased costs on establishments and materials. To assist the provinces towards the cost of such comprehensive planning, the Government of India have given during the period Rs. 61 crores by way of grants and Rs. 48 crores by way of loans. The provincial development programme in India has thus been carried on by Central assistance to the extent of nearly 35 per cent.

XI. CURRENCY AND BANKING

71. *The Reserve Bank of India continued as the Central Bank of Pakistan until the establishment of the State Bank of Pakistan in July* 1948.

In view of the fact that the banking systems in both the countries were closely inter-woven under the aegis of the Reserve Bank of India it was not possible for Pakistan to have its own monetary system immediately after the partition. A transition period of one year for the change over was therefore prescribed in the Pakistan Monetary System and Reserve Bank Order (1947). Under the transitional arrangements the Reserve Bank of India continued to

perform central banking functions for Pakistan, until it had time to evolve its own mechanism. These arrangements were, however, ended in July 1948 when the State Bank of Pakistan took over charge from the Reserve Bank of India. The sterling assets of the Reserve Bank of India were divided between India and Pakistan on the basis of an agreed formula provided in the Pakistan Monetary System and the Reserve Bank Order (1947).

72. *The Banking system and Money market are more developed in India than in Pakistan. The banking system in West Pakistan was paralysed after the partition by the migration of depositors and indigenous bankers and the closing down of the branches of Indian scheduled and non-scheduled banks.*

The banking system in Pakistan was in a more undeveloped state than in India. Pakistan's share in the number of offices, deposits, advances, bills discounted, as also in the amount of cheques cleared was very small. So far as indigenous banking in Pakistan was concerned, it was almost entirely in the hands of non-Muslims. The mass migration of non-Muslims which took place after the partition, coupled with the closing down of the branch offices of scheduled and non-scheduled banks created an acute shortage of loanable funds in Pakistan. The nature of the loss due to the partition in India was different. Indian banks having branches in Pakistan lost a part of their resources located in Pakistan. In order to minimise this loss, the two countries entered into an agreement which was to govern the inter-Dominion transfer of balances. The rush of refugees to withdraw their deposits from the banks threatened to create a banking crisis in India. But the soundness of the banking structure and the action taken by the Government in stopping the withdrawal of large amounts prevented the occurrence of a crisis.

73. *Insurance companies located in Western Pakistan have suffered considerably on account of the partition. Inter-dominion agreement was reached in order to facilitate transfer of records and movable assets of insurance companies.*

Pakistan was deficient as regards insurance facilities before the partition. After the partition, most of the insurance companies transferred their offices from Pakistatn to India, leaving Pakistan without a major portion of its insurance services. Industry and commerce have been handicapped by the insufficiency of insurance facilities, particularly at a time when they were increasingly necessary in view of civil disturbances. Insurance companies doing substantial business in West Pakistan received a rude shock owing to the partition. These companies had to make good the losses suffered by the policy holders as a result of the post-partition disturbances. At the same time the difficulty of transferring their records and assets from Pakistan made it difficult for them to function. An inter-dominion agreement was reached for the purpose of facilitating the transfer of records and movable assets of Indian insurance companies. Arrangements were also made to minimise the inconvenience caused to evacuee policy holders, and to arrange for the payment of claims to policy holders who had lost their policies, and for the revival of policies which had lapsed on account of the inability of the evacuee policy holders to make regular payments of premia.

74. *Although both India and Pakistan started their independent career under post-war inflationary conditions, the inflationary pressure has been much more severe in India than in Pakistan. In fact after the devaluation of the Indian rupee and non-devaluation of the Pakistan rupee, Pakistan has been experiencing deflationary pressure while the inflationary pressure in India continues unabated.*

The disturbances in the immediate post-partition period aggravated the inflationary pressure in both the countries by reducing agricultural and industrial output, by dislocating trade and transport and by increasing the demand on the part of refugees who were unable to contribute to productive activity. The rise in the price index in Pakistan was, however, much lower than in India. Pakistan was in a relatively more favourable position in view of the fact that while the assets left behind by non-Muslims in Pakistan far exceeded those left behind by Muslims in India, the standard of living of non-Muslims from Pakistan was higher than that of Muslim refugees who left India. Consequently, the expenditure incurred on behalf of the refugees was greater in India than in Pakistan. Fundamental changes in the economic structure resulting from the partition also served to reduce the inflationary pressure in Pakistan while increasing the inflationary pressure in India. Pakistan emerged relatively superior to India in respect of supplies of food and raw materials. The serious deficit in respect of these items in India was responsible for the greater part of the price rise in India. The rise in the prices of food and raw materials was further aggravated by the ill-conceived decontrol policy. It is true that India has emerged superior to Pakistan in respect of industries but the increased cost of living on account of high food prices, which served to raise the wage levels, and the difficulties of obtaining raw materials increased the cost of production and the prices of manufactures. The scope for importing manufactures from abroad was restricted on account of adverse balance of payments as a result of large scale imports of food, raw materials and capital equipment for development purposes. Pakistan, on the other hand, was able to procure necessary foreign manufactures in view of the large foreign exchange earnings which were built up with the help of its exportable surplus in raw materials. Thus the inflationary pressure created by the rise in the prices of foodstuffs, raw materials as well as manufactures in India was to a very large extent absent in Pakistan. As a result of the devaluation of the Indian rupee, the prices of imports were expected to rise and thus serve to increase the inflationary pressure in India. Firm anti-inflationary measures adopted immediately after the devaluation, however, prevented the occurrence of such a serious situation, though they could not succeed in bringing about positive disinflation. Pakistan on the other hand witnessed a serious deflation on account of its inability to sell all its raw jute at the pre-devaluation prices in terms of the Pakistan rupee. Food prices also similarly fell in Pakistan. In view of the fact that Pakistan is primarily an agricultural country, a severe fall in the prices of agricultural commodities is likely to be harmful to the economy of the country.

XII THE STATES

75. *The integration of the former Indian States with India has made it possible for her to have a contiguous large territory which could be developed on uniform lines in the interests of better utilisation of natural and human resources.*

While the partition of the country has created a host of new problems for India and has changed its entire economic structure, the integration of States[1] which has been accomplished within the short period of two years after the achievement of independence will in the long run enable the country to achieve economic progress along uniform lines by the proper utilisation of its natural and human resources. The 500 and odd Indian states, small and big, which enjoyed varying degrees of internal autonomy under the British administration were economically insulated from the rest of the country. Most of them followed economic policies which were somewhat divergent from those of British India. Economic progress was hampered in some of them, while in the case of a few others it was encouraged by the fortuitous circumstance of benevolent Rulers and Dewans. This state of affairs was a serious handicap in the way of the economic unity of India. This will be realised when we remember that in Undivided India the former Indian States occupied 45 per cent. of the total area and 24 per cent. of the total population. Prior to the introduction of the various schemes of mergers and integration, they occupied 48 per cent. of the total area and 28 per cent. of the population of the Indian Union. Looking to the population figures of the Census of 1941, it appears that as a result of the application of various merger and integration schemes, (a) 216 States covering an area of 108,739 square miles with a population of 19.1 millions have been merged in Provinces, (b) 61 States covering an area of 63,704 square miles with a population of 6.9 millions have been taken over as Centrally administered areas, (c) 275 States covering an area of 215,450 square miles with a population of 34.7 millions have been integrated in the Unions of States, and (d) 4 states covering an area of 197,000 square miles with a population of 27.8 millions exist as independent States with separate instruments of accession to the Government of India.[2]

With the merger of some of the States with the existing Provinces and the creation of States Unions, which will be treated as provinces, and the acquisition of control by the Central Government over some other States, we have the beginnings of a uniform administrative and economic system. It will take some time before the administrative arrangements of the States are brought in line with those of the Provinces. In due course, however, this arrangement will be reflected in the economic sphere and will make it possible for the people of these areas to follow economic policies similar to those adopted in the Provinces. The growth of democratic institutions and the consciousness of the people to improve their lot will also be reflected in greater efforts in the economic sphere. The integration of the States, the existence of which was considered a great weakness so far as India was concerned, is a great achievement for the future progress of the country. Unfortunately, but for few exceptions, it is not possible to have accurate data regarding their economic condition. Economic surveys and enquiries will have to be conducted to assess the potentialities of these areas. It will take some time before even a broad picture of the possibilities of these areas can be presented. In view of this though the integration of States will have healthy economic implications for the future, the States will require adequate attention from the Central Government for their proper development and their net contribution may not be large—may even be negative for some time to come.

1. The discussion of the economic significance of the integration of the States is outside the scope of this book; the problem has, however, been indicated in brief here.

2. India: Ministry of States, White paper on Indian States, New Delhi, 1950, p. 58.

The integration of States has led to a reduction in the cost of and increase in the efficiency of administration. The resources of the small States were not enough to provide for economic advancement of the people, and the existence of numerous administrative units meant heavy overhead costs for the maintenance of a multiplicity of *durbars* and other Governmental agencies. The integration of States has diverted a major part of the revenues, which were formerly frittered away by the rulers, to the people. The new large units are financially stronger and can undertake development schemes which were formerly not possible. Because of the large number of States there was a diversity of regulations relating to different aspects of economic life which was harmful to the well-being of the country. This was particularly noticeable in the case of taxation, controls and restrictions on internal trade. Income-tax which is regarded as the most equitable of all taxes was not imposed in quite a few States, while in a number of States it was at much lower levels than in the Provinces. While this may have provided some incentive for the starting of industries in the States, lack of uniformity between Provinces and States in this respect resulted in greater regressiveness in the tax structure, and also led to a considerable evasion of taxation, particularly during the war when the rates of taxation were steepened in British India. Under an ordinance passed by the Government of India in August 1949, Central laws relating to taxation of income which are applicable to Provinces will also be applicable to merged States. Another difficulty experienced by the Provinces was in maintaining effective controls in the face of numerous loopholes provided by the States. The administration of various controls in most of the States was very lax and this encouraged largescale black-marketing and smuggling. The merger of States with adjoining Provinces and the supervision exercised by the Government of India over the administration of State Unions will go a long way in solving this problem. Internal trade in India was also to a large extent affected by the numerous trade barriers erected by the States. The most glaring example of this was the Viramgam customs cordon. The formation of the Saurashtra Union, however, provided an opportunity to the Government of India to abolish this internal trade barrier and to assume charge of customs organisation in Saurashtra. The integration of States will also be beneficial from the point of view of the development of communications which in most of the States are in a very backward condition. The greatest boon conferred by the unification of States is undoubtedly the possibility of undertaking uniform development of the country, unhindered by the pursuit of divergent policies on the part of different States.

Another aspect of the economic significance of the States is the development of two important ports on the West coast of India. Cochin is already one of the important ports besides being a strong naval base. Kandla in Cutch promises to be another important port on the West coast of India. In fact its development has become imperative on account of the loss of Karachi and the consequent diversion of the cargo to the port of Bombay which is hardly suited to cope with the additional burden.

Reference has been made to the financial integration of States in a former paragraph. This reflects the new trend of economic events in the States as referred to above.

76. *So far as the present position is concerned, agriculturally the States are not prosperous. They have good mineral resources; and some of them have made good progress in industries.*

Because of the existence of a feudal system the impetus to carry on efficient agricultural pursuits was lacking in most of the States. As the predominant occupation in the States has been agriculture, the Ruler depended for his own exactions on the rural population. The apparent prosperity of the Ruler and of those few who formed his court was based on the squeezing of the resources of the rural population in one way or another. Systematic efforts were not made to develop the rural areas.

Although in respect of agricultural resources, the States are not in a very happy position, their position in regard to mineral resources is much sounder. Thus Rajputana States are large producers of mica, gypsum, fuller's earth, and beryl. Travancore is upto now the sole producer in India of monazite and zircon, two strategic minerals of which it has extensive supplies. Mysore accounts for almost the entire supply of gold produced in the country. It also produces considerable quantities of chromite and has large untapped deposits of iron ore. Hyderabad produces an appreciable quantity of coal and is a potential reserve of other minerals. Eastern Agency States are by far the best producers of minerals. They account for over half of the iron ore in India and for large quantities of coal, chromite and manganese. In addition to these known and exploited resources, there are vast hidden mineral resources in Vindhya Pradesh, Rajasthan and other States. Owing to the backwardness of most of the States, largescale geological prospecting operations have not been carried out and their potential resources have not come to light. It will, however, be easier in future to locate and exploit the subterranean wealth of these regions.

Development of electric power has taken place to some extent in the States. Mysore stands only next to Bombay and Madras in respect of generation of hydro-electric power and Travancore also generates a considerable amount of hydro-electric energy. Hyderabad and Central India rely to a considerable extent on steam power, while diesel electricity is generated to some extent in Baroda, Jaipur, Cochin and Hyderabad.

Generally speaking, the States have lagged very much behind the Provinces so far as the development of large industries is concerned. Yet some progressive States like Mysore, Hyderabad and Baroda positively encouraged industrial development and can stand comparison with most of the Provinces in this respect. Mysore is important for its iron and steel and general engineering industry as well as its woollen and silk textiles. It has also developed a number of other industries, which include cotton mills, a paper mill, glass works, a telephone factory, an aircraft factory and factories producing electrical goods and plywood. Hyderabad has also a wide range of industries. Among the important ones may be mentioned tanneries, cement, lime and pottery works, paper mills, tobacco works, match factories and cotton gins. Baroda has a highly developed chemical industry in addition to its cotton gins and woollen mills. Central India States have quite a number of cotton mills and gins besides having cement, lime and pottery works. Rajasthan also has a considerable number of the latter. Kashmir manufactures woollen and silk textiles. Cochin and Travancore are important for their rubber and rope works and brick and tile factories. The former State has in addition an oil milling industry and the latter paper mills. Bombay States have glass and sugar factories. In addition to these large industries, some of the States like Kashmir, Mysore, Hyderabad and Rajasthan have well-developed small-scale and cottage industries producing artistic wares, which have managed to survive the onslaught of modern industrialism. In spite of the fact that some of the lead-

ing States had developed the industries listed above, a majority of the States were politically and economically so backward that no industrialist could think of starting factory industries there. The integration of States, however, opens up the possibility of developing industries in these hitherto neglected regions.

77. *The economies of India and Pakistan have been more complementary than those of India and the States. The dislocation caused by the partition is not offset by the present or potential advantages of the integration of States.*

We may pass on to a consideration of the question as to whether from the economic point of view the integration of States has counter-balanced the loss suffered by the country as a result of the partition. In the first place it must be pointed out that India is very much dependent upon Pakistan in respect of industrial raw materials like cotton, jute and superior quality of hides. Since the States do not produce these to the required extent they are not in a position to offset this advantage. Further, the States have a larger deficit in respect of food supplies than the Provinces. As regards minerals, generally speaking the States are better off than Pakistan. Industrial development in the States also seems to compare favourably with that in Pakistan. On the whole, however, it seems that the economies of Pakistan and India are far more complementary than the economies of the States and the rest of India. This reason, combined with the fact that the resources of the States, were freely accessible to Indian industries even before the integration of States whereas the resources of Pakistan are not equally accessible after the partition, are responsible for the severity of the economic dislocation caused by the partition.

XIII. CONCLUSION

78. *In spite of the fundamental changes made in our economic structure by the partition and other events, and the difficulties of recent years, Indian economy has shown remarkable powers of resilience.*

The partition put a severe strain on the economies of India and Pakistan. But we are gradually turning the corner. As a matter of fact, within the short span of three years after the partition, India has shown remarkable resilience and has recovered from most of the short term effects of the partition. The indices of both agricultural and industrial production are on the upward grade. Due to the earnest efforts on the part of the Government, through Grow More Food Schemes, larger procurement, reclamation of wastelands, and a favourable monsoon, India's food deficit has now decreased to manageable proportions. It is estimated that in the year 1950, the expenditure on food imports will go down to less than Rs. 50 crores which may be compared with the heavy expenditure of Rs. 148 crores in 1949. India's raw cotton production has also improved from 21 lakh bales in 1947-48 to 31 lakh bales in 1949-50. Through the efforts of the Indian Central Cotton Committee, more area is being brought under production of medium and long staple cotton, without seriously impinging on food production. These measures include manuring with sulphate of ammonia, use of improved seeds and mixed cropping of cotton with groundnut. Even in raw jute India's production has improved from 16 lakh bales in 1947-48 to nearly 28 lakh bales in 1949-50. The Indian Central Jute Committee have now drawn up a plan for attaining a production of 50 lakh bales by assisting growers in getting the requisite means of production, providing better retting

and transport facilities, double cropping and extending jute cultivation to certain areas suited to jute production in South India. It is estimated that by double cropping alone it would be possible to increase the acreage under the crop by more than 3 lakh acres. The Government's financial assistance both to the Indian Central Jute Committee and the Indian Central Cotton Committee has been increased considerably. Side by side with encouragement to agricultural production, the Provincial Governments in India through legislation and other means are doing their best to make the necessary changes in the structure of agricultural organisation. Seeds and manure are being distributed to farmers at concessional rates and the building of wells is being subsidised. Recent Tenancy Legislation in the Provinces is likely to make farmers take more interest in the land. By greater expenditure on social services and economic activities in aid of production, the Provincial Governments have tried to make vast transfers of purchasing power towards rural areas. Between 1946-47 and 1949-50, the Provincial Governments have spent more than Rs. 230 crores on post-war Reconstruction Schemes over and above their normal revenue expenditure. In most of the Provincial schemes of post-war reconstruction the farming community receives top priority. Even in the policy of controlled prices, the level of agricultural prices has been above that of the prices of manufactured goods. It is true, however, that beyond a certain stage even offers of increased prices will not increase agricultural production in India, until such time as the requisite structural changes in the social organisation and methods of cultivation are effected.

Industrial production has not lagged behind. Whereas the total paid-up capital of all the industries of Undivided India in 1946-47 was estimated at Rs. 455 crores, towards the end of 1947-48 the total paid-up capital in India alone amounted to Rs. 520 crores. Whereas the total employment in perennial factories (private) in Undivided India was 1.76 million persons in 1946, at the end of 1948 such employment amounted to 1.84 million in India alone. The number of industrial disputes and stoppages of work have been reduced from 1,632 in 1946 to 1,176 in 1949, while the total number of man-days lost has been reduced from 12.7 million in 1946 to 6.5 million in 1949. In 1946 the total amount of electrical energy generated in Undivided India was estimated at 4,032 million k.w.h. but in 1949 it had moved up to 4,920 million k.w.h. The coal raisings have risen from 29 million tons in 1946 to 31.5 million tons in 1949, which is the highest peak recorded during the last ten years. Whereas in 1947 out of Undivided India's total production of 600 million lbs. of tea, India produced 557 million lbs. and Pakistan 43 million lbs., in 1949 the production of tea in India alone was estimated at 595 million lbs. Thus the tea industry has more than made good the loss due to partition. Similarly, whereas the installed capacity of Undivided India in 1947 for cement was estimated at 2.7 million tons, in 1949 the installed capacity in India itself is reported to be 2.8 million tons and the production in India has improved from 1.6 million tons to 2.1 million tons. Steel production has risen from 854,000 tons in 1948 to 925,000 tons in 1949, that of paper from 97.9 thousand tons to 103.8 thousand tons, power alcohol from 3.5 million gallons to 6.7 million gallons, super phosphates from 21,000 tons to 43,000 tons and diesel engines from 1,025 to 2,048. The only drop in production is visible in cotton textiles and jute manufacturing industries. The drop in cotton textile production may be attributed partly to the partition and partly to the accumulation of stocks, while the drop in jute manufacturing industry is solely due to the Indo-Pakistan trade deadlock. But now that there are hopes of getting larger internal supplies due to the im-

provement in the production of raw jute and the resumption of trade relations with Pakistan, it may be confidently hoped that even the jute manufacturing industry will show progress in future.

Both agricultural and industrial production have been helped substantially by the improvement in transport position, particularly in the railways. Since the partition, India has imported 447 broad gauge and 51 meter gauge locomotives up to the end of January 1950, while the delivery of another 209 broad gauge, 156 meter gauge and 20 narrow gauge locomotives is expected in 1950-51. The monthly average out-turn of locomotives, coaches and wagons repaired in railway workshops has increased from 145, 1,273 and 5,292 in 1948-49 to 1,732, 1,527 and 6,353 in 1949-50. The passenger miles per route mile have increased from 596,000 in 1938-39 to 1,630,000 in 1948-49, while the net ton miles per route mile have risen from 880,000 to 1,350,000 during the same period. The turn round of wagons has improved from 12.97 days in November 1948 to 10.87 days in November 1949; while the tonnage lifted in the first nine months of the financial year 1949-50 was 15.5 per cent. more than what was moved in the corresponding period of 1948-49. Because of all these factors, even though the index of the physical volume of exports has increased from 66.2 in 1948-49 to 67.7 in 1949-50, the railways have been able to carry the increased load. Overcrowding in the railways has tended to decrease.

Towards the latter part of 1949, the value of exports showed a sudden spurt and in the months of November and December exports touched the record level of Rs. 50 crores per month. Noticeable increases in exports have taken place in tea, spices, cashewnuts, manufactured tobacco, cotton and jute textiles. Exports of cotton textiles in particular have been more than doubled and amounted to 690 million yards in 1949-50. India's sterling balances which stood at Rs. 1,733 crores in March 1946 and had declined to Rs. 820 crores at the end of June 1949, again improved to more than Rs.. 850 crores by April 1950. Further, the foreign exchange situation would be considerably relieved as a result of the three loans from the World Bank, which in the aggregate amount of $62.5 million or nearly Rs. 24 crores. These loans will help India to finance the costs of import of capital goods meant for long-term projects such as land reclamation, transport and the Bokaro Thermal Plant at the Damodar Valley. The reduced food imports will enable India to get larger capital goods imports. The imports of capital goods in terms of value increased from Rs. 39 crores in 1946-47 in Undivided India to Rs. 76 crores in India alone in 1948-49, and amounted to Rs. 103 crores in 1949-50. Larger imports of capital goods will go a long way in replacing worn out machinery and in adding to installed capacity, which in turn will add to industrial production in course of time.

79. *Though there are signs that we have turned the corner, the average man finds himself in serious difficulties because of the continuation of inflationary conditions in the country.*

While the economy has thus partly regained from the shocks of the partition, the picture would not be complete if some of the disconcerting features were not noted. Unfortunately, despite improvements in production the inflationary spiral in the country does not appear to have abated. The Economic Adviser's weekly index of wholesale prices moved up from 297 in 1947 to 391 in April 1950. The cost of living index at Bombay rose from 349 in 1947-48 to 410 by the end of 1949. Despite the fact that the Central Government in their budget for 1950-51 find themselves with a nominal surplus, the

large influx of refugee movement might upset the apple cart of estimates. The Government's borrowing programme ever since the partition has shown no promising results. Because of the stoppage of Government grants to Provinces for plans of development except the Grow More Food Schemes, the scale of planning efforts of the Provincial Governments has been reduced in tempo.

Occasional disturbances leading to fresh refugee movements like those which occurred in the beginning of 1950 add to the difficulties of the situation in as much as production suffers and prices continue at a high level. The strain of the inflationary situation is most severe on the middle classes, who may find themselves extinct in the not distant future, if their lot is not improved. Organised labour backed by political forces is able to utilise the level of prices in its favour by exacting from unwilling employers higher wages. The consequent conflict in industry is one of the important factors in the present economic situation of the country. These trends point to the conclusion that the aim of economic policy should be to see that all classes of people get adequate reward for their work; in other words, we should not only have more production but also equitable distribution. It is hoped that the work of the Planning Commission will result in co-ordination of economic policy in future and in bringing about that balance in different spheres of our economic life which is lacking at present.

CHAPTER I

AREA AND POPULATION

AREA, POPULATION AND DENSITY

The following table gives statistics relating to population, area and the density of population in India and Pakistan in 1941 and 1948.[1] The figures relating to 1941 are from the Decennial Census, while those for 1948 are from official estimates prepared by the Governments of India and Pakistan and published in the "Census of India, Paper 2, 1949" and "The Report to the Food and Agricultuaral Organisation of the United Nations," respectively.

TABLE 1. Area, Population and Density in India and Pakistan, 1941 and 1948.

	Area		Population				Density	
	000 sq. miles	%	1941		1948		1941	1948
			Mn	%	Mn	%		
UNDIVIDED INDIA	1,581	100.0	389	100.0	417	100.0	246	264
INDIA	1,220	77.2	319	82.0	337	80.8	261	276
Provinces	633	40.0	230	59.1	243	58.3	363	383
States	588	37.2	89	22.9	94	22.5	150	160
PAKISTAN	361	22.8	70	18.0	80[2]	19.2	194	222
Provinces	233	14.7	66	17.0	75	18.0	281	323
States	128	8 1	4	1.0	5	1.2	34	38

It will be seen from the table that nearly four-fifths of the total population of Undivided India is in India, which covers a little more than three-fourths of the total area. Pakistan, which accounts for less than one-fifth of the total population, has a slightly larger share in the total area. The density of population in the States is lower than in the Provinces, particularly in the case of Pakistan. The table also indicates the relative importance of States in both the countries. Although nearly one-third of the area of Pakistan is covered by States, they account for a negligible percentage of its population. On the other hand, in India the States cover a little less than half the total area and account for more than a quarter of its total population. In consequence, whereas the problem of States has assumed a great importance in India, in view of the fact that most of the States were small and economically and politically backward as compared to the Provinces, Pakistan did not have any such problem. On account of the integration of States during the two years following the partition, this problem has been satisfactorily solved. As a result of the integration of the States, the number of independent units has been reduced to a minimum and the administration in the States is being brought to the level of the Provinces.

1. *Vide* Appendix I for details relating to the area and population in the different Provinces/States in India and Pakistan in 1941 and 1948. Appendix I also gives an estimate of the population in India in 1950. Appendix II gives district-wise partition of the two divided Provinces of Bengal and Punjab.

2. *Vide* Appendix III for the Pakistan estimates.

The growth of urban population is an indication of the development of trade and industry. The following table gives the magnitude of urban and rural population in India and Pakistan in 1941, the latest year for which these figures are available.

TABLE 2. Urban and Rural Population in India and Pakistan, 1941

	Urban		Rural		Total	
	Mn	%	Mn	%	Mn	%
India..	44.1	13.8	274.8	86.2	318.9	100.0
Pakistan	2.7	8.6	67.4	91.4	70.1	100.0

It will be seen from the above table that India has a proportionately larger urban population than Pakistan. This is the result of greater development of industries and commerce in India than in Pakistan which mainly depends on agriculture. Pakistan has comparatively few towns and its large cities like Lahore and Karachi can hardly compare with Bombay, Calcutta or Madras.

WESTERN AND EASTERN PAKISTAN

Statistics relating to Pakistan as a whole do not clearly bring out the striking contrast between Western and Eastern Pakistan. The following table gives separate figures for Eastern and Western Pakistan.

TABLE 3. Area, Population and Density in Eastern and Western Pakistan, 1941

	Area (in 000 square miles)	Population Mn	Density	% of urban to total population
TOTAL: PAKISTAN	361	70.1	194	8.6
Eastern Pakistan	54	41.8	774	4.8
Western Pakistan	307	28.3	93	14.3

It will be seen from the table that Eastern Pakistan which has only about 15 per cent. of the total area of Pakistan accounts for 58 per cent. of the total population. The density of population in Eastern Pakistan is, therefore, nearly seven to eight times that in Western Pakistan. The comparative backwardness of Eastern Pakistan is clearly indicated by the great disparity between the percentage of urban population to total population in Eastern and Western Pakistan.

In current discussions regarding Pakistan, people often have only Western Pakistan in view. This is due to the fact that Western Pakistan is more advantageously situated in a number of ways than Eastern Pakistan. Besides, it consists of a compact area nearly six times as large as Eastern Pakistan, with natural boundaries which hitherto formed the land frontiers of Undivided India. The capital of Pakistan is also located in Western Pakistan. Whereas these factors account for the importance of Western Pakistan, one has to remember that nearly three-fifths of the population of Pakistan is concentrated in East Bengal which is almost encircled by Indian territory. This feature of Pakistan and the fact that it is divided into two separate regions with a distance of over 1,000 miles between them may not be fully appreciated. Communication between these two units is not easy. The sea route would involve a voyage

between Karachi and Chittagong via Cape Comorin. The journey by land is possible only across Indian territory. Even for air journey it is necessary for Pakistan air services to fly over Indian territory.

MINORITY PROBLEM

The division of the country into India and Pakistan was mainly due to the insistence on the two-nation theory by the Muslim League, and the consequent communal bitterness. The Indian National Congress was opposed to the two-nation theory, though it accepted the partition as an escape out of the dilemma created by the Muslim League. In practice, the division was made on communal lines leading to the cutting up of the Provinces of Punjab and Bengal. In view of this, there existed at the time of the partition a large minority population in both the countries as will be evident from the following table.

TABLE 4. Communal Composition of Population in India and Pakistan, 1941 and 1948, (in millions)

	1941[1]		1948[2]	
	India	Pakistan	India	Pakistan
TOTAL	319	70	337	78
Non-Muslims	276	19	292	21
Muslims	43	51	45	57

According to the table there were at the time of the partition 45 million Muslims in India and over 21 million non-Muslims in Pakistan. The Muslim population, however, constituted only 13.4 per cent. of the total population in India, while non-Muslims in Pakistan accounted for as much as 27.1 per cent. of the total population. Thus the minority problem can hardly be said to have been solved by the partition. The inter-dominion transfer of population which took place on account of the post-partition disturbances has reduced the size of the minority population of both the countries. Large-scale evacuation of minorities took place from East Punjab including East Punjab States, Delhi, Alwar and Bharatpur in India and from the whole of Western Pakistan. The number of Muslim evacuees from India is roughly about 6.5 million, while the total number of non-Muslim evacuees from Western Pakistan is about six million. Although the evacuation of non-Muslims from West Punjab, N.W.F.P. and Bahawalpur is as good as complete, there are still nearly 200,000 non-Muslims in Sind, Khairpur and Baluchistan. In addition to the non-Muslims who have migrated from Western Pakistan, nearly 4 million non-Muslims have migrated from East Bengal to West Bengal and Assam. This movement has been only partially offset by a reverse movement of Muslims into East Bengal, only about a million Muslims having left West Bengal. When we take into account both Eastern and Western Pakistan the number of evacuees from Pakistan comes to about 10 millions, as against about 7.5 million evacuees from India. The net influx of evacuees into India would thus amount to 2.5 millions. As a result of these population movements the total population of India may be estimated at nearly 339.5 millions and that of Pakistan

1. Census figure.
2. *Vide* Appendix III.

at a little more than 75.5 millions.[3] Even after this mass movement of population, there still remain 37.5 million Muslims in India and 11 million non-Muslims in Pakistan. A complete disappearance of the minority problem would involve an exchange of even this remainder. This, however, is out of question in view of the fact that it would mean a net emigration of 26.5 million persons into Pakistan. Pakistan would neither be able nor willing to allow this.

GROWTH OF POPULATION IN INDIA AND PAKISTAN

It may be interesting to compare the growth of population in the two countries. The following table gives the decennial figures relating to the total population in India and Pakistan during 1901 and 1941 and the percentage variation during each decade.

TABLE 5. Growth of Population in India & Pakistan, 1901-41

Year	India		Pakistan	
	Population (Mn.)	decennial increase %	Population (Mn.)	decennial increase %
1901	238	..	46	..
1911	252	6	51	11
1921	252	..	54	6
1931	279	11	59	9
1941	319	14	70	19

Population in Pakistan increased by 52 per cent. during 1901-1941 while the population in India increased by only 34 per cent. during the same period. The rate of growth of population during the four decades was 1½ times that in India. The rate of growth during the decade 1931-1941 too was higher in Pakistan than in India. If the same trend continues in future, there is the likelihood of a more rapid growth of population in the future in Pakistan than in India. In this connection a few comments made by Mr. M. M. W. Yeatts, the former Census Commissioner, in the Census for India, 1941, are interesting. "The increase (in population) is by no means uniform, although a greater figure than for the previous decade is practically universal. Rates are noticeably larger in the north than in the south and have two distinct peaks in the extreme west and north-west and in the east. In fact we have in the Punjab and Eastern Bengal two swarming areas." In the Punjab the growth of population was largely due to agricultural prosperity resulting from extensive irrigational facilities. In Eastern Bengal, on the contrary, it was a case of poorer people multiplying more freely. As the whole of East Bengal and a larger part of the Punjab are now in Pakistan, it may be expected that there would be a tendency for the population of Pakistan to show a rapid growth.

3. These estimates form the basis on which *per capita* figures have been calculated in later chapters.

APPENDIX I

AREA AND POPULATION IN INDIA AND PAKISTAN IN 1941 and ESTIMATES FOR 1948.

(in thousands)

	Area in sq. miles	1941 Census							Estimates of population	
		Total Population	Urban [1] Population	Rural [1] Population	Muslim Population	Non-Muslim Population	No. of Males	No. of Females	1948[1]	1950[1]
INDIA	1,220	318,898	44,144	274,754	42,702	276,196	163,982	154,915	337,211	347,340
I. Provinces										
Madras	128	49,841	7,961	41,879	3,927	45,914	24,800	25,040	53,384	54,290
Bombay	110	28,924	6,866	22,058	2,446	26,478	14,949	13,975	30,970	32,680
West Bengal	28	21,196	4,614	16,583	5,302	15,894	11,493	9,703	21,372	24,320
U. P.	112	56,347	6,999	49,347	8,692	47,655	29,542	26,804	59,941	61,620
East Punjab	37	12,697	1,916	10,782	4,427	8,270	6,853	5,844	14,054	12,610
Bihar	70	36,546	1,962	34,583	4,719	31,827	18,325	18,220	37,741	39,520
C. P. & Berar ..	130	19,648	2,219	17,429	811	18,837	9,845	9,802	20,591	20,920
Orissa	60	13,708	412	13,356	166	13,542	6,707	7,062	13,874	14,410
Assam	54	7,685	225[2]	7,247[2]	1,754	5,931	4,068	3,617	7,749[2]	8,510
II. Centrally Administered Areas										
Ajmer	2	584	214	370	90	494	307	277	612	730
Bhopal	7	785	139	646	110	675	410	375	834	850
Bilaspur	1	110	3	107	1	109	57	53	122	130
Cooch-Behar	1	641	*n.a.*	*n.a.*	243	398	341	300	*n.a.*[3]	*n.a.*[3]
Coorg	2	169	11	158	15	154	92	76	169	170
Delhi	1	918	696	222	305	613	535	383	1,257	1,510
Himachal Pradesh ..	11	935	32	903	29	906	495	441	1,035	1,080
Kutch	9	501	90	411	117	384	239	262	536	550
Manipur	9	512	*n.a.*	*n.a.*	30	482	249	263	*n.a.*	540
Tripura	4	413	*n.a.*	*n.a.*	123	390	272	241	*n.a.*	580
Andaman and Nicobar Islands	3	34	....	34	8	26	22	12	36	*n.a.*
III. States Unions										
Madhya Bharat ..	54	8,986	1,329	7,657	332	8,154	4,725	4,262	9,542	7,870
PEPSU	10	3,424	499	2,925	899	2,525	1,868	1,557	3,790	3,320
Rajasthan	121	11,217	1,647	9,600	898	10,319	5,881	5,366	10,567	14,690
Saurashtra	25	4,014	1,029	2,985	464	3,550	2,043	1,971	4,298	3,960
Travancore-Cochin ..	9	7,493	959	6,534	543	6,950	3,742	3,751	8,026	8,580
Vindhya-Pradesh ..	25	3,569	196	3,373	95	3,474	1,819	1,750	3,790	3,880

	Area in sq. miles	1941 Census							Estimates of population	
		Total Population	Urban[1] Population	Rural[1] Population	Muslims Population	Non-Muslim Population	No. of Males	No. of Females	1948[1]	1950[1]
IV. States										
Hyderabad	82	16,339	2,194	14,144	2,097	14,242	8,347	7,992	17,347	17,690
Jammu and Kashmir	82	4,022	414	3,607	3,074	948	2,130	1,892	4,270	4,370
Mysore..	30	7,329	1,346	5,983	485	6,844	3,763	3,566	7,850	8,060
Sikkim	3	122	....	122	....	122	63	58	129	*n.a.*
PAKISTAN	360	70,102	5,516	64,197	49,333[1]	20,769[1]	37,088	33,057	80,181	....
I. Provinces										
West Punjab	62	15,802	2,433	13,278	11,805	3,997	8,572	7,230	20,233	....
N.W.F.P.	14	3,038	552	2,486	2,789	2,627	1,651	1,387	3,557	....
Baluchistan	54	502	100	401	439	63	295	207	530	....
Sind	48	4,535	892	3,643	3,206	1,327	2,494	2,041	5,052	....
East Bengal	54	41,844	1,381	40,462	29,393	12,451	21,678	20,165	45,921	....
II. States										
Bahawalpur	17	1,341	135	1,206	1,099	242	737	604	1,665	....
Khairpur	6	306	....	....	254	52	168	138	376	....
N.W.F.P. States ..	25	2,378	....	2,378	*n.a.*	*n.a.*	1,251	1,121	2,464	....
Baluchistan States ..	80	356	13	343	346	10	192	164	383	....

1 Figures may not add to total because some of them are not available.
2 Excluding Khasi Hill States.
3. Included in West Bengal on account of merger.

Explanatory Note:—The figures relating to 1941 for both India and Pakistan have been compiled from the "Census of India, 1941" while those for 1948 are from official estimates given in the Census Paper 2, 1949 in the case of India and from the Report to the Food and Agriculture Organisation submitted by the Government of Pakistan. These figures have been arranged according to the present lay-out though the earlier expressions such as Provinces, Centrally Administered Areas, States Unions, and States have been retained for the sake of convenience. According to the Census of India, Paper 2, 1949, the estimate of population for 1948 in India is based mainly on birth/death records. It does not profess to estimate specifically the population shifts as the result of the 1947 movements but offers a dimensional picture." The population figures for 1948 relating to Pakistan given in the report to the FAO are put at 80 million on the assumption of a net inflow of 2 million refugees into Pakistan. But as seen in the body of the chapter, however, there has been a net influx of refugees into India to the extent of 2.5 million. The final figure for the population of Pakistan after taking into account the post-partition population shifts will therefore, be 75.5 million instead of 80 million as given in the report of the Government of Pakistan to the FAO. The figures relating to the population in India on March 1950 are taken from a press communique issued by the Census Commissioner for India. According to the communique, "Refugee movement census was taken twice in 1948 and 1949 and a check-up in regard to the estimates of total population with the electoral rolls has proved the estimates to be more or less correct."

APPENDIX II (A)

DISTRICT-WISE PARTITION OF THE PUNJAB

WEST PUNJAB (PAKISTAN) Districts	EAST PUNJAB (INDIA) Districts
Rawalpindi	Hissar
Jhelum	Rohtak
Gujrat	Gurgaon
Gujranwala	Karnal
Sialkot	Ambala
Sheikhupura	Simla
Montgomery	Kangra
Lyallpur	Hoshiarpur
Jhang	Jullundur
Shahpur	Ludhiana
Attock	Ferozepore
Mianwali	Amritsar
Muzaffargarh	Gurdaspur—Excluding Shakargarh Tehsil
Multan	Lahore—A portion of Kasur Tehsil only.
Dera Ghazi Khan	
Gurdaspur—Shakargarh Tehsil only	
Lahore—Excluding a portion of Kasur Tehsil.	

APPENDIX II (B)

DISTRICT-WISE PARTITION OF BENGAL

WEST BENGAL (INDIA) Districts	DIVIDED DISTRICTS	EAST BENGAL (PAKISTAN) Districts
Midnapore	Jessore	Khulna
Bankura	Nadia	Bakarganj
Burdwan	Malda	Faridpur
Birbhum	Dinajpur	Noakhali
Murshidabad	Jalpaiguri	Tippera
Hooghly	Sylhet (Assam)	Chittagong
Howrah		Chittagong Hill Tracts
24-Parganas		Dacca
Darjeeling		Mymensing
		Rangpur
		Bogra
		Pabna
		Rajshahi

APPENDIX III

ESTIMATES OF POPULATION IN PAKISTAN AND THE MAGNITUDE OF REFUGEE MOVEMENTS

Estimates of Population in Pakistan:—The Government of Pakistan has in its report to the F.A.O. estimated the total population in Pakistan in 1948 at 80 millions on the assumption of a net influx of 2 million refugees. The population before the refugee movements must therefore have been 78 millions. Actually after the partition there has been a net influx of refugees into India to the extent of 2.5 millions. The final figure for the population of Pakistan after taking into account the post-partition shifts will therefore be slightly over 75.5 millions. The Muslim and non-Muslim population in Pakistan respectively for 1948 (Table 4) has been estimated on the assumption that communal distribution remained unchanged between 1941 and the date of the partition.

Refugee Movements:—The number of non-Muslim evacuees coming from West Pakistan to India has been estimated at nearly 6 millions. The following statement which gives the number of Hindus and Sikhs in Western Pakistan according to the Censuh of 1941 and their estimated population in 1947, based on an increase of 12 per cent. on the 1941 Census.[1]

Province or State	Population in 1941 (millions)	Estimated population in 1947 (millions)
West Punjab	3.60	4.05
N-W.F.P.	0.26	0.29
Bahawalpur	0.22	0.25
Sind (Including Khairpur)	1.32	1.47
Baluchistan (Including States)	0.07	0.08
	5.47	6.14

All the Hindus and Sikhs except about 1.5 lakhs who are still in Sind have migrated to India. Therefore, approximately 6 million non-Muslims appear to have migrated to India.

As regards the number of Muslims who have migrated from India to Pakistan, large scale evacuation of minorities took place mainly from East Punjab, including States, Delhi and Matsya Union. The following table indicates the estimated number of Muslims in these Provinces and States, at the time of the partition[2]:—

Province/State	Muslims (000s)
East Punjab	4,900
PEPSU	995
Delhi	417
Matsya Union	378
Himachal Pradesh	32
Total	6,722

On the basis of these figures the number of Muslim evacuees may be put roughly at 6.5 million in view of the fact that the Provinces/States shown above have almost completely been denuded of the Muslim population, and the small number of Muslims who may have still remained there is likely to have been offset by the migration of Muslims from other parts of India, especially the Western Districts of the U.P.

1. Annual Report of the Ministry of Relief and Rehabilitation, 1947-48, p. 78
2. Census of India, paper 2, 1949

CHAPTER II

THE REFUGEE PROBLEM

MAGNITUDE OF THE PROBLEM

From the point of view of the repercussions on the economy of the country, no other problem created by the partition has been so serious as the refugee[1] problem. Both in the short run, as well as in the long run this problem promises to loom large before the country. While in the immediate post-partition period the evacuation and relief of refugees dwarfed into insignificance other difficulties created by the partition, the rehabilitation of refugees is bound to divert a large part of the energy and resources of the country towards its solution for a long time to come. Besides, the repercussions of the vast transfer of population are not restricted to the economic sphere only. The human degeneration witnessed during the disturbances following the partition, the large scale abduction of women and children and the break-up of the normal way of life for millions of persons have grave sociological implications. It may take years for the social fabric to readjust to the impact of this phenomenon.

Mass transfers of population are not unknown to history.[2] For example at the end of World War I, there was an exchange of population between Greece, Turkey and Bulgaria in 1923. Beginning in 1922, Greece, with a population of 5 million, admitted 1.4 million Greek refugees from Asia Minor and Bulgaria. The League of Nations by means of an international loan made arrangements for the evacuation which was spread over 18 months. Thanks to the arrangements that were made, the immigrants were absorbed without much friction and brought to Greece a period of prosperity. An agreement between the Italian and the German Governments in 1939 made provision for the compulsory transfer from South Tyrol to Germany of all German nationals and all those Italians of German origin who were not prepared to become 'full-fledged' Italians. Germany concluded similar arrangements before 1939 with the Governments of Estonia and Latvia. During the war the Germans carried out their ethnographic repatriation on a large-scale. After Germany's defeat the expulsion of the new settlers followed. Another wellknown instance of the refugee problem is the expulsion of Jews systematically carried out by the Nazi authorities. The partition of Palestine also resulted in the evacuation of Arabs and Jews from regions where they were in a monority. A number of members of the United Nations like Poland, Czechoslovakia and U.S.S.R. have accepted the idea of population transfer as a measure of securing a lasting peace and far-reaching population redistributions have taken place after Germany's surrender.[3] But none of these instances can stand comparison with the refugee problem in India, which is unprecedented and unparalleled in magnitude. Never before in the history of the world has such a large-scale transfer of population taken place, under such adverse conditions and within such a short time. More than 15 million persons, that is, more than twice the population of Australia and more

1. 'Refugees' and 'Displaced Persons' have been used interchangeably in the book.
2. See "Economics of Migration"—J. Isaac, p. 3.
3. See "The Displacement of Populations in Europe,"—E. M. Kulischer.

than the entire population of Canada were involved in the post-partition Indo-Pakistan migrations.

SCOPE OF THE CHAPTERS

The various aspects of the Great Displacement will be discussed in two chapters. In this chapter a historical account of the evacuation, relief and rehabilitation measures of the Governments will be given. Although the crucial question of evacuee property forms a part of the problem of rehabilitation, it will be treated in a separate section in view of the importance and complexity of the issue. Finally, an account of the financial implications of the refugee problem will be given at the end of this chapter. In the second chapter attention will be focussed on the economic impact of the mass migrations on India's economy. An attempt will be made to discuss schemes for planned dispersal and resettlement. As the divided provinces of East Punjab and West Bengal have borne the worst shocks of the mass migrations, a study of the special problems of these provinecs followed by a statistical abstract has been given at the end of the second chapter.

I. EVACUATION

Even before the partition of the country, the disturbances in Bengal, Bihar and also the N.W.F.P., and West Punjab had resulted in the migration of nearly five hundred thousand non-Muslims and a few thousand Muslims. The partition added fuel to the fire of communal bitterness and thereby engulfed the whole of Northern India in an orgy of violence and destruction. The life and property of the minorities in these areas were in jeopardy and they were left with no other alternative but to evacuate. In the initial stages the Government of India thought that this evacuation would be temporary and that it would be possible to repatriate the refugees once conditions were restored to normal. In fact both the Governments of India and Pakistan underestimated the magnitude of the problem. As a result of this, the refugees were, in the early days of the evacuation, left to themselves and to the efforts of private organisations which rendered considerable help. By the beginning of September 1947, however, both the Governments realised that there was no other alternative but to effect a planned transfer of minorities from one country to the other. Once the magnitude and seriousness of the problem was realised, steps were taken to adapt the administrative machinery to the exigencies of the situation. The Government of India created a new Ministry on 6th September 1947 to look after the evacuation, reception, relief and rehabilitation of refugees. The Governments of East Punjab and U.P. also established Relief Departments in September 1947, and Provinces to which refugees had migrated in large numbers followed suit. Similar steps were also taken at the Centre and in the Provinces in Pakistan.

INTER-DOMINION AGREEMENT ON EVACUATION ARRANGEMENTS

An Inter-Dominion Conference was held immediately after the partition at which agreement was arrived at between the two countries regarding the arrangements to be made for the safe evacuation of refugees. A Committee of Ministers was set up to ensure co-ordination of administrative measures. All available means of transport—motor cars, trains and aeroplanes—were mobilised. According to the agreement the evacuees were permitted to carry with them

movable property. Searches on evacuees were prohibited and personal belongings seized during evacuation were to be restored by both the countries. In case of personal belongings which could not be restored, the owners were to be paid compensation. The Governments of East and West Punjab were to run the refugee camps located in these Provinces and to provide necessities to refugees in these camps, irrespective of the community to which they might belong. Although the Government of India acted fully in accordance with the agreement, a number of breaches of this agreement by Pakistan were reported.

Agreement was also reached between the two countries on the creation of the Military Evacuee Organisation which was to carry out the Inter-Dominion transfer of population. The M.E.O. was in addition to the Punjab Boundary Force which was to ensure the maintenance of peace. Even before the M.E.O. started functioning on 4th September 1947, nine hundred thousand refugees had already come into India. The function of the M.E.O. was to arrange for the evacuation of minorities and provide military escorts to foot columns, trains, motor lorries, and also to Muslim refugee camps in India and non-Muslim refugee camps in Pakistan. Its task was rendered difficult by large-scale disturbances, attacks on the refugee columns, disruption of communications and devastating floods. But in spite of all these obstacles, the M.E.O. tried to evacuate the maximum number of non-Muslims from Pakistan and Muslims from East Punjab and Delhi. The speed with which this task was performed can be gauged from the fact that the bulk of the evacuation was over by the end of December 1947 and only distant pockets remained to be cleared.

EVACUATION FROM WEST PAKISTAN

West Punjab, N-W.F.P. and Baluchistan: If transport was to be provided to all the refugees, it would have taken months to evacuate them. The most effective means of evacuating lakhs of refugees in the shortest possible time was to organise foot-convoys in place of the small bands of refugees who were formerly trekking into India. The refugees could protect themselves better against mob attacks when they moved in large convoys. The average size of a foot-convoy was about 50,000 persons, the largest convoy, which consisted of Hindus and Sikhs from the Canal colonies of Lyallpur, being four hundred thousand. The bulk of the evacuation by foot from West Pakistan was over by October 1947, by which time over a million refugees were evacuated by foot from West Pakistan. After that only a few convoys crossed the border and between November 1947 and March 1948 only about 23,000 people were evacuated.

Railways too were utilised for the mass evacuation of non-Muslims. The East Punjab Railway suspended regular train services and used all the available rolling stock and locomotives for the evacuation and dispersal of refugees. It ran on an average six refugee trains per day. These trains were so over-crowded by passengers sitting on roofs and hanging on to the foot-boards, doors and windows, that each train carried nearly three thousand refugees. Between August and November 1947, over a million non-Muslims were evacuated by rail from West Punjab and over 1.3 million Muslims from East Punjab. In all over 1.5 million non-Muslims had been evacuated by rail from West Punjab, N. W. F. P., Bahawalpur and Sind and over 1.7 million Muslims were evacuated from East Punjab and Delhi by the end of March 1948.

Motor transport was also availed of for the evacuation of refugees. In all about 2,500 trucks were used for this purpose, about half of them being

provided by the M.E.O. and the rest by Provincial Governments and private organisations. By the end of March 1948, about half a million non-Muslims and a quarter million Muslims were evacuated by motor transport. Motor transport was in the later stages used primarily to bring refugees stranded in small pockets to railway stations.

In spite of the maximum use of the means of evacuation mentioned above, a considerable number of refugees, particularly in distant places in West Punjab and N.W.F.P. could not be reached. The Government of India, therefore, decided to arrange for their transport by air. The regular services between Delhi and West Pakistan were increased and aircraft belonging to Indian airlines were mobilised and a number of B.O.A.C. planes were also engaged, for evacuating refugees stranded in distant places. In all about 50,000 non-Muslims and a slightly less number of Muslims were evacuated in this manner. Till the end of March 1948, the Government of India had spent over Rs. 1.20 lakhs on evacuation, more than half of which was only on air transport.

Sind: Up to the end of 1947 about half a million non-Muslims had been evacuated from Sind. But as a result of serious rioting in Karachi in January 1948 the pace of evacuation increased. The Government, therefore, requisitioned ships for evacuating Hindus and Sikhs from Karachi to Kathiawar ports and Bombay, and special trains were run from Hyderabad (Sind) to Marwar Junction in Rajputana. About 3,000 persons were evacuated daily. The evacuation, however, declined after the introduction by the Government of Sind of the permit system which required evacuees to produce certificates from Income-tax authorities, Municipalities and other Civil authorities that no dues, public or private, were outstanding. In March 1949, however, the Government of Pakistan agreed to relax the provision relating to the payment of income-tax. By the end of March 1948, about a million non-Muslims were evacuated from Sind. The evacuation by rail was affected by a dispute between the two countries regarding the Jodhpur Railway, as a result of which train services between Hyderabad (Sind) and India were suspended on 26th July 1948. It was, therefore, proposed to evacuate the remaining refugees *via* Karachi. But even here, considerable difficulty was experienced because of the ear-marking of shipping space for the Haj sailing. At the beginning of 1949 about a quarter million non-Muslims remained to be evacuated from Sind. These persons mainly belonged to the scheduled castes, who were forced to remain behind, because the Government of Pakistan prevented them from taking their cattle, which constituted their main wealth, along with them. Evacuation from Sind gained momentum in August 1949, on account of the seizure of property belonging to Hindus under the Evacuee Property Ordinance.

The evacuation from Sind was not as sudden as that from West Punjab, and it was carried on under more peaceful conditions. On account of this the evacuees from Sind were in a position to bring some movable property with them. Besides, they also had time to transfer their assets in the form of bank deposits and securities—a task which was almost impossible for the evacuees from other provinces in West Pakistan.

Bahawalpur: Between the date of the partition and the end of October 1947, nearly a hundred thousand non-Muslims migrated from Bahawalpur. The Government of Bahawalpur, however, prevented non-Muslims from leaving the State from November onwards. After the withdrawal of this ban in February, 1948, about 22,000 non-Muslims were evacuated in February and March 1948.

EVACUATION FROM KASHMIR AND HYDERABAD

Owing to the invasion of Kashmir by raiders from Pakistan in October 1947, there was a migration of approximately two hundred thousand non-Muslims to India and to those parts of Kashmir which were in Indian hands. Similarly, owing to the atrocities committed by the Razakars in Hyderabad, about a quarter million non-Muslims migrated to the adjoining Provinces in India. Most of these, however, returned to Hyderabad after it was taken over by the Government of India.

EVACUATION FROM EAST BENGAL

As pointed out before, the Noakhali disturbances in October 1946 resulted in the migration of some non-Muslims to West Bengal. East Bengal did not experience any disturbances immediately after the partition as in the Punjab. But a number of non-Muslims migrated because in addition to harassment by Muslims, their economic condition was fast deteriorating. Up to the end of March 1948 nearly eight hundred thousand refugees had gone to West Bengal.

With a view to preventing this mass migration an Inter-Dominion Conference was held at Calcutta in April 1948, at which it was agreed that since the mass exodus of minorities was not in the interest of either country, both the Governments should take steps to discourage it. The Governments also undertook to create such conditions as would check mass exodus in either direction and to encourage and facilitate the return of evacuees to their homes. With that end in view, both in East Bengal and West Bengal, Provincial Minorities Boards, and under them District Minorities Boards, were to be set up with a view to protecting the minorities, removing fear from their minds and inspiring confidence in them. The majority of the members were to be selected by the minority community members of the Provincial legislature. Severe action was to be taken against any person creating or attempting to create any fear, or insecurity or alarm in the minds of the minority community. The two countries were to take adequate steps to remove complaints regarding discrimination in the grant of export and import licenses and railway priorities to members of the minority community, and to curb all tendencies towards their economic boycott. The position of the minorities does not seem to have improved as a result of the agreements arrived at the Conference, because between April and December 1948 eight hundred thousand refugees migrated to West Bengal. In view of the virtual cessation of the influx of refugees by the end of 1948, the registration of refugees was closed after January 15, 1949. It is estimated that by January 1949, two millions persons had migrated from East Bengal, 1.8 million to West Bengal and the remaining to Assam and Tripura.

REGULATION OF REFUGEE MOVEMENTS

After the restoration of normal conditions in India during 1948 a number of Muslims, particularly from Karachi and Hyderabad (Sind) returned to their homes in India. They mainly went to Delhi or West U.P. One of the reasons put forward for this return is that the Muslim agriculturists of U.P. who had migrated to Sind could not accustom themselves to the irrigation system in Sind, which radically differs from that in U.P. In view of the large-scale influx of Muslims from Pakistan, the Government of India imposed

restrictions on the entry of Muslims into India on 19th April 1948 by introducing a permit system. It also passed the "Influx from Pakistan Control Ordinance, 1948" which provided for the removal of Muslims who refused to return to Pakistan when ordered to do so. The Government of Pakistan has also introduced a similar permit system to control the movement of non-Muslims into Pakistan; this was, however, more or less superfluous because few non-Muslims returned to Pakistan. The permit system is in operation only as regards the movement of persons to and from West Pakistan. So far as East Pakistan is concerned, there is no statutory restriction on the movement of persons either from or to East Bengal.

FRESH DISTURBANCES IN BENGAL, 1950

While the position of minorities in East Bengal was comparatively better during 1949, there was a recrudescence of rioting in February 1950. Owing to the non-devaluation decision of Pakistan and the ensuing trade deadlock between the two countries, the economic situation in East Bengal was steadily deteriorating, particularly as a result of the accumulation of jute stocks and the difficulty of obtaining coal supplies. This deterioration in the economic situation seems to have been to a very large extent responsible for the recrudescence of communal trouble in East Bengal. Serious rioting, similar to the disturbances which took place in Noakhali and Tipperah districts in 1946, started on 10th February in Dacca, and later, spread to the adjoining districts. These disturbances continued for nearly a month before they could be brought under control. In addition to the destruction of property, a number of Hindus were killed in these disturbances. Owing to the consequent insecurity of life and property, Hindus in East Bengal became panicky and migration of refugees from East Bengal which had virtually stopped during 1949 again started. By the end of May 1950 over two million Hindus had migrated from East Bengal to India, 1.5 million to West Bengal 300,000 to Assam and 200,000 to Tripura. The Government had to charter steamers to speed up the evacuation of refugees waiting at Narayanganj and other river ports in East Bengal. Evacuation of refugees was rendered difficult and unsafe by repeated attacks on trains carrying refugees and on those waiting at river ports and at border stations. The refugees were also deprived of the movables which they carried with them before they were allowed to cross the border and in some cases they were even prevented from crossing into Indian territory. Events in East Bengal had their repercussions in West Bengal. Retaliatory attacks on the life and property of Muslims took place in greater Calcutta and in the border districts of West Bengal. In order to bring the situation under speedy control martial law was declared in Howrah. Although the number of persons killed and the loss suffered by Muslims in West Bengal was much less than in East Bengal, as a result of the insecurity created by these disturbances, nearly a million Muslims migrated from India. The seriousness of the situation was realised by both the Governments of India and Pakistan, and a conference was held in the first week of April 1950 between the Prime Ministers of the two countries to find a solution.

NEHRU-LIAQUAT AGREEMENT

The following are the main provisions of the Indo-Pakistan Agreement signed on April 8, 1950 by Pandit Jawaharlal Nehru and Mr. Liaquat Ali Khan, the Prime Ministers of India and Pakistan respectively:—

(a) **Facilities for Migrants:** The agreement emphasised the determination of both the Governments to provide full facilities for the migrants from East and West Bengal, Assam and Tripura. Freedom of movement and protection in transit was to be guaranteed to them. The migrants were to be permitted to carry with them some movable property and jewellery and were also to be freed from harassment by the customs authorities.

(b) **Immovable Property:** The agreement stated that the rights of ownership in, or occupancy of, the immovable property of a migrant should not be disturbed. If during the absence of the migrants such property and land were occupied by another person, it was to be returned to him provided he went back by December 31, 1950. The rights of ownership of a migrant who decided not to return would continue to vest in him and he would have the unrestricted right to dispose of it by sale or by exchange or otherwise. A Committee consisting of three representatives of Government were to act as trustees of the owner. The Committee was to be empowered to recover rent according to law. The Governments of East and West Bengal, Assam and Tripura were called upon to enact the necessary legislation to set up these Committees.

(c) **Enquiry Commission:** Both the Governments affirmed their desire to punish all the guilty persons who were responsible for the disturbances and promised that efforts would be made to recover looted property and abducted women. Both the Governments agreed that they would take prompt and effective steps to prevent dissemination by press or radio or by any individual or organisation of mischievous news calculated to rouse communal passions. A Commission of Enquiry was to be set up immediately to enquire into and report on the causes and extent of the disturbances, and also to make recommendations with a view to preventing the recrudescence of similar disturbances in the future. This Commission was to be presided over by a High Court Judge.

(d) **Minority Commissions:** Apart from these measures, which were mainly calculated to inspire confidence in the migrants, the agreement had certain new features. The Governments of India and Pakistan decided to depute two Ministers, one each from the Governments of East and West Bengal, to remain in the affected area for such period as was necessary, in order to inspire confidence among the refugees. It was also decided to include in the Cabinets of East Bengal, West Bengal and Assam a representative of the minority community. The two Governments agreed to form Minority Commissions for the purpose of observing and reporting on the implementation of this agreement and to take cognizance of breaches or neglect. The Commissions were also empowered to advise on action to be taken on their recommendations. They were to consist of Ministers of Provincial or State Governments concerned, and of representatives of the majority and minority communities from the affected areas. They were to maintain contact with minorities in the districts and consult persons and organisations whenever necessary, and to submit periodical reports to the provincial or state governments concerned. The Central Governments of India and Pakistan and the State and Provincial Governments were normally to give effect to the recommendations of the Commissions when they were supported by both the Central Ministries.

(e) **Minority rights:** In the preamble to the Agreement both Governments guaranteed fundamental rights to the minority communities in India and Pakistan. According to the preamble; "The Governments of India and Pakistan solemnly agree that each shall ensure, to the minorities throughout its territory, complete equality of citizenship, irrespective of religion, a full sense

of security in respect of life, culture, property and personal honour, freedom of movement within each country and freedom of occupation, speech and worship, subject to law and morality. Members of the minorities shall have equal opportunities with members of the majority community to participate in the public life of their country, to hold political and other offices, to serve in their country's civil and armed forces. Both Governments declare these rights to be fundamental and undertake to enforce them effectively.....Both Governments wish to emphasize that the allegiance and loyalty of minorities is to the State of which they are citizens, and that it is to the Government of their own State that they should look for the redress of their grievances."

This Agreement was welcomed by the enlightened sections of public opinion in both the countries. The Central and Provincial Governments in India and Pakistan took swift measures to implement the provisions of the agreement both in letter and spirit. This was responsible for the reduction of exodus from East and West Bengal; in fact a number of refugees returned to their homes. This agreement was soon after followed by a temporary trade pact which ended the trade deadlock. If the mutual goodwill shown after the signing of the agreement is kept up and attempts are made to instil confidence in the minorities, a final solution of the refugee problem would be possible.

II. RELIEF

Simultaneously with the process of evacuation, the Government had to arrange for the reception and relief of refugees, who were pouring into India in millions. Since arrangements had to be speedily made, this problem was a very difficult one. An overwhelming share of the burden of receiving refugees from West Pakistan fell on the Government of East Punjab, which was itself an evacuee Government and which hardly had any time to organise its administrative machinery for this purpose. Similarly, the Government of West Bengal had to bear the brunt of refugee migration from East Bengal. Owing to the heavy pressure on railways, there was little scope for the immediate dispersal of refugees to different parts of India.

HOUSING

The provision of housing was the most difficult task. Some of the refugees were lucky in finding accommodation with their relatives in India. But a majority of the refugees were left without any satisfactory accommodation. A number of camps were opened to house them. Over a hundred thousand tents were put up in these camps and refugees were also provided with accommodation in houses evacuated by Muslims, in military camps and in public institutions which were requisitioned for this purpose. The East Punjab Government closed all educational institutions for a number of months in order to provide for these persons. Accommodation was also rationed in East Punjab.

FOOD

Food, clothing and medical facilities were for a long period provided free in almost all the refugee camps, whether run by the Government of India, or by Provincial or State Governments or by non-Government organisations. Free food was also supplied to Muslims in Indian refugee camps, although as a re-

sult of the failure of the Government of Pakistan to reciprocate in this respect, the Government of India had to send foodstuffs, sometimes even by air, to non-Muslim camps in West Pakistan. In November 1947 the Government of India laid down a uniform scale of daily rations for refugees. Additional items were added to this scale from time to time. Health reports from different refugee camps, however, revealed that deficiencies in the diet prescribed had resulted in malnutrition. It was, therefore, decided in December 1948 to revise the scales of food rations.

In May 1948 the Government of East Punjab decided to stop free rations to those refugees who were not prepared to accept the employment offered to them. Those who were unemployable were allowed to draw free rations, but those who were considered employable and were offered employment by the Employment Exchanges or who were allotted agricultural land were not to be given free rations, although they were allowed to stay in the camps if they wanted to. In case they proceeded to their places of employment, they were given a fortnight's free rations. This policy was adopted mainly with a view to dispersing refugees from camps and to encouraging their rehabilitation.

CLOTHING

Most of the refugees could hardly bring any belongings with them from Pakistan. They did not, therefore, have enough warm clothing to protect themselves against winter. It was necessary to supply them with quilts, blankets and other clothes. Large quantities of clothes and blankets were received as gifts from different parts of India and parcels were received even from abroad. The Government had to send thousands of blankets to the various camps in East Punjab and Delhi, and even to non-Muslim refugees in camps in West Punjab. Millions of yards of cloth of various kinds were distributed in refugee camps. Nearly two million ready made garments were also obtained from the Directorate General of Disposals. Clothing was provided free to poor refugees in camp.

MEDICAL FACILITIES

The task of providing medical facilities to millions of refugees who had suffered physically and mentally as a result of the privations which they had to undergo during their evacuation was enormous. Medical supplies and doctors had to be rushed not only to camps in East Punjab but also to different camps in West Punjab. A number of organisations, like the St. John's Ambulance Brigade, helped in this task. A number of hospitals were opened in camps all over India. Owing to the congestion in the camps and the low vitality of the refugees, great care had to be taken to prevent an outbreak of epidemics by means of inoculations and vaccinations. Supplies of cholera vaccines, sulpha drugs, penicillin, surgical dressing and injection lymph were arranged on a large scale. Special maternity and child welfare centres were also set up. A number of educated refugee girls were trained as nurses. In spite of the abnormal conditions and the shortage of material and technical personnel, health in the camps must be said to have been satisfactory; as a matter of fact the death rate in camps was lower than the average death rate in the country. In West Bengal, however, the heavy congestion caused by the large influx of refugees resulted in the outbreak of cholera during April 1950.

EDUCATIONAL AND TRAINING FACILITIES

In order that the education of refugee children in camps might not suffer, primary and secondary schools were set up in different camps, and teachers were recruited from among the refugees themselves. In some camps training in different vocations like spinning, weaving, tailoring, dyeing, etc., was given.

CAMP POPULATION

The following table gives the total number of refugees in the various camps between March 1948 and February 1950:—

Table 1. Refugee Population in Camps

Month & Year	Population (000)	Month & Year	Population (000)	Month & Year	Population (000)
1948		1949		August	797
March ..	877	January ..	799	September ..	755
April ..	918	February ..	866	October ..	693
May ..	957	March ..	900	November ..	654
June ..	864	April ..	903	December ..	615
July } ..	715	May ..	899	1950	
August ..	760	June ..	863	January ..	
October ..	807	July ..	819	February ..	557
				April	705

N.B.—Figures for September, November and December 1948 and March 1950 are not available.

The population in the camps went on increasing till May 1948. The decrease in the total number of refugees in camps after this month is mainly due to the reduction in the population of camps in East Punjab. The Government of East Punjab stopped the issue of free rations to refugees who were not prepared to accept employment provided to them. As a result of this policy the population in camps in East Punjab decreased from 616 thousand in April 1948 to 241 thousand in October 1948. The influx of refugees from East Bengal, however, slightly increased the population in camps from August 1948 onwards. Gratuitous relief for maintenance was provided to all refugees in camps as well as outside camps in West Bengal till 13th December 1948. After this date such relief was cut down and was confined mainly to certain categories of refugees in camps. Only hard cases outside camps continued to receive gratuitous relief. Camp population again registered an increase in March and April 1950 as a result of further influx of refugees from East Bengal.

The camp population showed a downward trend from May 1949 onwards on account of the decision of the Government of India to discontinue progressively the grant of free doles to refugees and to provide paid work for them instead. This policy was expected to further the objective of the Government, *viz.*, to rehabilitate the refugees rather than to provide relief. The Government of India issued a directive to Provincial and State Governments not to give free doles to refugees after 31st October 1949, but to provide remunerative work to them. As a result of this policy, the number of persons in receipt of doles declined progressively from 730 thousand in April 1948 to 309 thousand in October 1949 and to only 88 thousand in April 1950.

DISPERSAL OF REFUGEES FROM W. PAKISTAN

The distribution of camp population in different provinces and states is given in Appendix I, which clearly indicates that the refugees who came from West Pakistan tended to concentrate mainly in East Punjab and were not willing to move over to more distant places in India. This overcrowding of refugees in the border areas created serious administrative problems and also made their rehabilitation difficult. The refugees who came from West Punjab and N.W.F.P. tended to concentrate mainly in East Punjab, East Punjab States, Delhi and the Western Districts of the U.P. Those from Sind mainly concentrated in Bombay, C.P., Rajputana and Central India States. Most of the refugees from East Bengal concentrated in West Bengal while a few went over to Assam. The distribution of West Pakistan refugees, according to their provinces of origin, in the different provinces and states of India as revealed by the Census of Displaced Persons taken in October 1948 is given in Appendix II.

Having decided on the dispersal of the refugees, who had concentrated in the border Provinces, throughout the country, the Government of India held a conference in July 1948 with Provincial and State representatives in order to allocate refugees to different Provinces and States. The following table shows the quotas fixed at this Conference for each Province and State and the actual distribution of refugees in October 1948:—

TABLE 2. Province and State-wise distribution of West Pakistan Refugees

(figures in thousands).

Region	Refugee quota allotted July 1948	Dispersal of refugees October 1948	Divergence from the quota
Ajmer-Merwara	50	93	+ 43
Assam	250	....	....
Bihar	50	....	....
Bombay	500	264	−236
C. P. & Berar	300	92	−208
Delhi	250	377	+127
East Punjab & PEPSU	1,300[1]	2,790	....
Madras	....	....	....
Orissa	25	....	....
United Provinces	400	412	+ 12
West Bengal	....	....	....
Madhya Bharat	200	59	−141
Matsya	100	53	− 47
Jaipur	100	52	− 48
Udaipur	100	33[3]	− 67
Saurashtra	100	36	− 64
Vindhya Pradesh	50	13	− 37
Bikaner	50	77	+ 27
Jodhpur	50	45	− 5
Total	3,875[2]		

1 This relates to urban population only; besides the entire rural population of West Punjab, and the entire rural population of Punjabi extraction in other areas of West Pakistan were also allotted to East Punjab and PEPSU.
2 Plus the rural population mentioned in footnote 1.
3 Figures for Rajasthan.

A comparison between these quotas and the actual refugee population in the various Provinces and States shows that while some Provinces and States exceeded their quota, others were short of it. Arrangements were made by the Government of India to move the excess to other regions.

DISPERSAL OF REFUGEES FROM E. PAKISTAN

The dispersal of refugees from West Pakistan, however, has not created as serious a problem as that of refugees coming from East Bengal. Since East Punjab and PEPSU were more or less denuded of their Muslim population, the non-Muslim refugees from West Pakistan did not create any overcrowding in these areas. Besides, Bombay, Delhi and the U.P. have also to some extent shared the task of resettling refugees from West Pakistan. On the other hand, West Bengal alone has been required to bear the brunt so far as the refugees from East Pakistan are concerned. As against the influx of 4 million non-Muslims from East Bengal to India, only one million Muslims from West Bengal have migrated to East Bengal. Over 90 per cent. of the refugees from East Bengal have concentrated in West Bengal, and even refugees from Sylhet have mostly gone there instead of migrating to Assam. The net influx of refugees into West Bengal thus amounts to nearly 3 million, which is about 12 per cent. of the population of that Province. West Bengal was a highly overcrowded province, with a density of over 750 persons per square mile in 1941. Wartime shifts in population increased the congestion. The problem of overcrowding has now been further aggravated by these refugee movements. In view of the growing provincialism, hardly any refugees have gone over into the adjoining Provinces of Bihar, Orissa and Assam which are relatively less densey populated.

Another feature of the refugee movement in W. Bengal has been the concentration of refugees in urban area. Even before the partition, the City of Calcutta was the most overcrowded city in the country. This concentration was the result of the operation of a number of factors such as the war-time growth of industries and the famine of 1943. It is further estimated that nearly a quarter of the total population of West Bengal is concentrated in Calcutta. The overcrowding in Calcutta has now been further aggravated by the concentration of refugees from East Bengal in this city. Over 75 per cent. of the refugees who had gone to W. Bengal until April 1948 concentrated in Calcutta. In view of their unwillingness to disperse themselves throughout the Province, the Government of West Bengal, decided to disperse compulsorily the poorer refugees among camps, which were specially opened in the districts, when further heavy influx into Calcutta occurred during August and September 1948. Since Calcutta is very near the East Bengal border, most of the refugees used to come straight to the district camps. Similarly, refugees found at the railway stations in Calcutta or in the city were assembled and removed to district camps. This task was quite difficult because the refugees, who mainly belonged to the middle classes and came from urban areas, were hoping for better prospects of rehabilitation in Calcutta and resisted any attempts to move them to the districts. As a result of the policy of dispersing the refugees from Calcutta, the concentration in that city was slightly, though not satisfactorily reduced. Thus by the end of April 1949, 970 thousand or 60 per cent. of the total number of refugees were still in Greater Calcutta. The fresh influx of refugees, in February and March 1950 must have further added to the overcrowding in the City of Calcutta, although no figures are yet available in this connection.

ADMINISTRATION OF RELIEF CAMPS

In the initial stages, the Government of India was running the relief camps. In 1948, however, it decided to decentralise the administration of camps by handing them over to the Provinces and States in which they were situated. As a result of this policy, the refugee camps in the C.P. were handed over to the

Provincial Government in May 1948, and camps in Bombay, Kathiawar and Rajputana in June and July. The Kurukshetra camp was handed over to the East Punjab Government in August 1948, but was again taken over by the Government of India in the middle of 1949. The following table gives an idea of the population in camps run by the Government of India, Provincial Governments and State Governments in July 1948, January 1949 and August 1949.

Table 3. Administration of Relief Camps

Camps run by	No. of Refugees in thousands		
	July 1948	January 1949	August 1949
Government of India	1,07	98	1,89
Provinces	6,00	6,04	4,80
States	52	97	1,28

III. REHABILITATION

We have so far dealt with the relief measures taken by the Government of India and the Provincial Governments. It can hardly be overemphasized that relief can at best be only a temporary expedient. It is neither possible nor advisable to continue indefinitely with relief measures only. It is estimated, for example, that the Government of India had to spend on camps on an average one rupee per head per day. Besides, the productive capacity of the refugees who can contribute to the national income goes waste, if they are not provided with employment. The most important reason, however, why relief can be regarded as only a short-term measure is that a state of continued dependence on the part of refugees who were formerly earning their own livelihood, is very degrading and is also likely to create a sense of frustration among them. It is, therefore, necessary for the Government to take measures to rehabilitate and resettle the refugees as soon as possible by providing them with homes and employment. Having realised the need for such a course of action, the Government of India advised the Provincial Governments to convert the relief camps into work centres, and to implement schemes for permanent resettlement of refugees as soon as possible. The idea is to reduce by progressive stages the distribution of gratuitous relief and also to provide remunerative work to those who may not find suitable employment. Persons who are employed are to be allowed to stay in camps until they are provided with alternative accommodation. Although the Government of India intended to complete its programme of rehabilitaion by March 1950 at the latest, this has not been possible, owing to the fresh influx of refugees from East Bengal. It is, however, necessary to emphasize that care must be taken to ensure that the refugees do not unnecessarily suffer as a result of either hasty closure of camps or tardy execution of the rehabilitation programme.

RURAL REHABILITATION

East Punjab was less developed than West Punjab in regard to agricultural resources. Irrigation works undertaken by the British Government in pre-war days were mainly located in West Punjab. Non-Muslims who were in possession of some of the best irrigated tracts in West Punjab had to leave them behind and had to be satisfied with allotments of less fertile tracts. Besides, the average size of land held by non-Muslims in West Punjab was very much larger than that held by Muslims in East Punjab because the latter were mainly small farmers.

The following statement shows the great disparity between the total land and irrigated land left behind by non-Muslims in West Punjab and by Muslims in East Punjab and PEPSU:—

	In Million Acres	
	Total Area	Irrigated Area
Land abandoned by non-Muslims in W. Punjab	6.7	4.3
Land abandoned by Muslims in E. Punjab and PEPSU	4.7	1.3

ALLOTMENT OF ABANDONED LAND

Group Allotment: Immediately after the partition, the Government of East Punjab decided to allot the land left behind by Muslims to the refugees coming from Pakistan, so as to provide a source of living to rural refugees and to prevent the productive capacity of these abandoned lands from being wasted. Initially it was decided that each family should be given a holding of six to eight acres depending on the size of the family and the quality of the land. *Taccavi* loans were to be freely given in order to assist those refugees who did not have the necessary equipment. No ownership was to be conferred on the refugees who were to be settled and they were to pay rents at the prevailing rates. This scheme, however, did not come into operation, because a new Department of Rehabilitation which was set up in September 1947 favoured a system of group allotment. Group allotment was preferred to individual allotment because it would (1) ensure quick distribution of land; (2) make it impossible for individuals to claim specific pieces of land; (3) enable refugees coming from particular areas to stay together; and (4) enable them to pool their resources for the purposes of sowing and sharing equitably the standing crops. Land was leased temporarily for one harvesting season to peasant-owners, occupancy tenants and tenants-at-will, no distinction being made between these three classes of cultivators. The group allotment was divided among the members, each allottee being given an area of land which could be cultivated by an average family. The task of allotment was left to the revenue staff. The Government collected land revenue, cesses, water rates and the rents due to the original owners from the allottees.

Temporary Settlement: The group allotment scheme was accepted as a temporary measure, but influential landlords, who had not taken allotments under the scheme, soon began to oppose it and pressed for permanent settlement on the basis of individual rights. Permanent settlement, however, is a complicated and lengthy process. The only thing that could be done, in the meanwhile, was to grant temporarily to individual refugees plots of lands which they were cultivating under the group allotment scheme. Before doing so, the Government of East Punjab reviewed the allotments of land already made. It was brought to its notice that some plots were illegally occupied and in some cases refugees had availed themselves of double allotments in different regions. On February 7, 1948, the Government of East Punjab proposed to replace the system of group allotment by a new scheme which was to take into account the holdings of refugees in West Punjab. Thus land was to be allotted only to those "who in West Punjab, were owners, occupancy tenants under the Punjab Tenancy Act, and tenants under the Colonization of Government Land Act, and to certain other classes of grantees and holders of land in West Punjab to be specified by the Government". While no rights of ownership were to be conferred on the allottees, their possession was to continue. Since the new allotments were to be based on the holdings of the refugees in Pakistan, claims were invited from

refugees who had lands in Pakistan. These claims were largely exaggerated and before making allotments it was decided to verify the claims by obtaining records from Pakistan. For this purpose, the Governments of East and West Punjab came to an agreement in July 1948 to exchange Government records. Meanwhile, individual members of a group who wanted exclusive rights over the pieces of land which they cultivated during the previous year were permitted to get their lands demarcated. In May 1948 the Government of East Punjab extended the temporary allotments on the existing terms for one more harvesting season. The remaining land available for allotment was to be leased to refugee land-holders in proportion to their holdings in West Pakistan.

So far, we have dealt with the allotment of land to owner and tenant cultivators. As regards bigger non-cultivating land-holders, the Government of East Punjab decided to grant them special temporary leases of land on the following basis:—[1]

TABLE 4. Temporary lease of land to Evacuee Landholders

Owners of	100— 150	acres of land in Pakistan	to be given	20	acres in India
,,	150— 200	,,	,,	25	,,
,,	200— 300	,,	,,	35	,,
,,	300— 400	,,	,,	45	,,
,,	400— 500	,,	,,	50	,,
,,	500—1000	,,	,,	75	,,
,,	1000—2000	,,	,,	150	,,
,,	2000—3000	,,	,,	250	,,
,,	3000—4000	,,	,,	350	,,
,,	over 4000	,,	,,	400	,,

Quasi-Permanent Allotment: The Government of East Punjab decided in May 1948 to replace the temporary allotment of land by a quasi-permanent allotment[2]. This change involved a redistribution of the allotted land in pursuance of its new policy of allotting land only to those evacuees who owned land in West Punjab prior to the partition, and of dispossessing all landless evacuees who had during the earlier system managed to secure land in the Province. The exchange of records between the Governments of East and West Punjab being almost complete by February 1949, a detailed plan of individual allotment was worked out on this basis. Land was evaluated in terms of 'standard acres' on the basis of productivity of soil, type of tenure, land revenue, annual lease value, etc. It was found that while the land abandoned in West Pakistan amounted to about 4 million 'standard acres', the land abandoned by Muslims in East Punjab and PEPSU (very little being left behind in other Provinces and States) came to about 2½ million 'standard acres'. It was, therefore, decided to adopt the following scheme[3] of 'graded cuts' operating on a slab system under which the smaller holders could get a proportionately larger compensation than the larger holders:—

Upto 10 acres	25%	150 to 200 acres	75%
10 to 30 acres	30%	200 to 250 acres	80%
30 to 40 acres	40%	250 to 500 acres	85%
40 to 60 acres	50%	500 to 1000 acres	90%
60 to 100 acres	65%	Over 1000 acres	95%
100 to 150 acres	70%		

1. Annual Report of the Ministry of Relief and Rehabilitation, page 20.
2. *Vide* Section on Evacuee Property for a discussion of the problem of permanent settlement.
3. Rehabilitation Review, January to April 1949, page 6.

Quasi-permanent allotment on these lines began in July 1949 and was to be over by the end of the year. For this purpose evacuee land in East Punjab and PEPSU is treated as one large pool. Colonists from East Punjab who had settled in West Punjab in the pre-partition period are settled by their districts of origin. The allotment is done in such a way as to reduce to the minimum the movement of people settled according to the temporary allotment scheme and to enable refugees coming from the same village or tehsil to settle together. Areas in West Punjab in which abandoned holdings were located, as well as areas in East Punjab and PEPSU where allotments were to be made, were graded in order that refugees might be allotted areas in East Punjab and PEPSU which had irrigation facilities and soil similar to those possessed by the land abandoned by them in Pakistan. In order to give the allottees an assurance that they were being permanently rehabilitated for all practical purposes, they were allowed to lease their land for a period of three years, to make improvements, for which they could claim compensation and to effect changes in their allotments with the consent of the authorities. The ownership of land, however, still vests in the original Muslim owners pending the settlement of the evacuee property problem.

The discussion of the allotment of land has been primarily confined to East Punjab and PEPSU because comparatively very little land had been abandoned by Muslims in other provinces and states. This was allotted to the refugees on a temporary basis.

The Government of India also made attempts to bring under cultivation hitherto uncultivated land in Alwar and Bharatpur States for the benefit of refugees. It embarked on a large-scale experiment in scientific colonization of land and in co-operative farming. In view of the difficulties of clearing land overgrown with wild shrubs the Government decided to use tractors and other agricultural machinery. Alwar and Bharatpur have also introduced collective farming on Soviet lines in two villages and have organised co-operative farming in some other villages. The Government of West Bengal has started a colony in the Andamans for 200 refugee families. Other Provinces and States also have undertaken schemes for the settlement of refugees on uncultivated land.

RURAL FINANCE FOR REFUGEES

Since most of the refugees could not bring any resources with them they had to be provided with financial assistance until crops were harvested. *Taccavi* loans were, therefore, granted for the purchase of bullocks, seeds, fodder and implements. In addition to these, food loans were also granted to the cultivators. The exodus of Muslim artisans had created a vacuum and it was very necessary to provide an incentive to the refugees to take their place. Rural artisans were, therefore, provided with loans in order to enable them to maintain themselves and to purchase equipment. It was not enough to provide the allottees with land only. Owing to the disturbances which had taken place in the Punjab, rural houses and wells had suffered considerable damage. Grants and loans were, therefore, made for rebuilding and repairing these houses and wells. These amounted to Rs. 5.6 crores by the end of April 1950.

URBAN REHABILITATION

The rehabilitation of urban refugees primarily involves the provision of housing accommodation and of suitable employment. We have already seen that the problem of rural rehabilitation has not been easy. Urban rehabilitation

has presented still greater difficulties. The proportion of urban population is much higher in the case of non-Muslims who have come to India than in the case of Muslims who have migrated to Pakistan. It has been estimated that the number of urban immigrants is 50 per cent. higher than that of urban emigrants. Another difficulty is presented by the fact that the standard of living of incoming non-Muslims is very much higher than that of the Muslims who have left India. But they have been forced to accept a serious reduction in the standard of living because they had to leave behind their property and other assets. For this reason they have to depend on monetary assistance from the Government. So far as housing is concerned, the houses left behind by Muslims are very much inferior to what the urban refugees were accustomed to in Pakistan. Besides, East Punjab has fewer towns where these refugees could be accommodated. As a result of the great influx to cities and towns and the suspension of building activity during the war, the housing situation was serious even before the partition. The influx of refugees has therefore, rendered it still worse. The occupational disparity[1] between the Muslims and non-Muslim refugees, has resulted in a plethora in certain occupations like business and professions and shortages in skilled and unskilled labour. This has obviously made the problem of re-employment of refugees very complicated.

HOUSING

Quite a number of refugees have found accommodation with their relatives and friends, while a few who brought some money with them were able to purchase houses or to obtain them on rent. But in view of the shortage of accommodation, a majority of the refugees have to live in tents or temporary structures and in houses abandoned by the evacuees or newly built by the Government. The following statement prepared from the Displaced Persons' Census conducted in October 1948 shows the type of accommodation secured by 852 thousand evacuee families comprising 4.4 million persons from West Pakistan:—

TABLE 5. Nature of Accommodation secured by Refugees

	Type of accommodation	No. of families (000's)
1.	Camps	144
2.	Houses—bought or leased ..	195
3.	Houses—temporary	465
4.	Dharamshallas	21
5.	Open	27
	Total ..	852

Although over 140 thousand refugees were estimated to have been accommodated in houses abandoned by Muslims, the disturbances had rendered a number of houses uninhabitable, though some of the damaged houses could be repaired. Some of the Muslim refugees, particularly in Ajmer-Merwara, had asked for restoration of their property, but such requests have been quite negligible. The remaining houses and tenements were allotted to the refugees. The task of allotment of houses to refugees, however, has presented a very complicated problem. Even before the Custodian of Evacuee Property could take charge of the abandoned houses, a number of refugees had already illegally occupied most of them. But the Government decided not to evict these squatters

1. See Chapter III.

without providing them with alternative accommodation because this would have created discontent among them. As a result of this, the allotments made by the Custodian of Evacuee Property could not be carried out and the illegal occupants were confirmed in their possession.

Since all the urban refugees could not be accommodated in the houses left behind by Muslims, the Government of India decided to extend existing towns and to build new townships for refugees. Provincial and State Governments were asked to prepare comprehensive plans for housing in order to meet the requirements of displaced persons. They were also asked to acquaint the Government of India with the cost of such schemes so that the latter might provide financial aid to them. The date for the completion of these schemes was March 1950, though in the case of some Provinces like Bombay the date was extended by one year. Appendix III shows region-wise the nature of the schemes, the amount involved and the number of refugees who are to be provided with accommodation. Housing schemes have already been started in Bihar, U.P., Delhi and East Punjab. A Conference of engineers and other officers of Provinces and States dealing with the problem of housing of refugees was held in August 1949 to examine the difficulties in the way of progress of housing schemes. In July 1949 a Committee was appointed to prepare a scheme for the setting up of rural-cum-urban units for housing refugees.

The schemes are no doubt ambitious but the speed with which they are completed will depend on the availability of building materials. In order to minimise the requirements of scarce building materials like steel, cement, etc., the Government of India has asked the Provincial and State Governments to prepare their schemes in such a way as to utilise locally available materials as far as possible. Besides, the Government of India gives every assistance to Provinces and States in procuring materials. Certain priorities have been laid down for the allotment of houses and proportions have also been fixed on the basis of which allotments are made to refugees coming from different Provinces. In Delhi, an Advisory Committee consisting of representatives of refugees from Western Pakistan has also been appointed.

The Government also allots plots to refugees to build their own houses. After scrutinising the blue-prints prepared for these houses the Government sells them building materials at controlled rates. For this purpose a stock-pile of building materials has been built up by the Government of India. Non-refugee plot-holders who are also similarly assisted have to put their houses at the disposal of the Government for being allotted to refugees for a maximum period of five years. A special branch of the Central Public Works Department has been set up to look after the handling of refugee housing schemes. The Government of India have undertaken to finance housing schemes sponsored by Provinces and States. Besides, refugees who are constructing houses on plots allotted to them by the Government are provided with financial assistance. Appendix IV shows the progress achieved in the provision of housing for refugees in abandoned homes and by means of new housing schemes by the end of October 1949.

The Government of India has planned for the construction of 15 townships which, when fully developed, will accommodate 630 thousand refugees. Work on 11 of these townships has already been undertaken. The following statement gives an idea of the location and size of the proposed townships.

State	Location	No. of persons to be catered for (in thousands)	For Displaced persons from
Bhopal	Bairagarh	15	Sind
Bombay	Ulhasnagar (Kalyan)	130	Sind
	Ahmedabad	30	Sind
Delhi	Kalkaji	35	W. Pakistan
	Sheikh Sarai	10	W. Pakistan
Punjab	Faridabad	40	N.W.F.P. and W. Punjab
	Sonepat	60	W. Punjab
	Bahadurgarh	60	W. Punjab
	Chandigarh	80	W. Punjab
	Nilokheri	15	W. Pakistan
PEPSU	Tripuri	20	Bahawalpur
Kutch	Kandla	24	Sind
Rajasthan	Pratapnagar, Udaipur	20	Sind
U. P.	Shahjehanpur	24	W. Pakistan
W. Bengal	Habra Raigachi	70	E. Bengal
	Total for 15 townships	633	

EMPLOYMENT

Provision of housing accommodation is only one aspect of the problem of urban rehabilitation, the more important being the provision of suitable remunerative occupation. We may discuss this problem under the following heads:—

1. Allotment of shops, business premises and industrial establishments;
2. Grant of loans to enable refugees to settle in business and other professions;
3. Establishment of co-operative societies;
4. Promotion of small scale and cottage industries;
5. Technical and vocational training;
6. Employment through various Government agencies; and
7. Education.

ALLOTMENT OF SHOPS AND INDUSTRIAL ESTABLISHMENTS

Muslim refugees had left behind a number of shops and business premises which the Government of India decided to give over to the incoming refugees. Since a majority of the refugees from Pakistan belonged to the trading classes, the number of shops left behind by Muslims would hardly have sufficed to provide them with business premises. It was, therefore, decided to construct new premises to supplement these. The Government also undertook to repair some of the damaged shops. Since a number of shops left behind by the Muslim refugees were seized and illegally occupied before the Custodian of Evacuee Property could take charge of them, the procedure of allotment was neither smooth nor successful. The Government had decided not to evict refugees from the shops unless suitable alternative premises were found for them; so the illegal occupants were asked to report to the Government and in most cases they were recognised as tenants. Thus very few shops were left for allotment to those who had approached the Government through proper channels.

Muslim refugees migrating to Pakistan had also left behind a number of factories. The Government of India decided to allot the industrial concerns to non-Muslim refugees. So far as East Punjab was concerned, these remained closed for a number of months. The Government of East Punjab decided to lease them by auction or allot by tenders. Small repair shops from which most

of the equipment, however, had already been removed, were also auctioned. In Delhi over 2,000 applications were received by the Custodian of Evacuee Property for about 375 industrial concerns which were under his charge. Some of these had to be restored to the previous owners. The Custodian of Evacuee Property allotted most of the remaining factories, but possession could be given only in the case of a small number of factories, the rest having been illegally taken over. Before allotting industrial concerns the Custodian took into account the Applicant's previous ownership or experience of managing factories. The allottees were charged rent on land and building at 4½ per cent. of the assessed value and on machinery and equipment at 7½ per cent of the assessed value.

LOANS

Loans for Urban Rehabilitation: Since most of the refugees did not have the means to start any business or profession on their own, the Government of India decided to grant them loans. The administration of these loans is in the hands of Provincial and State Governments. Loans are granted for the purchase of machinery and equipment and for the expansion of business. Maximum amounts fixed for each class of borrowers are indicated below:—

1. Traders, shopkeepers and those persons who wish to start their own workshop or cottage industries	Rs. 5,000
2. Doctors, lawyers, architects and consulting engineers	Rs. 3,000
3. Purchase of tongas	Rs. 1,000
4. Others	Rs. 500

Advances made are free of interest during the first year but interest is charged at the rate of 3 per cent. for subsequent years. Instalments for repayment are fixed subject to the condition that advances are completely repaid within four years. In July 1949 Provincial Governments were empowered to extend the period of repayment upto six years in deserving cases. Two sureties are also taken before an advance is made. By the end of April 1950 a sum of Rs. 7,64 lakhs was given to borrowers.

Towards the end of June 1948, the Government decided to give financial help normally only to co-operative societies of refugees or to groups of refugees. This, however, put the borrowers in a very difficult position because co-operative societies are not feasible in certain trades and particularly in professions. Besides, a co-operative society may not always conduce to efficiency or create a sense of responsibility which can be found in an individual enterprise. Further, loans made under this scheme were not sufficient because the amounts involved were not only very small but they were also distributed to a number of persons. In view of these difficulties, the Government of India decided in March 1949 to relax the condition with a view to (i) granting loans to groups instead of formal co-operative societies, (ii) assisting individuals in the form of raw materials and equipment and (iii) giving loans to individuals engaged in professions where co-operative societies or groups were not feasible. In spite of this relaxation, the loans made under this scheme are not at all sufficient for financing large-scale industrial and trading activity of the refugees because of the low maximum limit to the size of each loan.

Rehabilitation Finance Administration: With a view to providing finance for larger industries, the Government of India decided to create the Rehabilitation Finance Administration. A bill was passed on March 23, 1948 bringing the Rehabilitation Finance Administration into being and it commenced work

from June 1, 1948. Actual loan operations were, however, started in September 1948. The Rehabilitation Finance Administration is an autonomous body under the control of the Finance Ministry. Its administration is in the hands of the Chief Administrator, who is also the Chairman of the Executive Board which consists of six other members, three officials and three non-officials. There is also an advisory body, consisting of non-officials representing the provinces of origin and destination of the refugees. It has its head office at Delhi and has branches at Simla, Bombay, Calcutta and a sub-office at Lucknow. The organisation of Rehabilitation Finance Administration is highly centralised, and each loan application has to be sent to the head office at Delhi for approval.

The Rehabilitation Finance Administration has a capital of Rs. 10 crores. It can grant direct loans to the extent of Rs. 7 crores[1] and rediscount bills of exchange up to Rs. 1 crore. In addition to these, it is empowered to guarantee loans made by banks and other financial institutions to refugees up to a maximum of Rs. 2 crores. While under the Provincial loan scheme examined above advances can be made only up to Rs. 5,000/-, the Rehabilitation Finance Administration is empowered to loan amounts between Rs. 5,000/- and Rs. 50,000/- to individuals, partners, joint families or to private limited companies engaged in large scale business and industry. In the case of co-operative societies and public joint stock companies it can grant loans up to a maximum of Rs. 1 lakh. For loans amounting to over Rs. 1. lakh, it is necessary to approach the Industrial Finance Corporation which, however, is not restricted purely to refugee finance.

The borrowers have to pay 6 per cent. interest on the loans granted to them, while the Administration pays 3 per cent. on the amounts which it draws from the Government. Loans are given for a maximum period of ten years and are repayable in annual instalments. Repayment starts after one year but not later than two years from the date on which the advance is made. The Rehabilitation Finance Administration has the first charge on the assets created as a result of the loan. The Administration may refuse to grant loans in case it believes that the industry or business cannot find a permanent place in the economy or in case the applicant has no previous experience or special qualifications to undertake the business or industry. The Administration calls for reports from bankers and other parties in order to ascertain the *bona fides* of the applicants, and it has access to books, accounts and other documents in order to enable it to exercise supervision over the disbursal of the loan by the applicant. Up to the end of 15th April 1950, out of a total of 14,854 applications received, 3,754 were sanctioned. The loans sanctioned amounted to nearly Rs. 4.04 crores. The following table indicates the amount of loans given to refugees from Pakistan according to their provinces of origin:—

TABLE 6. Loans granted by the Rehabilitation Finance Administration, upto 15th April 1950

Province of origin of refugees	Rs. lakhs	Percentage of total
West Punjab	1,98	49
N-W.F.P.	25	6
Baluchistan	8	2
Sind (including Khairpur)	95	24
East Pakistan	67	16
Bahawalpur	12	3
Total ..	4,04	100

1 This was later on reduced to Rs. 5 crores in view of the economy drive of the Government of India.

In view of the fact that refugees from West Punjab got the largest share of loans, the Rehabilitation Finance Administration decided to liberalise the grant of loans to refugees from Sind and East Bengal, and to open branch offices at Nagpur, Jubbulpore, Jodhpur and Jaipur and also in Assam for facilitating this task. In view of the financial difficulties which the Government of India had to face towards the end of 1949, the Rehabilitation Finance Administration decided in December 1949 not to entertain any new applications for loans. In June 1950, however, it was decided to invite applications from refugees from East Bengal.

CO-OPERATIVE SOCIETIES

The Government of India was of the opinion that refugees would be in a better position to utilise Government assistance if they formed co-operative societies, because in this way the limited benefits provided by the Government could be spread over a large number of persons. A Committee was, therefore, set up to recommend the best method of promoting the formation of co-operative societies by refugees, and to suggest the nature of financial aid and other assistance to be given to them. Provincial and State Governments were required to prepare schemes for forming co-operative societies and were asked to give all possible assistance to them in securing premises, raw materials, power and transport. They were also asked to provide technical guidance and to supervise their activities. In order to reduce the shortage of skilled and semi-skilled labour in the country, workers were to be trained in workshops run by co-operative societies. The Government of India also provided training to about 70 candidates in co-operative organisation and sent them to different parts of the country to encourage and assist the refugees in the formation of co-operative societies. The co-operative movement has been popular, however, only in Delhi, where there were 323 co-operative societies with a membership of 6,673 and owned funds of Rs. 3.79 lakhs at the end of August 1949. An amount of over Rs. 14 lakhs was advanced to 153 of these co-operative societies. The Government also sanctioned a scheme for co-operative health centres in order to rehabilitate refugee medical practitioners and to supplement the existing medical facilities. Co-operative societies have also been organised to a smaller extent in East Punjab, U.P., Madhyabharat, Rajasthan, Ajmer-Merwara and Bombay.

COTTAGE AND SMALL-SCALE INDUSTRIES

A Committee, consisting of representatives of the Ministry of Industries and Supply, the Ministry of Relief and Rehabilitation and the Government of East Punjab, was appointed in order to suggest ways of promoting cottage and small-scale industries. The Committee recommended the promotion of small-scale industries not requiring complicated machinery in refugee camps and townships so as to convert them into working centres. It also recommended the provision of expert advice, equipment and technicians to these industries. These short-term plans for the development of cottage and small-scale industries were to be dovetailed into long-term plans for the development of large-scale industries.

In pursuance of the recommendations of the Committee, the Government of India arranged for the sale of disposal stores, valued at Rs. 1 crore and comprising machines, tools, textile stores and consumer goods, to refugees and to co-operative societies formed by them in order to help them to start small

industries. A number of plots were reserved for sale to refugees in Delhi for starting industries. Land was also acquired for the Machinery Hardware and Manufacturers' Co-operative Industrial Society Ltd., representing 275 industrial concerns from West Pakistan which participated in the scheme. The Government also assisted refugees by recommending them to various authorities for the allotment of premises, electricity, raw materials, import and export licenses, railway priorities and other permits. A mission consisting of representatives of the Ministries of Industries and Rehabilitation was sent to Japan in May 1949 to study the working of small-scale and cottage factories there, with a view to starting similar industries in India for the benefit of refugees. The Mission also placed orders for machinery in Japan and secured the services of Japanese technicians for training refugees.

TECHNICAL AND VOCATIONAL TRAINING

The need for the provision of technical and vocational training to refugees became urgent in view of the exodus of a number of skilled Muslims from India. In November 1947 the Labour Ministry extended to refugees facilities for training which were hitherto provided to ex-service men. Training centres in Delhi, Ajmer-Merwara and East Punjab and later on in Bombay and U.P. started training refugees and over 2,000 seats were sanctioned for this purpose. In May 1948 the scheme was extended to all provinces and the number of seats allotted was increased from time to time. Selected persons have to undergo training for a period of six months to one year depending on the nature of the work, and are entitled to a stipend of Rs. 40 per month for board and lodging. Provision was also made for the training of displaced women and girls in Delhi. Practical training is also given in railway workshops, factories and industrial concerns and trainees are entitled to a stipend during the training period in addition to remuneration from their employers. Over 2,000 seats have been allotted to different provinces under the Apprenticeship Training Scheme. A number of trainees have secured employment. Admission of refugees was, however, stopped in July 1949.

A number of schemes have also been started at different centres for imparting technical and vocational training for refugees in camps. The most important among these are the Arab-ki-Sarai Scheme in Delhi and the Nilokheri Scheme in East Punjab. The latter envisages the establishment of a rural-cum-urban colony of 5,000 refugees around small-scale industries run on co-operative lines. In view of the decision of the Government to stop the grant of free doles to refugees by the end of October 1949, training-cum-work centres were set up in order to provide them with means of livelihood.

EMPLOYMENT THROUGH GOVERNMENT AGENCIES

As we have seen before, a large number of refugees were formerly in Government or private service. In the early days of the partition, there was no co-ordination between different Ministries and Government agencies in providing employment to the refugees and this resulted in confusion and delay. In March 1948 an Employment Co-ordination Committee was set up to bring about the co-operation of Provincial and State Governments and industrial and business concerns in providing employment to the refugees. The following agencies help them to find employment:—

(i) **Employment Exchanges:**—Employment Exchanges are run by the Ministry of Labour and they deal with both refugees as well as others. By the end

of April 1950 the Employment Exchanges found employment for over 134 thousand out of a total of over half a million refugees who had registered with them. These included a number of women also..

(ii) **Special Employment Bureau**:—This is also run by the Ministry of Labour. This was established in March 1948 in order to find employment for highly qualified refugees who had high academic qualifications or an experience of ten years or who were having a monthly income of over Rs. 500/- before the partition.

(iii) **Transfer Bureau**:—This is in charge of the Ministry of Home Affairs. It was originally meant for providing employment to surplus staff and Government servants, displaced as a result of the constitutional changes which took place in the Indian States. These facilities were extended to Government servants from N.W.F.P., Sind, and Baluchistan who were displaced as a result of the partition. Government servants from West Punjab and East Bengal and Sylhet were excluded, because the Governments of East Punjab, West Bengal and Assam respectively were expected to provide employment for them. Facilities have also been extended to certain classes of highly qualified non-official refugees. All Ministries of the Government of India have to notify vacancies, except those which are filled through the Public Service Commission, to the Transfer Bureau and preference is to be given to the recommendations made by it. The Bureau also helps displaced Government servants in settling arrears of payment, pensions, provident etc., with the Government of Pakistan. It is estimated that by the end of April 1950, out of a total of over 12,000 persons, who were registered, about 6,800 had been absorbed. Fresh registrations with the Transfer Bureau were stopped from April 15, 1949.

EDUCATION

We have seen before that schools were opened in a number of camps in order that the education of refugee children might not suffer. Education also plays a very important part in the rehabilitation programme. The Government of India have, therefore, taken measures to help them to continue their studies without being hampered by lack of funds or facilities. Provincial and State Governments have been asked to take measures to ensure this. They have been requested to expand the capacity of the existing institutions, to introduce double shifts and to start new schools and colleges. The Government of India have promised to reimburse them for the expenditure incurred up to the primary standard. Financial assistance in the form of loans to students attending colleges and technical institutions, scholarships, and exemption from the payment of fees and grants for the purchase of books, etc. have been sanctioned. Provinces and States have also been asked to waive domicile restrictions.

A number of students who were studying abroad were stranded because their parents had to migrate from Pakistan leaving all their assets behind. The Government of India have undertaken to give them loans to enable them to complete their studies. The loans are repayable by the students or their guardians, or sureties in lump or in instalments after any one of them has been rehabilitated. The loans are stopped if the students fail to pass the required periodical examinations. The Government of India has the first claim on the services of students who are thus financed by them. The Government of India which directly administers this scheme had sanctioned £12,012 to 43 students in the U.K. and $77,137 to 38 students in the U.S.A. till the end of March 1949.

LONG-TERM REHABILITATION PLAN

A Committee was appointed by the Government of India in October 1949, under the Chairmanship of the Honourable Mr. N. Gopalaswami Ayyangar to formulate a long-term plan for the rehabilitation of refugees. The Committee was required to examine the schemes prepared by the Ministry of Rehabilitation, to recommend such a plan in the light of the availability of finance, to allocate expenditure for various schemes during 1950-51 and to make recommendations regarding the setting up of rural-cum-urban units for the rehabilitation of refugees. The keynote of the report, which was submitted by the Committee in the middle of 1950, was 'to provide as far as possible gainful employment and shelter to every displaced family.' We shall discuss below the various recommendations made by the Committee and the action proposed to be taken by the Government of India.

Housing: The Committee recommended that the first priority as regards housing should be given to those who were living in tents or were having no shelter. For this purpose every effort was to be made to expedite housing schemes. In addition to providing evacuees with abandoned houses, the Committee recommended the construction of cheap houses each of which would not cost more than Rs. 500. In order to encourage the construction of such houses, the Committee suggested the granting of loans upto Rs. 1,000 per house, interest being charged on amounts in excess of Rs. 500. Urban houses were to be divided into three classes—cheap, middle class and higher class. Interest-free loans of Rs. 750 were recommended for the first type, an additional sum of Rs. 500 carrying interest, being recommended for the other type of houses. The Committee recommended the grant of interest-bearing advances upto Rs. 5,000 provided the refugees contributed 50 per cent. of any sum required in excess of Rs. 3,000. Financial assistance as well as the supply of building materials at controlled prices for better types of houses were recommended by the Committee, the cost of acquiring and developing land for this purpose being borne by the Government. The Government of India agreed with most of the recommendations in regard to housing, except the scale suggested by the Committee in respect of the grant of interest-free loans, which would have involved an expenditure of Rs. 37.5 crores.

The Committee recommended the construction of townships and integrated rural-cum-urban units only in places where new opportunities for employment could be created or where the entire economy could be radically transformed by means of irrigation and power facilities, as in the case of the Bhakra and Nangal Dam areas in East Punjab.

Education: The Government of India agreed to assume responsibility as recommended by the Committee for providing free primary education to refugee children and for assistance in the shape of school fees to other students. The latter was to continue only for two or three years. The Government also agreed to replace advances of loans to students by a system of stipends except in the case of students undergoing medical, engineering and technical courses and of those studying abroad. It also decided to grant stipends to refugee women for training in nursing and midwifery. The Government of India also sanctioned an advance of Rs. 7 lakhs to the Government of West Bengal for dispersing college students from Calcutta. The Committee recommended the intensification of vocational and technical training, first priority being given to the training of refugees staying in camps.

Provision for Destitute Refugees: The Committee recommended that the Government should consider as a permanent liability the maintenance and care of unattached women and children as well as of old and infirm refugees without any one to support them.

Financial Provision: The Committee recommended an expenditure of Rs. 75 crores spread over three years. This amount was to be spent on educational, vocational and technical training to refugees which was to continue for three years, and on the housing programme which was to be completed by the end of 1950-51. The Government of India has accepted this recommendation. The expenditure upto the end of 1949-50 was Rs. 70 crores.. Thus by the end of 1952-53 a total of Rs. 145 crores will have been spent on refugees. The Committee had suggested the allotment of Rs. 40 crores for 1950-51, Rs. 25 crores for 1951-52 and Rs. 10 crores for 1952-53. The Government of India, however, decided to spend the sum of Rs. 75 crores in three equal annual instalments of Rs. 25 crores each. Greater benefit would have been derived by distributing the expenditure over the three years, as recommended by the Committee, because it would have enabled the completion of almost the entire programme for the construction of houses during 1950-51, and allowed the expenditure to taper off gradually in the following years when less sums would have been required. In view of the financial stringency, however, the Government of India was not in a position to accept this recommendation. It therefore decided to increase the allotment of funds for rehabilitation from Rs. 20 crores to 25 crores during 1950-51. An additional sum of Rs. 5 crores was also provided for refugees coming from East Pakistan. The Committee urged an increased expenditure on refugees in the event of an improvement in the financial position of the Government of India.

In addition to these sums, the Government has agreed, as recommended by the Committee, to make available annually Rs. 1 crore for three years for the construction of the new capital for East Punjab which is expected to absorb 60,000 refugees. The Committee suggested that the Governments of India and East Punjab should rapidly push forward with and ensure the early completion of the Bhakra and Nangal Projects, which would enable the development of the province of East Punjab and make possible the rehabilitation of a large number of refugees.

The Committee recommended that the Governments of Provinces and States should undertake 50 per cent. of the financial responsibility for providing services in camps with effect from 1950-51, in order that "the displaced population in camps should begin to be treated as part and parcel of the population of the State". The Government of India was of the opinion that such arrangements might be possible with effect from 1950-51.

Other Provisions: Special consideration of the problem of Harijan refugees who suffered from greater disabilities was recommended by the Committee. The Government of India also agreed to an expenditure of Rs. 4 lakhs for refugees suffering from tuberculosis. The Commitee expressed the hope that a reasonable settlement of the evacuee property problem would reduce the dissatisfaction among refugees who had considerable properties in Pakistan.

IV. EVACUEE PROPERTY

NATURE OF THE PROBLEM

One of the most important aspects of the problem of rehabilitation is the question of evacuee property. A separate and detailed discussion of this problem has been necessitated by its importance as well as its complexity. As

we have seen already, a large section of evacuees depended on urban and rural property as the primary source of income. Since they had to leave their property behind, they have been forced to look to Government for their livelihood. Their rehabilitation, however, can be speeded up by compensating them for their loss by the allotment of property left behind by Muslims. Temporary and quasi-permanent allotment of land and houses has already been undertaken by Government. But great difficulty has been experienced in arriving at a permanent solution of the problem. A long-term settlement of the problem must necessarily be based on an exchange of evacuee property in both the countries. This, however, presupposes the solution of two main issues. In the first place, there must be an agreement between the Governments of India and Pakistan on the value to be assigned to evacuee property and the method by which it is to be estimated. Secondly, the two countries must agree as to the manner in which the exchange of property should take place, whether on the basis of individual transactions or on a Government-to-Government basis. Both these issues can be settled only if there is a clear understanding and proper co-operation between the two Governments. In the absence of any agreement, it will neither be possible for both the Governments to exchange data, on the basis of which an equitable and rational distribution of property can be effected, nor will it be possible to give effect to decisions in regard to long-term policy arrived at by either country. In view of this, it is most unfortunate that in spite of a number of Inter-Dominion Conferences, a deadlock still persists between the two countries on the issue of evacuee property. We shall outline below the main stages in the negotiations between India and Pakistan.

EVACUEES' RIGHTS TO PROPERTY

At a special meeting of the Joint Defence Council held at Lahore on August 29, 1947 the Governments of India and Pakistan agreed to appoint Custodians of Evacuee Property and decided not to recognise illegal seizure of property. A statement was issued by the Governments of both the countries to the same effect on September 3, 1947. The statement also confirmed the intention of both the Governments to restore property to the rightful owners. Ordinances were passed by the Governments of East and West Punjab in September 1947 appointing Custodians of Evacuee Property to protect property belonging to evacuees. Other Provincial Governments also issued similar ordinances later. The Government of West Punjab, however, simultaneously issued two ordinances, viz., West Punjab Evacuee Property Ordinance and the West Punjab Rehabilitation Ordinance, which were contrary to the spirit of the agreements, since they empowered the Rehabilitation Commissioner of the Province to assume possession and control of abandoned lands, businesses and undertakings, to grant temporary lease of abandoned agricultural holdings for a period of one year and to permit the occupation of any abandoned buildings by refugees or other persons. The Rehabilitation Commissioner was also empowered to assume possession and control of property under the control of the Custodian of Evacuee Property. In view of the unwillingness of the Government of West Punjab to revise the attitude taken by them in these ordinances, the Governments of East Punjab and Delhi were compelled in January 1948 to bring their Evacuee Property Legislation in line with that in West Punjab.

A Conference was held at Lahore on October 3, 1947 at which it was agreed that both the Governments should carry out a common policy in regard to Evacuee Property. In spite of this agreement, the Government of West Punjab

issued an Ordinance on December 1, 1947 which had several confiscatory provisions. According to this Ordinance, no transfer of any evacuee property made by an evacuee was to be effected unless (a) it was registered within a prescribed time limit, (b) the Custodian was satisfied that the transaction was a *bona fide* one, and (c) the transferer produced a certificate from the Income-Tax authorities to the effect that all taxes had been paid by him or that satisfactory arrangements had been made for their payment. Even if all these conditions were satisfied, the Custodian could still refuse to effect the transfer if he felt that it would adversely affect the rehabilitation of refugees. The right of the owner to transfer his property was thus virtually taken away by this Ordinance. Further, evacuee property was to be restored to the owner only if he returned to West Punjab to resume his residence or business. Since this was a remote possibility in view of the insecurity to life and property of non-Muslims, the Ordinance amounted to a virtual withdrawal of the right of the owner to the restoration of his property.

INTER-DOMINION AGREEMENT, DECEMBER 1947

At the Inter-Dominion Conference held in December 1947, agreement was reached on the following matters:—

(a) An evacuee having a savings bank deposit could hand over his pass book at a Post Office in the country in which he was residing, and the Director General of Posts and Telegraphs was to forward a consolidated list of such cases to his opposite number in the other country. The latter was to arrange for the transfer of the accounts so listed without insisting on production of pass book or on verification of signature. The same procedure was also to apply to the Post Office Five-Year Cash Certificates, Defence Savings Certificates and National Savings Certificates.

(b) Evacuee depositors or government agencies empowered by them could apply to the Custodians of Evacuee Property for permits to remove the contents of lockers and safe deposits, subject to the condition that if any person claimed any part of the contents standing to the account of a depositor, the depositor was not to be allowed to remove the contents of his locker or safe deposits until the case was settled.

(c) The Governments of both the countries undertook to protect and safeguard the property belonging to religious, charitable and cultural institutions. At the Inter-Dominion Conference held in September 1947, it had been decided that places in either country, regarded as sacred by any community, should not be allowed to be occupied by members of any other community, and that particular care should be taken to preserve such places. As a result of further negotiations, it was agreed that both the countries should take steps to ensure the restoration, at public expense or otherwise, of all shrines, temples, gurdwaras, mosques and other religious places which had been damaged during the communal disturbances. The hoisting of any emblem or flag, other than that of the religion concerned, on any such building or edifice was to be prohibited. Facilities were to be granted for the removal of all religious books from both the countries.

(d) Provincial Governments were required to take definite measures to facilitate transfer of pension papers with the least possible delay. All complaints of pensioners in either country were to be made to the Auditor-General of the country to which the pensioner had migrated and were to be cleared between the two Auditors-General. Pending transfer of pension papers, pro-

visional payments due for the period ending 31st March 1948 were to be made to the pensioner. The Government of India set up a Central organisation for dealing with claims for pensions, provident funds, leave salary and security deposits of Government servants of Provinces (other than West Punjab and East Bengal) in Pakistan, and servants of local bodies and States which have acceded to Pakistan. This organisation was to arrange for the speedy verification of claims and for their early payment. The Government of Pakistan was also to set up a corresponding organisation.

(e) Contractors whose bills remained unpaid were required to put in a claim to the Chief Secretary of the Province, where they were residing to be forwarded to the Chief Secretary of the Province, where the service had been rendered or material supplied. The payment was to be authorised after making the necessary verification.

EVACUEE PROPERTY MANAGEMENT BOARDS

The evacuee property problem in East Bengal has not presented as great difficulties as it has in West Pakistan for two main reasons. In the first place, there has not been a migration of non-Muslims *en masse* as from West Pakistan. Secondly, the evacuees have not permanently abandoned their property. The main problem facing the evacuees has been the difficulty of managing their property and recovering rents and other dues. At the Inter-Dominion Conferences held in Calcutta in April 1948 and in Delhi in December 1948, it was decided that the Governments of East and West Pakistan should enact legislation for the setting up of Evacuee Property Management Boards in the districts or areas from where a substantial exodus had taken place. These Boards were to be set up only when there was a demand for their establishment. They were to assume management of evacuee property only on the definite request of the owners who declared their intention to return to their homes as soon as normal conditions were restored. Their function was to be of a managerial character and they were not to have the power to alienate the property entrusted to them. These Boards were to consist of members of the minority community.

EVACUEE PROPERTY IN WEST PAKISTAN

The three agreements outlined above were useful in so far as they safeguarded the rights of the evacuees and of evacuee institutions to their property, and prevented any illegal seizure of the property but they hardly touched the core of the problem. The first positive step in the direction of a long-term settlement of the problem was taken at the Inter-Dominion Conference held in March 1948 at Lahore when an agreed draft scheme regarding evacuee property was prepared by the Joint Official Committee. This scheme was further considered at the Inter-Dominion Conferences held in July, August and December 1948. Owing to considerable disagreement between the two Governments on certain points, the scheme underwent modifications at these conferences and final agreement was arrived at only at the conference held at Karachi in January 1949. Before dealing with the negotiations leading to the Karachi Agreement, however, we may make a brief reference to the problem of valuation of evacuee property.

VALUE OF EVACUEE PROPERTY

Unfortunately no reliable estimates regarding the property abandoned by evacuees in both the countries are available. With a view to estimating the value of property left behind by non-Muslims, the Government of India appointed a Registrar of Claims to entertain claims of evacuees to both movable and immovable property abandoned by them in Pakistan. By the end of July 1948 nearly 96,650 persons had put up claims for Rs. 10.26 crores in Delhi Circle alone. Since it was felt that these claims were exaggerated the Government of India wound up the organisation of the Registrar of Property Claims. Another attempt was made to record claims to property when the census of evacuees was taken in October 1948. According to this census, the evacuees put up a claim for Rs. 3,929 crores. This also appears to be an exaggerated figure. An impartial estimate of the property left by non-Muslims is very difficult to make in view of the fact that a number of records relating to land revenue, property tax and income tax have been left in Pakistan. But there is no doubt that the property left behind by non-Muslims in Pakistan is, on a conservative estimate, worth not less than twice as much as that left by Muslims in India, on account of the fact that the economic condition of the former was far superior to that of the latter.[1]

The Government of India passed the Displaced Persons' Claims Act, 1950 under which claims to the immovable property left by evacuees in West Pakistan were to be registered during the period July 1, 1950 to September 30, 1950. The evacuees could register their claims to buildings in urban and rural areas, industrial undertakings and agricultural land. Agricultural land in West Punjab and house property in rural areas, of which the current cost of construction was under Rs. 20,000 were to be excluded from the operation of this Act. Persons giving wrong information were liable to be punished with imprisonment and fine and also liable to forfeit their claims to rehabilitation benefits.

JOINT OFFICIAL COMMITTEE'S SCHEME

At the Inter-Dominion Conference held at Delhi in December 1947, a Sub-Committee consisting of two officers from each country was appointed to consider the problem of evacuee property. It was decided that the proposals of the Sub-Committee should be considered by both the Governments, which were then to furnish their own schemes for the treatment of movable and immovable evacuee property to a Joint Committee of officials. Both the countries were then to consider the report of the Joint Official Committee. The scheme prepared by this Committee, which met in March 1948 was as follows:

(a) **Agricultural Property**:—The country in which evacuee agricultural property was situated was to acquire it on payment of a fair value, except that part of it, which the Government had permitted to be exchanged or sold or to be restored to the owner. The fair value was to be determined by a Joint Valuation Board, on which each country was to have representatives, on the basis of the average price prevailing for similar land during the period June 1927 to June 1947. The difference between the total value in both the countries was to be paid in the form of bonds bearing 1½ per cent. interest, free of income-tax and of not more than twenty years' maturity; these bonds were to be freely

1. From a news item published in the Times of India, dated 20th July 1949, it appears that the Government of India has put up a claim of Rs. 1400 crores to the Government of Pakistan.

transferable between the two countries. A list of evacuee owners and the rents due to them was to be exchanged half-yearly, and the difference due by one country to the other was to be paid. The rents collected were to be paid to the evacuee owners.

(b) **Urban Immovable Property:**—The Provincial Governments were to be allowed to acquire or requisition urban immovable property on payment of fair compensation which was to be determined by a Joint Government Agency. The owners were to be permitted to sell or exchange property not acquired or requisitioned by the Government. The Government of the country, in which the property was situated, was required to provide facilities to evacuees for the purpose of sale or exchange. The Governments of India and Pakistan were also to set up a Joint Government Agency for sales and exchanges in order to supplement the efforts of evacuees and private agencies. The Central and Provincial Governments in both the countries were expected to see that no organised attempts were made to bring down the prices of evacuee properties by the formation of rings, syndicates or by boycotting. In order that the owners of other property may continue to receive rents, the Committee recommended the establishment of a Joint Urban Assessment Board for the purpose of deciding the basis on which to assess rents due to evacuees. The two countries were to exchange accounts relating to rents every six months with a view to paying the rents to the evacuees.

(c) **Movable Property:**—Movable property was to be normally restored to the evacuee owner except where it had been requisitioned or acquired by the Provincial Government or taken over by the Rehabilitation authorities. The evacuee was to have the right to manage or dispose of movable property restored to him in any manner and even to export it to the other country. The Custodians were to ensure the payment of full compensation for movable property requisitioned by the Government.

(d) **Other Provisions:**—The Provincial Governments were to take steps to ensure the safety of the evacuee owners and their agents and also to provide transport facilities. Reasonable exchange facilities were to be given for remittances of proceeds from the sale of evacuee property, and customs, export and import controls were to be relaxed. An Inter-Dominion Commission consisting of the Secretaries of the Governments of India and Pakistan was to supervise the working of the arrangements, and an Inter-Dominion Refugees' and Evacuees' Council was to be established at Ministerial level to resolve matters on which the Inter-Dominion Commission could not reach an agreement.

If the scheme prepared by the Joint Official Committee had been accepted the problem of evacuee property would have been solved satisfactorily because it would have made possible the exchange of agricultural property, provided facilities for the sale or exchange of urban immovable property at fair prices and ensured the receipt of rents by evacuee owners in the interim period. But while the Government of India was prepared to accept the scheme, the Government of Pakistan delayed its decision. When the scheme came up for consideration at the Inter-Dominion Conference at Lahore in July 1948, it became clear that the Government of Pakistan was unwilling to pay the difference in value which was bound to arise in case of a Government-to-Government exchange of agricultural property in view of the excess of the land left behind by non-Muslims in Pakistan over the land left behind by Muslims in India. The Government of Pakistan put forward the plea that it required more data relating to agricultural land before giving a definite decision as to whether

the settlement should be as between the two Governments or as between individual evacuees. It was finally decided that special revenue officers should be appointed by both the Governments to undertake the copying of revenue records. A Special Joint Committee was to be set up to supervise and expedite the work. No agreement was reached on the question of immovable urban property at this conference also, although it was decided to set up the Joint Urban Assessment Board to prepare a locality-wise list of all urban immovable property in both the countries and to assess the value of such property. The scheme of the Joint Official Committee in regard to movable property was accepted at this Conference.

In spite of the agreement reached at the Inter-Dominion Conference, however, the Government of Pakistan did not supply to India, even by the end of November 1949, agricultural records regarding West Pakistan Provinces except for West Punjab, although the Government of India had supplied the records for East Punjab, East Punjab States and Delhi. The Government of Pakistan informed the Government of India at the Inter-Dominion Conference in December 1948 that it could not agree to the setting up of the Joint Urban Assessment Board. In fact the agreement reached at the Inter-Dominion Conference in July 1948 was not at all ratified by the Government of Pakistan till the end of that year. Besides, the following measures taken by that Government actually made the position of non-Muslim evacuees worse. In the first place, the confiscatory provisions of the West Punjab Rehabilitation Ordinance were extended to the whole of Western Pakistan. Secondly, the Government of Pakistan also extended evacuee property legislation to cover partnership, firms, as a result of which if one of the partners left Pakistan for India, the business was treated as evacuee property even if te other partners stayed in Pakistan. Finally, the Government was empowered to utilise the rental income from evacuee property for granting allowances to the refugees in Pakistan. Provision was also made for the pooling of evacuee property and giving it over to the refugees.

INTER-DOMINION AGREEMENT ON EVACUEE PROPERTY, KARACHI, JANUARY 1949

At the Inter-Dominion Conference held in Delhi in December 1948, the Government of Pakistan again put forward the plea that it had not been able to collect all the data which was necessary to enable it to come to a conclusion, and that it would be in a position to come to a definite decision in a month's time. As a result of this attitude, the scheme submitted by the Joint Official Committee in March 1948 was not considered till January 1949, when an agreement was reached between the two countries at the Karachi Conference in regard to the disposal of movable property, and the procedure of Inter-Dominion sales and exchanges of urban immovable property. Some of the important provisions could not be incorporated in the Karachi Agreement. Thus no agreement was reached on the question of sales and exchanges of agricultural property. The following were the main provisions of the agreement:—

(a) **Area of applicability**: The Government of India was in favour of making the agreement applicable to the entire area of both the countries. But the Government of Pakistan wanted to restrict the area of applicability of the agreement to only a few provinces in India. Ultimately it was decided that the Agreement should apply to the whole of West Pakistan, and to North-Western areas in India, viz. East Punjab, Patiala and E. Punjab States Union, Himachal Pradesh, Delhi, Bharatpur, Alwar and Bikaner. Some additional areas in India,

viz. Ajmer-Merwara, Rajasthan Union, Saurashtra, and Western Districts of U.P. were to be included for the purpose of provisions relating to urban immovable property.

(b) **Evacuees' Rights to Property**: The rights of the evacuees to their property were to be guaranteed subject to the right of the Government of the province, in which the property was located, to requisition it temporarily, on payment of fair compensation, for a public purpose, including the rehabilitation of refugees or the economic rehabilitation of the Province. The Government of the country in which the property was situated was to be responsible for preserving the property and safeguarding the rights and interests of the evacuee owner. For this purpose Custodians of Evacuee Property were to be appointed to take over the management of abandoned property. Each country was to appoint a Liaison officer to be in close touch with the Custodians of Evacuee Property in the other country.

(c) **Agricultural Property**: In view of the unwillingness of the Government of Pakistan to come to any decision immediately on the question of agricultural property, the two countries agreed to exchange copies of land records and three joint committees were to be appointed for expediting this work. For the same reason in spite of the fact that considerable progress had been made in the preparation and exchange of copies of these records, the two countries could not come to any agreement as to whether the exchange of agricultural property should be between individual evacuees or between the two Governments. The maximum period for which agricultural property could be requisitioned by the Provincial Governments was limited to three years. The Custodian of Evacuee Property was entitled to deduct 10 per cent. of the realised rents as management charges.

(d) **Urban Immovable Property**: The maximum period for which the Provincial Government could requisition urban immovable property was to be three years in the case of residential and commercial property and five years in the case of industrial establishments. Property which was not requisitioned was to be managed by the Custodian in the interest of the evacuee, and the Custodian was to be entitled to deduct from the money realised 10 per cent. of the realised rent for management and 10 per cent. of the assessed rent for normal repairs. Inter-Dominion adjustment of rent collections was to be made by the Auditors-General of the two countries, who were required to consolidate returns relating to the income from the property in their respective countries after deducting management charges. Both the Governments agreed to permit evacuee owners to sell, or exchange or transfer urban immovable property subject to the right of the Provincial Government to requisition it. All transfers had to be registered with the Custodian who was normally required to register them except when he found that the owner had not paid all the taxes or other outstanding dues. The Government of the country in which the property was situated was required to provide facilities to evacuees or their agents to enable them to sell or exchange the property. The Custodian was also required to give the owners of property information which would help them in the disposal of their property. The Central and Provincial Governments were to do everything in their power to see that no organised attempts were made to bring down the prices of evacuee property by boycotting or by forming rings or syndicates.

(e) **Movable Property**: The Custodian was to be responsible for the preservation of the movable property and the safeguarding of the rights and interests of the owner. The Provincial Government was to have the right to acquire or

requisition movable property for a public purpose on the payment of fair compensation. The rate of compensation was to be on the basis of fair value, that is, the price which the property would have fetched in the local market under the existing conditions provided no attempts were made to bring down prices artificially. The Custodian was to make arrangements for the disposal of movables which could not be preserved without loss in value. In case of movables which were not requisitioned, the evacuee owner could ask for their restoration, and evacuee owners, particularly of commercial and industrial undertakings, were to be given special facilities. The Provincial Governments were to be responsible for ensuring the safety of the evacuee owners and their agents engaged in managing, disposing of or removing their movables. The two Deputy High Commissioners at Jullunder and Lahore were to plan the movement of movable property from one country to the other. Transport facilities as well as priority for transport by rail was to be provided for them. Special treatment was to be accorded to household goods, articles of professional value, goods buried underground, and motor vehicles. Both the countries were to provide reasonable exchange facilities for remittance arising out of the sale or exchange of property, in case foreign exchange control was instituted, and goods allowed to be moved from one country to the other by evacuees under this agreement were to be exempted from export and import duties as well as export and import controls.

(f) **Supervision of the Agreement:** A permanent Inter-Dominion Commission was to be set up at Secretarial level to meet at regular intervals to review and supervise the working of the arrangements and consideration of other matters referred to it by the Government of either country. An Inter-Dominion Refugees' and Evacuees' Council composed ordinarily of two ministers each from India and Pakistan, was to be set up to resolve matters on which the Inter-Dominion Commission was unable to agree or to consider questions of policy which required settlement at Ministerial level.

FAILURE OF THE KARACHI AGREEMENT

The Karachi Agreement which provided for exchange of immovable urban property did not produce the results which were expected of it. While a couple of sales were affected in the N.W.F.P. there were no sales in Western Punjab, Sind, Baluchistan or Bahawalpur in Western Pakistan. In India 1 sale and 6 exchanges of property in East Punjab, 21 sales and 4 exchanges in Delhi, 1 sale in Rajasthan and 8 sales and 8 exchanges in U.P. took place.[1]

The reason for the failure of the agreement is not far to seek. We have already observed in connection with the procedure for the valuation of evacuee property how Pakistan tried to create obstacles and delay the solution of the problem. The obstructive attitude of the Government of Pakistan at every stage of the Inter-Dominion negotiations relating to evacuee property clearly indicates that the Government of Pakistan was not anxious to arrive at a settlement with India, because the property left behind by non-Muslims in Pakistan is very much larger and much more valuable than that left by Muslims in India. In case of an inter-Dominion exchange of property, the value of evacuee property in India would fall far short of the value of evacuee property in Pakistan, and the Government of Pakistan would have to find some other means of compensation. With a view to escaping from this obligation, the Government of Pakistan adopted an attitude which rendered this Agreement in-

1. Rehabilitation Review, January to April 1949, page 22.

operative. In the first place, Pakistan issued an ordinance requiring every person entering the Dominion for effecting the sale of his property to obtain a tax-clearance certificate before departure. Continued propaganda against the purchase of non-Muslim property in haste and at fancy prices acted as a discouragement to Muslims willing to transact business. The value of property of non-Muslim evacuees is stated to have depreciated as a result of this propaganda. In Sind, non-Muslim owners of landed property had asked for the restoration of their property on the ground that they were not evacuees and that they had returned to Pakistan permanently. But the Government of Sind ordered the District Officials not to restore property once allotted to refugees, until the Custodian of Evacuee Property had taken a decision and to revoke restoration orders where they had already been passed. Owners of such property could not find any redress because there was no Custodian of Evacuee Property functioning in Sind. In a number of cases, property belonging to non-Muslims who were still residing in Pakistan had also been allotted to evacuees. In West Punjab a number of Hindu-owned properties were treated as evacuee property and allotted to evacuees in spite of the fact that the owners were still in Pakistan. Further, the Government of Pakistan unilaterally reduced by 80 per cent. rents payable on urban evacuee property in Pakistan and stated that it could not recover any rents on agricultural property at all. The Government of Pakistan also failed to appoint Liaison Officers in India to expedite settlement of claims for the abandoned property of Muslims. In some cases where evacuees had applied for the restoration of their property on the ground that it had not been requisitioned, the authorities in Pakistan, instead of restoring it to the applicants, are stated to have actually requisitioned the property on the basis of the information supplied by them. Finally, five districts of West Punjab were closed to evacuees, who could not obtain their movable property from these areas. As a result of the closing of these districts in West Punjab, N.W.F.P., also was closed to evacuees. In view of the breaches of the agreement committed by Pakistan, sales of property, instead of increasing, actually came to a standstill after the Karachi Agreement.

At the Inter-Dominion Conference held at Delhi in April 1949 a further consideration of the problem of evacuee property was one of the items on the agenda. A discussion of this problem, however, was not undertaken at this conference, but postponed for consideration at a later conference.

Meanwhile it was found that a large number of Muslims, originally resident in Delhi, U.P., Bombay and Bihar and other areas, who had gone over to Pakistan, had got evacuee property allotted to them in Pakistan, but at the same time retained their property in India on the plea that they were Indian nationals. Under an ordinance passed by the Government of India in June 1949, property belonging to such persons was to be treated as evacuee property. Under this Ordinance the definition of an evacuee was extended to include those who had been allotted evacuee property in Pakistan or who had in any other way taken advantage of evacuee property there. Similar ordinances were issued shortly afterwards by most of the Provincial Governments in order that a uniform policy in this respect might be followed throughout the country.

INTER-DOMINION CONFERENCE, KARACHI, JUNE 1949

An Inter-Dominion Conference was held in Karachi in June 1949 to assess the working of the January 1949 agreement and to reconsider the question of long-term settlement of the problem of urban and agricultural immovable property. In view of the virtual failure of the Karachi agreement, which pro-

vided for exchange and sale of evacuee property on the basis of individual transactions, the Government of India reiterated at this conference its view that a settlement of the question of evacuee property, both urban and rural should be reached on a Government-to-Government basis. For this purpose it submitted to Pakistan a scheme according to which both Governments were to take over the evacuee property within their territory, the difference in value being paid by one country to the other. The Conference ended in a complete deadlock mainly because this suggestion was unpalatable to the Government of Pakistan. It refused to discuss the matter unless the Government of India repealed the ordinances whereby Muslims acquiring evacuee property in Pakistan were to be deemed evacuees, and whereby the scope of evacuee property legislation had been extended to areas not covered by the Karachi Agreement, on the ground that it constituted a contravention of that Agreement. Another ground on which Pakistan refused to discuss the Indian proposal for settling the evacuee property problem on a Government-to-Government basis was that the exchange of records had not been completed. As regards the first contention, the Government of India pointed out that the ordinance was issued to prevent unfair action on the part of the Muslim evacuees who took advantage of property in both the countries. Regarding the enactment of similar ordinances in areas excluded from the scope of the agreement, it was pointed out by the Government of India that it had reserved the right to take such action as it deemed fit as regards areas to which the agreement was not applicable. In fact it was reiterated that it was the settled policy of the Government of India to proceed with the uniform application of the law relating to evacuee property to all parts of the country. As regards the second objection, it was pointed out to the Pakistan Government that the volume of records already exchanged between the two Governments was sufficient to enable them to take immediate decision regarding the policy to be followed in respect of immovable property.

EVACUEE PROPERTY CONFERENCE

In view of the complete failure of the negotiations with Pakistan, the Government of India convened a conference of refugee spokesmen in July 1949 to discuss and formulate the future course of action. The conference was of the opinion that the Government of India should tighten its evacuee property laws and that the Draft Constitution should be amended with a view to bringing all evacuee problems within the ambit of Central legislation. The absolute right of evacuees to compensation for the loss of property suffered by them was unanimously stressed. It was also suggested that immediate steps should be taken to set up a machinery for the expeditious verification of claims lodged by evacuees and for the valuation of the available evacuee property in India. The Hon'ble Mr. N. Gopalaswami Ayyangar, who presided at the Conference, observed:—

> "We believe that the problem can be solved only at a Government-to-Government level. If it were a case of 10,000 properties or even 100,000 properties, it might be possible to arrive at a solution by private negotiations between the parties concerned. But the problem is so vast that unless each Government takes over the properties physically situated within its jurisdiction and then distributes them in some equitable fashion among the refugees who have come over to that Dominion, the problem will not be solved."

He also expressed the determination of the Government to recover compensation from Pakistan, however protracted the negotiations might have to be, and he gave an assurance to the evacuees that they would be compensated for their loss, though the actual method of payment of compensation would be considered later. He also announced the intention of the Government to replace the various ordinances relating to evacuee property in force at the Centre and in the Provinces, by a uniform all-India legislation. The conference decided to set up four Committees for the purpose (i) of suggesting machinery for the verification of claims and valuation of evacuee property left behind in Pakistan and India, (ii) of maintaining contact between the refugee leaders and the Government, (iii) of examining the changes required in the Evacuee Property Legislation and (iv) of considering certain questions like exchange control, income-tax, etc. The Government of India sanctioned a scheme for the grant of maintenance allowances to widows, unattached women, minors and persons who on account of old age and infirmity had no means of livelihood and who depended entirely on income from property in Pakistan. The maintenance allowance is related to the income in Pakistan on a graduated scale.

PAKISTAN ORDINANCES ON EVACUEE PROPERTY

We have already examined the various breaches of the Karachi Agreement committed by the Government of Pakistan. Its next step was to make that agreement null and void by banning sales and exchanges of evacuee property. For this purpose the Government of Pakistan issued an ordinance on July 26, 1949 applicable to the whole of West Pakistan prohibiting all dealings in immovable evacuee property. The ordinance was to apply with retrospective effect and the Government was not to accept proposals for sales or exchanges of property made before the ordinance came into force. Agreements already entered into for the sale or exchange of property were not to be registered. Deeds executed and registered in contravention of the ordinance were to be null and void. Simultaneously with the promulgation of the ordinance, the Government of Pakistan started taking possession of residential and business premises belonging to Hindus who were still staying in Sind. It tried to justify these confiscations on the ground that the owners had sent away their families to India and that they themselves were intending to evacuate. This policy increased the pace of evacuation from Sind. In January 1950, however, the Government of Pakistan lifted the ban on the exchange of urban immovable property in Pakistan with similar property in the agreed areas in India. The Pakistan ordinance of July 26, 1949 was allowed to lapse, except in Baluchistan, where it was extended for a further period of two months. All agreements of sales of urban immovable property executed before July 26, 1949 and against which at least 80 per cent. of the consideration money was paid before that date were allowed to be completed.

On October 15, 1949 two ordinances relating to evacuee property were issued by the Government of Pakistan. to legalise the confiscation of non-Muslim property which was hitherto done under various pretexts. The more important of these was the Pakistan Administration of Evacuee Property Ordinance. This ordinance shifted the responsibility of discovering evacuee property from the Custodian of Evacuee Property to the persons occupying or managing such property. The ordinance provided for the imprisonment or fining of persons who attempted to conceal or destroy any property or document with a view to evading the ordinance. Unwillingness or failure to surrender evacuee property was also made a punishable offence. The definition of the terms 'evacuee' and

'evacuee property' was widened so as to enable the Government to treat as evacuee property the property belonging to persons who were suspected by the Government of having any intention to evacuate. The Custodians of Evacuee Property were empowered to take possession of property held jointly by evacuees and non-evacuees, in which the evacuees had a larger share. Similarly property belonging to a joint Hindu family could be taken over by the Custodian if the evacuee members of the family had a larger share in the property.

INDIAN EVACUEE PROPERTY ORDINANCE, OCTOBER 1949

While the position of non-Muslims in Pakistan worsened day by day as a result of the evacuee property ordinances, the Evacuee Property Ordinance promulgated by the Government of India on October 18, 1949, which replaced the various Provincial and State laws relating to evacuee property, liberalised the conditions under which property belonging to Muslims could be declared evacuee property. Under the different Provincial and State Ordinances, no distinction had been made between property belonging to an evacuee and that belonging to an intending evacuee. In view of the fact that the definition of an intending evacuee was capable of the widest possible interpretation, Muslim owners of property found it almost impossible to sell any property, because the possibility of such property being declared evacuee property had frightened away purchasers. Under the ordinance issued by the Government of India, the property of an intending evacuee could not be taken over by the Custodian of Evacuee Property if the consent of the Custodian was taken before making a transaction relating to such property. Only in cases where no consent was taken was the property to be treated as evacuee property.

The ordinance also limited the application of the terms 'evacuee' and 'intending evacuee'. While under some of the Provincial and State laws, a person was treated as an evacuee on his leaving the particular province or state in which his property was situated even if he was still in India, under this new ordinance a person was to be considered an evacuee only if he left the country. The definition of evacuee was further restricted only to those who had personally acquired any benefit from evacuee property in Pakistan either through illegal means or by way of allotment. But a person was not to be treated as an evacuee if he purchased evacuee property in Pakistan or if any of his relative or business partner obtained benefits from evacuee property in Pakistan. If a person transferred his assets or acquired any right to evacuee property in Pakistan through any relative, or if there was evidence of his desire to exchange his property in India for a property in Pakistan, he had to be treated as an intending evacuee. No restrictions were to be placed on remittances to Pakistan for purposes of trade and for the maintenance of family, nor were they to be treated as a transfer of assets.

The ordinance evoked considerable opposition from the representatives of evacuees from Pakistan, because they felt that the liberalisation of evacuee property legislation in India gave too many concessions to the Muslims, while the ordinances issued by the Government of Pakistan made evacuee property legislation stricter.

SALE OF SHARES AND SECURITIES BELONGING TO EVACUEES

Although shares and securities belonging to evacuees were to be treated as evacuee property, and could not under the law be sold or transferred without the consent of the Custodian, the Government of India decided in October 1949

to remove restrictions on the transfer of Government securities and shares of public limited companies which were in the possession of evacuees. But when such shares of securities were deposited with any bank or in a safe deposit vault, they were to be treated as evacuee property and could not be returned to the owner without the consent of the Custodian. Intending purchasers of shares in concerns which had been taken over by the Custodian, on account of the migration of majority of the share-holders to Pakistan, were requested to consult the Custodian before making a purchase in view of the fact that the concern could be retained by the Government for five years. Purchases made without the consent of the Custodian were not likely to be confirmed by him.

AGREEMENT ON THE TRANSFER OF MOVABLE PROPERTY, JUNE 1950

Informal talks were held between the Governments of India and Pakistan in June 1950, at which the problem of movable and immovable evacuee property was discussed. A satisfactory agreement was reached in respect of the transfer of movable property from one country to the other. The problem of immovable property was approached from a new angle. But no final agreement was reached and the problem was postponed for future consideration. The following were the main provisions of the agreement relating to movable property:—

The principle that an evacuee should be allowed to remove, sell, or dispose of his movable property without a permit from the Custodian was recognized. The following exceptions were however made:—(i) machinery fixed to the ground as part of a factory was not to be permitted to be removed; (ii) machinery or parts forming stock-in-trade could be disposed of in the country in which it was located but not allowed to be transferred to the other country; (iii) articles like bullion and cash which were not permitted to be exported were to be permitted to be disposed of within the country in which they were located; (iv) movable property other than household and personal belongings could only be sold but not removed from one country to the other. Personal and household equipment like typewriters, sewing machines and bicycles, however, were to be allowed to be transferred from one country to the other in spite of any restrictions on the movement of such articles.

As regards articles deposited with banks, pawned articles were to be allowed to be transferred from one country to the other only when the question of claims had been settled by a Committee consisting of one officer from each country. Other articles deposited with banks were to be allowed to be removed by banks without any restriction, the arrangements in this connection being left to the Deputy High Commissioners of the two countries.

The Government of Pakistan gave an assurance that the properties of joint-stock companies which were not treated as evacuee property would be restored. Existing leases were, however, to continue though the lessee was to be placed in direct contact with the company and asked to pay money directly to the owners. The property was to be restored to these companies after the expiration of the lease. The Government of India was also to take similar action and to pay compensation in case it acquired property of any joint-stock company.

Since no restrictions as regards the transfer of insurance policies existed, both the Governments of India and Pakistan undertook to take action in case any administrative restrictions were brought to their notice. Restrictions on the payment and transfer of shares, securities, national savings certificates, de-

bentures, etc., were to be removed in both the countries. Postal parcels which were deposited in post offices were to be restored to evacuee owners. The verification of claims relating to post office accounts, national savings certificates, etc., was to be proceeded with.

Compensation for property acquired for rehabilitation purposes was to be assessed jointly by the representatives of two Governments and the value to be paid to evacuee owners. Sale proceeds of movable property deposited with Custodians were to be handed over to the evacuee owners either directly or through the Government of the country in which they were residing. Evacuee property which was seized was to be restored to the evacuee owners or alternatively compensation was to be paid. District officers were required to send the property or the accounts along with the lists of the owners to the representatives of the other country. Police escort was to be provided for evacuees who wanted to remove buried treasure.

As regards court deposits, these were to be transferred *en bloc* in the case of those districts from which complete migration had taken place. In other cases action was to be taken through the Claims Organisations of the two Governments after evacuees had filed claims for the transfer of their deposits. Similarly, transfers were to be effected in the case of deposits made on behalf of minors who had migrated from one country to the other. Movable property administered by the Court of Wards Act until the partition, was to be automatically transferred to the other country in case the ward had also migrated from one country to another. The question of paying allowance after the partition, until the final settlement of the evacuee property problem was to be examined by both the Governments.

As we have seen before, the agreement on movable property which was arrived at in December 1947 had already incorporated a number of provisions which facilitated the transfer of movable property from one country to the other. But as the result of a number of restrictions which were imposed by the Karachi Agreement of January 1949 and owing to the unsatisfactory state of relations between the two countries, these provisions had more or less been ineffective. The Agreement of June 1950, therefore, served to facilitate the task of evacuees by revitalising the provisions of the previous agreement, and also by incorporating additional provisions beneficial to evacuees. The Agreement also obviated the necessity of individual evacuees going to the other country in order to establish their claims in view of the fact that Governmental agency was to act as an intermediary for this purpose, and wherever possible, movable property was to be transferred from one country to the other in bulk. In view of these arrangements, unnecessary expenditure and inconvenience will not have to be incurred by evacuees, and consequently it would enable a larger number of evacuees to take advantage of the facilities for the transfer of their movable property. The working of this agreement, and further negotiations for immovable property will be watched with interest.

V. FINANCIAL ASPECTS OF RELIEF AND REHABILITATION

In spite of the fact that from the point of view of numbers and the magnitude of population transfers, the problems created are equally colossal in both the countries, India alone has been able to spare vast sums of money for the relief and rehabilitation of refugees. In Pakistan, the Central Government, being committed to heavy defence expenditure which has absorbed more than 67 per cent. of her current revenues, and nearly 50 per cent. of the expenditure

on capital account, is unable to spare funds for refugee expenditure. The Government of West Punjab, therefore, has borne the brunt of such expenditure. Contrasted with this, in India the Central Government has provided a total expenditure of more than Rs. 42 crores exclusive of loans on current account within four years. The following table gives the main items of refugee expenditure incurred by the Government of India since the partition:

TABLE 7. Expenditure on Refugees in India
(in lakhs of rupees)

	Actuals 1947-48 (15th August 1947 to 31st March 1948)	Actuals 1948-49	Revised Estimates 1949-50	Budget Estimates 1950-51
A. Custodian of Evacuee Property ..	11	8	11	9
B. Attached and subordinate offices ..		15	1	1
C. Evacuation	91	44	50	5
D. Relief				
(*i*) Expenditure directly incurred by the Centre	....	2,07	2,19	1,24
(*ii*) Expenditure incurred by Provinces and States and reimbursed by Central grants ..	....	12,20	8,39	1,58
Total Relief D. ..	6,69	14,27	10,58	2,82
E. Rehabilitation				
(*i*) Expenditure directly incurred by the Centre	....	7	1,34	1,10
(*ii*) Expenditure incurred by Provinces and States and reimbursed by Central grants ..	....	18	1,16	1,93
Total Rehabilitation E ..	45	25	2,50	3,03
Grand Total, A, B, C, D, E..	8,16	15,20	13,70	6,00

Besides expenditure on revenue account, the Government of India has spent nearly Rs. 20 crores on capital account. The Government of India has agreed to reimburse the Provinces and States for the entire expenditure incurred by them on relief and rehabilitation of displaced persons, provided such relief is given in accordance with the scales prescribed by them and the schemes of rehabilitation are implemented after prior approval. Any contribution which the Provinces and States may like to make or are able to raise from the public by way of contribution would reduce to that extent the amounts claimed by them. Unfortunately as detailed accounts from Provincial and State Governments indicating their own efforts are not available, it is not possible to indicate the total financial burden exclusively borne by them.

From the above table it appears that the major portion of the expenditure from revenue—more than 75 per cent.—in each of the years 1947-48 and 1948-49 is accounted for by relief expenditure. These amounts were spent on feeding the refugee population in camps and in giving them loans. On an average about 12 annas per head was spent up to October 31, 1949. During the year 1950-51 the Government of India have budgetted a substantial amount of more than Rs. 3 crores for rehabilitation. The budget however takes no account of the large-scale movement of refugees from East Bengal, which ensued in the first half of 1950. It is reported that the Finance Minister of the Government of India has given a guarantee that the total refugee expenditure on current

account would be raised from Rs. 6 crores to nearly Rs. 20 crores, if necessary. It appears that a major portion of the expenditure would be spent on relief. On the assumption that nearly 10 million refugees have come to India, the total expenditure comes to nearly Rs 43 *per capita* in four years or Rs. 10-12-0 *per capita* per annum. The expenditure on rehabilitation is incurred both on revenue and capital account. The main items of such expenditure are expenditure on civil works including townships, financial assistance through loans and expenditure on small farm colonies by Provinces. The following table gives the expenditure on townships and colonies directly incurred by the Centre:

TABLE 8. Central Expenditure on Townships upto end of March 1950
(in thousands of rupees)

New Delhi Northern Extension scheme	12,93
Sheikh Sarai Township	31,33
Shadipur Township Plots	43,40
Malkagunj Township	2,42
Nizamuddin Township	2,00
Kalkaji Township	43,30
Kingsway Township	36
Total	1,35,74

The Government has established a Rehabilitation Finance Administration with a capital of Rs. 10 crores for financing long-term loans to refugee individuals as well as firms which are given amounts ranging between Rs. 5,000 and Rs. 1,00,000. The Provincial and State Governments also give loans which they advance to individuals who require less than Rs. 5,000. Refugees in rural areas are given liberal *taccavi* loans. The amounts of loans granted by the Centre to the Provinces and States for this purpose is shown below:

TABLE 9. Central, Provincial and State Loans to Refugees, 1948-49 and 1949-50

(in lakhs of rupees)

	Revised 1948-49	Budget 1949-50
1. Through Provincial Governments ..	3,59	9,00
2. Through States	3,10	4,00
3. Others by the Centre	43	2,00
Total ..	7,12	15,00

These loans to refugees are given on conditions of easy instalments. The Government of India has assured the Provinces and States that they would share with them all *bona fide* losses on account of the non-recovery of these loans on a 50:50 basis.

VI. CONCLUSION

So far we have given details relating to the various aspects of the refugee problem. It now remains to consider the problem as a whole and to examine how far the Government has succeeded in solving it. It is necessary at the outset to emphasise the everwhelming difficulties with which the Government of India had to grapple. Even before the administrative machinery which had itself been partitioned could readjust itself to the changed set-up, the large scale

migration of evacuees had begun. The newly created Government of East Punjab had to start from the scratch. The Government could not consolidate its position as a result of the prevalence of disorder and lawlessness in which its authority was openly flouted. In view of these obstacles it is indeed remarkable that the evacuation of refugees was carried out so speedily. While it is true that the task of providing relief is primarily the responsibility of the Central and Provincial Governments, even an expenditure of crores of rupees by these agencies above could not have been expected to solve the refugee problem satisfactorily. There was, therefore, great need for non-official organisations to supplement the work of the Government. Fortunately a number of social and other organisations took an active part in evacuating and providing relief to refugees. Among these, special mention may be made of the United Council for Relief and Welfare and the Central Relief Committee of the All-India Congress Committee. Limitation of space, however, does not permit a detailed description of the activities of non-official organisations. The organisation of relief by Government may be said on the whole to have been satisfactorily solved, although some of the refugee camps are still very much overcrowded and lack the minimum necessary amenities.

The rehabilitation programme of the Government, however, has not been attended with the same measure of success as its evacuation and relief programme. In fact the Honourable Minister of State for Relief and Rehabilitation himself admitted in the Constituent Assembly (Legislative) in March 1949 that the progress of rehabilitation had been slow. By that date nearly two-thirds of the evacuees had been rehabilitated. Although no later information on this point is available, the rehabilitation of the remaining evacuees is bound to be a long drawn out process because, as more and more evacuees get absorbed in agricultural and other occupations, the scope for providing the others with employment must progressively decline. Even those who have been already rehabilitated are still badly housed. Paucity of accommodation has also been responsible to some extent for slowing down the progress of rehabilitation. It is true that the Central and Provincial Governments in India have embarked on ambitious housing schemes for evacuees. Arrangements have also been made to float two companies for housing finance and construction in Bombay and Delhi, with the help of banks and insurance companies in order to provide houses for sale and on hire-purchase basis. But if the progress of most of the provincial housing schemes in the post-war period is any indication, one cannot be very optimistic about these paper schemes. Besides, they are bound to take some time to materialise. In the meanwhile, the refugees have been forced to live in temporary structures and tents. Thus there were nearly 138 thousand refugees who were still staying in tents in June 1950. Scarcity of water was responsible for the reduction of the number of refugees who could be accommodated in the Rajpura Township. As pointed out by the Honourable Mr. Mohanlal Saxena, the main difficulties in providing accommodation for refugees were lack of finance, non-availability of building materials and unwillingness to entrust construction work to contractors who were not likely to carry out the work satisfactorily.

A number of factors have been responsible for retarding the progress of rehabilitation. As the Honourable Mr. Mohanlal Saxena stated in the Indian Parliament on March 28, 1949:

> "The foremost among them have been the Provincial jealousies and local vested interests coupled with a general antipathy to the settlement of the large number of persons from outside the Province. In one of the

Provinces during my tour I was informed by officials and non-officials holding important and responsible positions that the 'rehabilitation of today was the politics of tomorrow'. In another Province where the Government had offered to give all reclaimed land to the displaced persons it had to go back on its word because of influence. Similarly, in several States and Provinces it was brought to our notice that the houses and shops belonging to Muslim evacuees had been occupied by local persons. It is also unfortunate that some of the Provinces and States have declined to absorb a small number of evacuees amounting to a few thousand, on the ground that they were not formally allotted a quota at the Premier's Conference .....Yet another factor responsible for the delay in rehabilitation was the unwillingness of the displaced persons themselves to go to distant towns and provinces and to take professions and employments other than those in which they were previously engaged. They do not seem to realise the fact that only a small proportion can be absorbed in business and services."

Financial difficulties of the Government of India and of the new Provincial Governments were also responsible for delaying the progress of rehabilitation. For example, the Ministry of Rehabilitation was allotted only Rs. 70 crores for the three years ending 1949-50 as against a sum of Rs. 200 crores demanded by it.

The solution of the different problems created by the movement of refugees has been comparatively easier in Pakistan than in India for a number of reasons. As we have seen already, India had a net influx of 2.5 million refugees. This implies that India has to look after a larger number of refugees than Pakistan. In the second place, the non-Muslim refugees who have migrated from Pakistan have abandoned land, houses and movable property which is worth at least twice as much as that left behind by Muslim refugees in India. As a result of this the burden on the Government of Pakistan in providing land, houses and other facilities to the refugees was considerably reduced. The rehabilitation of refugees in India has been worsened by the unhelpful attitude of the Government of Pakistan in regard to the treatment of minorities and the exchange of evacuee property. As a matter of fact while the Government of India assiduously took the initiative in working out a speedy and equitable settlement of all outstanding matters, the Government of Pakistan tried to delay any settlement by holding up such proposals, by displaying unwillingness to co-operate and even by committing breaches of agreement. A welcome change in the attitude of the Government of Pakistan has however been noticeable since the Prime Ministers' Conference which took place in Delhi in April 1950 and at which agreement was reached on the problem of minorities. If the goodwill displayed during and after this conference continues in practice in future, it should be possible to settle amicably other outstanding matters between the two countries.

It must indeed be said to the credit of the refugees, that in spite of the slow progress of rehabilitation, they have shown extraordinary patience. They had to evacuate under the most hazardous and trying conditions, which could hardly be distinguished from a state of war. A large number of persons were killed and injured and a large number of families broken up. The evacuees had to leave all their wealth, their homes, lands and other cherished possessions behind, and instead lead a hard life in crowded camps, exposed to the rigours of the climate, without any earthly possessions which they could claim as their own. Their sources of livelihood, which had so far given them economic security and a sense of independence, were now gone and they were

forced to live in insecurity and in a state of dependence on organised charity. Their attempts at earning a living by means of small trade were construed as unfair competition by local inhabitants, whose sympathies were thus alienated to some extent. All these sufferings and hardships have been borne by them with forbearance and fortitude. But for the remarkable patience and restraint shown by them the task of the Government would have been hopeless. Their patience is bound to wear out sooner or later, and it is in the interest of the country that such a situation is not allowed to develop. The Government should, therefore, avoid the temptation to dwell over much on its past achievements, which have been great indeed. Rather, it should concentrate its attention and energies on what still remains to be done, which is a much more formidable task. Till recently the Government of India used to adopt piece-meal measures for the rehabilitation of refugees. Fortunately the Ayyangar Committee appointed in order to formulate a long-term plan for the rehabilitation of refugees has evolved an integrated rehabilitation programme. It is to be hoped that this programme will be adhered to by the Government and that larger sums will be allocated for the purpose.

APPENDIX I

NUMBER OF CAMPS AND CAMP POPULATION ACCORDING TO PROVINCES AND STATES

Region	March 1948[2]		October 1948		March 1949		October 1949		February 1950	
	No. of camps[1]	Population (in '000s)	No. of camps	Population (in '000s)	No. of camps	Population (in '000s)	No. of camps	Population (in '000s)	No. of camps	Population (in '000s)
TOTAL	..	831	166	799	203	858	178	696	140	560
Ajmer-Merwara	..	7	1	9	1	12	1	3	..	..
Baroda State[5]	..	..	10	11	10	11	..	..	..	..
Bikaner State[5]	..	..	7	9	7	9	..	..	..	..
Bihar	..	7	3	9	3	4	2	3	2	3
Bombay	..	44	15	179	22	218	23	206	23	185
C. P. and Berar	..	10	6	61	9	81	7	34	1	9
Delhi	..	45	11	44	11	42	10	40	10	41
East Punjab	..	666	27	241	27	246	29	157	28	135
Himachal Pradesh	..	..	1	1	1	1	1	1	1	1
Jaipur States[5]	..	..	2	20	5	30[3]	..	..	..	..
Jammu Camps	..	..	5	28	5	33	5	32	5	32
Jodhpur State[5]	..	..	2	9	2	13	..	..	..	..
Kolhapur State[5]	..	..	..	..	1	6	..	..	..	..
Madhyabharat Union	..	..	2	4	1	3	1	3	1	2
Madras	..	3	4	3	3	4	2	1	..	..
Matsya Union[5]	..	..	2	1	1	1	..	..	..	..
PEPSU	..	..	2	1	4	6[3]	2	24	7	33
Rajasthan Union	..	..	5	11	10	7[4]	31	57	21	35
Saurashtra Union	..	..	4	27	5	6	6	41	7	38
United Provinces	..	44	20	50	17	45	15	24	16	26
West Bengal	..	3	35	70	55	60	40	40	15	7[6]
Vindhya Pradesh	..	..	2	11	3	20	3	20	3	13

1. Not available.
2. Data relating to March 1948 is incomplete.
3. Does not include 1 camp for which information is not available.
4. Does not include 8 camps for which information is not available.
5. No separate figures are available for these States for October 1949 and February 1950 in view of their merger with the adjoining Provinces or State Unions.
6. Before the commencement of the influx from East Bengal.

APPENDIX II

DISTRIBUTION OF WEST PAKISTAN REFUGEES IN PROVINCES AND STATES IN INDIA ACCORDING TO THEIR PROVINCE OF ORIGIN

Province/State/Union	Total Displaced Persons	Families						
		W. Punjab	N.W.F.P.	Bahawalpur State	Sind	Baluchistan	Unspecified	Total
TOTAL	4,424,000	622,106	37,439	45,444	141,486	144,922	431	851,828
Ajmer-Merwara	93,000	1,229	62	20	17,889	240	....	19,440
Baroda State	21,000	74	4	17	3,774	17	....	3,886
Bikaner State	77,000	3,836	187	9,231	2,301	42	1	15,598
Bombay	274,000	2,868	1,376	1,041	46,342	532	47	52,706
C. P. & Berar	92,000	4,500	311	183	13,014	105	....	18,113
Delhi	377,000	56,893	7,725	1,102	4,062	1,255	13	71,060
East Punjab	2,465,000	432,685	7,846	24,532	3,535	946	197	469,741
Himachal Pradesh	5,000	739	353	6	4	1	....	1,103
Jaipur State	52,000	1,269	573	317	7,200	32	2	9,390
Jaisalmer State	2,000	....	....	233	86	....	....	319
Jodhpur State	45,000	106	11	159	7,829	34	....	8,139
Madhyabharat Union	59,000	3,331	460	300	7,240	205	....	11,536
Matsya Union	53,000	6,705	1,905	1,250	1,755	262	164	12,941
Patiala and EPS Union	325,000	51,340	3,846	5,391	593	52	4	61,226
Rajasthan Union	33,000	1,160	77	124	4,407	311	....	6,079
Rampur State	....	16	2	....	....	....	....	18
Saurashtra Union	36,000	18	1	4	7,028	12	....	7,063
United Provinces	412,000	55,030	12,681	1,534	11,700	875	3	81,823
Vindhya Pradesh	13,000	307	12	....	2,227	1	....	2,547

N.B.—Figures for total population are rounded in thousands.

APPENDIX III

PROVINCIAL AND STATE HOUSING SCHEMES

(As on March 1949)

No.	Province/State	Schemes	Houses or Tenements	Population		Total Commitments accepted (Rs. in lakhs)
1.	Ajmer-Merwara	Construction of Houses	2,000 houses		12,000	50
2.	Bombay	(*a*) Kalyan Township	16,000 houses	100,000		
		(*b*) Chembur Development Scheme ..	1,600 tenements	10,000		
		(*c*) South Deolali Scheme	8,700 tenements	50,000		
		(*d*) Dapori Scheme (Poona)	1,100 tenements	7,000		
		(*e*) Valvide Camp near Kolhapur ..	1,600 tenements	10,000	177,000	14,08
3.	Central Provinces	(*a*) Townships 2	8,400 houses	50,000		
		(*b*) Conversion of 1,000 military barracks (to provide tenements)	1,000 tenements	6,000	56,000	2,92
4.	Jodhpur	Construction of Houses	1,000 houses		6,000	26
5.	Madhyabharat	Construction of Houses	4,000 houses		24,000	
6.	Matsya Union	Construction of Houses	1,400 houses		8,400	46
7.	United Provinces	I. (*a*) Muzaffargarh Township	400 houses	2,400		
		(*b*) Dehra Dun Township	400 houses	2,400		
		(*c*) Modinagar Township	600 houses	3,600		
		(*d*) Lucknow Township	350 houses	2,100		
		II. Renovation of 8 military barracks	5,300 tenements	31,800		
		III. Shops-cum-residences	1,200 tenements	7,200		
		IV. Other schemes		250,500	300,000	7,55
8.	PEPSU	Township Scheme (Rajpura)	10,000 houses		60,000	
9.	Rajasthan	(*a*) Pratapnagar Township scheme ..				
		(*b*) Construction of Houses	4,500 houses		27,000	1,10

No. Province/State	Schemes	Houses or Tenements	Population		Total Commitments accepted (Rs. in lakhs)
10. Saurashtra Union	Construction of Houses	3,000 houses		18,000	2
11. Bikaner	Township Scheme	2,000 houses		12,000	1,07
12. Baroda	Construction of houses :	3,000 houses		18,000	
13. Jaipur	(*a*) Township scheme	5,000 houses	30,000		
	(*b*) Construction of houses	3,300 houses	20,000	50,000	
14. East Punjab	(*a*) Construction of houses in various districts	4,200 houses	25,200		
	(*b*) Sale of plots to refugee for house building		120,000		
	(*c*) Faridabad Township	6,670 houses	40,000		
	(*d*) Sonepat Township	6,670 houses	40,000		
	(*e*) Bahadurgarh Township	6,670 houses	40,000		
	(*f*) Scheme for constructing refugee houses in proposed capital ..	25,000 houses	150,000	415,200	
15. Vindhya Pradesh	Construction of houses	3,300 houses		20,000	
	Grand Total ..	138,960	848,200	1,203,600	27,96

APPENDIX IV
PROVISION OF HOUSING FOR DISPLACED PERSONS
(31st October 1949)

	Accommodation in Evacuee houses		Accommodation in proposed schemes	Progress in housing schemes							
				Units completed				Units under construction			
	No. of Units	Persons estimated to be accommodated	(No. of persons)	Houses	Semi-pucca tenements	Plots	Total	Houses	Semi-pucca tenements	Plots	Total
TOTAL	202,900[1]	1,445,200[1]	1,327,700	15,740	9,895	9,045	34,680	16,386	2,675	1,833	20,894[4]
Ajmer-Merwara	5,100	75,000[1]	2,500	..	..	421	421	..	..	..	..
Bihar	1,000	5,000	9,300	..	..	..	..	..	..	..	..
Bombay	.. [3]	.. [3]	260,000	400	..	..	400	5,594	..	..	5,594
C.P. & Berar	400	2,000	54,000	1,641	..	..	1,641	5,072	..	..	5,072
Delhi	43,900	190,000[2]	120,000[5]	2,939	4,015	1,961	8,915	536	2,675	996	4,207
East Punjab	112,300	892,000[2]	358,000[5]	3,873	5,880	5,963	15,716	127	..	837	964
Himachal Pradesh ..	250	1,200	..	..	..	..	..	..	..	..	..
Kutch	..	..	24,000	..	..	..	..	400	..	..	400
Madhyabharat Union ..	300	1,500	40,200	..	..	..	..	..	..	..	..
Mysore State	..	..	4,800	..	..	200	200	..	..	..	..
PEPSU	26,600	200,000	60,000	..	..	..	..	..	..	..	..
Rajasthan Union	3,800	21,500	90,000	600	..	..	600	.. [4]	..	..	.. [4]
Saurashtra Union ..	6,000	36,000	4,900	301	..	..	301	271	..	..	271
United Provinces	3,250	21,000	200,000	5,872	..	..	5,872	3,767	..	..	3,767
West Bengal	..	..	100,000	114	..	500	614	619	..	..	619

1. Excluding Bombay and some States in Rajasthan for which information is not available.
2. Reported very congested accommodation. In normal circumstances expected to provide accommodation for 30,000 in Ajmer-Merwara 150,000 in Delhi and 670,000 in East Punjab.
3. Information not available.
4. Construction of work has been taken in hand at Billimora colony in Udaipur, Masuria and Pali colonies in Jodhpur, urban colonies in Bikaner and Kotah, construction of 700 quarters at Fateh Tibri, and 3,350 houses in Pratapanagar township at Udaipur. Figures regarding number of houses under construction at these places are not available.
5. Including provision made through semi-pucca tenements and through townships schemes.

CHAPTER III

THE REFUGEE PROBLEM—ITS ECONOMIC SIGNIFICANCE

INTRODUCTION

In the last chapter we have given a brief account of the main events connected with what may be described as the largest mass migration in history. In this chapter an attempt will be made to give an idea of the economic aspects of this Great Displacement which at one time threatened to disrupt and shatter the economic structure of the country, soon after the advent of independence. On account of lack of data regarding Pakistan, we shall mainly confine ourselves to the economic significance of the problem of displaced persons so far as it concerns India.

The refugee problem in India is an experience unparalleled in history both in its origin and its magnitude. Very few among the millions that were affected dreamt before August 1947 that they would have to leave once and for all their land, property, occupation and other means of living. The mass migration was as much a surprise to the persons affected as to the Governments themselves. When the partition deed was being signed in Delhi, nobody could have imagined that within a very short period more than 17 millions would cross over the borders of either country. The suddenness of this event made all attempts towards a planned exchange of population an impossible task. There have been cases in history where large-scale migrations have taken place on account of various reasons, such as political dissatisfaction, religious persecution, racial hatred and dissatisfaction with the opportunities available for a decent standard of living. But the migrations of India and Pakistan cannot be classified under any one of these heads. With the partition, a vast section of people in the contiguous areas of both the countries were filled with fear and threat to their way of life, their property and their very existence. They felt that the political, religious, cultural and economic relationships and links they had with the neighbouring provinces would no longer be possible. At one stroke, millions in either country found that they had become aliens in the land, where they and their forefathers had earned their livelihood for centuries. The consequent mass migrations which followed were achieved within a period of less than six months. The transfer of 1.4 million Grecian people from Asia Minor and Turkey, which took place after the first Great War, was achieved over a period of eighteen months, under the supervision of the League of Nations. The magnitude, the suddenness as well as the speed of the migrations that we witnessed in India and Pakistan are unique.

This meant that we had to divert a large portion of our economic resources in men, money and transport for the purposes of speedy evacuation, before we had recovered from the strain of the war. Judged by the magnitude of the task, the success achieved in the evacuation arrangements was remarkable. But evacuation is only the first phase of this phenomenon. The problems of providing immediate relief, of dispersing the displaced persons to the different parts of the country, of providing them enough wherewithal to sustain

themselves until they could stand on their legs, and finally of securing them employment and a tolerable standard of living became the responsibility of the Government. The impact of the net influx of more than 2.5 millions on the limited resources of India meant new difficulties for this country. Their concentration in a few urban areas meant overcrowding, heavy congestion and inevitable frictions.

In order to understand the importance of the various aspects of this Great Displacement, it is necessary to note some salient features connected with it. There was a wide disparity in the occupations pursued by the immigrants as against those of the emigrants. The gap that was left by the emigrants could not, therefore, be filled by the immigrants. The standard of life which the immigrants had enjoyed in Pakistan, was definitely higher than that which the emigrants were accustomed to in India. The value of property that was left and the earnings of those who came from Pakistan were high, compared with those of the emigrants who left India. The land on which the immigrants were used to farming, had facilities of perennial irrigation. Areas like East Punjab and PEPSU had fewer irrigation facilities. A large number of factories was situated in West Punjab, whereas East Punjab and PEPSU were relatively backward in industrial development. The strong urban bias of those who migrated to India may be contrasted with the predominantly rural character of the Muslims who left India. Those who came to India could not be settled until the problem of evacuee property was solved. Along with these inherent difficulties of the problem, we should also keep in mind the economic conditions in India which created further difficulties in the way of speedy resettlement.

I. THE NATURE OF THE PROBLEM

FACTORS BEHIND THE MIGRATION

Large scale mass transfers were witnessed both in the West and in the East. Though the migrations in the Western part lasted for nearly six months at a stretch, in the East the migrations have been going on since the partition. It has been stated that almost all the Hindus and Sikhs from West Pakistan migrated to India within a short period of time. But a vast section of non-Muslims continued to stay in East Pakistan after the partition. For a period, the influx of displaced persons to West Bengal stopped. But with the recrudescence of communal trouble in East Pakistan following the trade deadlock between the two countries, large scale migration again started in the beginning of 1950. Thanks to the Nehru-Liaquat Agreement in April 1950, there was a welcome change in the atmosphere in both India and Pakistan. It was reported that some refugees were gradually returning to their original homes.

It is difficult to single out the cause which has been responsible for these mass migrations. One must visualise the psychological atmosphere of uncertainty, instability and fear that must have motivated millions of people to give up the land of their birth or choice. Along with the political and religious factors, economic factors have also had their sway. Some of the non-Muslims who had at first decided to stay in Pakistan had to leave on account of the drastic evacuee property laws that were enforced in Pakistan from time to time. The decision to make Pakistan an 'Islamic' state, resulted in misgivings in the minds of the minorities, who felt that adequate opportunities would not

be available to them. It must also be noted that a large portion of non-Muslims were following vocations connected with trade and business, which had thrived on account of the existence of complementarity between the areas forming India and Pakistan. After the partition both the countries drifted apart in the economic sphere; recent efforts may change the course of events for the better.

When we compare the characteristics of the migration towards India and of that towards Pakistan, we find that whereas almost all the Hindus and Sikhs staying in the different West Pakistan Provinces have come away to India and a large section of Hindus has been flowing from East Pakistan to West Bengal and Assam, only a small portion of the Muslim population of India has left for Pakistan. The affected areas are East Punjab, PEPSU and some areas surrounding Delhi and parts of U.P. Though some Muslims from other parts went to Pakistan, it was because of the prospects of increased economic opportunities due to the vacuum created by the exodus of Hindus and Sikhs from Pakistan. Even in these cases, it may be noted that considerable sections of Muslims returned to India as they were disappointed in their hopes. It has been reported that some skilled Muslim artisans and workers in U. P. are being offered incentives in Western Pakistan. This may account for some amount of migration from U.P. Until the beginning of 1950, no large scale exodus of Muslims from West Bengal was noted.

The search for greater economic opportunities has been the motive force behind many migration movements. But the displaced millions of India and Pakistan had little time to weigh the economic advantages and disadvantages of migration. In order to prevent tendencies towards migration in the long run, it is necessary that both the countries should take steps to guarantee the same degree of economic security for the minorities as for the majority. Economic security includes equal opportunities for members of all the communities. The lives and properties of members of all the communities must be treated on an equal footing, both in the letter of the law as well as in its spirit and execution. When these rights are guaranteed in practice the proper atmosphere will be created in both the countries to prevent the long run tendencies towards migration. The minorities will then have sufficient incentive for contributing their best to the economic prosperity of the country in which they live. The declaration of fundamental rights of the minorities, which was incorporated in the Nehru-Liaquat Agreement, is a welcome step in this respect. It may be noted that the Constitution of India has guaranteed equal rights to all citizens of India, irrespective of caste or community.

THE INCREASED PRESSURE OF POPULATION

While the migrations in the West were more or less balanced, in the East there was a net influx of nearly 3 million displaced persons. This sudden and unexpected pressure on the already overstrained economic resources of India created enormous difficulties for the provision of food, clothing, and housing for these people. In this connection, we should note that India was left with inferior land in the West after the partition. In consequence, the pressure of population on the limited food resources of the country has been increased. The same effect is brought about in the East by the net influx of more than three million persons without any corresponding increase in food production.

Along with the problem of provision for food, is the problem of providing adequate housing facilities to the displaced persons. The houses that were left,

particularly in the West, by the emigrants were crude as compared with what the immigrants left in West Pakistan. The mass frenzy that preceded and followed the partition also resulted in the destruction of some valuable property. In West Bengal, the large net influx of refugees resulted in heavy pressure on housing facilities, particularly because of the tendency of the immigrants to concentrate in urban centres. The large amount of relief expenditure that had to be provided in order to meet the minimum needs of displaced persons must have had an inflationary effect on the price level of some commodities, as the rate of increase in production was not commensurate with the sudden increase in demand. Some among those who were fortunate to migrate to India with their wealth intact, bought houses and business concerns by paying fancy prices.

OCCUPATIONAL DISPARITY

The occupations of a large portion of the displaced persons, who came over from Pakistan, were different from those of the Muslims who left India. The Census Report for 1941 does not give us an idea of the occupational distribution of non-Muslims in Pakistan or of the Muslims in India, as the data are not classified according to communities. Before formulating a rehabilitation programme, however, it was necessary for the Government to have detailed occupational statistics. A Census of refugees was therefore taken in October 1948 in the West, in those Provinces and States where there were a considerable number of refugees. A similar Census was taken in May 1949 in West Bengal, Assam, Bihar and in Bengal and Assam States. The following table gives the occupations of West Pakistan refugee earners, in Pakistan before the partition and at present in India:—

TABLE 1. Occupational Distribution of Refugee Earners from West Pakistan
(figures in thousands)

	No of earners in West Pakistan before migration.	No. of earners in India after migration.
TOTAL	746	499
Rural	266	159
Agriculturists	245	143
Rural Artisans	21	16
Urban	480	340
Services	127	103
Professions	23	13
Trade and Business	266	157
Industry	18	11
Others	47	56

Similar figures are not available regarding occupations followed by refugees who left India for Pakistan. Although the table relates to earners only and not to the total number of persons depending on a particular occupation, it does indicate certain tendencies. The largest class of refugees coming from West Pakistan depended on trade and business. The next largest class consisted of agriculturists, a number of them being large land-holders. Services and professions provided employment to a large number of persons. Rural artisans and industrial workers, however, constituted the smallest class of earners. As

against this the Muslims who left India were mainly cultivators and artisans. This disparity between the occupations followed by the Muslim and non-Muslim refugees has rendered the problem of rehabilitation most difficult and has upset the economic structure in both the countries. India has particularly suffered as a result of the exodus of urban and rural artisans. The Muslims of India were specialists in weaving, leather-working, tailoring, trade in provisions, meat and fish, etc. Besides, the Muslims of East Punjab and PEPSU formed a large portion of semi-skilled labour in East Punjab industries like woollen, hosiery, engineering and metalworks, and in railways. Their migration has resulted in an acute shortage of skilled artisans. On the contrary, most of the refugees who have come from Pakistan have no aptitude for these occupations. A number of them belong to the trading and professional classes. They cannot follow their original pursuits in the areas to which they have migrated, because these occupations are already overcrowded and there is limited scope for them. In Pakistan, on the other hand, banking and trade have suffered considerably, owing to the exodus of persons specialising in these lines. Since the non-Muslims were mainly accusomed to intellectual pursuits or had developed a high business ability, they could not adapt themselves to manual labour in India for which there was a considerable demand. Similarly the large land-holders, most of whom were not accustomed to doing any manual work, could not adapt themselves to any available employment. Refugee businessmen, hawkers and traders have been looked upon by the local population as their competitors and this has resulted in apathy towards them. It has thus not been possible to fill the occupational gap caused by the exodus of Muslims, by substituting non-Muslim refugees in their place.

So far as West Bengal is concerned, there was only one-way movement from Pakistan to India since very few Muslims left West Bengal for East Bengal. The influx of non-Muslims was therefore not offset by an exodus of Muslims as in the Punjab. Since there is a net addition to the population of West Bengal, the question of substitution of Muslim by non-Muslim labour did not arise. The following statement shows that most of the refugees who have come to West Bengal belong to the business, professional and service classes, those very classes whose rehabilitation is most difficult:—

TABLE 2. Occupational Distribution of Refugee Earners from East Bengal

1.	Trade and Business 38%	6.	Artisans and miscellaneous professional men 4%
2.	Services 28%	7.	Peasants 4%
3.	Landholding or tenure holding 12%	8.	Tailors 3%
4.	Doctors 4%	9.	Lawyers 1.5%
5.	Teachers 4%	10.	Labourers 1.5%

In the migrations that took place in the East in 1950, a considerable number of Muslim workers were affected. It is said that a large portion of the workers in some of the industries in West Bengal, particularly in the jute industry and in collieries were Muslims. Their migration to East Pakistan created a transitional gap in labour supplies.

Among the immigrants from both West and East Pakistan there were a good number of lawyers, doctors, teachers, managers and clerical workers. Some of these professions require great specialisation and training. It is difficult for such persons to transfer themselves to other jobs. If social security schemes like health services and education programmes expand, it is possible

that some of these persons may be absorbed. At the same time, if a larger amount of industrial activity is undertaken in India, a number of persons who are connected with trade and business can be absorbed. Adequate loans and grants are necessary for these refugees as they could carry very little of equipment or capital with them. As regards the vocations where there has been a gap on account of the emigration of Muslims, it may be said that it will take some time before others can take up these jobs, as they will have to be trained for the work. But there will still be another fundamental difficulty. The jobs which the Muslims pursued will not provide as high a level of income, as the jobs which the non-Muslims pursued in their former provinces.

THE URBAN CHARACTERISTICS OF REFUGEES

According to the figures given by the Census of Displaced Persons, 1948, more than 50 per cent. of the total number of earners followed urban professions while in Western Pakistan. The all-India percentage of urban to total population is only 14. The influx of refugees has thus created special problems. The industrial centres of West Punjab like Karachi, Rawalpindi, Sialkot and others were largely built by the enterprise and initiative of non-Muslims. Even though several non-Muslims owned agricultural land, it appears that they were residents of cities. In Sind also, Hyderabad and Karachi flourished on account of the spirit of enterprise shown by non-Muslims. In the East also the same was the case. The large number of people who were accustomed to living in cities tended to concentrate in and around the cities when they migrated to India. In consequence, Delhi, Bombay and Calcutta became heavily overcrowded with refugees. There was also the fact that some opportunities for employment lay in the cities. Criticisms have been made that the displaced persons have refused to shift from the cities. Proper inquiries have revealed that it is too much to expect that persons who have spent their lives and earned their livelihood in cities should all of a sudden take to rural vocations. That is why attempts must be made to see that these persons get the necessary facilities in the new townships and suburban centres that are being built. The ability of the rural areas to absorb a larger number of population is limited. The future of these refugees must therefore lie mainly in cities and towns.

Cannot the large cities of India as they stand today absorb a larger population? It is wellknown that owing to the acute shortage of building materials there has not been any notable expansion in building activities in the cities. The problem of accommodation has persisted with equal rigour in Delhi, Calcutta and Bombay. The capacity of these cities to provide adequate urban services like transport, water supply or medical facilities is also limited. Physical limitations in fact make it impossible for further expansion of cities like Bombay in the short run. During the war and the postwar period, these cities witnessed a tremendous increase in population on account of internal migration. The public utility services in the cities are overburdened and overstrained. That is why the influx of refugees created increased burdens and resulted in some friction between them and the original residents of these cities. The price level of essential products and services also tended to go up with consequent discontent among the existing population.

DISPARITY IN WEALTH

It is wellknown that the refugees who came to India, particularly those from Western Pakistan had large landed and immovable properties as well as a large stake in industrial activities. The relative wealth of these persons and

of those who left India shows a remarkable difference. Some of the richer tracts in West Punjab belonged to non-Muslims. The East Punjab Government estimated that out of 18.8 million acres of cultivable area in West Punjab, 6.6 million acres of land belonged to non-Muslims. This is corroborated by the fact that the Hindus and Sikhs of West Punjab paid as much as 34 per cent. of the total land revenue in spite of the fact that they formed a minority. Compared with this, the Muslim population of East Punjab paid only 27 per cent. of the total land revenue to the State. Out of a total area of 14.2 million acres in East Punjab, only 3.4 million acres belonged to the Muslims. The non-Muslims have thus left behind in West Punjab about 3.2 million acres of land in excess of what the Muslims have left behind in East Punjab. As was stated earlier, lands in West Punjab are more valuable as they are supplied with a network of perennial canals and distributaries. In N.W.F.P., Sind and Baluchistan also non-Muslims owned a considerable portion of fertile lands. It is estimated that the non-Muslim minorities of Sind owned as much as 4 million acres of land out of the total of 10 million acres of arable land in Sind.

Although the non-Muslims formed a minority of the population in West Punjab, it is estimated that nearly 80 per cent. of the industrial undertakings belonged to them. According to a survey conducted by the Punjab Board of Economic Inquiry in the year 1945-46, the non-muslims were reported to have contributed as much as Rs. 5 crores in the total investment of Rs. 6 crores in the Lahore factories. They owned 167 factories out of a total of 215 indigenous factories in that city. The entire money market in West Pakistan was controlled by non-Muslims. It has been estimated that nearly 95 per cent. of the deposits of large joint-stock banks of Western Pakistan were reported to have been held in the accounts of non-Muslims. More than 92 per cent. of the insurance premia was paid by non-Muslims. It is stated that 75 per cent. of urban immovable property in terms of value, belonged to non-Muslims. In Lahore it is reported that non-Muslims paid nearly three times the property tax paid by Muslims. In Karachi, which was the city built by the enterprise of Sindhis, 80 per cent. of the landed property belonged to non-Muslims. The best areas of Karachi were inhabited by them. Similarly the bulk of the trade of West Pakistan was manned by non-Muslims. Even with respect to foreign trade carried on in the port of Karachi, 87 per cent. of the concerns were controlled by non-Muslims.

The above figures give a graphic picture of the great prosperity which non-Muslims had enjoyed in Western Pakistan. The sacrifice and the suffering that the partition and the mass migration have enforced on them can very well be imagined. It will take many years before these persons can recover the wealth that they left in West Pakistan. The Great Displacement has at one stroke brought about equality in poverty among all these persons.

DISPARITY IN INCOMES

On account of the larger wealth that the refugees possessed in Western Pakistan and on account of the specialised occupations which they followed, they were accustomed to income levels higher than those of the Muslims who went from India. The enquiry conducted by the Government of Bombay about the condition of displaced persons showed that a large number of refugees who stayed in Bombay were accustomed to earnings above Rs. 200 per month. It is wellknown that West Punjab and Sind were highly prosperous. The available figures for refugees coming from Eastern Pakistan show that a large proportion of the non-Muslims who came over from East Bengal were

accustomed to good incomes. To provide these displaced persons with at least a decent income is indeed a formidable task. Increased business and trade activities follow increased industrial prosperity. Unless India is able to increase its pace of industrialisation, it must be admitted that it is difficult to preserve and maintain the standard of living, which the displaced persons had enjoyed in the land to which they originally belonged.

It is extremely difficult in an underdeveloped country like India to attain a high level of income and standard of life. One of the most unfortunate effects of the partition is that it has resulted in the virtual poverty of millions of persons who were accustomed to live well. A high level of income means increased demand for goods as well as increased savings which can go into investment activities, either through contributions to Government loans or through private initiative. On account of the displacement, large, though imperceptible, repercussions on the economy are being felt. For example, thousands of persons who were able to provide for technical training or education out of their own incomes, have now been forced to let their young dependents fall back upon the State.

On account of the suddenness of the mass migration, it was not possible for a large number of the refugees to carry along with them their resources like equipment and machines or even liquid capital. Though it was possible for some refugees from Sind to transfer their bank accounts, this was not the general rule. In fact conditions at the time of the partition were such, that it was impossible for the refugees to sell their property and to convert their fixed assets into cash. The dangers in carrying property or cash were also so great that nobody could think of a physical transfer of property or cash. In consequence, most of the refugees came to India with bare hands. This rendered the problem of rehabilitation of ten million refugees exceedingly difficult. When we contrast the Indian mass migration with the migrations in other countries we find that there have been many cases in the West, when it was possible for the migrants to carry with them some property and cash. In some cases international organisations like the League of Nations provided facilities. In Palestine for example, which is a land mainly of immigrants, every person brings along with him a capital of at least £1,000. It is estimated that such an amount is necessary in order that the individual may provide himself with a decent source of livelihood. In a way, those who bring capital along with them are also welcome in the country where they go, as it is possible that the employment of such capital would result in providing work also for the local populace.

INCREASED RESPONSIBILITY OF THE STATE

The Census of Displaced persons from Western Pakistan discloses that out of the total of 4.4 million persons enumerated, nearly 1.4 million persons were below 15 years of age. Taking into account also the number of persons above 60 years (3 hundred thousand), it is found that the State has to take direct responsibility for providing proper educational, or living facilities, for about 1.7 million persons or nearly 40 per cent. of the total displaced persons. If we take into account the refugee influx from Eastern Pakistan also (that is, 4 million persons), and if we take the proportion of those below 15 years and of those above 60 to be the same, we find that 1.5 million more persons have to be provided for in the same manner. The State has thus to look after more than 3 million persons until the earners in the families are able to rehabilitate themselves. It is very necessary that the large number of young

and tender persons, who have been subjected to the catastrophe of mass migration should not be allowed to develop without proper educational facilities. The nation must harness their energies to the best possible use. Otherwise we will only add to their frustration, misery and suffering.

DISPERSAL

The Census of Displaced Persons shows that out of the refugees who came from West Pakistan more than half were in East Punjab; large numbers were also absorbed by U.P., Delhi, PEPSU and Bombay. Those who came from West Punjab mainly concentrated in East Punjab, PEPSU, Delhi and U.P. Greater diversity was seen in the persons who migrated from Sind; though a large number of families, nearly 30 per cent., concentrated in Bombay, the others were distributed over different parts of India. While this was the case with reference to the refugees from West Pakistan, those from East Bengal were mostly concentrated only in West Bengal, though some went to Assam. There was no systematic plan for the dispersal of displaced persons, though an attempt was made at the Conference of Chief Ministers of Provinces and States to fix quotas for each region. One thing is clear that except for three or four Provinces and States, the others have not shown the same enthusiasm and desire to take in refugees. This tendency becomes particularly evident when we note the large scale concentration that is taking place in West Bengal.[1] It is neither in the interest of the over-burdened province, nor in the national interests to allow such huge overcrowding. It is obviously necessary that a more balanced distribution should take place. In this connection the integration of the former Indian States might help in providing some opportunity for a redispersal. One difficulty in achieving balanced dispersal is that the refugees themselves may not be willing to shift to far off areas. It is a natural tendency on their part to go to those areas where they have economic, political, religious, linguistic or social links. With proper economic opportunities provided for them it is possible, however, that they may be convinced of the need for dispersing themselves more evenly over different parts of the country.

II. OBSTACLES TO RESETTLEMENT

STAGNATION IN INDUSTRIAL ACTIVITY

The mass migration of refugees unfortunately coincided with a period of stagnation in industrial activity in India. If there were a larger rate of industrial expansion in India, it would have been possible to provide employment for a considerable number of the displaced persons. In fact in the year 1947, there was an all round decline in industrial production owing to transport bottlenecks and labour-capital disputes. The paralysis in the investment market which accompanied also created difficulties. In such an atmosphere it was a formidable task to provide jobs for the displaced millions. Though the Central and Provincial Governments make rules and regulations to give preference to displaced persons in Government appointments, their ability to provide employment is limited. In consequence, the private sector has the major burden of providing employment to these persons.

1. The controversy between West Bengal and Bihar over the border districts of Bihar was accentuated by the partition and created hurdles in the way of the dispersal of East Bengal refugees in Bihar. It was reported that Assam was applying in the case of non-Muslims refugees, migration laws, which were mainly meant to prevent infiltration of Muslims.

THE THREAT OF INFLATION

The refugee movement coincided with a period of inflation. Owing to the inconsistent policy of the Government regarding control and decontrol, the price level in India was showing a sharp rise. In such an atmosphere, any attempt at embarking upon schemes involving large-scale expenditure for purposes of relief and rehabilitation might have aggravated these trends. Diversion of funds from productive activities, for the purposes of relief and resettlement would result in decrease in production. Expenditure on relief could not directly contribute towards production, and that on rehabilitation would help production only in the long run.

The Government of India had to curtail its grants and loans to the different Provinces in order to introduce economy in expenditure. This resulted in the abandonment or slowing down of several long-run projects like irrigation dams and hydro-electric schemes. Many industrial ventures proposed to be started by the Central or Provincial Governments had to be postponed or given up. These economy cuts affected certain projects (e.g. Bhakra and Nangal) which were meant to make a direct contribution towards the problem of rehabilitation. Instead of increasing employment, this situation caused difficulties in finding suitable work for the refugees.

THE PROBLEM OF EVACUEE PROPERTY

There was also another difficulty in the way of resettlement. The delay in the solution of the problem of evacuee property made it impossible to bring about the permanent settlement of displaced persons. It is well known that unless the person who occupies a property or a factory is sure that he would continue to be in possession of it for a number of years, and so could take ownership interest in building up the undertaking, it is difficult to achieve increase in production. The property that has been left by Muslims still continues to be owned by them, though they are no longer citizens of this country. How can the displaced persons who are temporarily allotted rights over such property have adequate incentives for more production? For an ultimate settlement of the displaced persons, the solution of the evacuee property issue is thus urgent.

THE LACK OF SUFFICIENT RESPONSE FROM THE PROVINCES

As the problem of displaced persons was being dealt with by several departments of the Central Government, there was an urgent need for a co-ordinated policy in order to bring about a speedy solution of the problem. But unfortunately the existing system in the Central Government made co-ordination difficult. The same was true with respect to the co-ordination of the policies of the Centre and of the Provinces. Though the Central Government accepted responsibility for the rehabilitation of the displaced persons, the actual work had to be done by the Provinces. If the Provinces did not have sufficient interest in this attempt the objectives of the Centre would be defeated. In fact this was what was happening in some cases. Partly due to the play of vested interests and also partly due to internal difficulties, the different provinces were not co-operating with the Centre to the extent they ought to have done. Though the Central Government promised assistance by way of finance there was not much response from the Provinces. It was only a few Provinces which adopted a national attitude towards rehabilitation of re-

fugees. Some of the Provinces and States refused to take a larger number of refugees. Though the criticism of the actions of some of the Provinces is justified, the Central Government was also to blame. For example, though West Bengal witnessed a large amount of net influx in her already overcrowded area, adequate financial help was not given to her in the first two years.

From an overall point of view, it is true to say that the Governments have done much by way of relief. But what is important from the long run point of view is the progress of rehabilitation. As the spokesmen of the Central Government themselves have admitted, the progress in this field has not been satisfactory. In fact we may say that too much attention was concentrated on providing relief. By allowing a large number of persons to stay in camps and by providing them with free rations and other facilities for a long time, it is possible that the spirit of self-help in them may have been checked, reducing them to the position of parasites.

III. SOME PROBLEMS OF REHABILITATION

RURAL RESETTLEMENT

Apart from the difficulties and dislocations that have been created by the refugee movement, the main problem is that of the pressure of about 2½ million persons on the limited resources of India. The capacity of the country to absorb a larger population on the land is limited; in fact we have already a surplus population on the land. The prospects of bringing new land under cultivation and of getting an assured supply of crops from the existing lands depend upon the execution of short-term schemes like the digging of wells and of long-term schemes like irrigation projects. In East Punjab itself, unless the Bhakra Dam comes to fruition, the scope for rural resettlement is very limited. The progress on this project has not been as rapid as might be desired. In West Bengal also, until the Damodar Valley Project materialises, the possibilities of new outlets for rural resettlement are remote.

Some special difficulties in the way of rural resettlement may be mentioned. Those who were accustomed to canal irrigation, find it difficult to cultivate land in East Punjab.[1] Those who came from West Pakistan were accustomed to ownership of large tracts. In East Punjab only small tracts are available. There is also the difficulty arising out of the different types of crops that were being grown in West and East Punjab. But the mass migration has provided an opportunity, in East Punjab at least, for developing scientific agriculture. This can be done by training the refugees in modern technique and giving them opportunities to practise the same.

Some Provinces and States offered facilities for resettlement of refugees in areas from where the existing population is migrating in search of opportunities, e.g. the coastal tracts of Bombay and the Malnad areas of Mysore. It is natural that the refugees have not shown any great enthusiasm for these offers. Such areas, from where even the existing population is tending to go out, may not offer sufficient incentive to the displaced persons. It is only if a planned scheme of rural development in these areas is launched and other facilities are promised or given, that the displaced persons may be tempted to settle in those areas.

1. On the other hand, it has been stated that many Muslims who had migrated to Pakistan returned to India as they found that they could not accustom themselves to canal irrigation.

URBAN RESETTLEMENT

It is clear that as the capacity of land to absorb more population is limited, a greater number has to be provided for in urban centres. Most of the displaced persons are familiar with trade and business. The Government of India as well as some of the Provinces have undertaken the policy of constructing new townships. There is thus an opportunity for taking into consideration modern techniques in town planning and for seeing that these towns are built to serve as models in the country. An experiment is being made in Nilokheri in East Punjab to construct a township on a co-operative basis. As far as possible the construction of these new towns should make use of the initiative of the displaced persons. Townships should be planned in areas where supplies of building materials are readily available and also where facilities for starting factories and businesses exist. In the allocation of scarce materials, the Government should give top priority to such schemes.

INDUSTRIALISATION

It is evident that the only way by which large numbers of displaced persons can be resettled in order to bring about a higher standard of living, both for themselves and for others, is by planned industralisation. In India, unfortunately, the rate of industralisation has been slow. The initiative in planning for large-scale industralisation should come from the Government in an under-developed country like ours. If attempts are made towards large-scale industrialisation and the abilities of the displaced persons are harnessed towards this end, the amount of relief expenditure that is now being incurred, may prove a stimulus for increased industrial production. But though the Government will have to play a greater role in initiating development, the major effort will have to be through the private sector. If the private sector co-operates with the Government sector, and the activities of both are co-ordinated, the problems of resettlement will not appear as unwieldy as they do today. Besides there should be active co-operation between the Central and Provincial Governments. The starting of a large factory, for example, will provide employment to several thousand persons. The Central Government itself is planning a number of factories, which will have to be located in the Provinces. Each Province desires that such factories should be located within its boundaries. But the Central Government can insist that if a factory is to be located in any Province, that Province should be willing to settle a certain number of refugees. The Central Government also provides large amounts by way of grants and loans. Such help should also be conditional on the Provinces agreeing to take up their quota of refugees. But ultimately it is only on the basis of a national plan for rapid industrialisation, that the large number of refugees can be absorbed in gainful employment. We may suggest in this connection that certain areas should be viewed as one unit or region for purposes of rehabilitation and resettlement. For example, East Punjab, PEPSU and Himachal Pradesh can be combined into one region, and an authority like the T.V.A. may be created to look after the planned development of such a region.

LONG-TERM VERSUS SHORT-TERM PLANS

There are two ways by which greater facilities by way of fuel, power, iron and steel, etc., can be provided. There are long-term plans as well as short-term plans. A thermal station or a diesel plant may provide electricity

in a short period of time. But a hydro-electric project may take a longer period to mature. If speed is essential, it is necessary that while planning long-term schemes we should attach sufficient weightage to short-term measures. Immediate rehabilitation is very necessary in the interest of providing a proper psychological atmosphere. Otherwise the refugees may become a source of disruption and provide explosive material for anti-national forces. In other words, the advantages of both short-term and long-term schemes will have to be properly balanced.

INDUSTRIALISATION OF BORDER AREAS

The border provinces like East Punjab, West Bengal and Assam present a new problem in the schemes of industrial development. Are not these areas unsafe from the point of view of strategy and safety? In the event of war, will not the large industries that are started here be subjected to threats of disturbances? These are indeed pertinent questions. But it must be noted that a larger number of refugees have tended to concentrate in East Punjab, West Bengal and Assam. There are two ways of resettling them. The refugees may be asked to go to distant areas where industrial units may be planned or units may be taken to the areas where the refugees live. Between these two methods, there is greater justification for providing facilities for starting some industries in areas where the refugees have settled. What is necessary is that basic and strategic industries should not be located in these areas. Even the threat of insecurity may be met if sufficient precautions are taken for defence. Light industries, consumer goods industries and process industries can well be started in these areas. In areas like West Bengal where there is the greatest density of population in India, the only way by which a higher standard of income can be assured is by planned industrialisation. Calcutta all along has offered unique advantages for industrialisation. It may be possible to start industries in areas other than Calcutta, so that the heavy pressure on Calcutta may be reduced. Bihar also offers good prospects; but if industries are started in Bihar for these reasons, arrangements should be made to offer full facilities of employment to the people of West Bengal.

TOWARDS A PLANNED SCHEME OF REHABILITATION

The Government policy regarding rehabilitation can be criticised on the ground that no attempt was made to dovetail rehabilitation programmes into the schemes of general economic development. It is necessary to view the problem of resettlement of refugees as part of the general problem of economic development of India. In this connection the Central Government has a great role and a heavy responsibility. They have shifted the responsibility of refugee welfare to the Provincial Governments. On the other hand, they have taken the initiative in planning and starting many schemes of general economic development. Both the Central and the Provincial Governments have been spending and intend to spend large amounts for purposes of refugee resettlement. The Rehabilitation Finance Administration is distributing loans to displaced persons. Individuals or groups of refugees, even though they are offered liberal financial assistance, may not be able to start new businesses or industrial ventures. This may be due to lack of adequate supplies of capital equipment or the expectation or existence of slump conditions, or the absence of suitable atmosphere in which the refugees can work. In such circumstances, financial assistance given by the Government is bound to be frittered away on current consumption. The defect in the rehabilitation policy lies not

in the granting of assistance but in its direction. If the Government had employed the same resources on the construction of new projects (irrigation, hydro or multi-purpose) or of large factories, it is quite possible that new avenues for employment would have been created, and at the same time a net addition to the country's national wealth would have been made. It is a paradox that the Government complains of lack of financial resources for the execution of projects like the Bhakra or the Damodar Valley and applies the economy axe to such nation-building programmes, and at the same time plans for large scale expenditure on refugee rehabilitation.

In order that a planned system of dispersal and resettlement may be evolved, it is necessary that a survey should be conducted to ascertain the following:—

(1) The ability and willingness of the displaced persons to move into any assigned area or region; (2) the measures necessary to introduce greater mobility among the displaced persons; (3) the ability and willingness of the different Provinces or States to absorb any given quota of refugees; (4) the measures necessary for making the Provinces or States and their inhabitants take an 'interested' attitude towards the resettlement of the refugees; and (5) steps necessary for providing facilities for the speedy assimilation of refugees in different areas.

THE ATTITUDE OF THE REFUGEES

This will depend upon the nature of links that bind the refugees to any particular province or region. For example the social, linguistic, cultural and family links that the refugees from West Punjab have in East Punjab make it difficult to expect greater mobility among these refugees. The willingness of a refugee to continue to stay in any particular area will also depend upon economic factors. If he is already satisfied with the job and income he is getting at present or if he expects any particular job and income, then he will be prepared to shift only if he is assured of a higher income and a more congenial job. In many cases the age group of the displaced persons is important. Persons who are young may be more easily persuaded to shift to other areas than those who are old. If it is possible for the refugees to resettle in groups in other regions or areas, they may be more willing to redisperse.

MEASURES NECESSARY TO INTRODUCE GREATER MOBILITY

Among these the most important is the provision of training facilities. If the refugee gets suitable technical education and experience and develops vocational aptitude, other than that to which he was accustomed prior to the Great Displacement, then he will be in a better position to move to other parts. Such training should be co-ordinated with the demand for different kinds of skilled labour or services as well as with the aptitude of the refugees. Besides training facilities, the displaced persons must be provided with assistance by way of capital, for which also the State must take the initiative.

THE ABSORBING CAPACITY OF THE PROVINCES OR STATES

Any attempt towards a planned resettlement must be preceded by an enquiry into the willingness and ability of the different Provinces to absorb any given quota of refugees. So long as the standard of living of any particular region or Province stands a chance of being improved on account of the im-

migration of refugees, then it is reasonable to expect that there will be co-operation for resettlement in those areas. Such possibilities exist if there are already cases of under-utilisation of productive equipment or factories. There may be a shortage of labour or of skilled personnel in respect of some industries or projects. The local population may not be in a position to fill this gap. In such a case, if displaced persons can step in, they will be treated as complementary to the existing labour in that Province. If, on the other hand, the influx of refugees results in competition in an already crowded vocation, or if it results in the undercutting of the prevailing wage level, the people of the Province will tend to develop a hostile attitude towards them. If the refugees bring with them capital and equipment and if they are able to start new and non-competing enterprises, then there will be employment opportunities created also for the residents of the city or province. The enterprise of the displaced persons will thus help in making the area economically prosperous. In such cases the displaced persons will be welcome.

A proper study of the absorbing capacity of the Provinces will have to take note of the existence of potential resources and the plans for their development in the different Provinces and States. In making an appraisal of the 'burden' of refugees, too much attention should not be concentrated only on density and overcrowding. The following table indicates the changes in population some of which have been brought about by refugee movements. The percentage of refugee population to total population is also given:—

TABLE 3. Area, Population and Density of the different Provinces of India

Province	Area in square miles ('000s)	Population (1950) (millions)	Density in 1941	Density in 1950	%change in Density	No. of refugees ('000s)	% of refugees to total population
Madras ..	128	54.29	391	417	+ 7	....	....
Bombay ..	100	32.68	273	297	+ 9	264	.79
West Bengal ..	29	24.32	751	840	+ 12	3,000	12.30
U. P. ..	112	61.61	518	550	+ 6	412	.66
East Punjab ..	37	12.61	403	341	— 16	2,465	19.54
Bihar	70	39.52	521	565	+ 8	....	....
C. P. & Berar ..	130	20.92	171	161	— 6	92	.49
Orissa	60	14.41	271	240	— 11	....	....
Assam	54	8.51	147	157	+ 7	....	....
Delhi	6	1.51	932	2,632	+190	377	24.00

The table shows that the density in West Bengal, Bihar, U.P., and Delhi is very high. The refugees form a significant proportion of the total population only in East Punjab, Delhi and West Bengal. In the case of East Punjab the refugees form almost one-fifth of the total population. But the density of East Punjab has been reduced compared with the 1941 Census. This is on account of the larger efflux of people from that Province. In the case of Delhi, refugees form almost one-fourth of the total population, while in West Bengal they constitute one-eighth of the population.[1] We do not have separate figures for Calcutta, but it is well known that most of the refugees in West Bengal have tended to concentrate in Calcutta. In consequence, the density in Calcutta is likely to be greater than in Delhi, for which the figure is the highest, namely, 2,632 as shown above.

In order to get a truer picture of the burden, we must study the relationship between population and resources in the different Provinces. The lack of ade-

1 If we include the figures of the refugee movements of 1950, the proportion of refugees to total population in West Bengal works out to about one-seventh.

quate data as regards States will be a lacuna in such a study. Table 4 gives an idea of the extent of agricultural development and further possibilities in the different provinces. The heavy pressure of population on sown area in some Provinces like West Bengal, Bihar and Orissa is clearly seen. Except in the case of East Punjab, U.P., and to some extent of Madras, the other Provinces have to depend largely on the vagaries of rainfall. If we take the extent of cultivable waste in the different Provinces, the large potentialities of Assam and C.P. are evident. But C.P. has not figured much in irrigation planning. East Punjab on the other hand can provide sufficient land for the displaced persons, if the irrigation projects in that Province are completed soon. Provinces like Madras, Orissa and U.P. can also offer future prospects for rural resettlement of the refugees, without jeopardising the opportunities of their residents.

TABLE 4. Agricultural Development and Possibilities in Different Provinces

Province	Net sown area million acres	Sown area per '000 persons	Irrigated area million acres	Irrigated area per '000 persons	Area to be irrigated by new projects million acres	Area to be irrigated per '000 persons	Culturable waste million acres	Culturable waste per '000 persons
Madras ..	31.16	570	9.74	180	8.11	150	11.98	220
Bombay ..	28.29	870	1.22	40	.76	23	.77	24
W. Bengal ..	11.22	460	1.84	75	1.60	66	1.98	81
U.P. ..	37.38	606	1.57	187	2.11	34	10.00	162
E. Punjab ..	12.00	950	5.17	409	4.50	357	2.41	191
Bihar ..	17.69	447	1.22	30	2.65	67	6.42	162
C.P. & Berar ..	24.19	1,156	1.65	78	.22	11	13.92	670
Orissa ..	6.52	452	1.69	117	1.09	76	3.31	229
Assam ..	5.18	608	1.12	131	.30	35	17.60	2,066

In respect of electrical and water power resources, the following table gives an idea of the extent of the present development and the future possibilities:—

TABLE 5. Electrical Development and Possibilities in different Provinces

Province	Electrical Generating Capacity ('000 kw)	Generating Capacity per '000 persons (kw)	Electrical Projects Million kws	New project capacity per '000 persons (kw)
Madras	155	29	.50	92
Bombay	350	107	.60	183
West Bengal	349	143	.34	139
U. P.	168	27	1.20	194
East Punjab	57	5	.50	396
Bihar	33	1	1.80	455
C. P. & Berar	28	1.3	.25	119
Orissa	1.5	.1	3.86	2,678
Assam	2.4	.3	4.00	4,700

The table shows that apart from West Bengal and Bombay, the other provinces have not made much headway in the exploitation of electrical resources. But the immense potentialities of Assam, Orissa, Bihar and East Punjab are evident. If we take the possibilities of the Wainganga and of the Narbada projects into account C.P. can also offer large possibilities of development. The generation of electricity will help in rural resettlement also.

Owing to the lack of data, it is not possible to give other indices of possible sources of development. In respect of industrial development it is not possible to estimate the extent of potential resources in the different provinces. Table 6 gives an idea of the extent of industrial development in the Provinces. West Bengal and Bombay have been leading in industrial activity. But as the cities of Calcutta and Bombay are overcrowded, the development of industries in other parts of these Provinces and in other Provinces becomes very necessary. Such schemes will give new employment opportunities, which will not only result in the industrial prosperity of India, but will also help in the rehabilitation of the large number of urban refugees who are stranded without avenues of employment.

TABLE 6. Industrial development in different Provinces

Provinces	Number of industrial workers ('000s)	Number of workers per '000 population	Paid up capital in Joint stock companies (crores of rupees)	Paid up capital per '000 persons	Value of industrial output (crores of rupees)	Industrial output per '000 persons
Madras	276	.5	47.38	8,700	82.45	15,100
Bombay	698	21.3	190.88	67,140	226.83	69,400
West Bengal	668	27.4	193.59	79,600	216.17	88,800
United Provinces ..	240	3.8	15.57	2,520	97.39	15,800
East Punjab	45	3.6	15.95	12,640	7.83	6,210
Bihar	137	3.4	11.02	2,780	58.12	14,700
C.P. and Berar	97	4.6	4.14	1,970	16.01	7,650
Orissa	11	.8	2.77	1,920	2.72	1,890
Assam	49	5.7	2.77	3,250	4.54	5,300

ATTITUDE OF PROVINCES AND STATES

The refugees have not been distributed equitably over all the Provinces and States of India. While this was partly due to the unwillingness or inability of the refugees themselves to spread over the country, the apathy and indifference of the Provinces and States are also partly responsible for this tendency. In order that a more helpful attitude is created, it is necessary for the Centre to influence the units by providing suitable incentives. In the different units themselves, there is need for propaganda for creating a suitable atmosphere among the local inhabitants. In this connection, priority should be given to areas contiguous to the affected parts.

ASSIMILATION

Absorption is not enough. Ultimately the displaced persons will have to be assimilated in the Provinces and States where they settle. This is indeed a difficult task. There is very little homogeneity between the displaced persons and the people of some of the Provinces and States. Given a long period of years and adequate co-operation on the part of the people of the different Provinces, it is possible that the process of assimilation might be completed and the re-

fugees might become one with the local inhabitants in all respects. The difficulties of language, custom and religion may be got over after a period of time. The process of absorption and assimilation is bound to take time. With proper planning and co-ordination it is possible that the pace may be quickened. One of the urgent tasks before the leaders of public opinion is the establishment of a psychological atmosphere of sympathy and 'receptiveness', which will work as a suitable background for the execution of the different rehabilitation measures.

THE PROBLEM OF DISPLACED PERSONS IN PAKISTAN

We do not have adequate information about the displaced persons who migrated to Pakistan, their occupational characteristics and their resources. It appears that the problem of resettlement of the persons who went over to West Pakistan has been as formidable as it has been in India. But Pakistan had certain advantages. The non-Muslims that came over from Pakistan left valuable land, property and going concerns. As West Punjab was relatively more industrialised than East Punjab and as most of the factories were owned by Hindus or Sikhs, their migration created an opportunity for the Muslims who went there. The non-Muslims also left rich and fertile lands. Though they were a minority they owned a larger proportion of the total wealth of Western Pakistan. The emigration of a considerable number of skilled workers and rural artisans from East Punjab and the Punjab States resulted in an additional boon to Pakistan. But the gap created by the emigration of entrepreneurs and experienced businessmen, bankers and traders could not be easily filled. There is also a gap in the professional fields. It will take some years before the people in Pakistan can pick up these vocations. The administrative services in Pakistan have also been affected. As Pakistan had to start with an entirely new Government, the problem of relief and resettlement presented great difficulties. But the main responsibility for resettlement was taken over by the Provincial Governments, particularly by West Punjab. In Eastern Pakistan, the problem was non-existent until 1950.

CONCLUSION

The significance of the mass displacement does not merely lie in the increased pressure it has created on the scarce and limited resources of the two countries. The disturbances and dislocations caused to the lives of more than seventeen million people have undoubtedly far reaching consequences. It will take some time before the economy in either country fully recovers from the shocks, and before the structural gaps created by the displacement are once again filled. Of equal importance and significance are the tremendous sociological and psychological changes that have followed in the wake of the Great Displacement. Human misery is likely to spread. If sections of population are allowed to continue in a state of discontentment, grave political consequences may follow affecting the stability and peace of the country as a whole.

Broadly speaking, the refugee problem has two aspects. In its internal aspect, the problem is mainly one of the resettlement of the permanently displaced. For achieving success in speedy rehabilitation, a scheme of planned dispersal, on the basis of the absorbing capacity of the Provinces and States is necessary. Such a scheme can succeed only if the different units shed their 'indifferent' attitude and develop a greater national consciousness. It must be remembered that the partition has depleted the resources of East Punjab and

West Bengal, the two Provinces which are bearing the main burden of relief and rehabilitation.[1]

In its international aspect, the problem is one of preventing further migrations between the two countries. It is evident that the two aspects are closely interlinked. A discontented refugee carries a tale of woe. Misery generates and transmits hatred and a desire for retaliation. It is only on the basis of a co-ordinated and harmonious policy, jointly followed by both the countries, that future migrations can be effectively checked. The Nehru-Liaquat Pact of April 1950 has stressed that the minorities in either country should look to their own state for security and protection. There has been an unfortunate tendency on the part of some members of the majority community to consider the members of the minority community as aliens, owing allegiance to the neighbouring country. This feeling, coupled with the tales of hardship spread by the refugees, has resulted in much misunderstanding. Consequently, the minority community has been looked upon with indifference and prejudice, and the potential contribution of large sections of people to national prosperity has been checked. Such an atmosphere does not augur well for both the countries. In order to harness the energy, resources and talents of a significant proportion of the population, measures to create confidence and a feeling of security are very necessary. Ultimately these can succeed only if both India and Pakistan make sincere efforts to work together in a spirit of mutual co-operation. It is only then that the 'refugee problem' will become an incident and a matter of history rather than an ever-burning ulcer and a powerful source of conflict between the two countries, making economic progress in either country difficult.

APPENDIX

SPECIAL PROBLEMS OF DIVIDED PROVINCES

The major impact of the mass migrations was felt in the divided provinces of East Punjab and West Bengal. It is estimated that in East Punjab nearly 2.5 million persons or one-fifth of the total present population consists of displaced persons. The problem of economic development of East Punjab is closely connected with the problem of rehabilitation of the refugees. In West Bengal there has been a net influx of more than 3 million refugees. This has created additional and difficult problems for the Province which was already so overcrowded. The refugees who have come over from Eastern Pakistan have tended to concentrate mainly in West Bengal, thus aggravating the dangerous and explosive situation that already existed in the Province. Though we are too near the event to make a detailed survey of the conditions in the divided provinces, an attempt is made in this appendix to refer to some important problems. At the end of this appendix we have given a statistical abstract of some of the resources of the divided provinces. In Statement I, the extent of agricultural resources in East and West Punjab and in East and West Bengal has been given. In Statement II, the effect of the partition on the irrigational systems of the Punjab has been given. In Statement III, the revenue and expenditure of the divided provinces have been compared. In Statement IV, two tables have been given, the first giving an account of the number of factories and the extent of employment in East and West Punjab, and the second giving the same information about West and East Bengal.

1. An account of the special features of these two Provinces is given in the appendix.

EAST PUNJAB

On account of the partition, 48 per cent. of the area and 42 per cent. of the population of Undivided Punjab constitute East Punjab. This does not mean that there has been any lessening of the pressure of population on land on account of the partition. East Punjab has got only 39 per cent. of the total cropped area of Undivided Punjab, out of which only 28 per cent. is irrigated, that irrigated by canals being only 21 per cent. West Punjab on the other hand has the major portion of the irrigational network of Undivided Punjab. The main crops of East Punjab are wheat, bajra, maize, gram, sugar-cane and cotton. One effect of the mass transfer of refugees was that a large number of skilled artisans migrated to Western Pakistan. East Punjab has been facing acute scarcity of agricultural labour after the partition as the incoming refugees have not been accustomed to this vocation. The cattle wealth of East Punjab compares favourably with that of West Punjab, but on account of the religious objection against the slaughter of bovine animals, the production of good quality hides and skins is comparatively less. Considerable supplies of goat and sheep skins are available and the Province produces large quantities of wool. The Province has also been blessed with the greater portion of the forest resources of Undivided Punjab.

In respect of industrial activity, East Punjab was not as well-developed as West Punjab. In fact, the major centres of industrial activities were located in West Punjab. Out of the total number of factories in the Punjab, East Punjab had 415 factories and employed 43,000 persons, whereas West Punjab had 602 factories and employed 110,000 persons. In respect of the distribution and consumption of electricity also, East Punjab was relatively less developed than West Punjab. West Punjab did not depend upon East Punjab to the same extent as East Punjab depended upon West Punjab. East Punjab depended upon West Punjab for supplies of raw materials like wheat, cotton, lime, coal, gypsum, salt and wool. Industries like flour milling, cotton textiles, brick kilns, chemicals and sports goods have been affected on account of the partition. Muslims formed over 50 per cent. of the field workers and about 70 per cent. of the unskilled labour employed in the various industries in East Punjab. Widespread and serious dislocation was caused on account of their migrations. Most of the industries of East Punjab depended for their markets on West Punjab. The partition has created a large gap in respect of marketing arrangements. After the partition, there was a flight of capital from East Punjab. East Punjab was not provided with adequate banking and credit facilities. It is stated that unless this flight of capital is checked, even the limited industrial development that is in existence in East Punjab might be lost.

The problem of industrial rehabilitation in East Punjab bristles with difficulties. The locational advantages which the East Punjab industries formerly enjoyed on account of the existence of Undivided Punjab as part of Undivided India have all been shattered. Areas which are very near the border of Pakistan have been seriously affected. A survey conducted by the East Punjab Board of Economic Inquiry reveals disquieting features. The Survey which dealt with industrial activity in the border districts of Amritsar, Jullunder, Gurdaspur, Ferozepur, and Ludhiana compared indices of industrial activity in 1946-47 and 1947-48. Many of the industries had to remain understaffed on account of the migration of Muslims who formed 54 per cent. of the total number of workers. The wage rate rose from Rs. 48 per month in 1946-47 to Rs. 63 per month in 1947-48, on account of shortage of labour. The total

gross value of industrial output fell from Rs. 12.5 crores in 1946-47 to Rs. 10 crores in 1947-48. Most of the industrial concerns in border districts expressed a desire to shift from their present location.

It is necessary to put an end to these disquieting features. This can only be done if a planned scheme of economic development is undertaken in the Punjab areas. In order to create a proper atmosphere, it is necessary that there should be no corruption in the administrative services. The degree of instability that has been noticed in East Punjab politics during the last three years does not augur well for ordered economic progress. The main hope for the displaced persons in East Punjab is in the early fulfilment of the Bhakra and Nangal projects; their completion will release 3.5 million acres of land for cultivation and result in the generation of half a million kilowatts of electrical energy.

WEST BENGAL

West Bengal has got 36.4 per cent. of the area and 35.1 per cent. of the population of Undivided Bengal. These figures refer to the 1941 census when the density of West Bengal was calculated at 751 persons per square mile. On account of the net influx of 3 million refugees the density must be above 900. The partition has made West Bengal the smallest of the Provinces in India and the most overcrowded among them all. In respect of agricultural resources, the greater portion of the fertile area went to East Bengal. West Bengal is deficient in rice as well as in jute. The major rivers of Undivided Bengal have fallen to East Bengal. Moreover, the West Bengal rivers are full of mud and dirt. West Bengal and East Bengal have been more complementary than East Punjab and West Punjab. For example, the West Punjab industries depended upon parts of India other than East Punjab for supplies of raw materials and fuel. But West Bengal depended upon East Bengal for supplies of raw materials for her industries like jute, paper, tobacco and tanning and leather. The transport facilities in West Bengal and East Bengal were complementary to each other. The partition actually cut into the roots of the unity of Bengal, dividing even families and relatives. In respect of industrial activity West Bengal has been wholly fortunate. Almost all the major industries of Undivided Bengal are situated in West Bengal. Calcutta has been the leading centre of industrial activity in India. As stated earlier, most of the industries depended upon East Bengal as a source for supplies of raw materials and as an outlet for markets. The partition has affected industrial production considerably. One of the effects of the partition was that there was no connecting rail link between North and South Bengal. Assam which provided some raw materials was also cut off from West Bengal. The new Assam-Bengal rail link has, however, solved some of the problems in this respect.

Even prior to the partition and particularly after it, West Bengal has been causing a lot of anxiety in India. There has been a a state of continuous disturbance in Calcutta and in other areas in West Bengal. In fact, the Province of West Bengal has come to be known as the Problem Province of India. The root of the difficulties lies in the recent troubled economic history of West Bengal. The war put undue strain on West Bengal. The Province and particularly Calcutta were subjected to air raids. Bengal faced virtual starvation and millions died as a result of the famine of 1943. The disturbances at Noakhali and Calcutta were responsible for large scale suffering. West Bengal has become the most urbanised Province in India, the population of Calcutta

being the highest in India, estimated at more than 5 million. The migration of a large number of Hindus from East Pakistan and their tendency to concentrate only in Calcutta has put a terrific strain on the city's already overburdened public utility and medical services. The task of preserving health and preventing diseases and epidemics in the city is indeed formidable. The financial resources of the Province have been overburdened by the liabilities that have to be paid to East Bengal after the partition. Large numbers of administrative personnel opted for West Bengal at the time of the partition, creating an additional strain on its limited resources. The majority of the old pensioners migrated to West Bengal and the burden of the payment has fallen on her. West Bengal has been having continuously deficit budgets. The need for maintaining a police force over the 750 miles of the border, and of preserving law and order in the face of explosive conditions, have added undue strain on the security services. Added to all these, the large amount of tension and instability that has been witnessed in Calcutta, coupled with political factions and ministerial instability has succeeded in destroying conditions of normal life in the Province.

There is no doubt that the scope for expansion in West Bengal is limited. Agricultural land per capita in Undivided Bengal was .49 acres. In West Bengal it is now 0.46 acres, while the actual figure must be very low, if we take into account the influx of refugees in March and April 1950. Unless the long-term projects like the Damodar Valley scheme and the Mayurakshi project materialise, the increased and increasing pressure of population on the limited resources of this small Province might lead to the spreading of disruptive forces in the country.

Industrial activity in West Bengal has been highly concentrated in areas around Calcutta. It is highly desirable that these industries should be spread in the different parts of West Bengal. It is stated that in West Bengal, even with its huge pressure of population, there is scarcity of agricultural labour. This has arisen on account of the desire of the West Bengal youth to prefer to settle in cities rather than in villages. The system of education in West Bengal has also tended to concentrate on education in arts rather than in technical fields. These are some of the fundamental defects in the economy of West Bengal. Until these are remedied, and the people in West Bengal develop mobility and move to other provinces, thus lessening the burden on the area, the prospects of a bright economic future for her are remote.

STATISTICAL ABSTRACT OF THE ECONOMIC RESOURCES OF THE DIVIDED PROVINCES

STATEMENT I.

AGRICULTURE

	East Punjab (India)	West Punjab (Pakistan)	Total Punjab	West Bengal (India)	East Bengal (Pakistan)	Total Bengal
AGRICULTURE (A)—LAND UTILISATION (*thousand acres*)						
Classification of Area						
1. Total area according to village papers ..	22,980	37,239	60,219	18,797	34,201	52,998
2. Net area sown ..	12,904	17,028	29,932	9,552	19,932	29,484
3. Area under forests ..	769	1,150	1,919	1,695	3,047	4,742

	East Punjab (India)	West Punjab (Pakistan)	Total Punjab	West Bengal (India)	East Bengal (Pakistan)	Total Bengal
4. Area not available for cultivation	6,156	6,743	12,899	3,019	5,756	8,775
5. Fallow land ..	741	2,340	3,081	2,283	2,294	4,577
6. Other uncultivable land excluding current fallow	2,410	9,978	12,388	2,248	3,172	5,420
7. Area sown more than once	3,620	2,522	6,142	1,126	5,697	6,805
8. Net irrigated area ..	5,218	12,687	17,905	1,840	424	2,264

AGRICULTURE (B)—PRODUCTION OF CROPS

(*in thousands*)

Estimates of area and Yield							
Rice	Area (acres) ..	436	395	831	7,964	20,394	28,358
	Production (tons) ..	115	327	442	2,688	7,548	10,236
Wheat	Area (acres) ..	3,343	7,259	10,602	118	84	202
	Production (tons) ..	1,055	2,300	3,355	25	17	42
Jowar	Area (acres) ..	445	373	818	5	1	6
	Production (tons) ..	44	65	109	1	..	1
Bajra	Area (acres) ..	2,219	1,271	3,490	1	1	2
	Production (tons) ..	295	233	528	(*a*)	(*a*)	(*b*)
Maize	Area (acres) ..	867	471	1,338	116	7	123
	Production (tons) ..	300	189	489	39	2	41
Ragi	Area (acres) ..	*nil*	*nil*	*nil*	*nil*	*nil*	*nil*
	Production (tons) ..						
Barley	Area (acres) ..	516	236	752	64	101	165
	Production (tons) ..	106	69	175	14	20	34
Gram	Area (acres) ..	4,117	2,037	6,154	276	216	492
	Production (tons) ..	730	456	1,186	62	47	109
Sugar-cane	Area (acres) ..	309	266	575	67	257	324
	Production (tons) ..	392	361	753	107	384	491
Edible Oilseeds	Area (acres) ..	529	428	957	152	566	718
	Production (tons)	80	75	115	29	98	127
Non-Edible Oilseeds	Area (acres) ..	24	11	35	64	68	132
	Production (tons)..	2	2	4	10	10	20
Cotton	Area (acres) ..	386	1,047	2,333	(*a*)	91	91
	Production (bales)[1]	148	805	953	(*a*)	23	23
Jute	Area (acres) ..	..	..	..	203	1,855	2,058
	Production (bales)[1]	..	..	..	585	6,332	6,917
Tea	Area (acres) ..	9	..	9	194	88	282
	Production (lbs.) ..	1,757	..	1,757	143,809	85,947	229,756
Tobacco	Area (acres) ..	16	29	45	25	152	177
	Production (tons) ..	7	19	26	10	58	68

(*a*) Below 500
(*b*) below 1,000 tons
1. Bales of 400 lbs. each

STATEMENT II. IRRIGATION

A. PARTITION OF THE PUNJAB IRRIGATIONAL SYSTEMS

Major canal Systems

	East Punjab (India)	Area irrigated (thousands of acres)	West Punjab (Pakistan)	Area Irrigated (thousands of acres)
1.	Western Jumna Canal ..	834	Upper Bari Doab Canal ..	728
2.	Western Jumna Canal Extensions	91	Lower Bari Doab Canal ..	1,540
3.	Sarusti	43	Dipalpur	693
4.	Ghaggar	29	Pakpattan	911
5.	Sirhind	1,062	Mailsi	442
6.	Eastern	189	Haveli	925
7.	Upper Bari Doab Canal ..	757	Rangpur	155
			Lower Chenab Canal	2,921
			Upper Chenab Canal	830
			Lower Jhelum Canal	1,005
			Upper Jhelum Canal	379
			Muzaffargarh Inundation ..	366
			Indus Inundation	299
			Shahpur Inundation	68
		3,005		11,263

B. AREA, CAPITAL OUTLAY, VALUE OF CROPS AND FINANCIAL RETURNS OF IRRIGATION

(*in thousands*)

	East Punjab (India)	West Punjab (Pakistan)	Total Punjab
Total area irrigated (acres)	3,005 (21.0%)	11,262 (79.0)%	14,257 (100 %)
Cost of Construction (rupees)	86,543 (20.8%)	3,29,136 (79.2%)	4,15,679 (100 %)
Value of crops (rupees)	274,000 (21.27%)	10,17,800 (78.73%)	12,92,700 (100 %)
Financial Returns (rupees) Total..	15,452	72,075	85,727
(*a*) Direct	14,305	39,799	54,104
(*b*) Indirect	1,147	32,276	33,423
Working expenses (rupees)	6,000	18,399	24,399
Net Revenue (rupees)	9,452 (14.97%)	53,676 (85.03%)	63,128 (100.%)

STATEMENT III.

REVENUE AND EXPENDITURE[1]

	East Punjab (India)	West Punjab (Pakistan)	West Bengal (India)	East Bengal (Pakistan)
Total Revenue 1950-51 (Budget) (in lakhs of Rs.)	16,63	19,62	33,89	17,93
Revenue per capita Rs.	11-12-8	9-13-1	15-14-3	3-14-3
General ratio for the division of assets and liabilities	40%	60%	35.2%	64.8%

1. For details, see Chapter XII

STATEMENT IV.

FACTORIES CLASSIFIED ACCORDING TO DIFFERENT INDUSTRIES

A.—EAST AND WEST PUNJAB

Industry	East Punjab		West Punjab	
	No. of Factories	No. of Workers	No. of Factories	No. of Workers
TOTAL	415	43,024	602	109,471
Textiles	106	14,071	16	20,074
Engineering	79	6,437	154	24,135
Minerals and Metals	67	3,691	75	7,666
Food, Drink and Tobacco ..	40	3,562	39	4,295
Chemicals, Dyes, etc. ..	18	1,548	36	2,816
Paper and Printing	8	1,733	42	3,899
Wood, Stone and Glass	14	1,067	38	7,789
Tanneries	2	106	3	1,954
Gins and Presses	72	4,155	178	14,842
Miscellaneous	9	6,654	21	22,000

B.—EAST AND WEST BENGAL

Industry	West Bengal		East Bengal (including Sylhet)	
	No. of Factories	No. of Workers	No. of Factories	No. of Workers
TOTAL	1,552	684,489	148	35,549
Textiles	154	325,466	18	10,789
Engineering	455	159,869	28	11,134
Mineral and Metals	30	24,808	..	..
Food, Drink & Tobacco ..	464	33,865	39	3,162
Chemicals, Dyes, etc. ..	134	23,188	6	218
Paper & Printing	121	21,395	1	29
Wood, Stone and Glass ..	87	17,047	2	338
Tanneries	12	12,369	..	..
Gins and Presses	24	8,833	52	7,598
Miscellaneous	71	57,649	2	2,281

CHAPTER IV

AGRICULTURE

While dealing with population it was made clear that Pakistan has a larger share in the rural population. Besides, its agriculture is in a more prosperous condition as can be seen by a comparative analysis of the structure of land utilisation and the production of food and commercial crops in both the countries.

I. LAND UTILISATION

INADEQUATE DATA

Table 1 (p. 153) indicates the structure of land utilisation in Undivided India, India and Pakistan for selected yeors. Before we undertake a detailed analysis of the structure of land utilisation as affected by the partition on the basis of these figures, it is necessary to refer to their scope and limitations. The table covers a total area of 670 million acres, whereas the total geographical area of Undivided India is 1,008 million acres. This is because we have no reliable statistics for what are known as "Non-Reporting" areas in respect of various crops. These were mainly concentrated in the Indian States. The total area of Indian States in Undivided India was 459 million acres. Of all the States only 79 furnished statistics relating to agriculture. These States covered a geographical area of 258 million acres or 56 per cent. of the total area. From the total area thus reported, deduction has to be made of 110 million acres comprising chiefly unsurveyed areas and lands held as *Jagir*, *Muafi* and other privileged tenures for which there are no agricultural statistics. The net area actually covered by agricultural statistics is 148 million acres. These limitations of coverage also make a comparison of land utilisation of India as a whole with Pakistan very difficult. This is because almost all the Indian States are located in India. As no statistics for at least 30 per cent. of these State areas are available, a statistical picture of India is incomplete to that extent.

It may also be noted that detailed data for land utilisation in India and Pakistan separately are available only upto 1945-46; wherever later figures are available they have been utilised. It is suggested, however, that the general tendency as indicated by the available data upto 1945-56 is substantially true at present.

AREA UNDER FOREST

Whereas in Undivided India, the area under forest formed 13 per cent. of the total area, forests in India occupy 15 per cent. of the total area, while those in Pakistan occupy only 5 per cent. of the total area. Forests have an important part to play in the economy of a country. In addition to being a source of revenue to the Government, forests contribute to prosperous agriculture in as much as they render the climate more equable, absorb excess water during heavy rains and lessen the dangers of both drought and floods.

TABLE 1. Land Utilisation in Undivided India, India and Pakistan[1]

(in million acres)

	UNDIVIDED INDIA				INDIA				PAKISTAN			
	Average 1936-37 to 1938-39	Average 1939-40 to 1941-42	Average 1942-43 to 1944-45	1945-46	Average 1936-37 to 1938-39	Average 1939-40 to 1941-42	Average 1942-43 to 1944-45	1945-46	Average 1936-37 to 1938-39	Average 1939-40 to 1941-42	Average 1942-43 to 1944-45	1945-46[2]
1. Area according to Village papers	660	675	664	667	546	561	553[3]	558[3]	114	114	111	109
2. Area under forest	88	87	86	87	82	82	81	82	6	5	5	4
3. Area not available for cultivation	121	123	120	120	91	96	92	92	30	27	28	28
4. Other uncultivated land excluding current follows ..	112	118	111	110	87	92	88	89	25	27	23	21
5. Current fallows	59	61	58	63	49	50	49	54	10	11	9	9
6. Net area sown	280	280	290	287	237	242	243	241	43	44	47	46
7. Area sown more than once	36	35	41	44	29	27	32	34	7	8	9	10
8. Net irrigated area	63	67	67	67	44	47	46	47	19	20	21	20

1. The above table is compiled on the basis of figures relating to reporting areas only in both countries ; other figures are not available.

2. Figures of Bahawalpur State, the only 'reporting State' of Pakistan are not available for the year 1945-46. Figures in the last column therefore relate to Pakistan Provinces only.

3. Includes an area of 845,000 acres of newly constituted district of Tirap frontier tract (Assam) for which details for cols. 2-8 are not available.

They give the peasantry wood for fuel and for building cottages, and protect the soil from erosion and preserve its fertility. If well-developed and scientifically exploited, they also show possibilities of a flourishing export trade in timber, apart from giving scope to subsidiary industries such as production of charcoal, extraction of turpentine, lac culture, preparation of dyeing and tanning materials, rope and mat making, etc. It is common knowledge that the prosperity of Canada in the earlier part of the 20th century was in large measure due to the scientific and commercial exploitation of forest wealth.

For all these purposes, is the area under forests adequate in either country? To answer this question, we will have to accept a standard proportion necessary in any agricultural country. It is extremely difficult to give any definite figure of a desirable percentage of forest land in a country. From a review of the position in certain European countries, we find an average of 26 per cent. of forest area in these countries. This is not a scientific method of arriving at the correct percentage of forest area that a country should have. It may be noted, however, that countries like Great Britain and Denmark which have much less than this percentage, are heavy importers of timber, while countries like Sweden, Russia and Finland have great forest wealth. "Considering the Indian climate and the general demand of the agricultural villages it is likely that this (the optimum necessary) figure might be taken at any rate as rough minimum guide, say 20 to 25 per cent."[1] From this point of view it appears that Pakistan is in a peculiarly unfavourable position in as much as it has an area of only 5 per cent. under forests. Besides, there is uneven distribution of forest area as between East and West Pakistan. Whereas in East Bengal the area under forests is 10 per cent. of the total area, in West Pakistan it is only 3 per cent. At the same time it should be remembered that West Pakistan does not depend much on rainfall for its cultivation. Nevertheless, problems of soil erosion, water-logging and floods will persist in West Pakistan. So far as India is concerned, the Provinces as a whole are in a better

Table 2. Forest Resources of India and Pakistan

(in millions acres)

	Total area according to village papers		Area under forest		Percentage of forests to total area	
	Average 1936-37 to 1938-39	Average 1943-44 to 1945-46	Average 1936-37 to 1938-39	Average 1943-44 to 1945-46	Average 1936-37 to 1938-39	Average 1943-44 to 1945-46
TOTAL INDIA	402	403	62	62	15	15
Assam	33	33	4	4	12	12
Bihar	44	44	7	7	16	16
Bombay	49	49	8	8	16	16
C.P. and Berar	63	63	16	16	25	25
East Punjab	23	23	1	1	4	4
Madras	80	80	13	13	16	16
Orissa	20	21	3	3	15	14
U.P.	68	68	9	9	13	13
West Bengal	19	19	2	2	11	11
Ajmer-Merwara	2	2	..	..	..	..
Coorg	1	1	..	..	..	..
TOTAL PAKISTAN ..	110	110	5	5	5	5
East Bengal	34	34	3	3	9	9
N.W. F.P.	9	9			—	—
Sind	30	30	1	1	3	3
West Punjab	37	37	1	1	3	3

1. Herbert Howard—'Post-war forest Policy' p. 20.

position. Toble 2 (p. 154) gives the proportion of area under forests to total area in the Provinces in India and Pakistan. The provinces in India have on an average 15 per cent. of the total are under forests. Moreover, the forest areas, except in East Punjab and West Bengal, are fairly evenly spread.

From the above it appears that though in both India and Pakistan. the area under forest is not adequate, India is in a better position. So far as Pakistan is concerned, East Bengal has forests that have large possibilities. The new Province has a large but neglected legacy of 4,600 square miles of reserve forests, in addition to a large area of protected and unclassed 'A' type forests situated in the districts of Khulna, Chittagong Hill Tracts, Sylhet and Mymensingh. The Sundarbans used to supply large quantities of firewood, boxwood, thatching and tanning materials to Calcutta. It is said that plantation-grown teak wood found in the Chittagong Hill Tracts was the best in Undivided India. Large quantities of bamboos, cimal and matchwood and wood suitable for making paper and tea-chests were hitherto exported to West Bengal. So far as India is concerned, it is dependent on imports of timber to the extent of two hundred thousand tons. The main demand for timber and wood is satisfactorily met from internal supplies. It should be noted, however, that of the total area of forests in India only 50 per cent. can be classified as 'merchantable', while the rest is either inaccessible or unprofitable. Our forest policy has been static since 1894 and needs considerable revision in view of modern changes in technique and possibilities of exploitation of forest wealth.

The recent celebration of *Vanmahotsava* or planting of trees at the instance of the Minister of Food and Agriculture has drawn pointed attention to the desirability of having more trees and taking care of them. One wonders whether this propoganda should take the form of indiscriminate planting of trees in urban areas or whether it should take the form of a proper forest policy. During the war, our forest resources were exploited indiscriminately; a systematic forest policy for conserving and developing these resources is required. This work will have to be done patiently over a number of years before any results can be expected.

CULTIVATED AREA

We may now analyse the figures for cultivated area as indicated by figures of net area sown given in Table 1. It appears that both Pakistan and India have more than 40 per cent. of the total area under cultivation, though the pre-war situation was different. Table 3 (p. 156) gives the net area sown in the Provinces of India and Pakistan.

It will be seen that the war has not appreciably affected the net sown area in any of the Provinces in India. This is not, however, the case in Pakistan. Due to the high prices of agricultural commodities and irrigational facilities, the cultivated area in Sind has increased by half a million acres, whereas in West Punjab there is an increase of about 3 million acres. On the whole, the net area sown has increased from 40 million acres to 46 million acres in Pakistan. As contrasted with this in India the net area sown has remained stationary. Of the cultivated area the proportion of double-cropped area to total area is 5 per cent. in India; in Pakistan it is 9 per cent. This shows the more advanced stage of cultivation and intensive land utilisation in Pakistan. The larger size of double-cropped area indicates a systematic mode of rotation of crops and continuous use of land. As a large part of the cultivated area in Western Pakistan is irrigated, there are no difficulties of water supply as in India.

Table 3. Net area sown
(thousands of acres)

	1936-37 to 1948 Average	1943-44	1944-45	1945-46
TOTAL INDIA ..	171,365	173,828	174,086	170,808
Assam	4,840	5,305	5,453	5,378
Bihar	19,073	17,659	17,510	17,506
Bombay	28,549	38,625	28,397	27,557
C.P. & Berar	24,500	24,989	24,633	24,302
East Punjab[1]	11,607	11,612	11,610	11,617
Madras	31,706	31,891	31,534	30,534
Orissa	16,481	6,296	6,331	6,453
U.P.	36,140	37,210	37,252	37,410
West Bengal	7,810	9,436	10,660	9,242
Ajmer-Merwara ..	314	436	434	431
Coorg	145	156	155	155
Delhi	200	213	217	222
TOTAL PAKISTAN	40,839	45,169	46,415	47,277
East Bengal	18,502	20,247	20,396	20,242
N-W. F. P.	2,173	2,301	2,512	2,243
Sind	4,986	5,700	5,643	5,477
West Punjab[1]	16,178	16,921	17,864	18,315

1. Based on pre-war average.

It is common knowledge that within the last few decades the pressure of population on land has increased. It is not intended here to enter into any controversy as to whether or not India or Pakistan is over-populated. It is possible, however, to indicate whether the pressure of population on land is greater in Pakistan or in India. Table 4 shows the cultivated area *per capita* in the various Provinces in India and Pakistan for the year 1941.

Table 4. Cultivated Area per capita, 1941

	Net area sown (acres) '000	Total Population '000	Net area sown Per capita acres
TOTAL INDIA	171,320	243,837	0.7
Assam	5,070	7,472	0.7
Bihar	17,924	36,546	0.5
Bombay	28,714	24,977	1.1
C.P. & Berar	24,545	19,648	1.2
E. Punjab	12,256	12,697	1.0
Madras	31,980	49,841	0.6
Orissa	68,101	13,768	4.8
U.P.	36,540	55,021	0.7
W. Bengal	7,431	21,196	0.3
Ajmer-Merwara	7,431	21,196	0.3
Coorg	151	169	0.9
Delhi	205	918	0.2
TOTAL PAKISTAN	45,192	67,312	0.6
E. Bengal	19,002	42,835	0.4
N-W. F.P.	2,357	3,084	0.8
Sind	5,770	4,535	1.2
W. Punjab	15,914	15,717	1.0
Bahawalpur	2,149	1,341	1.6

Ordinarily comparisons of the pressure of population on land should be based on the estimates of arable land *per capita* of the farm population, but unfortunately no reliable statistical data relating to the occupational distribution of Undivided India are available after 1931. The figure of arable land per capita

of the whole population, however, provides o satisfactory alternative measure of population density. According to Western standards, 2.5 acres of land *per capita* under dry crops, provides the minimum guarantee of subsistence. From this point of view the Provinces in India are densely populated. So far as Pakistan is concerned, it is difficult to comment on the net area sown *per capita* in Sind and Punjab in as much as the larger portion of land is irrigated in these two Provinces. If irrigated area were to be considered, it is estimated that .75 acres *per capita* would give a reasonable standard. Thus Sind and West Punjab are the two Provinces where there is enough land to maintain the existing population on a reasonable standard of living. Sind, West Punjab, Bahawalpur and East Punjab are the main areas where there is no problem of pressure of population on land. It should be noted that comparisons like these are not strictly scientific. It is not so much the size of cultivated area as the technique of cultivation and consequent yields per acre which would affect the pressure of population on land. There is no doubt, however, that the fact that in most Provinces of India the cultivated area *per capita* is less than one acre indicates a problem of increased pressure of population on land, which can be solved only by modern methods of intensive farming, and development of alternative means of livelihood like industrial work and other occupations.

IRRIGATED AREA

As has been indicated earlier the mere size of net area sown does not indicate the prosperity or otherwise of cultivation in either country. Yields of crops are also affected by the nature of cultivated area. Among the measures that are usually adopted for increasing yields of crops on land already under cultivation, the first place is assigned to works for the supply and conservation of water. Over a great portion of the sub-continent of India, successful cultivation cannot be assured, unless facilities are available for the artificial watering of crops when necessary. This is because of the peculiar characteristics of rainfall in India. Undivided India probably presents the greatest variety of meteorological conditions compared with any area of similar size in the world. The normal annual rainfall varies from 460 inches at Cherrapunji in the Assam Hills to less than 3 inches in Upper Sind. Besides these diversities of rainfall, there is unequal distribution of rain throughout the season. In view of her geographical position and rainfall, irrigation is necessary in one form or other in most parts of the country where the mean annual rainfall is less than 50 inches. This is so in the whole of Baluchistan, Sind and Rajputana, in the Western parts of N.W.F.P., the Punjab, the United Provinces and parts of Central Provinces, Bihar, Orissa and over the whole of the Deccan Plateau of the Bombay Province. Irrigation thus has a protective purpose to ward off famine in certain areas with scanty rainfall as also to increase the productivity of the soil. Undivided India used to irrigate every year over 70 million acres of land—the largest irrigated area in any country of the world. It is more than three times the area irrigated in the U.S.A., the next most irrigated country, which is twice as large as Undivided India. The area irrigated in Undivided India was more than the combined total of irrigated area in any other ten countries of the world.

How has the partition affected this position? From table 5 it appears that of the 70 million acres of irrigated land in Undivided India, India has 48 million acres or 68 per cent. and Pakistan 22 million acres or 32 per cent. But the proportion of irrigated area to net area sown is larger in Pakistan as compared with India. This, however, does not give a complete picture of the nature of irrigation in either country. It should be remembered that over large portions of

India, irrigation works are of a protective character *i.e.* they are meant more to ward off famine conditions than to produce a significant increase in yield per acre. This is particularly true of irrigation in Southern India especially in the Bombay Deccan, Mysore and Madras. As contrasted with this, the irrigation works in Sind and West Punjab, apart from being financially profitable, have changed the scope of cultivation. Table 5 gives the data regarding irrigation in some Provinces and States of Pakistan and India.

Table 5. Irrigation in India and Pakistan, 1945-46

(*in thousand acres*)

Region	Irrigated Area	Net area sown	Irrigated area as percentage of net area sown
UNDIVIDED INDIA ..	70,700	286,216	24.5
INDIA	48,228	236,808	20.2
A.—Provinces	39,226	170,808	22.7
B.—States	9,000	66,000	13.6
PAKISTAN	22,182	49,418	45.0
(1) East Bengal ..	371	20,242	1.0
(2) West Pakistan ..	22,011	29,176	76.0
(*a*) West Punjab ..	12,816	18,315	72.2
(*b*) Sind	6,242	6,242	100.0
(*c*) N-W. F.P. ..	967	2,243	45.0
(*d*) Bahawalpur ..	2,086	2,375	87.0

We see from the table that whereas in Undivided India the proportion of irrigated area to net area sown was 24.5 per cent., in India it is only 20.2 per cent., while in Pakistan it is as large as 45.0 per cent. Both Sind and Bahawalpur have nearly the whole of their cultivated area under irrigation. In West Pakistan the proportion of irrigated area to net area sown is as large as 76 per cent. The canals also yield some revenue to the Province. The Lloyd Barrage in Sind is the largest barrage in the world with 7 canals and an aggregate capacity of over 40,000 cubic feet per second. It began to function in 1932, and was constructed at a total cost of Rs. 20 crores at a time when Sind was part of the Bombay Province. The Barrage has a length of just under a mile and irrigates about 6 million acres. So far as West Punjab is concerned, it will be found that of the total irrigated area of Undivided Punjab, West Punjab has secured 65 per cent. This is because most of the Government-owned land to which irrigation was extended first is situated in West Punjab.

Table 6 (p. 159) indicates area irrigated in various Provinces and States of India and Pakistan by sources. It appears that of the total area of 31.6 million acres, irrigated through Government canols in Undivided India, the share of Pakistan is nearly 55 per cent. It is well known that irrigation through canals is the most useful means of raising the yield per acre of crops. From that point of view Pakistan is in a peculiarly favourable position. Not merely has Pakistan the larger share under irrigated canals, but even in respect of some important crops she enjoys an advantage. Table 7 (p. 160) shows the are under different crops irrigated in different parts of Indio and Pakistan. For example, out of a total of 15.2 million irrigated acres under wheat in Undivided India, the share of Pakistan is as high as 7.7 million acres or nearly 51 per cent. Similarly, out of a total irrigated area of 4 million acres under cotton, Pakistan's share is 3 million acres or 75 per cent.

Table 6. Area Irrigated—India and Pakistan by Sources, 1943-44

(*in thousand acres*)

	Govt. Canals	Private Canals	Tanks	Wells	Other sources	Total area irrigated
TOTAL INDIA	14,659	3,481	7,382	12,565	6,209	44,296
Ajmer-Merwara	..	..	33	98	2	133
Assam	..	417	1	..	456	874
West-Bengal	199	206	808	19	369	1,601
Bihar	686	910	1,449	600	1,066	4,711
Bombay	317	58	144	572	49	1,140
C.P. and Berar	..	1,285	..	185	51	1,521
Coorg	3	..	2	..	..	5
Delhi	39	..	2	25	..	66
Madras	4,117	129	3,432	1,544	303	9,525
Orissa	374	52	490	30	688	1,634
East Punjab	2,512	92	8	2,017	27	4,656
U.P.	3,922	28	10	5,405	2,138	11,503
Indian States (1942-43) ..	2,490	303	1,003	2,069	1,060	6,925
TOTAL PAKISTAN ..	17,007	850	62	2,314	1,470	21,703
West Punjab	9,971	402	30	2,199	123	12,725
East Bengal	45	38	30	8	104	225
Sind	4,511	7	..	19	1,164	5,701
N-W. F.P.	480	403	2	88	79	1,052
Bahawalpur	2,000	..	..	..	..	2,000

A dispute has arisen between East and West Punjab Governments regarding the supply of water by East Punjab to the Central Bari Doab and the Depalpur Canals in West Punjab. With the division of the Punjab, the Upper Bari Doab canal system has been dissected diagonally, and about 40 per cent. of the area hitherto irrigated from the Upper Bari Doab Canal now lies in West Punjab. Secondly, the Ferozepore head-works lie in East Punjab, whereas the Depalpur Canal and the Sutlej Valley canals, which take water from the Ferozepore head-works, with their entire irrigated area, are in the West Punjab. As the sources of supply of water are in East Punjab, while the areas hitherto irrigated from these are located in West Punjab, an inter-Dominion conflict on the ownership of and rights to canal waters has arisen. In December 1947, the East Punjab and West Punjab Governments entered into a stand-still agreement, for the supply of water to West Punjab. Thereafter, the Government of East Punjab contended that the proprietary rights in the waters of the rivers in East Punjab vested wholly in them. The West Punjab Government agreed that after a period of two years from June 1948 during which it would receive water as usual in gradually diminishing amounts, it would try to create alternative sources. The Government of East Punjab does not want that West Punjab should take this water in future. It wants to go ahead with the Bhakra Dam Project, for which it has to draw water from this source.[1] At present out of a total cultivated area of 20 million acres, it has only 3 million acres irrigated by canals. The East Punjab Government also wants to utilise waters of the river Beas for bringing land under irrigation in South East Punjab, particularly in the districts of Hissar and Rohtak where there was a famine in 1939. This quarrel regarding the use of water from East Punjab canals and head-works by West Punjab cultivators has taken the form of a dispute in International Law. In this connection it is interesting to note the policy of the United

1. *Vide* section on the dispute between India and Pakistan on the water resources in Chapter VI.

TABLE 7. Area of crops irrigated—India and Pakistan, 1943-1944

(*in thousand acres*)

	Rice	Wheat	Barley	Jowar or Cholum (great millet)	Bajra or Cumbu (spiked millet)	Maize	Other cereals and pulses	Sugar-cane	Other food crops	Cotton	Other non-food crops	Total
TOTAL INDIA	20,375	7,582	3,116	671	910	802	6,438	2,477	2,200	1,068	3,062	48,701
Ajmer-Merwara	..	17	39	2	..	39	18	..	5	13	7	140
Assam	851	..	..	..	..	..	1	..	11	..	11	874
West Bengal	1,539	13	4	3	..	8	63	24	33	1	17	1,705
Bihar	3,557	329	201	4	1	80	793	154	165	1	77	5,362
Bombay	231	170	11	273	70	25	103	115	176	6	149	1,329
C.P. and Berar	1,300	61	2	..	..	..	11	27	115	..	4	1,520
Coorg	5	..	..	..	..	..	..	..	..	..	..	5
Delhi	..	30	5	..	..	..	10	2	6	..	11	64
Madras	8,700	5	..	470	337	11	1,062	148	288	274	544	11,839
Orissa	1,462	21	..	..	..	1	93	30	53	..	13	1,673
East Punjab	290	162	169	34	215	342	706	233	135	372	899	3,557
U.P.	641	4,109	2,258	23	4	119	2,531	1,565	413	166	378	12,207
Indian States (1942-43) ..	1,799	1,220	427	161	281	175	1,045	180	799	233	953	7,273
TOTAL PAKISTAN	2,535	7,703	253	877	1,257	708	1,818	432	403	3,001	3,537	22,714
West Punjab	757	4,351	163	140	473	336	962	232	200	2,095	2,874	12,583
West Bengal	254	1	..	..	..	..	..	5	88	..	4	352
Sind	1,389	1,489	31	417	874	3	716	5	77	882	524	6,407
N. W. F. P.	35	362	59	20	10	269	40	90	38	14	135	1,072
Bahawalpur	100	1,500	..	..	..	100	100	100	..	100	..	2,000

States of America in respect of international streams, as unambiguously expressed in "Interstate Compact" compiled by the Colorado Water Conservation Board, based on the opinion of Attorney-General Judson Harmon of the U.S.A. According to Attorney Harmon, a sovereign nation has indisputable rights to the waters of all rivers within it. It can direct these waters to all profitable uses in its area, and the neighbouring country, if it lies below it, can claim no rights to these waters either by tradition, past usage or for its own requirements.[1]

In the Punjab, however, the construction of irrigational works has proceeded along Government waste-lands which happened to be situated in West Punjab. This was done by the British at the expense of the South-Eastern parts of Punjab despite the fact that the districts of Hissar, Rohtak and part of Karnal had suffered from famines for a number of years. The irrigation policy of the British was dominated by commercial and financial considerations. This resulted in the concentration of irrigation schemes in Government waste-lands instead of in areas with scanty water supply in the Punjab. There is, therefore, no reason why water from these head-works in East Punjab should not be diverted towards the famished areas in the Province which are badly in need of it. Ultimately the solution of these disputes is bound up with the outcome of the political quarrel over the Kashmir issue, as the mouths of some of the Punjab rivers are in the Kashmir Valley, and whoever has political control over Kashmir will control the profitable exploitation of these waters.

The above survey shows that so far as irrigation is concerned, Pakistan has gained by the partition. At the same time it should be remembered that despite the largest area of irrigation, the yield per acre of various crops in Undivided India was the lowest in the world. Apart from facilities of water, it is the general technique, the modes of cultivation and the social habits of the people that play a large part in the results of cultivation. Since the advent of freedom, the Government of India has planned 160 river valley projects to be spread all over the country, which when put into execution will change the entire scope of cultivation. Appendix 1 at the end of the chapter gives an account of the proposed irrigation projects in India and Pakistan. Among these projects, four are receiving the immediate attention of the Government of India. These are the Damodar Valley Project in West Bengal and Bihar which will bring under cultivation 1 million acres, the Bhakra Dam Project in East Punjab which is expected to irrigate about 3.5 million acres, the Tungbhadra Dam Project which is being jointly executed by the Madras and Hyderabad Governments and which will bring nearly 1 million acres under cultivation, and the Hirakud Dam Project in Orissa which will bring under cultivation an additional million acres of land. There are a number of other

1. "It thus appears to be the settled doctrine of the United States respecting International rivers, that the United States may use and enjoy all the waters of streams arising wholly within the United States and flowing into other nations, irrespective of prior use by or the necessities of the citizens of such other nations, that by the rules of International Law the lower nation may not justify a claim of servitude upon the stream within the upper nation upon the ground of prior appropriation (by the lower nation) of either all or a part of the waters of the stream rising within the territory of the upper nation, that any adjustment respecting such international streams must be determined by considerations different from those which apply between individual citizens of either nation (e.g. prior appropriation, riparian uses, etc.), that a recognition of an international rule of distribution and administration of waters by prior appropriation would amount to a recognition of an international servitude upon the territory of one nation for the benefit of the other and would be entirely inconsistent with the sovereignty of the upper nation over its national domain; and that the rules, principles and precedents impose no liability or obligation upon the upper nation with respect to the use of water of the river by the lower nation but that all such questions should be decided only as matters of policy and are properly settled by treaty".

Provincial schemes which, when completed, will bring 31 million acres of additional land under irrigation, and result in the production of 10 million tons of foodgrains. The World Bank gave India a loan of $18 millions in 1950 for the Bokaro Thermal Power Station at the Damodar Valley.

In conclusion, we may say that the partition has placed India under a serious handicap so far as her agriculture is concerned. India has nearly 80 per cent. of the total population of Undivided India. But she has only 73 per cent. of the total cultivated area and only 68 per cent. of the area under irrigation.

RECLAMATION OF WASTE LANDS

Having analysed the net area sown, the double-cropped area and the area irrigated, a few comments are necessary on the extent of new area that can be cultivated. Unfortunately until very recently, no attempts were made to find out the extent of culturable waste lands that could be reclaimed. Up to 1946 even the Grow More Food Schemes were confined only to efforts at diversion of area from commercial crops to food crops and increase in the productivity of land already under cultivation. The Bengal Famine Commission in 1945, and the Food Grains Policy Committee of 1947 made for the first time some practical suggestions in this respect. The availability of some 300 tractors left by the United States and other allied governments gave a spur to this movement for land reclamation. The fundamental point in the plans for reclamation is to make lands immediately available for increased food production so as to reduce and ultimately wipe out the necessity for food imports. It has been estimated that in Undivided India there were 109 million acres of culturable waste lands, but that after the partition this area is estimated at 87 million acres in India. It should be remembered that of the 87 million acres of culturable waste land within the country reclamation of only 20 to 25 million acres would be economic. Of this it is proposed to reclaim 6.2 million acres within a period of about six years. Of the area proposed to be reclaimed, about 4 million acres of land are infested by weeds called *kans* or *hariali*[1] in C.P., Bombay and Madhyabharat, Vindhya Pradesh and Bhopal. Besides this area, it is proposed to reclaim an additional area of uncultivated but cultivable waste land, to the extent of about 2.2 million acres. Weed infested lands occur mostly in heavy rainfall belts. In the areas which comprise C.P. and Berar, Madhyabharat, Vindhya Pradesh and Bhopal, there exist on a conservative estimate four million acres of good wheat land which has practically gone out of cultivation because of *kans* infestation. In normal years these lands are capable of yielding 700 to 800 pounds of wheat per acre. Because of infestation by *kans* they are either not cultivated or if cultivated, yield only about 160 to 180 pounds per acre per annum. As these areas already belong to cultivating farmers they are important sources for increasing production. It is found that reclaiming land infested with these weeds does not cost more than Rs. 40 per acre, while the cost of reclaiming entirely new land is estimated at about Rs. 100 per acre. It is because of this that the Government has concentrated on reclamation work in such areas. Table 8 gives the acres of land proposed to be reclaimed in various Provinces.

1. The two principal weeds which have made these lands uncultivable are *kans* and *hariali*. *Kans* is coarse perennial grass with large underground creeping roots which penetrate beyond 12 to 14 inches in the ground. *Hariali* is also a type of grass.

Table 8. Plan for Reclamation of Waste Land in India

(in million acres)

	New Land	Weed infested land
TOTAL	2.2	8.76
East Punjab	0.5	Nil
East Punjab States	0.2	Nil
Orissa	.3	Nil
Central Provinces	..	.6
United Provinces	.5	.3
Bihar	.2	.2
Madhya Bharat	Nil	1.4
Bombay	.3	.8
Bhopal	Nil	.4
Jaipur and Vindhya Pradesh	Nil	.1

The entire expenditure on the scheme would be about Rs. 121.36 crores. Of these Rs. 31.62 crores would be required in dollars and Rs. 21.98 crores in sterling, while the rupee expenditure within the country would amount to about Rs. 67.76 crores. The dollar and sterling expenditure is proposed to be incurred in the first three years. It is too early to comment on the progress of these schemes. Of the 2.2 million acres of new lands proposed to be reclaimed, 1.5 million acres are rice lands situated in heavy rainfall areas like the *Tarai* in U.P., and Orissa States. The weed infested areas are in C. P., Madhyabharat and U.P. They will yield additional wheat. It is estimated that when all this land is reclaimed the production of food crops will increase by over 3 million tons.

The scheme has already been put into operation. On December 16, 1947 a scheme of land reclamation through mechanisation—described as the largest in the east excluding Soviet Russia—was put into operation in the Meerut District of U.P. where heavy mechanical machinery moved up the first sods of 50,000 acres of culturable waste lands overgrown with jungle and tall grasses. This has since been followed up by two other similar schemes in U.P., one in C.P. and one in Matsya Union. The Ministry of Agriculture has assisted the Provinces to reclaim about 70,000 acres of land so far through tractors either imported from the U.K. and the U.S.A. or rehabilitated in their own workshops at Pusa. Work has been concentrated for the present on the reclamation of land in respect of which information is available and which satisfies three conditions. In the first place, large blocks of land preferably of more than 10,000 acres should be available. Secondly, areas where tree growths are dense would be avoided because expenses for reclamation would be abnormally high, and also because such a policy of rooting out trees would not be in the interests of forest conservation. Lastly, preference would be given to those areas which have well-conceived schemes of 'follow up' cultivation. By the end of April 1948, the Government of India had received 300 tractors from abroad, in addition to the 300 tractors which had remained as surplus stores left for disposal by the United States. It is estimated that in all about 3,000 tractors would be required.

Though the plans for reclamation are admirable and ambitious in scope, their successful implementation depends on the availability of capital goods from abroad and requisite foreign exchange for financing them. In September 1949, the Government of India obtained a loan of $10 million from the World Bank for the purpose of reclamation of weed infested land in C.P., U.P., Madhyabharat and Bhopal. The loan will help India to reclaim nearly 3 million acres within a period of seven years. At the end of the period

TABLE 9. Production of Cereals and Gram in India[1]

Reporting and Non-Reporting Areas
(*in thousand tons*)

	1936-37 to 1938-39 Average	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49
TOTAL CEREALS	46,157	45,279	44,782	43,523	48,214	48,203	47,138	41,899	42,415	43,123	38,301
Rice	21,199	20,121	18,178	18,949	19,755	22,530	21,455	19,892	21,540	21,268	18,863
Wheat	7,277	7,517	7,136	6,684	7,109	6,551	7,076	6,134	4,971	5,575	5,414
Jowar	7,209	7,077	7,617	6,759	7,042	7,184	6,884	5,539	5,295	5,748	4,788
Bajra	2,700	2,615	3,315	3,166	4,005	3,766	3,391	2,855	2,716	2,574	2,247
Maize	2,188	2,466	2,472	2,239	2,566	2,546	2,592	2,383	2,349	2,425	1,762
Barley	2,222	2,113	2,417	2,129	2,247	2,189	2,429	2,253	2,450	2,524	1,356
Ragi	1,791	1,785	1,905	1,901	1,830	1,823	1,697	1,229	1,480	1,395	2,260
Small Millets ..	1,571	1,585	1,742	1,696	1,560	1,614	1,614	1,614	1,614	1,614	1,614
Gram	3,862	3,628	3,670	3,322	4,291	3,452	3,943	3,837	3,599	4,310	4,503

1. See page 165.

the country's food production would increase by 1 million tons per annum and would thereby go a long way in making her self-sufficient. Even during the seven year period the loan would enable India to increase its production of food supply by 4 million tons in the aggregate. This loan will finance the dollar cost of the reclamation programme amounting to $8.7 million for the purchase in U.S.A. of 345 heavy tractors, ancillary equipment and spare parts. The balance of the loan will help to finance a pilot programme for clearing about 1,700 acres in Northern India. For this purpose 30 heavy tractors and ancillary equipment at a total cost of $1.2 million would be imported from the United States. The whole programme will benefit Indian farmers by increasing the income and the value of their land. The main crop to be produced in the reclaimed areas is wheat, which would be rotated with gram in the proportion of 2:1. Yields from the *kans* infested land to be reclaimed are expected to average about 1,000 pounds per acre which compares favourably with the existing average yield of about 750 lbs. per acre elsewhere in India. The programme of reclamation is being carried out by the Central Tractor Organisation, and it is reported that by April 1950 more than 70,000 acres were already reclaimed.

II. FOOD CROPS

MAGNITUDE OF FOOD IMPORTS

It is now common knowledge that for the past 15 years the sub-continent of India has been having continuous deficits of food supply. Table 9 (p. 164) shows India's production of cereals and gram both for "Reporting" and "Non-Reporting" areas. The following table shows the imports of foodgrains:—

Table 10. Imports of Foodgrains

Year	Quantity in thousand tons	Value in crores of rupees
1944	649	13.0
1945	850	20.4
1946	2,250	76.1
1947	2,330	93.7
1948	2,840	129.5
1949	3,700	148.0

From table 9 it is clear that since the war the internal production in India has remained more or less stationary; and during the last three years ending with 1948-49, there has been a decline in production due to a series of successive unfavourable monsoons in various parts of the country. At the same time, the population has increased from 318 million in 1941 to 350 million in 1950.[1]

IMPACT OF THE PARTITION

The partition has increased the food deficit of India. Table 11 (p. 166) shows the food production of India and Pakistan since the partition. Looking to the averages internal trade position of Undivided India for the period 1936-37 to 1939-40, it appears that the province of Sind in Pakistan used to export to the provinces in India rice to the extent of 150,000 tons per year, whereas Undivided Punjab and Sind together used to export to the other deficit areas in India wheat to the extent of 500,000 to 700,000 tons a year. As against this surplus of Western

1. *Vide* Appendix I, Chapter I.

TABLE 11. Food Production in Reporting Areas—India and Pakistan, 1947-48 and 1948-49

(Figures in thousands)

	INDIA				PAKISTAN			
	Area (Acres)		Yield (Tons)		Area (Acres)		Yield (Tons)	
	1947-48	1948-49	1947-48	1948-49	1947-48	1948-49	1947-48	1948-49
TOTAL	177,876	176,545	44,393	41,259	37,871	39,983	12,363	14,391
Rice	60,818	60,480	19,584[1]	18,863[1]	21,100	21,545	7,447	8,429
Wheat	20,353	21,165	5,389	5,414	9,627	10,552	3,264	3,985
Jowar	36,242	35,388	5,967	4,788	1,040	1,092	210	213
Bajra	20,693	19,604	2,764	2,247	2,072	2,299	309	373
Maize	7,777	7,462	2,127	1,762	897	965	406	412
Ragi	5,148	5,095	1,455	1,356	...	978	...	...
Barley	7,509	7,640	2,604	2,266	9,478	611	134	179
Gram	19,336	19,711	4,503	4,563	2,576	2,919	593	800

1. In terms of cleaned rice.

Pakistan has to be viewed the deficit of rice in East Bengal, which is estimated normally at 2 to 4 hundred thousand tons. From this it would be safe to assume that under normal conditions Pakistan has a surplus of 5 to 7 hundred thousand tons of wheat, which before the partition was being supplied to Provinces and States in India. It is also clear that immediately after the partition food production in Pakistan had gone down. It is only in 1949-50 that Pakistan recovered in food production and had an estimated surplus of half a million tons. In India too in 1948-49, food production decreased by 3 million tons as compared to 1947-48. This necessitated an increase of imports from 2.8 to 3.7 million tons.

ECONOMIC EFFECTS OF FOOD IMPORTS

So far as India is concerned, heavy food imports have retarded the pace of planning and industrialisation in our country (a) by reducing available foreign exchange for the import of capital goods, and (b) by diverting the financial resources of the Central Government, which could otherwise have been utilised in nation-building activities. Further, because the import prices are high, the internal controlled prices also to some extent are fairly high. High prices of rationed foodgrains have raised the working class cost of living indices, which in turn have increased the costs of production in industry. In the year 1948, the food import expenditure of nearly Rs. 130 crores accounted for 18 per cent. of the total value of imports, 27 per cent. of the total value of exports and 64 per cent. of India's net deficit in balance of payments on current account with foreign countries.[1] Apart from this heavy drain on foreign exchange resources, food imports and rationing have involved the Central Government in heavy emergency expenditure on revenue account. During the year 1948-49, the sale of foodgrains at concessional rates cost the Government of India Rs. 32.6 crores or 10 per cent. of their normal annual revenue. Since 1949-50, part of the expenditure has been shifted on to Provincial Governments; even then during the year 1949-50 the subsidy on foodgrains has cost the Government Rs. 25 crores, and in 1950-51 it is estimated to cost Rs. 21 crores. The reduced expenditure in 1950-51 has been estimated on the assumption that the Government of India will not import more than 2 million tons of food.[2] Because of emergency expenditure on foodgrains and refugees and the increased expenditure on defence, the Government of India has been forced to reduce grants for developmental purposes to the Provinces. If the necessity of importing food is reduced to a manageable proportion, more resources of the Central Government could be diverted to nation-building activities.

Though, even on *a priori* grounds, the existence of food shortages in India cannot be doubted, it must be emphasized that since the partition upto June 1949, the food policy of the Government of India as well as the Provinces was defective. To a large extent defects in policy have been due to unreliable statistical information.

DEFECTIVE FOOD STATISTICS

In the past, statistics in this country originated and developed as by-products of administration. Upto the year 1943, when the Bengal Famine overtook the country by surprise, the Government did not have to face any acute problem of food control. No attempt was, therefore, made to collect reliable

1. *Vide* Appendix I, and Table 1 Chapter XI.
2. Conditions of acute food scarcity witnessed in Bihar and other parts in the middle of 1950, may upset these calculations.

statistics of food crops. While crop forecasts in the country have been defective, this was much more true of those pertaining to food supply. To some extent the defects in the statistical machinery are due to technical and administrative causes. As compared to commercial crops, statistics of food crops by their very nature would be less reliable. While figures of commercial crops can be verified by their internal industrial or commercial use, exports and stock position, this is not possible in the case of food production. There are millions of cultivators in the country who undertake farming on a small scale. A major portion of the food produced is consumed by these cultivators themselves, and it is difficult to have any adequate idea of the total production by a reference to the size of the marketed crop.[1] It is common knowledge that the yield statistics of crops in India are usually underestimates. According to Sir John Russel, this underestimation is more than 25 per cent. of the total production.[2]

Official forecasts of food production do not cover the entire area of the country given to the cultivation of foodgrains. The coverage of area is defective due to the existence of what are known as "Non-Reporting" areas. Though the estimates of area and yield are fairly comprehensive in respect of the former British Provinces, the same cannot be said of the former Indian States. Many of these Indian States did not report the progress of their cultivating operations to the Director-General of Commercial Intelligence and Statistics, who was in charge of collecting and publishing official forecasts of agricultural production in India. Even today the same situation holds good and no estimates of agricultural production in "Non-Reporting" areas is included in the Government forecasts. Table 12 shows the extent of the areas of Provinces and States in Undivided India for which reports of estimates of area and yield were prepared every year and were therefore called "Reporting" areas, and those areas for which no regular reports were available and were, therefore, known as "Non-Reporting" areas:—

Table 12. Size of "Reporting" and "Non-Reporting" areas in Undivided India

(*In million acres*)

Cereals	Provinces			States			Undivided India			Percentage of N.R. to total
	R.	N.R.	Total	R.	N.R.	Total	R.	N.R.	Total	
Wheat ..	400	152	52	269	187	456	669	339	1,008	33.6
Rice ..	506	46	552	134	322	456	640	368	1,008	36.5
Jawar ..	481	71	552	112	344	456	593	415	1,008	41.1
Bajra ..	481	71	552	112	344	456	553	455	1,008	41.1
Maize ..	481	71	552	72	384	456	553	455	1,008	45.1
Barley ..	481	71	552	75	381	456	556	452	1,008	44.8

It will be seen from the table that over one-third of the total area of Undivided India was unsurveyed for the purposes of food statistic and that the "Non-Reporting" areas covered from 33 to 44 per cent. of the acreage in respect of each one of the important cereals and millets. This is a very important limitation to all the interpretations made with reference to the food problem by various authors on the basis of the information given in official forecasts. Un-

1. "Food Crisis in India," by T. M. Desai, Research Assistant, School of Economics and Sociology, Bombay in Commerce, July, 1949.

2. "It is however, safe to assume that the figures underestimate the production. When a direct check was made on the production of cotton, the estimates were found to have been 25% too low. For the food crops it may be of the same or even greater order." Report by Sir John Russel on the Working of the Imperial Council of Agricultural Research, page 17.

fortunately students of the food problem have not always realised the significance of this defect. It is not unusual to find responsible persons using this data, and comparing them with the requirements of the total population of the country, which leads to pessimistic conclusions.[1]

Recently the Ministry of Food has estimated the acreage and yields of "Non-Reporting" areas by a survey of 70 per cent. of the total area so called.[2] As the Government of India themselves admit, the yield estimates of these non-reporting areas are far from satisfactory. It has to be emphasized however, that recently the Government of India has tried to bring "Non-Reporting" areas to a reporting basis, and thus to reduce the size of "Non-Reporting" areas.

To what extent the reduction has been made is not yet clear. It should be emphasized however, that the terms 'reporting' areas 'non-reporting' areas do not imply some fixed rigid territories for all cereals and for all times. While all the Provinces are in the 'reporting' group with reference to rice, none of them is so for small millets, the total production of which is estimated at nearly 1.6 million tons and comprises grains such as *bavta, nagli, kodra,* etc., largely consumed by the working class population both in rural and urban areas. Further, while Assam is a 'reporting' province for rice, it is 'non-reporting' for all other cereals, while East Punjab is a 'reporting' area for all cereals, except *ragi.* From time to time as the statistical machinery improves, more and more 'non-reporting' areas are brought within the 'reporting' group. Thus

1. For example, Dr. Radha Kamal Mukherjee in his book "Food Planning for 400 Millions" has made no allowance for the existence of "Non-Reporting" areas in respect of various food crops while estimating the total food supply available for consumption in India in each of the years between 1910 and 1935. See his estimates in Appendices to Chapter I, page 33. To some extent his all too pessimistic estimate of "a food deficiency of 12 per cent. of the population in a year of normal harvest" (page ix, Preface) in relation to Undivided India may be traced to his mistake of matching the requirements of the whole population with incomplete estimates of available supply particularly relating to production.

2. The Ministry of Food has estimated the acreage of yield by a recent survey of 70 per cent. of the "Non-Reporting" areas. The following table gives the results:

Average Area and Yield of cereals in Undivided India for the seven years ending 1942-43 (*Figures in thousands*)

Cereals	Reporting		Non-Reporting		Percentage of	
	Area Acres	Yield Tons	Area Acres	Yield Tons	Col. 4 to Col. 2	Col. 5 to Col. 3
1	2	3	4	5	6	7
Total	173,863	49,567	14,118	4,131	8.1	8.4
Wheat	34,516	10,335	898	275	2.6	2.6
Rice	73,933	25,385	3,821	1,729	5.1	6.8
Jowar	34,517	6,729	3,533	655	10.2	9.7
Bajra	18,159	2,905	3,094	532	17.0	18.3
Maize	6,387	2,111	1,841	622	28.8	29.4
Barley	6,351	2,102	931	318	14.6	15.1

"Food Statistics of India," Government of India, 1946 : page 3.

As for the scope of reliability of these estimates, the Ministery of Food itself has admitted, "it is true that the estimate provided for by the administration of the non-reporting areas are even more in the nature of guess work than the statistics furnished by the reporting areas." From the table it appears that the total production of non-reporting areas in Undivided India was 4.1 million tons. Of this, according to the Ministry of Food, Government of India, the total yield of non-reporting areas in India is 3.4 million tons. The yield of non-reporting areas in Pakistan is within the amount of 7 lakh tons.

'reporting' area means an area, which in relation to any cereal is included in the forecast of yield estimates for a given year. In spite of this, it is surprising that though the 'non-reporting' areas account for nearly 30 per cent. of the acreage in respect of most cereals, the production of these areas is estimated by the Government at only 8.4 per cent. of the total.

The available statistics are considerably vitiated by the prevailing land systems and the lack of crop cutting experiments of sufficient magnitude so as to verify and give accurate results. So far as the permanently settled areas are concerned, reporting is known to be more in the nature of guess work. Referring to Crop Statistics of the permanently settled areas in Bengal, the Famine Inquiry Commission of Bengal stated, "A comparison of the total area recorded in settlement reports with the acreage furnished in crop forecasts indicates that there has been systematic understatement of acreage for a long period of years ...the estimated acreage of *aman* crop is likely to be closer to the true figure if they are increased by one-fifth." The impressions of the Famine Inquiry Commission were confirmed by Prof. Mahalanobis as well as by the 'Plot-to Plot Survey of Crops' conducted by the Bengal Government in 1947.

While there is understimation of area in the permanently settled tracts, the areas stitistics of *ryotwari* regions may be considered satisfactory. But both in the permanently settled areas and in the temporarily settled areas the estimates of the total yield of crops are defective. The Government ordinarily takes into consideration the following formula for their yield estimates:-
Total Yield = Area × Normal Yield of a Standard Unit × Seasonal Factor.

We have already dealt with the data relating to area. So far as normal yield is concerned, it has been defined as "the average yield on average soil in a year of average character". By its very definition, it is clear that it is an arithmetical abstraction, in deciding which the personal factor plays an important role. Anyone who is conversant with the lack of trained statistical personnel in the country, would obviously infer that this factor cannot be much depended upon for statistical accuracy. For example, the figures of yield per acre in Indian States in recent years shows a considerable decline to the extent of over 35 per cent. In view of the prevailing food prices and profitability of agriculture, this conclusion looks unrealistic. Further, the crop-cutting experiments are not sufficiently exhaustive in number so as to become representative of the areas in which they are conducted. Apart from the defects in estimating the yield per acre, glaring mistakes are usually made in assessing the importance of the seasonal factor. In *ryotwari* areas reports relating to the condition of weather and rainfall are sent, from time to time, by the village officials or accountants. Government officers at the head office adjust the total crop by making due allowance for changes in climatic factor through what are known as the *annawari* methods. But they mainly depend for their conclusions on the reports sent by these village officials or accountants. As land revenue in *ryotwari* tracts is directly connected with crop yields, there is a tendency for the village people to exaggerate the difficulties of climatic factors and send pessimistic reports, lest the assessment at the time of revision might rise higher. It is believed that under-estimation in the *ryotwari* areas of Madras, which has perhaps a comparatively better statistical organisation than other Provinces, is to the extent of not less than 15 per cent. On an average, for the country, as a whole, it must, therefore, be said that the yields of food crops have been underestimated to the extent of at least 15 per cent. So far as individual crops are concerned, particularly rice, it has been complained by the Marketing Adviser to the Government of India that the conversion ratio of rice to paddy has been

seriously under-estimated. According to him, "it is found, for example, in commercial practice that hundred units of paddy will yield on an average 74 units of rice....In India, the conversion factors at present in use range from 62 per cent in the Central Provinces to 70 per cent. in Bombay, giving an average of about 65 per cent. for the whole of India." This appears to be due to the fact that the conversion factor in India is estimated on the basis of the recovery of machine-milled rice only. As a matter of fact, it has been found that the consumption of machine-milled rice is only 28 per cent. of the total, whereas hand-pounded rice is consumed to the extent of 72 per cent. Hand-pounded rice would involve a higher conversion factor. Because of factors like these, the Marketing Adviser considered that, "a more rational and conservative figure for converting paddy into rice would be 70 per cent." On the basis of a review of production for a series of years between 1927-28 and 1936-37, the Marketing Adviser considered that "the present methods of compiling the outturn of crops are responsible for under-statement in each season of nearly 10 per cent." If this inaccuracy were corrected, the addition to the rice crop in 1947-48 would alone amount to 1.8 million tons, which is about 63 per cent. of imported foodstuffs in 1948.

The above remarks relating to the defects in crop forecasts emphasise the difficulty of relying on them entirely for the purpose of formulating food policy. It hardly needs to be stressed that more money spent on improvements in the statistical organisation at the Centre, and on the agencies which report the primary data, will make it possible to avoid mistakes in calculating the deficits, and in correctly estimating import requirements and procurement targets.

SOCIO-TECHNICAL LIMITATIONS

To some extent the food problem in India has been complicated by the existence of inflationary conditions and the shift of the population towards urban areas. Food rationing has socialised the demand for superior cereals like rice and wheat, and with the existing trends in the scales of preference of the working classes, it appears that more and more of these cereals will be required because of the changes in consumption standards. The movement of millions of refugees into the country and their concentration in urban areas has meant a larger demand for these cereals for the purposes of rationed distribution.

While the aggregate demand for foodgrains, particularly, superior cereals, must have increased due to factors like these, production has not kept pace with it. To the casual observer, it might appear surprising that despite increase in the prices of agricultural produce, particularly foodgrains, the food production in the country has not gone up. Some competent authorities, including Prof. Ashby, who visited India towards the latter part of 1949, are the opinion that high prices of agricultural produce, beyond a certain range, far from encouraging greater production, slacken it. Since the prices of agricultural produce have risen, the farmers are able to get the same amount of money incomes by producing less. Though it is difficult to give any final opinion on this controversial question, there is one important factor with reference to food production in India, which cannot be ignored. Beyond a certain stage an increase in the prices of agricultural production will not increase the aggregate production, so long as the socio-technical bottlenecks like illiteracy of the farmers, the growth of population, size of holdings, antiquated methods of cultivation, difficulties of storage as well as of marketing, etc. operate. With the best will in the world and the utmost encouragement that can be given to the farmers,

the Government will find that until these socio-technical limitations are overcome, the chances of success of grow more food schemes are remote. These socio-technical limitations are long range problems which will take time to solve. To some extent, the tendency of the rate of growth of population to outrun the employment opportunities afforded by the growth of industries and other non-agricultural pursuits, has made these problems more acute. Mechanisation of cultivation, unless confined to new land, if blindly attempted extensively on existing cultivated land may make matters still worse. It is good that attempts, in this direction are being undertaken through legislation e.g. tenancy laws, consolidation of holdings, scaling down of rural debts, control of money lending, encouragement of co-operation, etc. In course of time these measures are likely to show their effects and lead to greater production. The success of all such measures depends on the conscious co-operation of the people, which can easily be enlisted, if those concerned realise their utility.

PROCUREMENT POLICY

Unfortunately after the attainment of independence, the policy of decontrol towards the latter half of 1947 and the beginning of 1948 made the task of procurement almost impossible. Table 13 shows the progress of procurement between 1943-44 and 1948-49.

TABLE 13. **Procurement of major cereals**
(in thousand tons)

	Kharif Year 1943-44 and Rabi Year 1944-45	Kharif Year 1944-45 and Rabi Year 1945-46	Kharif Year 19 5-46 and Rabi Year 1946-47	Kharif Year 1946-47 and Rabi Year 1947-48	Kharif Year 1947-48 and Rabi Year 1948-49
TOTAL MAJOR CEREALS	3,813	4,288	4,151	4,236	2,599
Rice	2,651	2,864	3,030	3,244	2,322
Wheat	557	538	511	349	77
Other major Cereals[1]	605	886	610	643	200

1. Include jowar, bajra, maize and barley.

It is clear that during the Kharif season 1947-48 and the Rabi season 1948-49, procurement had gone down from 4.2 million tons to 2.5 million tons, indicating a decrease of nearly 40 per cent. Further, particularly during the year 1948 there was no uniformity in effort and earnestness towards procurement. While the deficit province of Madras could procure as much as 29 per cent. of its production, the procurement in the surplus province of U.P. amounted to less than 5 per cent. The Government of India have committed themselves to meet the requirements of rationed and semi-rationed persons in the country, who constitute nearly 130 million persons or 37 per cent. of the total population. The procurement during 1948, however, was less than 2.6 million tons, i.e. only 6 per cent. of the total supply. It appears that there is no uniformity of relative sacrifice between urban and rural sections of the population over the food problem. Upto the end of June 1949, it appears that the Government of India, for reasons largely administrative and political, had taken the easier course of larger food imports rather than better procurement or more effective grow more food schemes. In answer to certain criticisms against contradictory statements of estimates made by the Ministry of Agriculture from time to time in relation to food supply in the country, the Government of India stated in a press communi-

que issued on the 17th July 1949 that "An increase or decrease in the number of this unrationed population cannot, therefore, affect the quantity of foodgrains required by the Government, which as has been stated, are only for a definitely calculated number of persons in rationed and semi-rationed areas". Because the Government had to provide only for the rationed and semi-rationed population, can it remain unconcerned with the production, consumption and distributional activities of the non-rationed population, a large majority of which consists of food producers? Such a strange declaration is obviously inconsistent with the determination of the Government to rid this country of the necessity for food imports by 1951 through grow more food schemes and other measures. It is not the rationed urban population that will solve our food problem, but the non-rationed cultivators who alone can deliver the goods, and for that purpose they have to be exhorted not merely to produce more, but also to spare as much as possible for the rationed population.

PROVINCIAL RATIONING POLICY

Mistaken notions described above have resulted in defective rationing policy. Even in the administration of rationing and the task of bringing more and more people under rationed distribution, there has been no uniform policy as between one province and another. Appendix II shows the number of persons rationed under various categories of rationing and controlled distribution and the scale of rations in India as in March 1949. From this it is clear that in the surplus provinces of C.P. and Berar and U.P. the efforts at rationing have not been serious. As a matter of fact, with effect from February 1948 most of the large sized towns were derationed in these provinces. As contrasted with this, certain deficit areas like Bombay, Travancore and Madras have more than 60 per cent. of their population under rationing. If more and more people in surplus areas are not brought under rationing in national interests, there would be a tendency among farmers, grocers and middlemen in such areas to hoard food. It is common knowledge that the difficulties of the Bengal Famine of 1943 were accentuated by the reluctance on the part of Provinces like Undivided Punjab and Sind to spare more food to the Government of India for distribution in Bengal. Such things should not be repeated in free India, and the governments of surplus provinces like C.P., U.P. and to some extent Assam and Orissa should think of national interests first, and provincial convenience next, and spare more and more food in order that the quantum of ration in deficit areas where it is reduced to 8 ounces is brought upto the national average of 12 ounces per adult per day. So far as the deficit provinces are concerned, their requirements need to be carefully scrutinised. It appears that the deficit provinces do not follow a uniform policy in asking for their requirements. While the Government of Bombay asks for imported food in relation to the average imports of the Province in pre-war days, other provinces calculate their requirements in a different way. If the governmental forecasts were to be believed at their face value, and the consumption requirements were calculated according to reasonable nutritional standards, it might well appear that the greater part of the food deficit of the country is a problem not so much of Provincial Governments (with the exception of Madras and Bombay) as of the former Indian States.[1] The major portion of the imported food, however, is distributed only to the provinces. Either the official statistics are inaccurate or there is greater need for scrutiny of provincial food accounts. It is essential that a Food Budget for the whole country along uniform lines

1. "Food Crisis in India", T. M. Desai, "Commerce", July 1949.

should be compiled regularly from time to time by the Ministry of Food, and distribution of imported food made according to more reliable estimates of requirements.

Towards the latter half of 1949, however, the Government were aware of the need for change in their food policy. The devaluation of the Indian rupee in September 1949 brought the gravity of the problem to the forefront. The Government found that over a third of their food expenditure was incurred in dollars and that as a result of the devaluation and the agreement with U.K. to cut down dollar imports by 25 per cent., further food imports from dollar areas would raise internal prices and would be very costly. The Government of India decided not to import food from dollar areas as far as possible. The favourable monsoons of 1949 have luckily helped them. It was estimated that in 1949-50 food production would exceed that in 1948-49 by more than 2 million tons. The procurement machinery too has now been tightened up and the procurement targets have been raised to 5.4 million tons. This is a step in the right direction.

GROW MORE FOOD SCHEMES

Towards the latter part of the year 1949 the Government of India decided not to import foodgrains after 1951. To be able to achieve this, they have undertaken extensive grow more food schemes. Some of these schemes were started in 1943. The main aim of the Government then was to divert cultivated area from the production of non-food crops to the production of food crops by giving special subsidy, as well as by legal measures. The schemes involved (1) construction of surface wells, tube wells, tanks and dams, (2) distribution of manures and fertilisers—organic as well as inorganic and (3) reclamation of waste lands.

It is difficult to estimate the contribution of grow more food schemes to increased food production. Because of a series of unfavourable monsoons and crop failures the total production of food supply in the country has remained more or less stationary. From this however, it cannot be said that the grow more food programme failed. It would be truer to say that but for the grow more food schemes, perhaps the production would have been much less. At the same time, however, even in official quarters it is generally acknowledged that the grow more food schemes have not brought any substantial results in relation to the vast amounts spent on them. According to government estimates, the grow more food schemes were expected to yield an annual increase of over 2 million tons of food supply between 1943 and 1947.

Because of the increase in food deficits, partly due to the partition and partly to repeated failures of the monsoon, the Government of India intensified the grow more food schemes after the partition. Under the compost scheme in 1948-49, 705,335 tons of compost manure was prepared from urban refuse, and 72.7 million tons at the village compost centres and distributed to the provinces. During the year 1949, about 1.3 million tons of sulphate of ammonia was imported from foreign countries, and this with the addition of 64,000 tons of local production, was distributed to various areas. In 1948-49 the Government of India constituted a Central Phosphatic Pool for the planned distribution of phosphatic manures at reasonable rates. Under this pool the entire local production of super phosphates was purchased by government at prices recommended by the Tariff Board and sold at a uniform price fixed on a 'no-profit-no-loss' basis in the different provinces. During the year 1949-50 more than 97,000 tons of super phosphates were distributed.

Besides supplying manures and fertilisers, the Government of India also gives liberal quantities of centrally controlled basic materials such as iron and steel, cement, slack coal and fuel oil, for the purposes of construction of irrigation works. During the year 1949 the Government of India was able to meet 50 per cent. of the demands of the Provinces for iron and steel, 75 per cent. of the demands for cement and all the requirements of slack coal and fuel oil.

Recent experience of the Grow More Food campaign in Bombay Province has shown that while the acreage under food crops has increased, the total yield of foodgrains has not increased *pari passu* with it, and the yield per acre has continuously tended to fall. While the area under cotton has declined, that under oilseeds in general and under groundnut in particular shows a sharp rise. There has been very little addition to cultivated area by the extension of cultivation to culturable waste and forest area. On account of the concentration of efforts on poorer soils the results have been rather disappointing. If the same scale of efforts had been directed towards improved cultivation on better soils, the chances of success would have been much brighter. The subsidies for the construction of new wells were given on a lavish scale while the old ones requiring repairs appear to have been neglected. The Province has nearly 50,000 old wells which, if restored to use, would benefit cultivation effectively and would reduce the cost of the Grow More Food campaign to the Government. The price policy being one of partial control, there has been a tendency to divert area saved by the reduction of cotton cultivation to growing not food crops but decontrolled oilseeds. Very often the distribution of seeds and manures has not been timely because of the fact that the programme is conducted by more than one department. The Grow More Food campaign is often directed with more attention to spectacular publicity than to utility. Instead of harnessing existing resources, ambitious attempts are being made to create new resources so as to build up an impressive record of Government effort. Fertilisers are being distributed when better preservation of existing farm-yard manure itself would serve a similar purpose. While thousands of acres of occupied area are kept fallow, ambitious reclamation schemes are drawn up. Leakages through misuse of funds by those receiving subsidies and other forms of financial assistance have not been infrequent. The above remarks relating to Bombay Province are equally applicable to other Provinces as well, and it is not surprising that the authorities are usually apologetic about the results of their G.M.F. schemes. This is not to say that the existing G.M.F. schemes have failed *in toto*. They have had great preventive value and but for them the food deficits would to some extent have increased. But apart from being preventive, their positive contribution to the food self-sufficiency programme has been rather disappointing in relation to the time and money spent on them.

BASIC FOOD PLAN FOR INDIA, 1950

The Government of India have estimated a total commitment of 9.4 million tons for nearly 112 million rationed persons, living in 350 towns under statutory rationing, and in 540 towns under non-statutory rationing, and for a non-urban population of 67 million persons. For these commitments the Government hopes that the total procurement in 1950 will aggregate 5.4 million tons, while the surplus States like C.P., Assam, Orissa, PEPSU, Bhopal, Coorg, Madhya Bharat, and Vindhya Pradesh between them will contribute about 700,000 tons. This leaves a deficit of nearly 3.5 million tons which would be made good by imports as well

as by withdrawal from stocks. The maximum imports during 1950 are estimated at 1.5 million tons which means that the stocks with Central and State Governments in the beginning of the year would be round about 2 million tons. The bulk of the imports in 1950 is expected to consist of wheat. It is estimated that about 1.4 million tons of wheat and a hundred thousand tons of rice would in all cost Rs. 56 crores as against Rs. 148 crores in 1949. It is expected that no purchases will have to be made from hard currency areas. Since the basic plan was announced, it appears that the food imports may have to be increased upto 2 million tons. This has happened because Assam has intimated that it will not be able to give the estimated surplus quota of 150 thousand tons, while owing to the failure of the north-east monsoon in Madras for the third year in succession, she has asked for a larger quota than allotted to her. The province of Bombay is also not satisfied with the allocations made.

CONCLUSION

The above review shows that the Indian food problem is not merely a problem of production, but is also one of procurement and rationed distribution. To some extent, the procurement policy of the Government of India is handicapped by the prevailing inflationary situation. Because of the increase of purchasing power in the hands of the consuming public, there is always some demand, which, unsatisfied either by the quantity or quality of rationed food, is met by petty black marketing by millions of cultivators and consumers. In a country ot the size and population of India, rationed distribution involves immense administrative difficulties. Administrative corruption is another handicap to successful rationing and mobilisation of food from rural areas for distribution to the urban people. Recently, however, the enthusiasm and earnestness regarding procurement has increased. Table 14 (p. 177) gives the targets of local procurement and quantities actually procured during 1949. Comparing the situation in 1949 with that which was examined by the Foodgrains Committee in 1947, it appears that the Government has met with commendable success in its procurement policies. Simultaneously with the improvement in production and distribution of food supply in the country, it is also desirable that the existing machinery for the collection of statistical data is overhauled, in such manner that in future it should be possible to rely on the official food statistics for guidance in policy decisions. Further, by propaganda and greater production of subsidiary food like tapioca, sweet potatoes, bananas, groundnut flour, vegetables and milk, the overwhelming reliance of the common man on cereals in his food diet should be reduced in the interests of health and nutrition. To some extent the rationing system, which has socialised demand and offered rice and wheat to every person in the rationed areas has increased our requirements of these grains. The urban citizen, particularly the worker, today finds it hard to carry on with inferior millets like *bavta, nagli, kodra,* and *jowar* in rationed areas. Some sort of price differentiation in rationing by offering these inferior small millets at cheaper prices, so that the consumers can have a choice of buying food according to the range of their incomes should be undertaken. The net influx of about 2½ million refugees in India and its concentration in urban areas has also increased the demand for rationed food and government commitments. It is satisfactory to note that by and by the Government of India has realised the necessity for more and more reliance on internal production, procurement and equitable distribution rather than on food imports as the means of solving the food problem.

TABLE 14. Targets of procurement of cereals and quantities actually procured during 1949

(in thousand tons)

	Targets	Quantity procured
TOTAL	8,992	4,417
Assam	191	168
West Bengal	467	438
Bihar	100	45
Bombay	230	556
C.P. & Berar	162	242
Madras	1,400	1,407
Orissa	135	168
Punjab	132	276
U.P.	400	321
Ajmer	—	1
Coorg	12	14
Himachal Pradesh	3	—
Cutch	1	3
Hyderabad	142	149
Jammu and Kashmir	58	58
Madhya Bharat	115	123
Mysore	95	98
PEPSU	77	59
Rajasthan	170	133
Saurashtra	—	26
Travancore-Cochin	80	75
Vindhya Pradesh	22	12

III. NON-FOOD CROPS

Apart from the production of food, a considerable portion of cultivation in Undivided India was devoted to the growth of commercial crops like raw cotton, raw jute, sugarcane, oilseeds, tea, coffee and tobacco. These commercial crops give farmers cash returns which help them to finance their daily expenditure. Some of these commercial crops, particularly raw jute and raw cotton, apart from meeting the requirements of the textile industries within the country also serve as important export commodities. The partition has seriously dislocated the distribution of these crops India has now become a heavy net importer of both raw cotton and raw jute. The problems arising out of the partition pertaining to raw cotton and raw jute have been dealt with in detail in Chapter VII. Considering the importance of commercial crops as a whole and the effects of the partition on their cultivation, it can be said generally that India faces the grave problem of adjusting cultivable area to the most profitable alternative uses. In the absence of extensive double-cropping and the full utilisation of the land throughout the year, there has been a diversion of land to the growth of food crops. In view of the acute problems of shortages of raw cotton and raw jute to meet the demands of our industries, and the fact that the progress of reclamation of waste land and extensive cultivation is slow, there has arisen the need for a judicious planning of cultivated area and its distribution between various food and non-food crops. The time has come when despite all the desire for self sufficiency in food supply, the problem of a choice between the economic advantages of devoting an acre of land to the growth of raw cotton or raw jute, *vis a vis* the cost of importing food which could have been otherwise produced on that piece of land has to be continuously faced and tackled.

Table 15 shows that the proportion of area under food-crops is larger in Pakistan than in India. This, coupled with the fact that due to effective irrigation in West Pakistan, the yield per acre is higher in Pakistan than in India, has enabled her to be more than self-sufficient in the matter of food supply. The table also shows that during and since the war, the proportion of area under food crops to the total cultivated area has increased in either country. In India, the area under food crops has increased from 159 million acres in 1938-39 to 181 million acres in 1947-48. On the contrary, the area under non-food crops has decreased from 122 million acres in 1938-39 to 117 million acres in 1947-48. This has been achieved due to various Growth of Food Crops Acts in the Provinces. Most of the reduction in area under non-food crops has been effected by a reduction in the area under short-stapled raw cotton.

TABLE 15. Area under Food and Non-food crops in India and Pakistan
(in million acres)[1]

Year	INDIA				PAKISTAN			
	Area under food crops	Area under non-food crops	Total	Proportion of area under foodcrops to total cultivated area	Area under foodcrops	Area under non-food crops	Total	Proportion of area under foodcrops to total cultivated area
1938-39	159	122	281	56	34	17	51	66
1945-46	178	114	292	60	41	16	57	71
1946-47	182	117	299	55	38	16	53	71
1947-48	181	117	298	60	37	16	52	71

1. Commercial crops included are sugarcane, oilseeds, jute, cotton, tea, coffee and tobacco.

As indicated earlier, the problems of raw cotton and raw jute are dealt with in Chapter VII. Other commercial crops are considered below. The following table shows the detailed distribution of cultivated area under various commercial crops in India and Pakistan.

Table 16. Area under main commercial crops in India and Pakistan
(in million acres)

Main commercial crops	INDIA		PAKISTAN	
	1946-47	1947-48	1946-47	1947-48
TOTAL	116.5	116.3	16.6	16.6
Cotton	11.6	10.6	3.2	3.0
Jute	0.6	0.6	2.0	2.0
Sesamum	3.7	3.9	0.1	0.1
Groundnut	10.2	10.0	..	..
Rape and Mustard ..	4.3	4.3	1.3	1.4
Linseed	3.2	3.2	0.1	0.1
Castor Seed	1.3	1.4	..	..
Sugarcane	3.5	4.0	0.6	0.6
Tea	76.8	77.1	7.4	7.5
Coffee	0.2	0.2	..	..
Tobacco	1.0	1.0	0.2	0.2

Sugarcane:—Ordinarily about 3.5 million acres are devoted to the cultivation of sugarcane every year in India. The area under sugarcane in Pakistan varies between 0.5 to 1 million acres. A major portion of the sugarcane grown is utilised for the production of sugar. The extent of such use is not the same

NOTE

It is regretted that a mistake has crept in the figures relating to acreage under tea on page 178. Readers are requested to read instead, the text on revised page 178 as given at the back.

Table 15 shows that the proportion of area under food-crops is larger in Pakistan than in India. This, coupled with the fact that due to effective irrigation in West Pakistan, the yield per acre is higher in Pakistan than in India, has enabled her to be more than self-sufficient in the matter of food supply. The table also shows that during and since the war, the proportion of area under food crops to the total cultivated area has increased in either country. In India, the area under food crops has increased from 159 million acres in 1938-39 to 181 million acres in 1947-48. On the contrary, the area under non-food crops has decreased from 48 million acres in 1938-39 to 41 million acres in 1947-48. This has been achieved due to various Growth of Food Crops Acts in the Provinces. Most of the reduction in area under non-food crops has been effected by a reduction in the area under short-stapled raw cotton.

TABLE 15. Area under Food and Non-food crops in India and Pakistan
(in million acres)[1]

Year	INDIA				PAKISTAN			
	Area under food crops	Area under non-food crops.	Total	Proportion of area under foodcrops to total cultivated area	Area under food crops	Area under non-food crops	Total	Proportion of area under foodcrops to total cultivated area.
1938-39 ..	159	48	207	77	34	8	42	81
1945-46 ..	178	40	218	82	41	8	49	84
1946-47 ..	182	42	224	81	38	8	46	83
1947-48 ..	181	41	222	82	37	8	45	82

1 Commercial crops included are sugarcane, oilseeds, jute, cotton, tea, coffee and tobacco.

As indicated earlier, the problems of raw cotton and raw jute are dealt with in Chapter VII. Other commercial crops are considered below. The following table shows the detailed distribution of cultivated area under various commercial crops in India and Pakistan:—

TABLE 16. Area under main commercial crops in India and Pakistan
(in million acres)

Main commercial crops	INDIA		PAKISTAN	
	1946-47	1947-48	1946-47	1947-48
TOTAL	40.4	40.0	7.6	7.5
Cotton	11.6	10.6	3.2	3.0
Jute	0.6	0.6	2.0	2.0
Sesamum	3.7	3.9	0.1	0.1
Groundnut	10.2	10.0	..	..
Rape & Mustard	4.3	4.3	1.3	1.4
Linseed	3.2	3.2	0.1	0.1
Castor Seed	1.3	1.4	..	..
Sugarcane	3.5	4.0	0.6	0.6
Tea	0.8	0.8	0.1	0.1
Coffee	0.2	0.2	..	..
Tobacco	1.0	1.0	0.2	0.2

Sugarcane:—Ordinarily about 3.5 million acres are devoted to the cultivation of sugarcane every year in India. The area under sugarcane in Pakistan varies between 0.5 to 1 million acres. A major portion of the sugarcane grown is utilised for the production of sugar. The extent of such use is not the same

in either country. Though the area under sugarcane in Pakistan amounts to nearly 15 per cent. of that in India her production of sugar is less than 2 per cent. During the year 1947-48, the production of sugar in India amounted to more than a million tons as compared with only 26,000 tons in Pakistan. In relation to her requirements, Pakistan faces shortage of sugar to the extent of nearly two hundred thousand tons every year. In India the installed capacity for sugar is just sufficient to meet internal requirements. In recent years, largely because of defective organisation of distribution and increased effective demand due to abundance of purchasing power, short-term scarcities have arisen. Table 17 gives the area under sugarcane, the number of sugar factories in various Provinces working in 1948-49, the actual quantity of cane crushed, sugar produced and the percentage of recovery in India. The table shows that more than 50 per cent. of the sugar is produced in the United Provinces and about 16 per cent. in Bihar. It is significant to note that the percentage recovery of sugar from sugarcane crushed is highest in the Province of Bombay, while it is lower in a major producing area like U.P. The recovery percentage in Java in 1939-40 was more than 12. The yield per acre of sugar cane in India is lower than in other countries. Whereas it is only 15 tons in India, in Cuba it is 17 tons, in Java 56; in Brazil 16; in Australia 21 and in Hawaii 62.

TABLE 17. Production of Sugar, 1948-49

	Area under sugarcane (thousand acres)	Yield per acre (Tons)	No. of factories working	Cane crushed (thousand tons)	Average duration of crushing season	Sugar produced (thousand tons)	Recovery percent
TOTAL INDIA	3,645	13.7	134	10,039	101	1,000	9.97
Bihar	380	9.8	29	1,787	84	184	10.34
Bombay	181	31.9	10	813	136	88	10.83
East Punjab	298	11.3	1	99	136	51	9.77
Madras	209	27.7	9	543	107	9	9.39
Orissa	33	20.9	1	32	125	3	10.43
U.P.	2,101	11.7	65	5,302	98	527	9.93
W. Bengal & Assam	188[1]	..	1	41	80	4	10.69
Indian States ..	420	..	18	1,419	117	132	9.33

1. Includes also area in rest of the Provinces.

Tea:—Table 18 (p. 179) gives detailed statistics relating to area under tea, and the output and yield per acre of tea in India and Pakistan in 1947 and 1948.

Tea is a profitable export commodity both in India and Pakistan. It will be seen from the table that the main tea producing regions in India are Assam, West Bengal, Madras and Travancore. The entire output of tea in Pakistan is accounted for by the Sylhet and Chittagong districts in East Bengal. Among the tea producing countries in the world, Pakistan is the only one which depends on imports to meet its internal requirements. This is because a larger part of Pakistan tea is inferior to that produced in India and is, therefore, not consumed in Pakistan. It is exported for blending. On the other hand West Pakistan meets its requirements of tea from India. In 1948 Pakistan exported 35 million lbs. of inferior tea and imported 15 million lbs. of superior tea. A detailed discussion of the effects of the partition on the tea industry and trade is given in Chapter VIII.

TABLE 18. Acreage, Production and Yield of Tea, 1947 and 1948

	1947			1948[1]		
	Acreage	Production ('000 lbs)	Yield per acre	Acreage	Production ('000 lbs)	Yield per acre
INDIA	768,042	557,030	725	771,581	567,750	737
Assam	375,451	295,491	804	..	315,250	..
West Bengal ..	196,173	157,828	804	..	147,000	..
Bihar	3,747	2,228	587	..		..
U.P.	6,530	1,659	259	..		..
Punjab	9,602	*n.a.*	..	..	250	..
Mandi	1,061	*n.a.*	..	..		..
Tripura	11,584	3,597	310	..		..
Nepal	300	55	182	..	..	..
Madras	78,203	51,865	663	..		
Coorg	315	325	780			..
Cochin	1,674	1,332	794	..	105,250	..
Mysore	4,197	1,688	402	..		..
Travancore ..	79,057	40,962	505	..		..
PAKISTAN	74,126	43,117	583	75,061	43,750	583
Sylhet	6,733	41,469	616	..	42,750	..
Chittagong ..	6,793	1,784	259	..	1,000	..

1. Province-wise details are not available for 1948.

The total production of tea in India in 1949, has been estimated at 595 million lbs. This is a record figure and the interesting point about it is that India alone has produced nearly as much tea as was produced by Undivided India. This means that the loss of 45 million lbs. as a result of partition has been more than made good. It may be recalled in this connection that the record production of Undivided India was of the order of 593 million lbs. in the year 1946.

The acreage under tea both in India and Pakistan is regulated by the International Tea Agreement, which has been in force ever since 1933. This lapsed in March 1950 and it was renewed for another period of 5 years. An important provision in the new Agreement relating to the increase in acreage is that each of the participating countries will be allowed to extend the area under tea by 5 per cent. and also to replace old tea areas by 10 per cent. of the total permissible acreage as on 31st March 1950. The permissible acreage in each country in force at present is as follows: India—806,728 acres (including the extension of 31,008 acres granted to it last year), Pakistan—79,768 acres, Ceylon—588,227 acres and Indonesia—539,772 acres.

Oilseeds: So far as oilseeds are concerned, the position of India has not been affected by the partition. Pakistan does not produce groundnut and castor seed. Even in other oilseeds her share is insignificant excepting that in rape and mustard. Mustard oil is largely produced and consumed in East Pakistan. It is used as a frying medium in cooking food. In spite of this, the Povince of East Bengal is a heavy importer from India.

The growth of oilseed production in India is recent. For example, the area under groundnut, which amounted to only 300,000 acres in the first decade of the twentieth century, has increased to over 9 million acres today and its production has increased from a quarter million to 3.3 million tons. India comes third in linseed production in the world and second only to Argentina in

export trade, while India's production and exports of castor seeds stand next only to those of Brazil. Over 20 million acres of land or roughly a third of the rice area of the country is given to the cultivation of oilseeds. The following table gives the area and yield of oil-seeds in India during each of the years 1946-47, 1947-48 and 1948-49:—

TABLE 19. Estimates of the Area and Yield of Oilseeds in India

(*in thousands*)

	1946-47		1947-48		1948-49	
	Area (acres)	Yield (tons)	Area (acres)	Yield (tons)	Area (acres)	Yield (tons)
Groundnut ..	9,078	3,073	10,079	3,411	10,267	3,588
Linseed ..	3,877	439	3,877	431	3,259	328
Castor seed ..	1,406	109	1,414	118	1,345	117
Sesamum ..	3,567	295	3,980	351	3,727	323
Rape & Mustard ..	4,453	726	4,615	806	4,321	792

In recent years the exports of oilseeds from India are going down. Whereas the value of exports of oilseeds amounted to Rs. 19 crores in 1938-39, a decade later, in 1948-49, despite a 300 per cent. increase in price, the value of exports was Rs. 11 crores only. The following table gives the production of various oilseeds, the peak exports in certain years, and the actual exports in 1948-49 and 1949-50.

TABLE 20. Exports of Oilseeds

	Unit	Peak exports	The year of Peak exports	Exports in 1948-49	1949-50
Seeds:					
Groundnut ..	000 tons	835	1938-39	38	126
Linseed	,,	318	1938-39	25	72
Castor	,,	69	1934-35	..	5
Oils:					
Linseed ..	000 gals	3,317	1947-48	2,280	1,773
Castor	,,	5,638	1947-48	3,009	1,126
Groundnut	,,	8,703	1940-41	8,910	6,176

The table shows a significant reduction in the exports of groundnut. This is because of the growth of internal demand for groundnut and other oils for the production of vegetable ghee or what is known as *Vanaspati*. Secondly, exports of oilseeds have also decreased because of speculative rises in prices. As has been shown by the Export Promotion Committee, the Indian prices of certain oilseeds are perhaps the highest in the world. If even then some export trade is carried on, it is largely because of world shortage in supplies. It may be noted that the devaluation of the rupee has helped the trade in oilseeds. Since 1948, India had to face competition from Nigeria in groundnut, from Argentina in linseed and from Brazil in castor seeds. It is significant to note that in the total production of oilseeds, Hyderabad plays an important part, accounting for as much as 47 per cent. of castor seed production, 20 per cent. of groundnut production, 13 per cent. of sesamum production and 12 per cent. of linseed production of India.

IV. LIVESTOCK RESOURCES

Cattle wealth constituted a very important asset in Undivided India, which accounted for over 30 per cent. of the bovine population of the world, the highest figure for any single country. But qualitatively the position was far from encouraging. It is true that some of the varieties of cattle compared favourably with the best breeds in other countries. But for the most part Indian cattle were of an inferior variety and acted as a drain on the resources of the country. Apart from this, for every milch cow, there was one dry cow and this rendered the maintenance of cows an uneconomic proposition.

The total bovine population of Undivided India, according to the "Livestock Census of India, 1945", (which is the latest available) was 206 million, of which the shares of India and Pakistan may be estimated at 176 million and 30 million respectively. The Indian bovine population, which amounts to 24.3 per cent. of the world total is made up of 136 million cattle and 40 million buffaloes. In India, the density of population works out to 204 cattle per square miles, 65 cattle per 100 acres of cultivated area and 53 cattle per 100 of human population. Pakistan's cattle account for 4.3 per cent. of the world total. In Pakistan, the density of cattle per square mile is only 83.1, whereas the number of cattle per 100 acres of cultivated area is 73.3 and the number of cattle per 100 of human population is 42.8.

The partition has resulted in a distinct gain to Pakistan, as she is now the home of some of the best varieties of cattle. The *Sahiwal, Red Sindhi* and *Tharparkar* breeds. known for their large milk yield are in Pakistan. Other varieties to be found solely in Pakistan are the *Thari, Bhagnari,* and *Dhanni* which are known for their draught quality, *Lohani* and *Rojhan,* which are cattle of the light type and *Ravi* and *Nili,* which are well known buffalo breeds. The loss of these varieties of cattle, particularly the milk-yielding breeds, has affected India adversely. So far as the non-milk yielding varieties of India are concerned, the *Amrit Mahal, Hallikar* and *Kangyam* breeds of Mysore and Madras provide the best means of transport, whereas the Hissar, *Hariana* and *Nagore* breeds of the Punjab and Rajasthan meet the requirements of areas of scanty rainfall and can also traverse long distances in search of fodder. The *Kankrej* and *Ongole* breeds meet the needs of agriculturists because of their capacity for hard work.

To make good the loss of the milk-yielding varieties of cattle to Pakistan, the Government of India is making every endeavour to promote the breeding of these varieties. The country's need for stud-bulls may be estimated at 1 million, while the number available at present in the country is only 10,000. The Government has a plan for opening 1,600 centres at which first class stud-bulls would be made available for breeding purposes. As a first step in this direction, an experimental breeding farm has been opened in Jubbulpore for purposes of selective breeding. Artificial insemination is also being tried with a good degree of success. Attempts at cross-breeding between milch and draught varieties are also being made.

Pakistan is also faced with the problem of inferior cattle, particularly in Eastern Pakistan. Efforts are being made in Government farms to improve the quality as also the number of cattle through better breeding, feeding and management and more efficient disease control.

MILK PRODUCTION

Though the total bovine population of Pakistan amounts to only 17 per cent. of that of India, her milk production is proportionately much greater than in India. This is due to her good quality cows. Table 25 shows the position of the two countries regarding the number of cows.

TABLE 21. Number of cows in India and Pakistan

(figures in millions)

	Number of female cattle	
	Cows	Buffalo-cows
UNDIVIDED INDIA..	51.6	22.8
India	41.0	19.5
Pakistan	10.5	3.2

In India 41 million cows and 19 million buffaloes produce 38,600 million lbs. of milk per annum, whereas in Pakistan 10 million cows and 3.2 million buffaloes produce 13,000 million lbs. of milk. This reveals the obvious superiority of Pakistan cows. With only 21.66 per cent. of India's total number of cows, Pakistan accounts for as much as 33.26 per cent. of her total milk production. The average annual milk yield of an Indian cow, on this basis is 7 maunds or 574 lbs., whereas the Pakistan cow yields 11 maunds or 902 lbs. per year.

So far as the buffalo cows are concerned, the average annual yield in both countries is about 1,100 lbs. In some of the better managed farms in India, however, lactation yields of over 4,000 lbs. of milk with 4.5 to 5.0 per cent. of butter fat have been obtained in the case of cows, and lactation yields of 5,000 lbs. of milk with 7 to 7.5 per cent. butter fat have been obtained in the case of buffaloes. Thus with selective breeding, there is great scope for increasing the yields in both the countries.

SHEEP AND GOATS

According to the "Livestock Census, 1945" the total number of sheep in Undivided India was 43.6 million, of which India and Pakistan now possess 37.5 million and 6.1 million respectively. In Pakistan most of the sheep-breeding is carried on in N.W.F.P., Baluchistan and Sind. Most of Pakistan's wool is exported in a raw state.

APPENDIX I

Irrigation Projects under Construction

(A) INDIA

Name of the Project	Province or State	Estimated irrigation '000 acres	Estimated food '000 tons	Total cost Rs. crores	Expenditure upto 31-3-1949 Rs. crores
Damodar Valley ..	.. Bihar & W. Bengal	1,000	370	55.00	1.60
Bhakra & Nangal ..	.. East Punjab	3,581	747	109.21	5.25
Sadul Irrigation	.. ,,			.60	
Tungabhadra ..	.. Madras & Hyderabad	719	210	38.15	7.01
Hirakud Dam ..	.. Orissa	1,095	340	48.81	1.71
Mor Reservoir (Stage I & II) ..	.. West Bengal	600	600	14.00	.95
Lakkavalli Reservoir	.. Mysore	180	120	20.00	1.00
Ghataprabha (Stage I)	.. Bombay	125	40	5.40	.10
Lower Bhavani ..	.. Madras	180	5	7.29	.29
Radhanagari ..	.. Bombay	19	6	1.67	1.00

Name of the Project	Province or State	Ultimate irrigation '000 acres	Ultimate food '000 tons	Total cost Rs. crores	Expenditure upto 31-3-1949 Rs. crores
Vir Dam ..	.. Bombay	90	28	2.50	.07
Piprai Dam ..	.. U.P.	27	..	1.86	.02
Small Food Scheme	.. ,,	363	93	1.49	.43
Sarda Canal Extn.	.. ,,	299	65	1.55	.07
Peech ..	.. Cochin	42	15	1.50	.18
Kodayar ..	.. Travancore	30	24	1.05	.45
Tunga Anicut ..	.. Mysore	21	14	1.99	.39
Jawai River ..	.. Rajasthan	70	21	2.75	.61
Kakrapara ..	.. Bombay	562	166	6.26	..
	(B) PAKISTAN				
Warsak Multipurpose	.. N.W.F.P.	60	..	9.50	..
Thal	.. West Punjab	693	..	10.00	..
Lower Sind Barrage	.. Sind	2,800	..	21.00	..

APPENDIX II

Persons under various categories of rationing in India

March 1949

(in thousands)

Provinces/States	Number of persons under Statutory	Non-statutory	Controlled Distribution	Relief Quota Fair price shops	Total	Scale of ration (ozs. per adult per day)
INDIAN UNION ..	35,613	36,708	29,197	27,884	129,402	..
Assam	353	..	7,433	..	7,786	12
Bihar	267	593	677	3,075	4,612	12
Bombay	8,000	..	8,000	..	16,000	12
C.P. & Berar	Derationed with effect from 1-2-1948			7,381	7,381	..
East Punjab	2,034	..	..	1,806	3,840	12
Madras	4,782	27,978	9,423	..	42,183	12
Orissa	..	601	N.A.	..	601	..
U.P.	..	..	300	5,709	6,009	12
West Bengal	6,218	2,668	808	..	9,694	9.14 to 10
Ajmer-Merwara	289	14	2	272	577	8 to 10
Andamans & Nicobars ..	16	..	..	..	16	
Coorg	Derationed with effect from 1-1-1948					
Delhi	1,615	..	..	34	1,649	10
Himachal Pradesh	..	..	36	600	636	..
Kutch	..	120	..	480	600	..
Baroda	287	..	..	3,225	3,512	12
Bhopal	..	..	..	150	150	..
C.I. States	Merged into Vindhya Pradesh and Madhya Bharat					..
Cochin	1,748	..	..	..	1,748	10
Deccan States	Merged into Bombay Province					n.a.
Hyderabad	2,166	..	..	54	2,220	12
Kolhapur	151	..	..	789	940	12
Madhya Bharat	310	500	..	1,000	1,810	10
Matsya Union	..	160	..	125	285	8
Mysore	1,222	2,738	..	..	3,960	9 to 11.5
PEPSU	..	..	..	304	304	..
Rajasthan	418	1,091	2,284	369	4,162	..
Rajputana States	Merged into Rajasthan, Matsya Union and Bombay Province					
Rampur	..	..	..	117	117	..
Saurashtra	402	..	..	2,352	2,754	..
Sirohi	53	245	..	..	298	..
Tehri Garhwal	..	..	234	..	234	..
Travancore	5,282	..	..	..	5,282	8.1
Vindhya Pradesh	..	..	..	42	42	..

CHAPTER V

MINERALS

INTRODUCTION

It is generally known that no country in the world is self-sufficient in all the mineral resources necessary for its economic development. It is an extremely hazardous task to venture on a final opinion about the mineral resources of India and Pakistan as only few portions of the vast areas of Undivided India had been intensively surveyed. The supplies of minerals in Undivided India could be divided into the following four categories:—(i) With respect to iron ore, titanium and thorium ores and mica, she had large resources and could even glut the world market with supplies. (ii) As regards other minerals like manganese, gypsum, refractory minerals, beryl, bauxite, magnesite, monazite, steatite, silica, monumental granite, natural abrasives and corundum she had important exportable surpluses. (iii) With respect to other ores like coal, glass sand, gold, felspar, building stones, zircon, industrial clays, barytes, precious and semi-precious stones, alum, aluminium-ore, borax, chrome-ore, phosphates, slate, antimony, mineral pigments, sodium salts and alkalis, vanadium, cement materials, pyrites, nitrates, marble, arsenic, limestone, dolomite, and rare earths she was fairly self-sufficient so far as the current needs were concerned. (iv) But with respect to other minerals like silver, sulphur, copper, tin, molybdenum, asphalt, nickel, lead, mercury, platinum, potash, petroleum, zinc, tungsten, graphite, and fluorides, she had to depend upon other countries for supplies.

The distribution of mineral resources in India and Pakistan may be analysed under the following heads:—

1. Coal
2. Petroleum
3. Iron ore
4. Chromite
5. Bauxite
6. Gypsum
7. Sulphur
8. Antimony
9. Salt
10. Building materials
11. Clays
12. Manganese
13. Fuller's earth
14. Mica
15. Gold
16. Strategic minerals
17. Other minerals

After assessing the relative mineral wealth of India and Pakistan, a brief survey of the problems and policies regarding the mining industry will be attempted. An abstract of the statistical position is given in the appendices. Appendix I gives an idea of the mineral production of India and Pakistan; Appendix II gives a statement showing the number of workers employed in the mining industry in India and Pakistan; Appendix III gives an account of India's trade in minerals and metal products; and Appendix IV sums up the overall position in mineral resources in India and Pakistan.

I. COAL

Owing to its suitability for raising steam, smelting ore and providing heat, coal has become the principal source of energy in the world. Though the development of hydro-electric power, and the utilisation of oil, have gradually diminished the importance of coal, yet it retains the leading place. In India coal has been the main source of energy.

Recent events have brought to the forefront the biggest drawback in Pakistan's economy, viz., her lack of supplies of coal. A large part of the needs of Pakistan areas was being met by the coal fields of Bihar and West Bengal. Though West Punjab and Sind have some coal fields, the quality of the coal is poor and the cost of mining is high.

The reserves of quality coal in India are not of unlimited extent. In the past there has been no consistent drive towards conserving our scarce coal resources and utilising them in the most efficient manner. The coal mining units have been employing wasteful methods. Valuable metallurgical coal has been used for purposes like railways for which inferior coal can be used. A position has now been reached when urgent steps have become necessary to control the use of coal and to conserve the dwindling supplies of this essential material, on which the very future of the industrial structure of the country depends.

COAL RESERVES IN INDIA AND PAKISTAN

The following table gives an idea of the coal reserves in India and Pakistan:—

TABLE 1. Estimated Reserves of Workable Coal in India and Pakistan

(in million tons)

	Reserves		Reserves
INDIA	16,476	PAKISTAN	166
Bihar	13,146	West Punjab	89
Central Provinces	382	Baluchistan	77
West Bengal	2,352		
Hyderabad	113		
Assam	14		
Orissa	7		
Other States	461		

Though the coal reserves of India are put at 60,000 million tons, the total workable reserves of all grades are estimated at 16,476 million tons. Pakistan's reserves are 300 million tons and the workable reserves are only 166 million tons. At the present rate of utilisation in India (about 30 million tons a year) the reserves will last for more than five centuries. In this connection it must be noted that in the opinion of experts, the last word on the extent of coal reserves in India has not yet been said.

COAL PRODUCTION IN INDIA AND PAKISTAN

Though Pakistan has one-fifth of the total population of Undivided India, she produces less than 1.5 per cent. of the coal produced in Undivided India. The following table gives an account of the production of coal in India and Pakistan:—

TABLE 2. Production of Coal in India and Pakistan

(*in thousand tons*)

	1945	1946	1947	1948	1949
INDIA	28,855	29,344	30,122	29,822[1]	31,500[1]
Assam	308	350	355	..	..
West Bengal	7,291	6,954	7,646	..	..
Bihar	16,597	17,333	17,318	..	..
Central India (Rewa) ..	473	521	569	..	..
Central Provinces	1,649	1,570	2,590	..	..
Eastern States	1,354	1,431	..	..	..
Hyderabad	1,023	1,040	1,168	..	..
Kashmir	5	9	9	..	..
Orissa	113	96	432	..	..
Rajputana	42	40[2]	40[2]	..	..
PAKISTAN	312	406	64[3]	235	n.a.
Baluchistan	138	197	n.a.	..	..
West Punjab	162	193	n.a.	..	..
Sind	12	16	n.a.	..	..

1. Province-wise figures are not available for 1948 and 1949.
2. The States have been merged with the neighbouring Provinces and the production figures are included under the respective Provinces.
3. Figures relate to the period from August to December.

The amount of coal produced is considered an index of the extent of the industrial development of a country. Table 3, which gives the figures of coal production in some leading countries of the world, shows the comparatively backward state of India's economic development. India takes the seventh place. Pakistan's position is much lower.

TABLE 3. Coal Production in some countries, 1948

Country	Production ('000 metric tons)
United States	591,000
United Kingdom	211,000
Germany	89,000
Poland	70,000
France	43,000
Japan	84,000
India	30,000
Belgium	27,000
Union of South Africa	24,000
Canada	15,000
Australia	15,000
Pakistan	240

COAL REQUIREMENTS OF INDIA AND PAKISTAN

Detailed statistics about the consumption of coal are not available. But table 4, which shows the estimated coal requirements of different types of consumers, may be of some interest. This statement was prepared by the Coal Commissioner for the year 1946. The requirements to be met by the Punjab, Assam, Kashmir, Sind, and Baluchistan coalfields were omitted in the statement.

TABLE 4. Coal requirements in Undivided India

	'000 tons	% to total
TOTAL	32,234	100.0
Railways	10,800	33.5
Steel works	3,360	10.4
Bunker and Export	2,400	7.4
Cotton Mills	2,400	7.4
Provincial Miscellaneous Requirements	2,400	7.4
Electric Supply	2,100	6.5
Cement	1,200	3.7
Brick burning	1,200	3.7
Jute Mills	600	1.9
Engineering Works	600	1.9
Coke ovens	600	1.9
Essential steamer services	480	1.5
Paper Mills	480	1.5
Glass factories	300	0.9
Chemical Industries	300	0.9
Defence	300	0.9
Potteries	240	0.7
Ginning and Pressing	200	0.7
Re-rolling Mills	180	0.6
Ports	180	0.6
Municipalities and Water Works	180	0.6
Refractories	180	0.6
Woollen Mills	120	0.3
Tea Gardens	110	0.3
Sugar Mills	100	0.2
Ordnance Factories	84	0.2
Copper Corporations	72	0.1
Miscellaneous	720	2.2

The following table gives figures of production and despatches of coal from 1944 to 1949:—

TABLE 5. Coal raisings and despatches

(in million tons)

	1944	1945	1946	1947[1]	1948[2]	1949[2]
TOTAL RAISINGS	26.04	28.72	29.28	29.98	29.82	31.50
TOTAL DESPATCHES	23.16	24.65	25.61	25.87	21.86	28.07
Railways	9.66	9.73	10.94	11.59	9.55	10.10
Iron and Steel Works	2.06	2.78	2.89	3.16	2.87	3.35
Cotton Mills	1.42	1.99	1.96	1.91	1.87	1.80
Electric Supply Cos.	1.16	1.40	1.42	1.42	1.92	2.09
Bunkers and Exports	1.44	1.32	1.51	1.38	1.75	1.51
Brick Burning	.11	.24	.60	.44	.68	1.42
Cement	.73	.88	.80	.80	.67	.74
Jute Mills	.41	.56	.60	.52	.64	.57
Paper Mills	.31	.40	.41	.31	.40	.43
Engineering	.26	.26	.20	.20	.23	.28
Chemical Industry	.10	.12	.13	.14	.14	.14
Others	4.69	4.57	3.79	3.55	3.84	4.62

1. Figures from August 1947 relate to India only.
2. India only.

The railways account for more than one-third of the despatches. In spite of the partition, the despatches to railways have shown an increase. The steady increase in the despatches to electric supply companies and brick burning units points towards increasing production in these industries. It was originally estimated that by 1956 the coal requirements of Undivided India would reach 41 million tons per annum. As will be pointed out presently the areas forming Pakistan consumed less than 10 per cent. of the total coal production of Undivided India. The resumption of normal trade relations with Pakistan will increase the exports of Indian coal. The proposed expansion in the iron and steel, cement, chemicals and engineering industries and the starting of the synthetic petrol factory will make large demands on the Indian coal industry. In spite of the partition, it is possible that the target of 41 million tons by 1956 may well be reached. Coal production in the first four months of 1950, totalled more than 11 million tons, thus showing trends of notable increase.

Separate figures of requirements in the areas now forming part of Pakistan are not available. But the following table has been prepared after taking into account the approximate present needs of consumers in those areas.

TABLE 6. Annual Coal Requirements of Pakistan

	'000 tons	% to total
TOTAL	2,500	100.0
North Western Railway	800	32.0
East Bengal Railway	500	20.0
Cement Factories	220	8.8
Electric Supply Stations	86	3.4
Bunkers and Port Trusts	84	3.4
Engineering Workshops and Foundries	75	3.0
Cotton Mills	60	2.4
Gins and Presses	55	2.2
Domestic needs	39	1.6
Other requirements	638	25.5

Thus out of the 32 million tons considered to have been the requirements of Undivided India, Pakistan's requirements come to 2.5 million tons, i.e. only about 8 per cent. of Undivided India's requirements. Railways account for over half the consumption of coal in Pakistan. The major industries in Pakisan that depend upon coal are cement factories, engineering workshops, cotton mills, jute presses and cotton gins, re-rolling mills and chemical works. The consumption of coal in Pakistan industries is negligible when compared with that of the industries in India.

Figures of actual consumption in different industries are not available for either country. Almost every industry depends upon coal for fuel or for energy. The following table compiled from the Census of Manufactures, gives an idea of the quantities of coal consumed by the industries in India and may be of some interest.

TABLE 7. Quantities of Coal consumed in Different Industries

	Quantity consumed ('000 tons)	
Industry	1946	1947
Iron and Steel	2,630	3,069
Cotton textiles	1,256	1,401
Jute textiles	541	684

Industry	Quantity consumed ('000 tons) 1946	1947
Cement	344	459
Paper and Paper Boards	352	297
Vegetable oils	134	176
Ceramics	99	151
Aluminium, Copper and Brass	112	98
Glass and Glassware	92	94
Chemicals	169	90
General Engineering	62	88
Rice Milling	53	74
Sugar	61	52
Distilleries and breweries	38	44
Woollen Textiles	36	30
Wheat Flour	25	20

On account of the dislocation that was caused on the eve and in the wake of the partition, the consumption of coal in different provinces of India was affected. This was well marked in the case of East Punjab. During the year 1947, the position of coal supply to different industries became very difficult and contributed largely to the decline in industrial production. The following table taken from the Census of Manufactures, gives an account of the consumption of coal in different provinces in 1946 and 1947.

TABLE 8. Consumption of Coal in Different Provinces

Province	1946		1947	
	'000 tons	% of total	'000 tons	% of total
TOTAL	6,039	100.0	6,535	100.0
West Bengal	1,849	30.6	2,262	34.6
Bombay	861	14.3	850	13.0
Madras	203	3.4	221	3.3
U.P.	348	5.8	319	4.9
Bihar	2,276	37.7	2,400	36.7
East Punjab	79	1.3	66	1.0
C.P. & Berar	278	4.6	270	4.1
Delhi	64	1.1	62	.9
Orissa	45	.7	52	.8
Assam	13	.2	12	.2
Ajmer-Merwara	23	.4	21	.3

These figures do not give a complete idea as the number of factories from which returns were received was greater in 1947 than in 1946. The exact position for all the provinces must have been less bright. The supplies of coal to the Pakistan areas were also affected. Some of the industrial establishments in Pakistan had to work for shorter periods on account of the absence of coal supplies.

THE PROBLEM OF CONSERVATION

As was remarked earlier, the most important problem confronting the coal industry is the problem of conservation. This problem has not received the attention it deserves. There have been different estimates of the extent of high grade coal resources in India. Sir Cyril Fox calculated that these reserves were only of the order of 750 million tons and would hardly last for 70 years at the present rate of utilisation. High grade coal is essential only for two industries, the iron and steel industry and coke ovens. Immediate steps

must, therefore, be taken to ration the supply of metallurgical coal to different users and to undertake proper conservation measures like washing and blending. Investigations should also be undertaken to ascertain more definitely the extent of our reserves.

In this connection it may not be out of place to draw attention to the remarks of a leading authority on coal. In an article in the 'Indian Minerals' April 1947, Mr. E. R. Gee of the Geological Survey of India estimated the reserves of good quality coal at approximately 2,290 million tons. This estimate takes into account probable reserves below 2,000 feet. He writes, "If we assume that this total is approximately correct, and the indirect evidence suggests that it will be of this order, then the life of India's reserves of coking coal will be appreciably enhanced. Along with the problematical deeper reserves from the Bokaro field, the total life may be more than double that of the previous estimates and with enforced stowing and conservation may well be in excess of 200 years."

Whatever the extent of the reserves, adequate steps are urgently necessary. The future of the iron and steel industry is dependent on proper supplies of metallurgical coal. The Coalfields Committee of 1937 recommended that it was for the iron and steel works to safeguard their future by taking precautions as regards good grade coal. But the Coalfields Committee of 1946 strongly dissented from this view and stated that the prosperity of a country and its industrial future being mainly dependent on a sound iron and steel industry, the case for conservation was a national one. As regards the regulation of coal used among consumers other than the iron and steel industry, the Committee made the following recommendation:—(1) replacing the good coking coal now being used by the railways by good non-coking coal; (2) instructing railways to make use of inferior grade coal for goods services; (3) studying the possibility of designing future locomotive boilers to burn high ash coal; (4) restricting cotton textile mills and electric supply companies in Western and Southern India to supplies from adjacent fields and confining West Bengal and Bihar to comparable high volatile coals; (5) confining the supplies to cement works to those corresponding approximately to grade II coal; and (6) restricting the consumption for brick-burning and soft coke manufacture to the inferior coals. The Committee also recommended that ownership rights of collieries in *zamindari* and other areas should be bought.

During the year 1949 earnest efforts were made to tackle the problem of conservation. The Fuel Research Committee appointed by the Government of India was of the opinion that with the usage of coals hitherto considered unserviceable for coke manufacture and the prevention of malutilization of good coking coal, the life time of the coal reserves could be enhanced. The Committee was reported to have estimated the available quantity of metallurgical coal, including recovery by blending, at 400 million tons and the average consumption at 4 million tons. The Committee drew up a five year scheme for coal conservation and recommended the diversion of 200 wagons from coking to non-coking coal. The Advisory Research Council for railways considered the question of improving efficiency by the use of low-grade coals. Railways take nearly 30 to 50 per cent. of their requirements in the form of coking coal. Out of the annual production of 10 million tons of high grade coal, it is estimated that only about one third is used for metallurgical purposes, the rest being used for steam raising.

COAL TRANSPORT

The problem of coal is not merely that of conservation but also of transport. It has been estimated that nearly 3,700 wagons have to move out of the coal fields daily, if the 28 million tons produced therein every year have to be transported to different areas. The transport bottleneck largely contributed to the industrial crisis in India during 1947-48. The transport situation improved considerably in 1949 and the Government guaranteed 100 per cent. transport facilities for coal, but owing to the small size of collieries there was some delay in loading. Figures of actual despatches to different provinces are difficult to ascertain. But the following table gives an estimate of coal despatched to different provinces in the year 1946:—

TABLE 9. Despatches of Coal to Provinces, 1946

	Despatches (million tons)	% to total
TOTAL	19.36	100.0
Bengal	4.52	23.3
Bombay	2.89	14.9
Madras	1.28	6.6
Assam	1.08	5.6
U.P.	1.97	10.2
Bihar	3.25	16.8
C.P. & Orissa	2.28	11.8
Punjab and N.W.F.P.	1.60	8.3
Sind	0.49	2.5

The total despatches to Pakistan areas approximately come to 2.59 million tons, made up of the following:—

TOTAL	2.59 million tons
West Punjab	1.60 ,, ,,
Sind	0.49 ,, ,,
East Bengal	0.50 ,, ,,

The figures of despatches to West Punjab and East Pakistan are not very precise. While the entire despatches to Punjab have been attributed to West Punjab, the figures for East Pakistan include only the requirements of railways. On the whole they come to nearly 2.5 million tons. In the first Inter-Dominion Commodity Agreement, Pakistan asked for 3.4 million tons of coal and India agreed to give 1.8 million tons and also some quantities of coke. Actual despatches were much less on account of transport bottlenecks. During 1948-49 India's exports of coal to Pakistan amounted to 1.67 million tons.

The prices at which coal was sold to Pakistan by India did not undergo much change after the partition. The average works out to Rs. 20 per ton. The cost including the freight charges works out to Rs. 37 per ton. This is comparatively low. The prices of foreign coals in Pakistan are reported to be in the neighbourhood of Rs. 75 to Rs. 90 per ton. After the devaluation of the rupee, the Government of India assumed control over export of coal and raised the prices of coal by Rs. 12 per ton in order to offset the effects of non-devaluation by Pakistan.

COAL PRODUCTION IN PAKISTAN

Only a small portion of Pakistan's coal requirements is met by indigenous production. As we saw in Table 2, Pakistan has some reserves of coal in Baluchistan and West Punjab. The Pakistan seams are much thinner than Indian seams. They are situated in hilly areas and are not easily accessible; the cost of removing coal goes up in consequence. The pit-head cost works out at Rs. 20 per ton as against Rs. 10 to Rs. 16 in India. The Pakistan coal is poor in quality, being highly volatile. Sulphur and ash are found in large quantities in this coal.

Another problem that Pakistan has to face is that of transport. The coal mined in Bihar and West Bengal has to be transported all the way to Western Pakistan. The major consumers like the North Western Railway managed to get their supplies by sea. Sea-borne coal is costlier, because of the great distance. In order to get over these difficulties by stepping up indigenous production, Pakistan engaged the services of Messrs. Powell Duffryn Technical Services Limited, a leading British technical authority on coal to make a survey of Pakistan's coal deposits. A party of experts from this firm visited Pakistan in 1948 and after inspecting all the principal coal deposits in West Punjab, as also the various power plants in industrial undertakings, submitted their first report. They estimated the workable reserves of coal in Pakistan at 165 million tons, consisting of about 77 million tons in Baluchistan and the rest in West Punjab. They suggested the following targets for development of the coal mines in various provinces of Pakistan:—

Province	Short-term—within 5 years (tons per annum)	Long-term—6 to 10 years (tons per annum)
Baluchistan	375,000	425,000
Punjab	350,000	495,000
Sind	110,000	220,000 (subject to favourable drilling results)
N.W.F.P.		8,750

The consultants also suggested washing and desulpharisation of selected coal in Pakistan with a view to evolving a commercial process for the production of coke, gas, carbonised briquettes, by-products and processed fuel suitable for use in railways so as to replace imported coals. They recommended that a scheme of rationalisation of the colliery units should be immediately undertaken. The Pakistan Government have accepted this recommendation and have already given effect to this in respect of collieries in Baluchistan where about 14 groups of collieries have been formed. The British consultants also recommended that a rapid improvement in communications was very necessary for proper transport of coal. Utilisation of a larger degree of power in colliery areas was also advocated. Attempts are being made in Pakistan to convert locomotives from coal burning to oil burning so that the dependence upon coal may be reduced.

STOPPAGE OF INDIAN COAL SUPPLIES TO PAKISTAN

After devaluation, the Government of India assumed trading control over all coal exports. All payments to coal companies were to be made through the Coal Commissioner. Prices of coal were raised by Rs. 12 per ton. The

continued strained relations between the two countries which reached a peak in January 1950 when the refusal of Pakistan to allow supplies of Indian jute and other goods coming from Assam and Tripura to India, resulted in India's stopping her coal supplies to Pakistan.

The White Paper on Indo-Pakistan trade issued by the Commerce Ministry on 8th February 1950, states that except for obtaining supplies of coal from India, Pakistan had no intention of any commercial deals and that it was only for obtaining coal that Pakistan used to make prompt payments after devaluation. According to the White Paper, "In view of the unwillingness of Pakistan to arrive at any long-term understanding or even to meet at a conference to reach such an agreement, negotiations were started in June 1949 for a fresh agreement for the supply of commodities and a trade agreement was signed on June 24, and a meeting was held at Delhi with the representatives of the Government of Pakistan to explore the possibilities of stepping up exports of coal to Pakistan. As a result India placed a large number of wagons at their disposal."[1]

The Pakistan authorities made serious efforts to make arrangements for coal supplies from other countries. After the stoppage of supplies from India, the Government of Pakistan broke the tacit agreement between her and India on the joint economic boycott of South Africa by entering into trade relations with the latter. The prospects of large scale imports of South African coal to Pakistan are, however, not bright. In order to get coal from South Africa, Pakistan has to sell her some products. Before 1944-45, when Undivided India had trade relations with South Africa, she used to export cotton goods, jute bags and cloth, groundnuts, linseed oil, hides and skins and paraffin wax. She imported wattle bark, copper rods and diamonds. Small quantities of coal were also imported occasionally. Undivided India had, however, a favourable balance with South Africa. Of the goods mentioned above, Pakistan can export only hides and skins and paraffin wax. She cannot export jute goods as she has no jute mills, and South Africa will not find it economical to buy Pakistan raw jute at the prevailing high prices after devaluation and to get it processed in other countries. Even if Pakistan makes use of her sterling balances and gets coal from South Africa, East Pakistan will have to pay higher prices on account of larger freight charges.

The loss of the Pakistan market did not create a big gap for the Indian coal industry. The share of Pakistan was only between 7 to 8 per cent. of India's production. But as only a few companies had been authorised by the Government of India to export coal, these companies were affected. Attempts were made to develop other export markets. The Coalfields' Committee of 1946 had already discounted the fear that India's low grade coal resources were limited in extent. A target of 3 million tons can be easily fixed for export. If the port facilities at Calcutta are improved, it may not be difficult for India to achieve this target, as Indian coal finds a ready market in the East Asian countries and in Australia. In the long run this will be an additional gain as Pakistan is bound to fall back on India ultimately. Table 10 which gives figures of coal exports from India may be of some interest.

India has entered into an agreement with Australia to supply about half a million tons of coal. Thus the transitional gap created by the dispute with Pakistan may be filled up to some extent. The devaluation of the Indian rupee has given an additional stimulus to Indian coal exports.

1. The figures of actual movement of coal for the months July 1949 to November 1949 were:—July 180,423 tons ; August 204,969 tons ; September 168,559 tons ; October 198,569 tons ; and November 222,180 tons.

TABLE 10. Sea-borne Exports of Coal from India

	Quantity ('000 tons)			Value (Rs. in crores)		
	1947-48	1948-49	1949-50	1947-48	1948-49	1949-50
TOTAL EXPORTS	480	1,124	1,157	1.56	3.77	4.03
Western Pakistan	5	468	392	.01	0.98	.82
Ceylon	123	273	331	.30	1.26	1.59
Straits Settlements	92	70	65	.25	.26	.25
Hongkong	65	94	112	.14	.24	.37
Burma	188	113	62	.84	.74	.36
Other countries	7	106	195	.02	.30	.63

II. PETROLEUM

The share of Undivided India in the world production of petroleum was insignificant. The annual output of petroleum in Undivided India in the three years prior to the partition, that is, in 1944, 1945 and 1946 was 97.4 million, 82.6 million and 76.7 million gallons respectively. The average annual consumption of all kinds of petroleum products in the same period was over 1,000 million gallons. The wide gap of over 900 million gallons was made up by imports mainly from Iran and the U.S.A. as well as from Borneo and Russia. The chief imported petroleum products and their percenage to total petroleum imports are:—

1. Kerosene 40%
2. Fuel oil 46%
3. Heavy and lubricating oils 10%
4. Petrol and similar light oils 4%

The following table shows the production of petroleum in some of the countries of the world:—

TABLE 11. Production of Crude Petroleum in different countries, 1948

Country	'000 metric tons	Country	'000 metric tons
United States	276,000	Colombia	3,400
Venezuela	70,000	Iraq	3,400
Iran	25,000	Trinidad	3,000
Saudi Arabia	19,000	India[1]	210
Mexico	8,000	Pakistan[1]	50
Indonesia	4,100		

1. Figures relate to 1946.

OUTPUT IN INDIA AND PAKISTAN

Prior to the partition there were only two areas producing petroleum in Undivided India, viz., the Lakhimpur District of Assam and the Attock District of the Punjab. The former is now in India, while the latter is in Pakistan. The output of the two countries is as follows:—

TABLE 12. Petroleum production in India and Pakistan
(*in million gallons*)

	India	Pakistan
1944	82.3	15.2
1945	69.7	13.0
1946	64.9	11.0
1947	65.2	..
1948	66.0	33.8

We find from the table that the production of petroleum in Pakistan during 1944-46 formed about 15 per cent. of the total production of Undivided India. Actually, the readily workable deposits are much greater than the figures for production in 1944-46 convey. In the years 1938, 1939 and 1940 the production of the Punjab fields amounted to 21.2, 30.1 and 30.4 million gallons respectively, while in the same period the production in the Assam fields was 65.9, 51.3 and 66.2 million gallons respectively. This shows that while production in India remained fairly steady, that in Pakistan has fallen considerably between 1940 and 1946. But it would be reasonable to assume that with more intensive efforts the production in Pakistan would reach the 30 million mark.

VARIETIES OF PETROLEUM PRODUCTS IN INDIA AND PAKISTAN

So far as the variety of petroleum products is concerned, Pakistan enjoys an advantage over India. The following table shows the distribution of the output of different petroleum products between the two countries:—

TABLE 13. Petroleum Products

(*'000 gallons*)

	India		Pakistan	
	1945	1946	1945	1946
Kerosene[1]	19,497	13,984	612	502
Batching oil	523	376	..	..
Sundry oils	21,679	19,071	..	..
Spirit	22,938	18,552	..	..
Wax (in lbs.)	8,011	8,225	39	177
Petroleum from (*a*) Natural gas	..	..	7	34
(*b*) other sources	..	..	2,367	2,130
Diesel (fuel oil)	..	..	920	865
High speed diesel	..	..	616	404
Lubricating oil	..	..	2,143	986
Grease (in lbs.)	..	..	482	657
Mineral Turpentine	..	..	..	negligible

1. The production figures for kerosene in India for later years are as follows :—

1947 .. .. 13.9 million gallons
1948 .. .. 14.3 „ „

We find from the table that the entire supply of petrol, diesel oils, lubricating oil and grease is concentrated in Pakistan, leaving India at the mercy of imports from abroad. Though the supply of these products does not meet the needs of Pakistan in full, Pakistan is in a better position as regards the variety of petroleum products.

POTENTIAL RESOURCES

We may next examine the future prospects of petroleum production both in India and Pakistan. The position of India is far from encouraging. Except in the dense forests of North West Assam, there are no traces of petroleum anywhere else. Even here conditions are extremely difficult for geophysical prospecting, because of the vast impenetrable forests. The North-Western areas of Pakistan hold out good promise of prospective petroleum yields. The area stretching from Sind to North-East Punjab, through Baluchistan, North West Frontier Province and crossing the Indus between Kalabagh and Kohat is a promising

one for petroleum. Surface indications of oil and natural gas are prolific here at several points.[1] Extensive geophysical prospecting which has not been tried here so far, may prove fruitful some day. Baluchistan also holds out some hope, though upto now no serious attempts have been made for extracting oil. Strenuous efforts are being made in search of oil in Pakistan. The Attock Oil Company is drilling two wells at Balakasgar. The company is also carrying on drilling operations at Dhulian. The Burmah Oil Co. (Ltd.) is also carrying on prospecting and drilling operations, its main centre of activity being Chakwal. One of its ventures has met with success and the well is now yielding 2,000 barrels of oil a day.

According to Dr. D. N. Wadia, certain Himalayan regions near East Punjab, the Cambay area in Saurashtra and Tripura State in Assam may contain possible reserves of oil in India. The Geological Survey of India has already commenced prospecting operations in Cutch, Kathiawar, Assam, Tripura State and East Punjab.

A word may be added about synthetic oil production, for which India has a special advantage. Her vast quantities of inferior coal can be used for producing synthetic oil. This experiment was successfully tried in Germany. But this process involves heavy expenditure and the product will not prove cheaper than imported oil.[2]

CONCLUSION

We find from a survey of the present position and future potentialities that in regard to petroleum Pakistan is favourably situated as a result of the partition. If the deposits of Pakistan can be worked economically, she will have a comparative advantage. The entire diesel oil production of Undivided India is concentrated in Pakistan, and this is an additional advantage which she enjoys. Apart from the direct uses to which diesel oil can be put, it may also be used in the generation of electricity. This will be particularly advantageous in view of the fact that supplies of coal are very limited in Pakistan. India does not produce any diesel oil. But her extensive river systems can be harnessed for the generation of alternative sources of power, like hydro-electrical energy and her coal resources can be utilised for generating thermal electricity. While such energy cannot by any means displace petroleum, it will at least result in minimising dependence on it.

III. IRON ORE

In judging the industrial potential of a country in modern times one would consider the presence of iron ore in large and workable quantities an important factor. In fact, the presence of iron ore, along with coal, determines to a great extent, the degree to which a country can be industrialised. Judged from this point of view, the partition has placed India in an advantageous position as against Pakistan whose resources are negligible. The full implications of the absence of any workable iron ore reserves in Pakistan have been discussed in detail in chapter VIII.[3] Here it would suffice to examine the present position of India in respect of this all-important mineral.

1. *Vide* Dr. D. N. Wadia: "Petroleum Resources of India", Indian Minerals, January 1948, page 7.
2. *Vide* p. 325 below.
3. *Vide* pp. 332-338 below.

The production of iron ore in India during the last few years was as follows:—

TABLE 14. Production of Iron Ore in India

(in tons)

	1944	1945	1946	1947	1948[1]
TOTAL	2,363,640	2,264,184	2,370,731	2,498,000	2,285,000
Central India	450	..	..	..	
Central Provinces	716	..	..	..	
Eastern States Agency	1,396,942	1,196,331	1,396,726	1,341,905	
Punjab	585	279[2]	..		
Bihar	941,875	1,046,099	974,005	1,105,767	

1. Region-wise figures are not available for 1948.
2. Pyrites.

The following table gives an idea of the production of iron ore in the leading countries of the world:—

TABLE 15. Iron Ore Production in Different Countries, 1944

(Million long tons)

Producing Country	Ore	Iron content
United States	95.4	49.0
France	18.6	5.8
United Kingdom	15.5	4.3
Sweden	7.1	4.3
Korea	3.3	1.8
India	2.4	1.5
Australia	2.0	1.4
Luxemburg	2.9	0.9
Austria	2.6	0.8

Although India is ninth in the list so far as production of iron ore is concerned, as regards the iron content of ores India ranks sixth. Taking the percentage of iron in the ores, India comes second, being only next to Australia.

The production figures, however, are hardly an index to the potential reserves of iron ore in the country. In Bihar and the Eastern States alone the minimum deposits are estimated at 8,000 million tons with a 60 per cent. content of iron. There are also extensive deposits in C.P. and Mysore. The deposits in India are quantitatively almost at par with those of the United States of America. The total reserves of high grade iron ore in India are put at 10,000 million tons. As regards the quality of the ores also, it may be said that Indian ores compare favourably with any ore in the world. The Indian ores are of several types, hematite, magnetite, siderites, limonites, etc. Of these the largest deposits are of the hematite variety. The deposits of Mysore, Madras and the Central Provinces, which are mostly hematite are also of an excellent quality. But the main snag in ushering a steel era in India is the extremely limited stock of good quality metallurgical coking coal.[1] While there is a great need to conserve the existing stocks of coking coal for the purposes of iron-smelting, every effort must also be made to utilise electrical energy for smelting iron. This may considerably reduce the pressure on coking coal. Barring this limita-

1. *Vide* pp. 190-191 above

tion, the iron and steel industry in India has a bright future. The Government of India have under consideration the establishment of two units for the production of steel with a total capacity of 1 million tons a year, to meet not only the pent-up demand created by war time shortages, but also the normal increase in demand, which has grown manifold. If increased generation of hydro-electrical energy and increased production of good quality coal can be combined with the vast deposits of valuable Indian ore, India can become one of the biggest supply centres for iron and steel.

As regards Pakistan, the N.W.F.P. has some deposits of workable iron ore. In Bajaur and the Bannu districts, hematite is said to be available in fairly good quantities, while in Chitral, Hazara, North and South Waziristan districts also workable deposits occur. But the greatest handicap in developing the iron and steel industry in N.W.F.P. is the absence of the necessary fuel. Pakistan has no reserves of coke and, therefore, her iron ores cannot be exploited economically.

IV. CHROMITE

The following table gives an idea of the production of chrome ore in some of the countries of the world during 1944:-

TABLE 16. Production of Chrome Ore

Country	Long tons ('000)
Southern Rhodesia	273
Cuba	189
Turkey	182
Union of South Africa	88
Japan	55
New Caledonia	54
United States	41
Undivided India	39
Canada	24

The average annual production of chromite in Undivided India during the three years immediately prior to the partition, was about 50,000 tons. Estimates made after the partition show that the output in Pakistan on an average accounted for about 50 per cent of the total production. The following table shows the production of chromite in India and Pakistan:-

TABLE 17. Chromite Production in India and Pakistan

(*in tons*)

	1944	1945	1946	1947		1944	1945	1946
INDIA	18,686	10,445	24,201	34,717	PAKISTAN	20,867	20,697	20,591
Bihar					*Baluchistan*			
Singbhum	4,541	5,225	3,861	3,067	Quetta Peshin		30	135
					Zhob	20,867	20,667	20,456
Eastern States Agency								
Keonjhar	6,929	375	12,100	21,023				
Madras								
Kistna	500	..	274	153				
Mysore								
Hassan	3,016	3,137	5,996	9,869				
Mysore	3,700	1,710	1,970	605				

The annual consumption of chromite in Undivided India was about 12,000 tons, while the rest was exported. Over 90 per cent. of the exports were from areas now in Pakistan This was because the uses to which chromite was put in Undivided India were limited. Even this limited consumption was mainly accounted for by India. Thus in spite of Pakistan's possessing about half the total deposits of Undivided India, India has not been affected, because consumption is restricted to three-fourths of her own production.

The utilisation of chromite within the country leaves much to be desired. At present chromite is used for preparing furnace refractories as well as for some chemical purposes. But the potential uses to which chromite can be put are many. Some of the other uses that deserve mention are for electroplating, the preparation of ferro-chrome alloy, the manufacture of chrome steels, etc. If the available chromite is to be put to all these uses, India may experience a shortage. The importance of ferro-chrome and chrome-steel is becoming more marked day by day and there is, therefore, great need for increasing the Indian production if shortage is to be avoided in future. Cutting down exports may also become necessary in that case.

As regards potential deposits, it must be said that Pakistan is at an advantage especially in view of the fact that Baluchistan contains the richest deposits. There is reason to believe that a good amount of deposits are yet unexplored. Mention must be made of the possibilities of producing large quantities of chromite in North Waziristan. In India, workable quantities of chromite deposits are said to occur in Saraikela State and in the Ratnagiri District of the Bombay Province. Regarding the extent of these reserves, however, there is no information.

Chromite thus presents an example of a very important mineral in the possession of which Pakistan has been favourably placed by the partition. India, though self-sufficient at the moment, may experience a shortage in future, unless other sources are discovered and utilised in time.

V. BAUXITE

The entire deposits of bauxite in Undivided India are situated in India. Pakistan is not known to possess any deposits of bauxite. The principal use of bauxite is in the manufacture of aluminium. The Indian ore compares well with any other bauxite deposits in the world, both from the point of view of quality as well as quantity. The total reserves of bauxite are estimated at 250 million tons. Reserves of high grade bauxite are probably of the order of 35 million tons, distributed as follows:-

TABLE 18. Distribution of Bauxite in India

Region	million tons	Region	million tons
Central Province	15.1	Madras	2.0
Eastern States	8.6	Bombay	1.3
Bihar	5.2	Jammu and Kashmir ..	1.0
Kolhapur	2.0	Bhopal	0.3

The present output is, however, insignificant and is restricted to the Jubbulpore district in the Central Provinces. It amounted to 12,235 tons in 1944, 13,893 tons in 1945 and 16,405 tons in 1946. Workable deposits of bauxite also occur in the Ranchi district of Bihar, the Balghat district of the Central Provinces, the Kaira, Kolaba, Kolhapur and Belgaum districts of Bombay, the She-

varoy Hills of Salem in Madras and in smaller quantities in Mysore. With such extensive deposits, spread all over the country, it is indeed strange that the output of bauxite should be so small. This is mainly because the ore is not being put to its most important use, *viz.* aluminium production. Though aluminium production is still in its infancy, it is bound to expand by rapid strides. With the extensive demand for aluminium in modern times for the purpose of body-building, as in the case of aeroplanes, railway coaches and even motor-cars, increased output of bauxite for metallurgical uses is bound to follow. Bauxite can also be used in the preparation of alum and other chemicals, furnace refractories and abrasives like emery and also in petroleum refining. With the availability of power at cheap rates, there is great future for bauxite utilisation in India. It is possible for India to make up for the absence of some non-ferrous metals by developing a large light metal industry.

IV. GYPSUM

Gypsum is one of those important minerals the supply of which in India has been temporarily adversely affected by the partition. The average annual production of gypsum in Undivided India, in the three years immediately prior to the partition was about 85,000 tons, that is, less than 1 per cent. of the total world production of 12 million tons. The distribution of this output between India and Pakistan was as shown below:—

TABLE 19. Production of Gypsum in India and Pakistan

	1944	1945 (*in tons*)	1946	1947
INDIA	58,185	63,160	48,189	50,569
Madras				
Trichinopoly	14,316	21,004	12,747	16,380
Rajputana				
Jaisalmer	449	416	462	315
Jodhpur	35,000	32,000	35,000	21,000
Bikaner	8,420	9,740	520	2,874
Saurashtra	..	..	..	10,000
PAKISTAN	25,521	27,612	39,770	
Baluchistan				
Sibi	5,861	1,155	7,314	
Punjab				
Jhelum	17,560	26,457	32,456	
Sind				
Karachi	2,100	..	..	

We find from the table that on an average Pakistan accounted for nearly one-third of the total output of gypsum in Undivided India.

There are several varieties of gypsum: (i) the glassy crystals of elenite, (ii) the fibrous or satin gypsum, (iii) the massive fine-grained translucent alabaster and (iv) the common granular textured massive beds of gypsum.[1] This division of gypsum into various categories needs mention here because the bulk of the Indian production consists of common massive gypsum only. Consequently, the uses to which Indian gypsum can be put are limited. But the variety produced in Pakistan is particularly in demand in India. Prior to the

1. Records of the Geological Survey of India Vol. II No. 1.

partition, most of the gypsum produced in the country was consumed by industries (mainly cement industry) which were located in India. The other uses of gypsum are in the manufacture of plaster of paris, stucco and various kinds of wall plasters and cements. In the tin-plate industry, gypsum is used for polishing the plates; and it is added to water to give permanent hardness in brewing. The coarser grades of gypsum are used in the manufacture of fertillsers. In view of the fact that the present production of gypsum in Pakistan amounts to about 35 per cent. to 40 per cent. of the production of Undivided India, India has to depend on Pakistan for a good portion of her needs of gypsum, though it is expected that in course of time this shortage will be made up by tapping the large resources of Rajputana and Madras. Pakistan, however, has an exportable surplus of gypsum in view of the fact that the consumption of gypsum by Pakistan's cement industry, the only large-scale consumer of gypsum, is small.

Even from the point of view of potential resources, it may be said, that Pakistan is at an advantage. The entire reserves of gypsum in the N.W.F.P. still remain untouched. In the Dera Ismail Khan, Hazara and Kohat districts of this Province, there are extensive deposits of good quality. When these are worked, Pakistan can put its gypsum to more advantageous uses.

It has been recently reported that large deposits of gypsum have been discovered in Saurashtra. The reserves are of the order of 30 million tons. This will enable India to make good the gap in gypsum created by the partition.

VII. SULPHUR

Prior to the partition, Undivided India had to depend for her requirements of sulphur mainly on imports from abroad. Indian imports of sulphur, which were 13,000 tons in 1931, today stand at about 45,000 tons. The only sulphur-producing area in Undivided India was in Baluchistan. India has, therefore, to depend for a considerable share of its sulphur imports on Pakistan. Sulphur production in Pakistan in 1944 amounted to 12,245 tons and at present the annual production is over 10,000 tons. Sulphur is a very important element for the chemical industry particularly for the manufacture of sulphuric acid and various sulphates including alum. The demand for sulphur is on the increase.

As regards potential reserves also, the position of Pakistan is sound. At Koh-i-Sultan in Baluchistan, the reserves of sulphur-bearing rock with a 40 per cent. sulphur content, are estimated at 500,000 tons. Excessive cost of mining sulphur in this area has acted against profitable exploitation. Even if she can secure all this, India can meet her needs for about five years only, at the present rate of consumption. Sulphur is also found in Pakistan in Sanni in Kalat State. Thus Pakistan is in a strong position regarding sulphur. It cannot be said with any definiteness as to how much of this she will be able to export to India. For one thing, supplies are not unlimited; and secondly, Pakistan is itself contemplating the starting of heavy chemical industries, in which case she may retain a good proportion of its sulphur output for home consumption. If desulphurisation processes are discovered the Assam coal fields might make up for India's deficiency in sulphur.

VIII. ANTIMONY

The development of antimony ores in India received a great fillip during World War II. Prior to that, the bulk of the supplies came from China and to a small extent from the United Kingdom. The only attempt at developing antimony resources in Undivided India was made in 1903, in the Kangra dis-

trict of the Punjab in Pakistan. But the work was very expensive and difficult and not much progress was achieved in this direction. Fortunately, just when the war started, new deposits of this ore were discovered in Shagor in the Chitral State in Pakistan. The ores are not easily accessible, being situated at an altitude of 7,500 feet and at a distance of 175 miles from Durgai, the nearest railway station. The production of ores in the Chitral mines amounted to 962 tons in 1944, 829 tons in 1945 and 573 tons in 1946. After the partition the processing of antimony ore has received a great set-back since the only processing factory is in India. The implications of this have been discussed while dealing with the antimony industry in chapter VIII.[1].

IX. SALT

The following table gives the production of salt in some countries of the world in the year 1946:—

TABLE 20. Production of Salt in some Countries

('000 metric tons)

1.	United States	14,700	4.	Germany	1,600
2.	United Kingdom	3.200	5.	India	1,400
3.	France	2,000	6.	Pakistan	500

The output of salt in Undivided India was 604 lakh maunds in 1946. The total quantity manufactured in Pakistan was about 125 lakh maunds and the share of India was 479 lakh maunds. Before the partition Undivided India imported 75 lakh maunds in 1945, 23 lakh maunds in 1946 and 120 lakh maunds in 1947. After the partition the imports into India amanted to 120 lakh maunds in 1948. The increase in quantity was due to imports from Pakistan which was left with a relatively larger share of the output. The following statement gives an idea of salt production in both the countries in the years 1946, 1947 and 1948:—

TABLE 21. Salt Production in India and Pakistan

(in lakh maunds)

	1946	1947	1948	1949[2]
INDIA	479.2	516.0	635.2	556.2
Government Factories:				
Rajputana Salt Sources Division ..	108.5	132.0	117.8	..
Kharagoda	33.1	36.8	36.9	..
Private factories:				
Provinces:				
Bombay	103.4	64.4	123.3	..
Madras	140.3	174.3	221.6	..
Orissa and West Bengal	5.1	10.1	6.1	..
States:				
Kathiawar and Kutch	69.8	86.3	11.8	..
Travancore	18.0	12.1	16.7	..
PAKISTAN	125.0	..	..	..
Government Factories:				
Punjab Salt Mines	75.6	..	..	..
Kohat Salt Mines	7.1	..	..	..
Salt Range Preventive Circle ..	1.0	..	..	..
Private Factories:				
Provinces:				
Sind	40.8	..	..	..
Other sources	1.0	..	..	..

1. *Vide* pp. 336-37 below. 2. Province-wise figures not available.

Salt produced in Undivided India was of two kinds: (i) that obtained by evaporating sea and lake water, and (ii) that obtained from rock salt mines. While the former variety is produced both in India and Pakistan the production of the latter is confined mainly to Pakistan. The main salt producing regions in India are West Bengal, Bombay, Gwalior, Madras, East Punjab, Bihar, Orissa, the United Provinces and Rajputana. In Pakistan, the areas producing salt are Baluchistan, West Punjab, the N.W.F.P., and also East Bengal. The potential supplies of rock salt in Pakistan are immense. India has some rock salt reserves in Mandi in Himachal Pradesh. There are plentiful supplies of good quality rock salt in the Kohat District of the N.W.F.P. and the pre-war average annual output of this area was about 20,000 tons. Traces of salt have also been found in the North Waziristan District of the same province. Prior to the partition, Pakistan exported on an average about 3.5 million tons of rock salt to India.

The *per capita* consumption of 15 to 18 lbs. of salt in India compares very poorly with the world average of 40 lbs. and with the consumption of 205.7 lbs. per head in the United States. This is on account of the low offtake by the industries of the country. Whereas industrial consumption forms 80 per cent. of the total consumption in U.S.A., in India it forms only 12 per cent. The total demand for salt in India is estimated at 684 lakh maunds. Indigenous production is expected to reach 707 lakh maunds in 1950. The Government have decided to import about 30 lakh maunds during 1950. Salt production depends upon various factors like weather conditions, labour situation and transport facilities. To guard against any unforeseen circumstances 25 per cent. of total production is always kept as reserve. Moreover the salt produced in salt factories of Madras and Bombay is of inferior quality and is unsaleable in the Calcutta market where there is a deficit. It is estimated that between 10 to 15 per cent. of the total production cannot be normally brought to the consuming areas on account of transport difficulties. These reasons explain why provision for import has to be made, though estimated production is greater than estimated requirements. The Government of India expects that India will be completely self-sufficient by 1952. The Government have proposed the installation of a plant costing Rs. 60 lakhs at Mandi Salt Hills. An expert committee has recommended that control and management of these mines should be jointly undertaken by the Governments of India and Himachal Pradesh.

Attempts have been made to manufacture salt on a large scale in Bengal. But on account of unfavourable climatic conditions and other factors they have not been successful. Frequent showers and rainfall, the dilution of sea water by the fresh water of the Ganges, the lower salinity of the sea-water on the Bengal coast, and the high cost of fuel and transport have made it impossible to expand the salt industry in Bengal. Therefore, though West Pakistan has been blessed with large reserves of rock salt, East Pakistan has to face the same problem as West Bengal in respect of salt. Prior to the partition India used to supply salt to East Bengal. After the stoppage of trade between India and Pakistan during 1949, the salt scarcity became very acute in East Bengal and prices soared high.

Salt thus represents another instance of the interdependence of both India and Pakistan. If India becomes self-sufficient in salt, Western Pakistan will lose a large market. But East Pakistan on the other hand will have to depend on India or transport salt at a heavy cost from West Pakistan.

X. BUILDING MATERIALS

Undivided India had a vast and varied supply of building materials. The partition has placed India in a more advantageous position than Pakistan in regard to building materials. Most of the supplies of trap, marble, sandstone and laterite stones are to be found in India only. In regard to granite and limestones also, the present supplies of Pakistan are not adequate, though she has vast potential reserves. Among other varieties of building stone produced in India are charmockite, basalt and dolerite, quartzite, *moorum* and *kankar*. Soapstone and sandstone produced in Rajputana are well known, while, excellent slabs of limestone, also known as Cudappah slabs, were being exported to England in the pre-war days. Though the occurrence of finer varieties of stone is limited to a few areas, ordinarily limestone and other cheap building stone occur in most parts of the country. Slate is obtainable in the Gurgaon district in East Punjab. *Kankar*, which is the Indian name for irregular concretions of calcium carbonate, is found in the sub-soil in many parts of India. The total annual production of *kankar* in Undivided India was estimated at 2.5 million tons, of which the United Provinces alone consumes more than half a million tons annually. The production of soapstone or Talc or Steatite, which comes mainly from Jubbulpore and Jaipur is over 25,000 tons a year. The following table shows the production of building and road materials in India and Pakistan:—

TABLE 22. Production of Building and Road Materials in India and Pakistan

(in '000 tons)

Kind of materials	1944		1945		1946	
	India	Pakistan[1]	India	Pakistan[1]	India	Pakistan
TOTAL	12,258	1,538	15,810	1,352	10,106	1,625
Granite	1,451	185	635	..	375	..
Laterite	799	..	121	..	173	..
Limestone & Kankar..	4,410	799	10,467	1,018	5,159	1,201
Marble	18	.4	19	.4	15	..
Sandstone	392	4	382	4	425	6
Slate	.4	6	96	6	3	7
Trap	7	..	21	..	5	..
Miscellaneous Building and Road materials	5,181	542	4,069	327	3,951	411

1. Owing to the absence of detailed district-wise figures for each province, the production of Bengal and Punjab has been attributed to Pakistan and that of Assam to India. This will result in Pakistan's production being to some extent over-estimated.

The North-West Frontier Province of Pakistan promises to become an important centre for the production of many kinds of building materials. The chief building stone that occurs in this area is limestone or its transformed product, marble. For a long time, quarrying has been done in this area. This type of stone can be worked into a beautiful ornamental stone. The main producing regions are the Khyber Agency and the Mardan District. The finely grained Ghundai Tarako marble of the Mardan District is said to be much superior to the Jodhpur marble and is ideal for interior decoration. The Frontier Province is exceedingly rich in deposits of limestone of varying degrees of purity. The Bannu, Dera Ismail Khan and the North and South Waziristan districts possess an almost inexhaustible supply of limestone. The acid volcanic rocks of the Mardan District offer abundant supplies of road metal. There is a fairly good supply of slate in the Attock district in West Punjab which is mainly used for building. The possibility of using this as roofing material

should be explored. Among other areas, the Khyber Agency and the Hazara District possess supplies of ordinary varieties of building stone.

If the present production of all varieties of building materials in India and Pakistan is taken into consideration, the conclusion is inevitable, that India is relatively in a much better position than Pakistan. It is true that India's resources of road and building stone as well as limestone, cement, concrete, etc. have not been utilised to a degree which the available supply warrants. The reserves of the North West Frontier Province form a good source of potential supply for Pakistan.

XI. CLAYS

Clays are mainly of three varieties, China clay, Fireclay and other common varieties. The entire production of the former two varieties is concentrated in India. Even in common clays the share of Pakistan is not proportionate to either its size or its needs. The following figures give the production of clays in India and Pakistan:—

TABLE 23. Production of Clay in India and Pakistan
(in '000 tons)

Types of Clay	1944		1945		1946	
	India	Pakistan	India	Pakistan	India	Pakistan
Total	817	78	391	134	679	132
China Clay	46	..	67	..	75	..
Fire Clay	88	..	80	..	72	..
Other Clays	683	78	244	134	532	132

China clay or Kaolin, which is the more important variety, is mainly used for ceramics, in making porcelain and pottery ware of all kinds, from fine crockery to coarse sanitary ware. Kaolin, purified by electric osmosia, becomes an edible earth and is invaluable in tabloid medicine. Many of the so-called fireclays are the same as Kaolin, though they do not possess the whiteness and glaze of china clay. The common clays, of which Pakistan has some supplies, are used mainly in crude pottery making. In view of the growing importance of porcelain, particularly to the electrical industry, the shortage of china and fire clays will be keenly felt in Pakistan. India will be able to meet a good proportion of Pakistan's demand for fire clays.

XII. MANGANESE ORE

The predominant position of India in respect of the production of manganese ore can be gauged from the following table:—

TABLE 24. Production of Manganese Ore in different Countries, 1944[1]
(in '000 long tons)

Country	Ore produced	Manganese content
Gold Coast	504	262
India	371	182
Cuba	253	114
United States	221	117
Brazil	146	66
Union of South Africa	105	45

1. Figures relating to the production in Russia, which is the most important producer of manganese in the world, are not available.

The partition of the country has affected Pakistan adversely so far as the production of manganese is concerned, the entire production being accounted for by India. The following table shows the annual production of manganese ore in India during the last few years:—

TABLE 25. Production of Manganese Ore

in tons

	1944	1945	1946	1947	1948[1]
INDIA	370,980	210,583	252,916	451,000	467,000
Bihar:					
Singbhum ..	4,495	2,173	10,059	18,454	..
Bombay:					
Panch Mahal ..	22,515	17,425	16,059	19,654	..
Central India:					
Jhabna	..	2,495	1,403	..	..
C.P.:					
Balaghat	129,731	63,679	74,845	135,992	..
Bhandara	56,272	36,513	31,109	68,063	..
Nagpur	107,631	53,513	50,810	2,728	..
Chindwara	1,078	..	664	67,649	..
Eastern States Agency:					
Bonai State ..	21,691	11,694	18,564	22,151	..
Keonjhar State ..	18,377	19,734	31,446	66,650	..
Patna State ..	733	..	450	250	..
Madras:					
Sandur State ..	653	2,158	16,415	44,695	..
Bellary	73	..	..	..	..
Vizagapatam ..	3,203	..	..	..	..
Orissa:					
Koraput	4,000	575	..	2,000	..
Mysore:					
Tumkur-Chitaldrug	73	377	364	558	..
Shimoga	234				
Rajputana:					
Udaipur-Banswara ..	223	354	..	1,734	..

1. Province-wise figures are not available for 1948.

India has been one of the world's leading producers of high grade manganese ore. The reserves of some of the best quality ores in India are both extensive and well-distributed and are estimated at 15 to 20 million tons. Their manganese content is estimated at 48 per cent. But the utilisation of manganese within the country suffers from a drawback. 90 per cent. of India's production of manganese ore is exported every year. It is obviously not desirable to continue to export such a valuable national asset in an unfinished form, for industrial use by other countries. This is indeed unfortunate in view of the excellent scope for effectively utilising these deposits at home. The steel industry in India requires large quantities of manganese ore. In fact, some of the best quality steels have a manganese content as high as 11 to 14 per cent. It is quite possible to utilise a greater proportion of manganese ores in the preparation of ferro-manganese. The present annual production of ferro-manganese is 20,000 tons but it is possible to increase it considerably. It has been claimed that owing to the high phosphorous content in the coke or in the ore, it is not possible to prepare ferro-manganese of the highest grade. But the fact remains that both low phosphorous ore and coke have been found in the country. Manganese ore is also used for resistance of abrasion and shock as in rock-breaking machinery, including the drills and hammers used in mining and prospecting. The ore is also useful in the preparation of dry batteries.

In view of the large scope for the utilisation of manganese, it may appear that the absence of manganese is likely to be felt keenly in Pakistan. But at present the demand for manganese in Pakistan is negligible, in view of the fact that she does not possess any of the industries which require manganese ore. Though the present needs of Pakistan as regards manganese ores are negligible, in the long run, she will be at a disadvantage if she wants to develop a steel industry. With the further development of the steel industry in India, it would be possible to consume larger quantities of manganese ore. As regards manganese reserves too, the position of Pakistan is weak. Except for stray deposits in the Kohat district and the Chitral State of N.W.F.P., no workable deposits have as yet been found anywhere in Pakistan.

XIII. FULLER'S EARTH

Pakistan produces nearly twice as much fuller's earth as India. The following table shows the production in the two countries:—

TABLE 26. **Production of Fuller's Earth in India and Pakistan**

Region	1944	1945 (*in tons*)	1946	1947
INDIA	3,361	4,503	2,752	2,831
Central Provinces:				
Jubbulpore	22	..	..	22
Rajputana:				
Jaisalmer	198	192	175	109
Jodhpur	2,193	2,363	2,577	2,700
Bikaner	948	1,948	..	..
PAKISTAN	7,714	8,375	6,666	..
Punjab States Agency:				
Khairpur	2,877	4,125	2,509	..
Sind:				
Sukkur	4,286	4,250	4,157	..
Hyderabad	551	..	..	

At present fuller's earth obtained in either country is put mainly to two uses. The more important of these is its use as a detergent agent for washing clothes. But the importance of fuller's earth as a holder of drugs in tabloids as well as an aboserber of grease and oil, is becoming increasingly apparent. The material is also non-plastic and edible and thus in course of time may become extremely useful to the chemical and pharmaceutical industry. Though figures of exact quantity required for each purpose are not available, it may be said that a comparatively greater quantity is needed by India. Pakistan would be able to meet a large part of this need.

Multani Matti:—It is also a kind of fuller's earth and is available in Bikaner, Jodhpur and Jaisalmer in India and in Hyderabad (Sind) in Pakistan. The annual output of this material in both Pakistan and India is about 4,000 tons.

XIV. MICA

The partition of the country has resulted in the complete concentration of mica in India, which accounts for over 80 per cent. of the world production, the next important producer being Brazil. Except for its possible occurrence in Giddarpur in the Hazara District of the N.W.F.P., Pakistan is not known

to possess any mica reserves. The production of mica in India just before the partition is indicated by the following figures of exports, as the bulk of the production is exported:—

TABLE 27. Exports of Mica from India

(*in cwts.*)

	1944			1945			1946
	Block	Splittings	Scrap and Waste	Block	Splittings	Scrap and Waste	All types
Total	72,238			95,625			210,047
U.K. ..	14,173	8,356	..	12,555	9,023	6,460	..
Australia ..	730	615	..	86	320	..	..
New Zealand	80	..	..	104	..	..	..
China ..	4	..	..	..	..	..	..
U.S.A. ..	10,437	37,843	..	11,371	55,726	..	..
Saudi Arabia	..	..	..	..	..	..	..
Iran ..	..	..	..	..	..	..	..

The following table gives an idea of the production of mica in different countries of the world in 1944:—

TABLE 28. Production of Mica in some countries

Producing Country	Quantity (*long tons*)
India	
Blocks	1,271
Splittings	2,341
Scrap	..
United States	
Sheets (uncut)	680
Scrap	46,185
Brazil	926
Union of South Africa	1,245

It would be no exaggeration to say that the entire world is dependent on India for its supplies of mica. Though the U.S.A. is a large producer of mica it should not be forgotten that its production consists mainly of scrap and waste. On the other hand, Indian mica, which consists of the muscovite and phlogophite varieties, is the best block and sheet mica in the world. The export of this has averaged over 125,000 cwts. while that of scrap has averaged about 80,000 cwts. The pressing demand for this material during the war revolutionised its marketing and Indian mica accounted for 80 to 90 per cent. of the U.S. mica imports. Though the United Kingdom and the United States are the principal importers of Indian mica, considerable quantities are also exported to Germany, France, Italy and Japan. The domestic utilisation of mica, both block and sheet, as well as scrap and waste, forms a negligible percentage of the total production as also of exports. From the point of view of internal consumption, Pakistan is not likely to feel the loss very much as the need for mica within Pakistan is very limited. So far as India is concerned, with the internal development of electrical appliances industry, there may be increased consumption of mica, but there is no fear of demand out-

stripping supply. Regarding external demand also, it may be said that India is in a position to meet it because of the vast potential reserves. Production in Madras has not yet been properly encouraged, while the deposits in Rajputana have hardly been touched.

The main feature of mica, which differentiates it from other minerals is that no processing is necessary before it is used. Mica consists mainly of two varieties, block mica which can also be split into sheets and waste. Among articles for which block and split mica are indispensable are spark plugs, transformers, condensers, radio tubes, television sets, armatures, commutators and V-rings. Mica is said to be the best insulating medium. It is also used as a dialectric in radio condensers and is the finest filter; it is invaluable to the television industry. Among its less important uses may be mentioned its use as a condenser for many electrical appliances such as terminal insulators, washers, discs, etc. Among the non-electrical uses of mica may be mentioned its use in oven, stove and furnace windows, gas lamp chimneys and lamp shades, gas masks, goggles, etc., where transparency is a fundamental requisite, the thin mica diaphragms in particular being without parallel.

The mica industry is one of the important industries in India. Although the figures for employment in mica mines and factories is over 25,000 and 35,000 respectively, the splitters, who work in their own cottages constitute an important sector. It is estimated that these 'home-splitters' number over one hundred thousand. Most of these labourers are employed in the Bihar region, especially in Kodarma. Bihar being a reservoir of cheap labour, there has been an excessive concentration of the mica industry in this region, though Madras mica is of an equally good quality. Though mica is also produced in a number of other places, the quality is invariably poor, except in Rajputana.

In spite of its prosperity, the mica industry suffers from a number of drawbacks, as pointed out by the Mica Enquiry Committee, 1944. Better prices for Indian exports, conservation of the mineral by ensuring proper mining methods, and encouragement to the production of micanite and ground mica are the main problems facing the industry. The Committee suggested the setting up of a Mica Marketing Control Board and a Central Mica Committee to look after marketing and research respectively. The need for a research body is urgent, in view of the fact that mica mining in India is being carried on in the most unscientific and haphazard manner. Though there is no fear of Indian mica resources being exhausted, the loss sustained owing to crude mining methods is indeed great.

Other countries are trying to discover substitutes and synthetic mica, as otherwise they have to depend for virgin product on few countries. It was recently reported that United States scientists had invented synthetic mica. This report came on the very day the Industries Minister of India was addressing the International Committee on Mica on the bright prospects ahead of the industry. U.S.A. being one of the leading importers of mica, the industry will lose a large market if synthetic mica is commercially produced. This makes it necessary on the part of the Indian Government to explore ways and means of utilising the mineral inside the country itself. Proper attention towards quality and prices is also necessary.

XV. GOLD

Gold mining in Undivided India was carried on only in the Kolar Gold Fields of Mysore State, and, therefore, all gold-mining activity is now confined to India. The output of gold in India in recent years is shown below:—

TABLE 29. Gold Production in India
(in ounces)

	1944	1945	1946	1947	1948[1]
INDIA	188,206	168,366	131,775	171,705	180,046
Mysore :					
Champion Reef Mysore Nundydroog ..	187,827	168,325	131,718	171,696	..
Ooregaum					
Madras :					
Chillor	361	38	55	7	..
U.P.:					
Garhwal	..	1	2.5	2.4	..
Punjab :					
Ambala	3	2	..	..	..
Bihar :					
Manbhum	14	..	..	..	..

1. Province-wise figures are not available for 1948.

We find from the table that the output of gold has been continuously on the decline. The peak was reached in 1937 when the output was 330,000 ounces. Since 1941, however, the output has been falling. Some of the Kolar fields have now attained a depth of over 9,000 feet below the ground level. As greater depths are reached the quality of the ores tends to deteriorate. This means that the Kolar fields are now working under more difficult conditions and with lower returns. If this tendency persists, some of the mines working under uneconomic conditions may have to close down.

The total production of gold in India amounts to less than 2 per cent. of the total world production. There does not seem to be much hope for producing a greater quantity of gold. Of the recent discoveries of potential gold-yielding areas, mention may be made of the Bellara gold mines of Mysore State. Fairly good quantities of gold which can be worked with advantage have been proved to exist here with an estimated production of 25,000 ounces of gold per year, valued at about Rs. 40 lakhs. Even taking this into account, India's share in total world production is not likely to be augmented to any appreciable extent.

Trifling quantities of gold have also been produced in Pakistan. But so far no deposits which are commercially workable have been discovered. Mention may be made of its occurrence in negligible quantities in the Khyber Agency, Mardan, Hazara and Peshawar districts and Chitral in N.W.F.P. But whatever gold has been produced is only of the alluvial variety. In Chitral, gold-washing is being carried on since times immemorial. But this method is very expensive and the returns are negligible and hardly worth the enormous effort that it involves. Pakistan is dependent on other countries for her requirements of gold.

XVI. STRATEGIC MINERALS

Beryl, monazite and zircon are classed among strategic minerals. Their importance was recognised during the war when they were largely used in the manufacture of shells, etc. The entire supply of these minerals is concentrated in India, thus providing another example of the poverty of Pakistan as regards the availability of minerals.

Beryl : Beryl occasionally occurs in association with muscovite mica. Thus a good quantity of this mineral comes from Rajputana which is a good supply

centre for mica. Beryl is also said to exist in the mica areas of Madras and Bihar. The main use of beryl is for the extraction of berrylium, which is used in the preparation of specially hard and tough copper, *viz.* berrylium alloys, which are said to have the strength of mild steel. The present output of India is about 150 tons a year. With proper encouragement by way of higher prices, it is possible to produce increased quantities. Recently a new type of beryl deposit has been discovered in Mewar State in Rajasthan. This deposit possesses a beautiful deep green hue and can be cut into emeralds. The prospects of increased yields of good quality emeralds are bright. Beryl has acquired great importance recently on account of its suitability for use in atomic fission.

Monazite : The entire supply of monazite in India comes from the beaches of Travancore coast. This area contains the largest concentration of monazite sands in the world. The following table gives an idea of the production of monazite in the world in 1944:—

TABLE 30. Production of Monazite in Different Countries

Country	Quantity (long tons)
India	2,016
Malaya	54
Brazil	3
Australia	negligible
Netherlands East Indies	n. a.

The chief importing country is the U.S.A. The total quantity of deposits in Travancore area are estimated at over 2 million tons, while the annual average output is over 4,000 tons. Monazite can be put to a number of uses in peace as well as in war. It is the raw material for the preparation of thorium nitrate which is used for impregnating gas mantles. Among its other prospective uses are the cernism compounds which provide the spark in cigarette lighters. It is extensively used for making tips of tracer bullets and shells, which ignite as the projectile is fired and enables its path to be seen. Messo-thorium, another extract of monazite, is used as a radio-active substance. The importance of monazite as a strategic mineral has increased owing to the possibility of utilising it in the generation of atomic energy.[1] The Government of India have established an Atomic Energy Commission. Development of atomic power for industrial purposes will be a boon to areas far removed from coal and water power supplies. There is a bright future for this mineral especially in view of the number of uses to which it can be put. The Government of India have recently entered into an agreement with two French firms for the processing of monazite sands in India. When the factory goes into operation in a year's time, about 1,500 tons of monazite sands will be processed annually.

Zircon : Zircon is available in Travancore. It is found in the ilmenite-monazite sands of the Travancore cost, and is recovered as zircon sand. In recent years the production has averaged over 1,600 tons a year. There are extensive reserves of this mineral in this area. Its chief use is as a high grade zirconia refractory and also as an abrasive. It is also used in the preparation of ferro-zirconium for making a special kind of steel.

It will be seen from a general study of these minerals that they constitute an invaluable asset to India. The multiplicity of uses to which each of these three minerals can be put, both in peace and in war, places India in a distinctly advantageous position. At present, the uses to which they are being put are

1. It is reported that uranium reserves have been discovered in Rajasthan and Bihar.

limited and hence the low production. But the potential reserves are vast and it would be possible to meet increasing demand when the scope for their utilisation increases.

XVII. OTHER MINERALS

Titanium:—Titanium ores are widely distributed in India. They are rutile, titaniferous magnetite, ilmenite, the aluminous and ferruginous laterites derived from traps and the black beach sands containing titanium minerals, as in Tranvancore and places along the east coast. About 75 per cent. of the world's requirements ranging normally between 200,000 to 300,000 tons were derived from the Travancore sands before 1939. Ilmenite is used for the extraction of titanium oxide which is a valuable pigment. According to Dr. D. N. Wadia, the reserves of ilmenite ore in India are of the order of 250 million tons. Titanium is also used in the form of ferro-titanium alloys for special steels. Nickel-cobalt-titanium alloys have special mechanical uses. During the year 1944, India (199,794 tons) was the second country in ilmenite production, next only to the United States (248,759 tons). Norway and Canada were the only other countries with considerable production. In 1948, India's production amounted to 229,000 tons.

Magnesite : India possesses deposits of magnesite of wide extent (about 90 million tons) and of great chemical purity, mainly in Madras and Mysore. In 1944 about one fourth of the annual production (41,936 tons) was exported abroad. U.S.A., Austria and Canada were the other countries which produced more than India in 1944. Magnesite is employed in India for refractories and special cements. Extraction of metallic magnesium liberates large quantities of carbon-dioxide gas which can be of great use in refrigeration plants. The question of preparing magnesium-aluminium alloys will come into prominence when India thinks of developing a large light metal industry.

Steatite or Talc: This is well-known as French chalk. It is a silicate of magnesium. Jaipur and Jubbulpore are centres of production in India. It is supposed to be a more satisfactory filler of paper than china clay or kaolin. It is used in industries like paints, polishes and cosmetics. In 1944 India produced 21,392 tons. Only U.S.A. (373,418) tons), Austria (44,036 tons), Korea (40,500 tons) and France (26,300 tons) exceeded her production.

Vanadium : This is a valuable metal, yielding special steels of great strength, toughness and durability. Vanadium bearing titaniferous iron-ores exist in Singhbhum and Mayurbhanj. The minimum reserves are of the order of 2 to 3 million tons. If Travancore ilmenite sands become depleted these ores can be utilised instead. Mexico is the leading country in vanadium production.

Silica and glass sands:..High grade quartz sands occur in India and Pakistan suitable for making clear glass and laboratory ware. Optical glass can also be made if suitable care is taken. Pakistan has also got reserves of glass sands.

Arsenic : Arsenious oxide or white arsenic is employed in medicine, in pyrotechny, in preparing pigments, in glass making, taxidermy and tanning. Arsenic compounds because of their poisonous nature are used as weed killers and insecticides. Chief occurrences are in Chitral (Pakistan) and Kashmir. There is considerable demand for arsenic in India (about 150 tons per annum). New ores have been discovered in Darjeeling. With the partition, Pakistan has

come to possess large ores. But very little of arsenic can be consumed by Pakistan industries.

Corundum: This mineral is used for manufacturing abrasives. It occurs in Madras, Mysore and Rewa and also in Khasi hills, Assam.

Felspar: This mineral has been largely used in the ceramic industry. India has large resources of felspar. Felspar can also be obtained as a by-product from the dumps of mica mines.

Saltpetre: Saltpetre may be potassium or sodium nitrate. In India, potassium nitrate is mined in U.P. and Bihar and in Pakistan, in West Punjab. It is a valuable fertiliser.

Zinc: Metallic zinc is used for various purposes. Kashmir has got reserves of zinc ore but the area is inaccessible. Udaipur also produces some quantities.

Kyanite: This is used as a refractory in the glass industry. It has the same composition as sillimanite which occurs in Assam. The total reserves of kyanite and sillimanite in India are put at 500,000 tons. India is one of the leading producers of kyanite. The Government of India has restricted the exports of kyanite in order to conserve it for internal uses.

Barytes: These are used mainly in the paint industry. They are also used occasionally in drilling for petroleum. Some districts of Madras and some Rajputana States contain good reserves of barytes. India is one of the important countries for the production of baryte.

Phosphates: Prosphates and super-phosphates are essential for plant life. Phosphorous is also used in metallurgical industries. The Trichinopoly district in Madras has reserves of phosphatic nodules. Bihar has large reserves of apatite which has 20 per cent. phosphorous content.

DISTRIBUTION OF MINERAL RESOURCES

The distribution of mineral resources of Undivided India, between the different parts of India and Pakistan has been described in a lucid manner by Dr. D. N. Wadia, and we cannot do better than quote his observations in full[1].

"Nature has made a very unequal territorial distribution of minerals in the Indian region. The vast alluvial plains tract of North India is devoid of mines of economic minerals. The Archaean terrain of Bihar and Orissa possesses the largest concentration of ore-deposits such as iron, maganese, copper, aluminium, chromium; valuable industrial minerals like mica, ilmenite, phosphates and over three-fourths of India's reserves of coal, including coking coal. The iron ore reserves lying in one or two districts of Bihar and in the adjoining territories of Orissa are calculated at over 8,000 million tons, surpassing in richness and extent those of any other known region. There are large reserves of manganese-ores; over 50 per cent. of the world's best mica, block, splittings and sheet is supplied by the mica mines of Kodarma and Gaya in Bihar. The second minerally rich province is the Central Provinces, carrying good reserves of iron and manganese, coal, limestone and bauxite. Madras has workable deposits of iron, manganese,

1. Quotation reproduced with the kind permission of the author from Dr. D. N. Wadia's paper "Geological and Geographical Distribution of India's Minerals", published by the Fourth Empire Mining and Metallurgical Congress, London, 1949.

magnesite, mica, limestone and lignite. Mysore State has yielded all the gold of India, besides producing appreciable quantities of iron, porcelain clays and chrome-ores. Hyderabad has good reserves of second-grade coal, besides being a potential source of several industrial minerals. Travancore on the southern tip of the Peninsula possesses enormous concentrations of heavy-mineral sands of high strategic importance, calculated to contain some 250 million tons of ilmenite, besides containing monazite, zircon, rutile, and garnet in workable quantities. The provinces of Bombay, (the N.W. districts) and Eastern Punjab have been far less productive and have scarcely as yet figured in India's mineral statistics. Rajputana for a long time absent from India mineral returns is gradually becoming a productive centre, holding promise for the future in non-ferrous metals (copper, lead and zinc), mica, steatite, berrylium and precious stones (acquamarine and emerald). Assam supplies about 80 million gallons of much needed petroleum, besides carrying important reserves of tertiary coal. Of the vast extent of the Himalayan region, the only proved mineralised region of importance is the territory of Kashmir south of the Great Himalayan Axis, with its coal (some of it anthracitic), aluminium ore, sapphire and some minor industrial minerals. West Bengal's mineral resources are confined to coal (annual production capacity about six million tons) and iron ores. The next mineralised terrain is Nepal, from where occurances of cobalt, nickel and copper ores are reported, but which has scarcely yet been geologically explored. But for the partly-known copper deposits of Sikkim and Kumaon and some fairly wide-spread iron ore bodies in these areas, the rest of the Himalyan region is a veritable *terra incognita* as regards economic minerals.

'The Provinces of Sind, N.W.F.P., now constituting Western Pakistan, and the new Province of Eastern Bengal forming Eastern Pakistan, are parts of India which have less development of the minerally productive geological rock-systems and have not in the past supported any considerable mining industry. The provinces of Sind, N.W.F.P. and the rocky parts of Western Punjab have prospects of petroleum resources on a workable scale, as yet undeveloped. This feature is shared also by Baluchistan which has in addition important chromium deposits of a high grade, together with moderate reserves of low-grade lignite, coal and sulphur. Two or three oil-fields in Western Punjab produce a variable quantity of petroleum (10 to 30 million gallons). Other minerals of West Pakistan are rock-salt (175,000 tons annually) from Khewra and the yet untapped reserves of millions of tons of brine in Baluchistan; nitre and potash-salts, gypsum, and reserves of some 300 million tons of tertiary coal of inferior but usable quality. Energetic prospecting for oil in Sind and in the N.W.F.P., at present in progress, may reveal new oil-fields of better productive capacity than the existing Punjab oil-fields which are small and declining in their output. Pakistan's metal resources are confined to Baluchistan's high grade chromite, Chitral antimony and arsenic, and the hitherto indifferently prospected iron-ore and coal, in parts of Hazara and N.W.F.P. The country is richly supplied with vast reserves of pure limestone and other raw materials for cement manufacture, together with extensive deposits of high-quality gypsum and ornamental marble."

EFFECTS OF PARTITION ON MINERAL RESOURCES

Our survey of the different mineral resources reveals that India has not been greatly affected by the partition in respect of her resources, present and potential. With regard to minerals like iron ore, mica and titanium ores, in

which Undivided India had got an advantage over the other countries of the world, she has not at all been affected. In relation to the second category where Undivided India had got an important exportable surplus, some reserves of gypsum have gone to Pakistan. In respect of the minerals in which she was supposed to be self-sufficient as regards the present and the immediate future, she has been affected to some extent by the partition. Pakistan has come to possess reserves of the following minerals:—Chromite, gypsum, sulphur, petroleum, arsenic, antimony, rock salt and sodium compounds and some reserves of coal. Silica and glass sands are also found in Pakistan. Pakistan has got extensive reserves of chromite. But there is no use for that mineral in Pakistan itself, except in tanneries. Chromite is used in manufacturing special steels. Pakistan, as will be pointed out in chapter VIII, cannot hope to have a large iron and steel industry. In respect of sulphur, Pakistan may utilise its reserves for producing fertilisers and sulphuric acid. But these reserves are extremely limited. Even prior to the partition, Undivided India depended on other countries for imports of sulphur. As regards petroleum, Pakistan has potential resources, that is, she has areas where it may be possible to find petroleum. With respect to arsenic and antimony, the Pakistan industries at present cannot absorb them. India on the other hand used to get antimony supplies from Pakistan. She will have to look to other countries, for such supplies henceforth. Important reserves of rock salt are in Pakistan. But India is making efforts to achieve self-sufficiency in salt. Extensive rock salt deposits have been found in Mandi near East Punjab.

One important feature of the minerals in Pakistan is that some of these minerals are found at places like Baluchistan and N.W.F.P., where transport facilities are not adequate and the cost of mining becomes high at the pit-head itself. This will militate against profitable exploitation of these minerals in Pakistan. Another deficiency of Pakistan is that her reserves of coal are extremely limited and are not more than 8 million tons. The cost of coal is also very high because of difficulties of mining. The quality of coal is also very low, being high in ash and sulphur content. Another peculiar feature is that East Pakistan has no mineral reserves. The reserves that are found are all in West Pakistan. Even the supplies of limestone for the cement factory in Sylhet (East Pakistan) have to come from Assam. Pakistan has large reserves of gypsum. But India has been able to find out alternative sources in Rajputana and Saurashtra. Thus the partition has left India virtually unaffected with respect to these resources, at the same time rendering Pakistan relatively poor.

PROBLEMS OF THE MINERAL INDUSTRY

It may not be out of place to mention some of the important problems connected with the mineral industry of India. The mining industry in India is very backward compared with that in other countries. Many causes have been given for the backwardness of the Indian industry. The report of the industrial panel on Non-ferrous Metals Industries mentioned the following reasons for India's lack of development:—(1) Lack of policy and organised plans for prospecting, mining and utilisation of minerals; (2) Lack of effective State control, assistance and encouragement; (3) Absence of basic industries; (4) Lack of trained men and technical skill; (5) Want of reliable information on the industrial application of minerals; (6) The haphazard mining of the ore bodies with an eye for immediate gains, leading to the rapid depletion and waste of the useful portions

of the deposits; and (7) Inroads by foreign firms who have taken up concessions for most of the important Indian minerals.

Some of the valuable minerals of India have hitherto been exported to other countries in return for finished products. Uncontrolled and profit-seeking private concerns have been resorting to wasteful methods of mining. Minerals are wasting assets and unlike forests, once they are used up, they cannot be replenished. It has been stated that more than 50 per cent. of the coal dug up is wasted in India. Mechanical methods are not common in the mining fields. Thus the cost of the mineral has tended to be high. Most of our mineral resources were being exploited by foreign interests, who presumably could not have adequate interest in the proper conservation of minerals for India's welfare. The nature of mining leases and licenses have also complicated the issues. Further, till recently there was no enlightened state policy in regard to minerals in India. One of the first things the Government of India did after 1947, was to make attempts towards proper conservation and control of minerals and mineral rights. The Indian Mines Act was passed in September 1949 by the Indian Parliament. This Act extends to all Provinces and States in India. It applies to all minerals, including oil, and confers on the Government of India power to regulate the terms and conditions of prospecting licenses and grant of leases for the survey and development of minerals and to modify existing licenses and leases on payment of compensation. The Provinces and States will continue to own the minerals, but under the control of the Centre. The Act seeks to enforce systematic mining so that ores below a particular depth can be properly utilised. It facilitates the employment of machinery and mechanical appliances. Overproduction in some cases has to be avoided. Attempts have to be made to modify the leases and their periods. The Indian Bureau of Mines has been made the chief national agency for discharging these duties on behalf of the Government.

The Bureau has already done work. It has regulated the export of manganese ore of high grade and has fixed quotas for different countries. Another important metal, kyanite, which was being exported has been conserved. Attempts are being made to conserve stocks of chromite. There is a total ban on export of beryl, monazite and other minerals used for atomic energy purposes. The Bureau has also been given powers to advise the Government in regard to internal utilisation of minerals.

Other measures taken by the Government of India include the establishment of the Indian Metallurgical Laboratory at Jamshedpur, the reorganisation of the Indian School of Mines and Applied Geology at Dhanbad, the starting of the Fuel Research Institute and the expansion of the staff of the Geological Survey of India. But though the Government of India has been alive to the need for proper exploitation of the minerals, much yet remains to be done. Some of the foreign countries which import Indian minerals are trying to discover substitutes. The mica mining industry, for instance, is entirely dependent upon foreign markets. Attempts must, therefore, be made to develop basic industries in India in such a way that our mineral resources can be utilised inside the country, and the mining industry need not be dependent upon the economic uncertainties of other countries for its prosperity. Large quantities of minerals which are being exported abroad can be internally utilised, if there is proper development of basic industries in India. Research has also to be conducted with respect to the best possible uses of the available minerals in India.

Attempts must be made to diversify the mineral industry in India by trying to utilise resources available in different parts of the country.[1] Availability of proper and cheap transport facilities in order to encourage this diversification and regionalisation will help towards the growth of this industry. We must also attempt to discover substitutes for some of the minerals for which we are entirely dependent on other countries. If such efforts succeed, India may not appear to be as deficient in minerals as she has been supposed to be, compared with the U.S.A., and the U.S.S.R. One favourable feature as regards India is that she has got large resources of iron ore as well as aluminium and magnesite, by reason of which important iron and steel and non-ferrous industries can be developed in India. She can also utilise her large reserves of manganese for preparing special alloys and steels, and also the reserves of mica for building up a flourishing electric industry.

MINERAL WEALTH OF INDIA AND OF OTHER COUNTRIES

It has been often held that India is poor compared to other countries with respect to mineral resources. An inch-a-mile scale geological map of the country has yet to be drawn. The known mineral resources of the U.S.S.R. for example underwent considerable changes after detailed surveys. When intensive surveying with the aid of the latest geophysical technique is done in our country, there are reasons to hope that increased resources of some minerals will be found. Even if we take into consideration the existing resources, table 31 (p. 219) which gives the mineral wealth of some leading industrial countries, clearly shows that the absolute position of India is not bad in comparison with that of other countries.

The table reveals the fact that India has an exportable surplus in respect of five minerals compared with six in the U.S.A. and five in the U.S.S.R. India is self-sufficient in four, whereas U.S.A. is so in five and Russia in seven. With respect to major minerals like iron ore, coal, manganese, magnesite, mica, chromite and bauxite, India is well provided. She is deficient in copper, zinc, tin, lead, sulphur and petroleum. U.S.A. and U.S.S.R. are well provided with petroleum; but are deficient in mica and the U.S.A. is also deficient in manganese. The table also reveals that Germany is comparatively very deficient in mineral resources. In spite of this, she became an industrial country. If we remember the fact that India is yet to develop her large industries and that the problem is one of utilising the available mineral wealth, while the other countries have already consumed considerable portions of their mineral resources, we may

1. Unfortunately the mineral resources in India have been very unevenly distributed. The following table gives an idea of the concentration in the Damodar Valley Area.

Minerals	% of India's total production
Copper Ore	100
Kyanite	100
Iron Ore	93
Coal	80
Chromite	70
Mica	70
Fireclay	50
Asbestos	45
Chinaclay	45
Limestone	20
Manganese	10
Building materials	10

conclude that we have ample scope for industrial progress. The table incidentally reveals the relative poverty of Pakistan in respect of mineral resources. She has an exportable surplus only in one (chromite) and has one mineral (antimony) which is not mined in India.

TABLE 31. National Self-Sufficiency in Minerals

Minerals	U.S.A.	U.S.S.R.	Germany	India	Pakistan
Antimony	— — C —	— — C —	— — — D	— — — D	— — C —
Asbestos, long fiber	— — — D	A — — —	— — — D	— — C —	— — — D
Bauxite	— — C —	— — C —	— — C —	A — — —	— — — D
Chromite	— — C —	— B — —	— — — D	— B — —	A — — —
Coal	A — — —	— B — —	— B — —	— B — —	— — C —
Copper	A — — —	— — C —	— — C —	— — C —	— — — D
Industrial Diamonds	— — — D	— — — D	— — — D	— — — D	— — — D
Graphite	— — C —	— B — —	— — — D	— — C —	— — — D
Iron ore	A — — —	— B — —	— — — D	A — — —	— — — D
Lead	— B — —	— — C —	— — C —	— — — D	— — — D
Magnesite	— B — —	A — — —	A — — —	A — — —	— — — D
Manganese	— — — D	A — — —	— — — D	A — — —	— — — D
Mercury	— — C —	— — C —	— — — D	— — — D	— — — D
Mica High Grade	— — — D	— — — D	— — — D	A — — —	— — — D
Nickel	— — — D	— — — D	— — C —	— — — D	— — — D
Nitrate, natural	— — — D	— — — D	— — — D	— — C —	— B — —
Petroleum	A — — —	A — — —	— — — D	— — C —	— — C —
Phosphates	A — — —	— B — —	— — C —	— B — —	— — — D
Platinum	— — — D	A — — —	— — — D	— — — D	— — — D
Potash	— B — —	— B — —	— — — D	— — — D	— — — D
Quartz crystal	— — — D	— — — D	— — — D	— — — D	— — — D
Sulphur	A — — —	— — C —	— — — D	— — — D	— B — —
Tin	— — — D	— — — D	— — — D	— — — D	— — — D
Tungsten	— — C —	— — — D	— — — D	— — — D	— — — D
Vanadium	— B — —	— — — D	— — — D	— B — —	— — — D
Zinc	— B — —	— B — —	— — C —	— — C —	— — — D

A Minerals available for export.
B Minerals adequate to meet domestic demands.
C Minerals inadequate for domestic demands.
D Minerals for which the country depends entirely on imports.

APPENDIX I

Abstract Statement showing the Mineral Production of India and Pakistan

(*Figures in thousands*)

Minerals	Unit	Quantity Produced			
		1945		1946	
		India	Pakistan	India	Pakistan
A. Minerals Produced in Both the Countries					
Building material	Tons	16	1	10	1
Chromite	Tons	10	21	24	21
Clays other than China	Tons	358	101	608	128
Coal	Tons	28,856	312	29,344	406
Fuller's Earth	Tons	5	8	3	7
Gypsum	Tons	63	28	48	40
Petroleum	Gals.	69,737	12,959	64,878	11,874
Salt	Tons	1,513	431	1,485	453
Saltpetre	Tons	5	2	4	N.A.
Steatite	Tons	21	1	23	1
B. Minerals produced in Pakistan Only					
Antimony	Tons	....	1	....	1
Sulphur	Tons	....	N.A.	....	N.A.
C. Minerals produced in India Only					
Apatite	Tons	1	....	....	....
Asbestos	Tons	1	....	....	....
Barytes	Tons	25	....	29	....
Bauxite	Tons	14	....	10	....
Beryl	Tons	N.A.	....	N.A.	....
China Clay	Tons	67	....	75	....
Copper Ore	Tons	329	....	360	....
Corundum	Tons	N.A.	....	N.A.	....
Diamonds	Carats	1	....	1	....
Felspar	Tons	....	....	1	....
Gold	Ozs.	168	....	132	....
Graphite	Tons	1	....	2	....
Ilmenite	Tons	172	....	185	....
Iron ore	Tons	2,264	....	2,408	....
Kyanite	Tons	13	....	13	....
Magnesite	Tons	28	....	45	....
Manganese ore	Tons	211	....	253	....
Mica[1]	Tons	91	....	201	....
Monazite	Tons	N.A.	....	N.A.	....
Ochre	Tons	10	....	9	....
Silver	Ozs.	14	....	10	....
Zircon	Tons	N.A.	....	N.A.	....

1. Export figure.

APPENDIX II

Employment in Mining Industry in British India and Pakistan, 1944

	No. of workers in India	No. of workers in Pakistan
TOTAL	856,495	8,566
Coal	250,221	5,143
Iron ore	8,106	....
Manganese	15,797	....
Gold	371	....
Chromite	927	439
Copper	4,030	....
Mica	47,233	12
Salt (rock)	....	921
Magnesite	2,029	....
Steatite	651	....
Slate	360	577
Limestone	8,688	887
Stone (Igneous rock)	9,912	....
Sandstone	572	....
Fireclay	939	....
China Clay	3,848	....
Clay	96	....
Asbestos	227	....
Ochre	32	....
Gypsum	667	114
Bauxite	1,241	....
Felspar	45	....
Graphite	122	....
Beryl	378	....
Calcite	3	....
Sulphur	....	473

APPENDIX III

Exports and Imports of Minerals and Metal Products

	Quantity in thousands			Value in crores of rupees		
	1947-48	1948-49	1949-50	1947-48	1948-49	1949-50
Exports ..	..	..	..	9.41	10.43	15.14
Chromite (tons) ..	20	3	5	.14	.02	.26
Pig Iron (tons) ..	..	45	62	..	.63	.86
Steel (tons)	..	2	3	..	.06	.09
Iron or steel (tons) ..	3	13	11	.13	.56	.49
Manganese Ore (tons)	521	309	679	2.49	1.81	5.20
Mica (tons)	255	340	285	5.65	5.94	6.69
Blocks (cwts) ..	15	12	9	1.28	.84	.93
Splittings (cwts.) ..	175	200	203	4.34	5.03	5.72
Ground, scrap or waste (cwts.) ..	65	128	73	.04	.07	.05
Imports ..	..	..	..	57.69	70.42	85.66
Aluminium (cwts.) ..	249	189	133	2.87	2.66	1.84
Brass, Bronze and alloys (cwts.) ..	323	317	298	2.55	2.58	2.07
Copper Ore (tons) ..	43	146	89	.26	1.08	.67
Copper (cwts.) ..	445	870	682	3.79	7.57	6.40
Ferro-alloys (tons) ..	1	1	2	.06	.08	.22
German Silver (cwts.)	27	39	44	.22	1.09	.85
Iron or Steel Products (tons)	95	137	167	8.06	11.47	11.79
Steel (tons)	31	12	42	1.75	.77	2.05
Lead (cwts.)	107	165	148	.69	1.17	1.12
Tin (cwts.)	3	67	61	.10	2.33	1.69
Zinc or Spelter (cwts.)	553	756	610	2.04	3.81	3.18
Mineral oils (gals.) ..	614,679	535,825	776,337	34.04	35.70	53.59

APPENDIX IV

Self-Sufficiency in Minerals—India and Pakistan

Minerals of which exportable surpluses are of world importance		Minerals of which exportable surpluses form an important factor		Minerals in which either country is self-sufficient from the point of view present and future needs		Minerals for which either country has to depend on imports	
India	Pakistan	India	Pakistan	India	Pakistan	India	Pakistan[1]
Iron Ore	None	Manganese ore	Rock salt	Superior grade coal	Marble	Silver	Silver
Titanium and Thorium ores		Refractory Minerals	Gypsum	Glass Sand	Building stones		Copper
			Chromite				Tin
		Beryl		Gold	Clays	Copper	Molybdenum
Mica		Bauxite		Felspar	Limestone	Tin	Asphalt
		Magnesite		Building Stones	Dolomite	Molybdenum	Nickel
		Monazite		Zircon		Asphalt	Lead
		Steatite		Industrial clays	Antimony	Nickel	Mercury
		Silica			Chromite	Lead	Platinum
		Monumental Granite		Barytes	Sulphur	Mercury	Potash
		Natural abrasives		Vanadium	Limestone[4]	Platinum	Petroleum
		Corundum		Cement materials	Potassium Nitrate	Potash	Zinc
		Inferior grade coal		Pyrites	Arsenic	Petroleum	Tungsten
				Nitrates		Zinc	Graphites
						Tungsten	Flourides
							Gold
							Felspar
							Industrial clays
							Barytes
							Vanadium
							Pyrites
							Rare Earths
							Corundum[3]
							Natural abrasives[3]
							Monumental Garnite[3]
							Coal[3]
							Glass sand[3]

Minerals of which exportable surpluses are of world importance		Minerals of which exportable surpluses form an important factor		Minerals in which either country is self-sufficient from the point of view present and future needs		Minerals for which either country has to depend on imports	
India	Pakistan	India	Pakistan	India	Pakistan	India	Pakistan[1]
				Marble Limestone Dolomite Rare Earths Chromite Gypsum Potassium nitrate		Graphites Flourides Antimony[2] Sulphur[2] Arsenic[2]	Silica[3] Manganese ore[3] Zircon[3] Refractory minerals[3] Beryl[3] Bauxite[3] Magnesite[3] Monazite[3] Steatite[3] Limestone[4]

1. Though it is stated that Pakistan has to depend for the supply of these minerals on imports, it does not mean that she is utilising all of them at present. The list is meant to suggest only the absence of appreciable quantities, or sometimes total absence, of minerals.
2. Minerals in which the needs of India can be met by Pakistan.
3. Minerals in which the requirements of Pakistan can be met by India.
4. Minerals available in Pakistan but for which East Pakistan has to depend upon India.

CHAPTER VI

ELECTRICITY

DISTRIBUTION OF POWER CAPACITY

In regard to the distribution of installed capacity of generating stations India was definitely placed in a superior position at the time of the partition. Table 2 (p. 225) gives an idea of the distribution of the power capacity and the kilowatt hours generated by the two countries at the time of the partition. Pakistan, which has one-fifth of the total population of Undivided India, has one-twentieth of the generating capacity for electricity, whereas the production of electric power is only one-twentyfifth of that in Undivided India. The table also reveals that Pakistan is to a large extent employing oil as the major source of power. This may be attributed to the fact that West Pakistan is very near petroleum supplies. To transport coal from long distances as from Bihar and Bengal would be a costly affair. Besides, the rate of industrialisation has not been very rapid in this area. Small units which work with diesel oil are, therefore, more in vogue. It is only when there is a large industrial demand that we have to employ coal or resort to hydro-electric power. The following table gives an idea of the total consumption of coal and furnance-oil in the two countries at the time of partition:—

TABLE 1. Fuel Consumption by Power Stations in India and Pakistan, 1946
(*in tons*)

	Steam Power Stations		Oil power Stations
	Coal	Furnace oil	Diesel oil
Undivided India	1,639,633	1,503	64,438
India..	1,553,559	*nil*	48,528
Pakistan	86,074	1,503	15,910

Another maldistribution may also be noted. East Pakistan with nearly two-thirds of the population of Pakistan has been left with only one-tenth of the installed capacity and one-seventeenth of the total production of Pakistan. There are no hydro-power stations in East Pakistan.

UTILISATION OF ELECTRICITY

As regards the utilisation of electricity at the time of the partition, table 3 gives an idea of electricity sales to different classes of consumers in both the countries.

It is evident that the industrial demand forms only a minor portion of Pakistan's total demand. Most of the power was utilised for small scale industries and also for domestic purposes.

TABLE 2. Installed Plant Capacity and Generation of Electricity in India and Pakistan, 1946

Territory	Installed Plant Capacity in Kilowatts ('000)				Kilowatt-hours generated (millions)			
	Steam	Oil	Hydro	Total	Steam	Oil	Hydro	Total
UNDIVIDED INDIA ..	760	121	494	1,377	1,762	182	2,092	4,035
INDIA	725 (95.3%)	92 (75.8%)	484 (98.1%)	1,302 (94.7%)	1,688 (95.8%)	132 (72.7%)	2,072 (99.0%)	3,892 (96.4%)
PAKISTAN	35 (4.7%)	29 (24.2%)	10 (1.9%)	75 (5.3%)	74 (4.2%)	49 (27.3%)	20 (1.0%)	143 (3.6%)
(*a*) Eastern Pakistan ..	3 (0.4%)	3 (2.7%)	*nil*	7 (0.5%)	4 (0.2%)	5 (2.7%)	*nil*	9 (0.2%)
(*b*) Western Pakistan ..	32 (4.3%)	26 (21.5%)	10 (1.9%)	68 (4.8%)	70 (4.%)	44 (24.5%)	20 (1.0%)	134 (3.4%)

TABLE 3. Electricity Sales to Different Classes of Consumers in India and Pakistan, 1946

	India		Pakistan	
	Kwh sold millions	% of total	Kwh sold millions	% of total
TOTAL	3,258	100.0	200	100.0
Domestic	549	16.9	55	45.7
Industrial	2,128	83.3	53	44.2
Traction	269	8.2	..	..
Public Lighting	43	1.3	5	4.1
Water works	164	5 0	5	4.3
Irrigation	105	3.3	2	1.7

In order to understand the importance of electricity in industrial development, it is necessary to have an idea of the extent to which electricity is being consumed by different industries. The following table gives the consumption of electricity by different industries in the years 1946 and 1947 in India; similar detailed information for Pakistan is not available.

TABLE 4. Consumption of Electricity in India by Different Industries, 1946 and 1947

(*Million Kilowatt hours*)

Name of the industry	1946	1947
Cotton textiles	732	774
Jute textiles	194	209
Iron and steel	90	110
Paper and paperboard	40	32
Vegetable oils	35	47
Cement	33	30
General and electrical engineering	30	39
Chemicals	19	21
Wheat flour	16	11
Aluminium, copper and brass	8	12
Woollen textiles	8	9
Soap	4	4
Rice milling	4	4
Paints and varnishes	3	3
Ceramics	3	2
Electric fans	2	1
Sugar	2	3
Tanning	1	2
Distilleries and breweries	1	1
Starch	1	1
Biscuit making	1	1
Glass and glassware	1	3
Plywood and tea-chests	1	0.4
Matches	1	1
Bicycles	1	1
Sewing machines	0 3	1
Electric lamps	1	1

The above figures refer only to that portion of total electrical consumption which was purchased by the industries. Besides what they buy from public utilities, the leading industries of India consume electricity generated in their own plants. The following table gives the total electrical consumption in the year 1948:—

TABLE 5. Total Consumption of Electrical Energy, 1948

	Million Kwh.
TOTAL	2,472
Cotton textiles	1,078
Iron and steel	488
Jute	288
Collieries	203
Cement	192
Paper	158
Sugar	29
Woollen textiles	28
Soap	7

INTERDEPENDENCE BETWEEN EAST AND WEST PUNJAB

Before the partition West Punjab used to derive the bulk of its supply from the Jogindernagar power house, which is located in East Punjab. One of the complications, in consequence, is that a considerable portion of power sold to West Punjab originates in East Punjab. Arrangements had to be made for continued supply of power to West Punjab. The terms on which supply was granted by East Punjab to West Punjab in the post-partition period have been varying from time to time. From August 1947 to December 1947 power was supplied on the basis of common expenditure relating to this period, to be pooled together between East and West Punjab, and not on the basis of units actually supplied. With effect from January 1948, the supply to West Punjab was continued in accordance with the Tribunal Award at the rate of 6 pies per unit to the extent noted below:—

Period	Million units
From 1-1-1948 to 30-9-1948	56.7
From 1-10-1948 to 31-12-1948	60.1
From 1-1-1949 to 31-3-1949	13.8

From 1-4-1949 the supply to West Punjab was governed by a special agreement and charged at the rate of 9 pies per unit.

The following table gives an idea of the production and consumption of power prior to partition in Undivided Punjab and afterwards in East Punjab.

TABLE 6. Effect of Partition & Power Production & Consumption in the Punjab

	Undivided Punjab (End of 1946)	East Punjab (End of 1948)
TOTAL NO. OF CONSUMERS ..	80,210	60,779
Domestic lighting, heating & cooking	76,516	59,076
Industrial power	3,637	1,674
Irrigation and hydro-works ..	27	29
Generating capacity (Kws) ..	89,651	56,892
Kilowatt hours generated (Millions)	224	154

1. This does not include the KWH sold to West Punjab Government.

The power that was formerly being sold to West Punjab is being gradually utilised in East Punjab itself. Out of the gross receipts of Rs. 64 lakhs from electricity sales in 1948-49, about Rs. 24 lakhs formed the payment by West Punjab for the units that it bought in bulk from Jogindernagar Scheme. The total receipts were estimated at Rs. 74 lakhs for 1949-50, the payment from

West Punjab being about Rs. 28 lakhs. But the budget estimate for 1950-51 was for Rs. 67 lakhs gross receipts, the receipts from West Punjab being only Rs. 16 lakhs.

DEVELOPMENT OF ELECTRICITY IN INDIA AND PAKISTAN

The following table gives an idea of the development of electricity supply in India and Pakistan since 1939:—

TABLE 7. Development of Electricity in India and Pakistan, 1939-1948

Year	Generating Capacity '000 KWs		Maximum demand '000 KWs		KWs generated millions	
	India	Pakistan	India	Pakistan	India	Pakistan
1939 ..	1,070	66	576	26	2,442	91
1940 ..	1,120	67	629	28	2,701	100
1941 ..	1,148	69	664	31	3,121	111
1942 ..	1,131	70	696	30	3,160	116
1943 ..	1,182	69	713	31	3,445	123
1944 ..	1,211	69	788	32	3,710	121
1945 ..	1,249	70	841	37	3,993	134
1946 ..	1,302	75	819	40	3,892	143
1947 ..	1,363	..	883	..	4,073	52[1]
1948 ..	1,411	..	966	..	4,572	133
1949 ..	1,540	..	..	..	4,620	..

1 Figures relate to the period from August to December.

The generating capacity of India increased from 1.07 million kilowatts in 1939 to 1.36 million kilowatts in 1947, the year of the partition, i.e., by more than 27 per cent. As against this, the installed capacity of Pakistan increased from about 66,000 kilowatts in 1939 to about 75,000 kilowatts in 1947, i.e., by about 14 per cent. India added more than 177,000 kilowatts during the 2½ years since the partition, which is more than twice the installed capacity of Pakistan. During the last 11 years, plant capacity has increased by 45% and generation by 100%.

LOAD FACTOR

The load factor is the percentage of maximum demand to generating capacity and gives an indication regarding the utilisation of electric power. The load factor in India in 1939 was 54 per cent and it increased to 65 per cent. in 1947. The electricity plants thus came to be more effectively utilised. But Pakistan had a very low load factor in 1939. It was only 40 per cent but by 1946 it had increased to 53 per cent. This, presumably because Pakistan was becoming more electricity minded during these years. Increased demand for power was in evidence in Pakistan.

The actual energy generated in India increased from 2,442 million kwh in 1939 to 4,073 million kwh in 1947. There was an increase by more than 66 per cent. during these years. In 1948 nearly 4,572 million kilowatt hours were generated giving an increase of more than 87 per cent. during the last ten years. Pakistan plants generated 91 million kwh in 1939 and 143 million kwh in 1946, showing an increase of nearly 57 per cent. But between 1947 and 1948 Indian plants increased their power generation by nearly 0.5 million kwh, i.e., about three times the total generation of all Pakistan plants. These figures are compelling evidence to the increased potentiality of India.

As regards the total capacity of Undivided India and India after partition the following figures show that India has not been affected; and that the energy generated and sold has actually increased.

TABLE 8. Effect of Partition on Power Production and Consumption in Undivided India

	Undivided India (End of 1946)	India (End of 1948)
Total Number of consumers: Domestic lighting, heating and cooking	1,035,301	1,178,715
Developed capacity (kws)	1,376,093	1,410,966
Kilowatt hours generated (millions)	4,036	4,576
Kilowatt hours sold (millions)	3,337	3,721

SIZE OF POWER STATIONS IN INDIA AND PAKISTAN

The following table gives an idea of the distribution of capacity according to the size of plant between India and Pakistan:

TABLE 9. Distribution of Plants according to Installed Capacity between India and Pakistan, 1946

Installed capacity (Kws.)	Number of stations	
	India	Pakistan
Upto 250	175	86
250 — 500	71	17
501 — 750	25	7
751 — 10000	8	1
1,001 — 5,000	36	7
5,001 — 10,000	6	1
10,001 — 50,000	15	2
50,001—100,000	2	0
Over 100,000	2	0

The above table clearly shows that there are very few big sized power undertakings in Pakistan. Pakistan has 10 stations with capacity of over 1,000 kilowatts while India has 61 such stations. Moreover, India has 25 stations with capacity of above 5,000 kilowatt while Pakistan has only three.

RELATIVE ELECTRICAL DEVELOPMENT IN DIFFERENT PROVINCES IN INDIA

Appendix I shows the extent of relative electrical development in different Provinces and States of India. The extent of Government ownership in respect of electrical plant capacity has also been indicated. Of the total generating capacity of 1.4 million kilowatts at the end of 1948, only 40 per cent. was hydro. 40 per cent. of the total capacity was being owned by the state and local authorities. Electrical development in India has not been properly distributed over the entire country. The three cities of Calcutta, Bombay and Cawnpore generate and sell more than half of the total electrical energy produced in India. States like Travancore (89 per cent.) and Mysore (82 per cent.) lead in the percentage of industrial to total consumption of electricity. Of the total capital expenditure of Rs. 116 and Rs. 119 crores at the end of 1947 and 1948 respectively, the expenditure incurred by the Provincial and State Governments amounted to Rs. 43 and Rs. 56 crores respectively. The share of the State

increased in recent years as the U.P. Government purchased the Kanpur Electric Supply Company and the Madras Government bought over the Madras Electric Supply Company. The role of the Government in initiating electrical development has been greater, in the case of States than in the case of Provinces. Electric supply is completely nationalised in Mysore, Hyderabad and in Kashmir and mostly nationalised in Travancore. Among the Provinces, Madras, U.P. and East Punjab Governments have taken lead in fostering electrical development. The demand for electricity for irrigation purposes forms a significant portion of the total consumption only in Madras and U.P.

THERMAL STATIONS IN INDIA AND PAKISTAN

We may now consider the water power resources and coal resources in order to ascertain whether the partition has done any major injury to India's potential resources. As regards coal, it is very clear that Pakistan has been placed in an unenviable position. The major supplies of coal for her power stations used to come from India. India, on the other hand, has large quantities of low grade coal that can be utilised for power production. The Coalfields' Committee, 1946, for example, suggested that railway tracks around the coal fields area should be converted to electrical operation so that coal resources could be conserved. The Railway Board is also having projects for electrification of railways.

The first thermal station in India was started in Calcutta in 1899. The Bombay, Kanpur and Madras companies came into being in 1899, 1905 and 1906 respectively. The following table gives an idea of the important thermal and oil stations in India and Pakistan:—

TABLE 10. Thermal Stations in India and Pakistan

	Station	Province	Capacity in kilowatts
INDIA	Calcutta	W. Bengal	294,750
	Kanpur	U. P. (G)	64,500
	Ahmedabad	Bombay	39,000
	G. I. P. Railway Power Station	Bombay (G)	40,000
	Gourepore	W. Bengal	27,000
	Delhi	Delhi (G)	24,900
	Harduaganj	U. P. (G)	20,000
	Sijua Jherria	Bihar	19,000
	Hyderabad	Hyderabad (G)	18,250
	Dishergarh	W. Bengal	16,000
	Madras	Madras (G)	43,000
	Allahabad	U. P. (G)	11,750
	Lucknow	U. P. (G)	10,500
	Jubbulpore	C. P. (G)	7,750
	Seebpore	W. Bengal (G)	6,500
	Patna	Bihar	6,000
	Chandausi	C. P.	9,000
	Agra	U. P.	7,300
	Benares	U. P.	7,750
PAKISTAN	Lahore	W. Punjab (G)	18,200
	Karachi	Sind	13,356

G = Government-owned.

DEVELOPMENT OF HYDRO-ELECTRICITY IN INDIA AND PAKISTAN

The first hydro-electric plant in India was constructed in 1897-98 at Darjeeling. This was followed by the Cauvery River Project in 1902, the pioneer major hydro-electric power scheme in Asia. Power was carried over 92 miles of transmission lines from Shivasamudram to Kolar Gold Fields. The first World War gave a tremendous impetus to the use of electricity. The Industrial Commission of 1916-18 emphasised the necessity for a hydrographic survey of India. The Government of India appointed Mr. G. T. Barlow, then Chief Engineer of Irrigation in U.P., to undertake the work in association with Mr. J. W. Meares, the Electrical Adviser to the Government. The triennial report issued by Meares in 1921 indicated a minimum continuous water power of 3.5 million kilowatts with a maximum of 8 million kilowatts as the power potential of the country. After the publication of this report the Government took very little interest and other countries forged ahead. Thanks to the enterprising spirit of the Tatas, the biggest electricity undertaking group came into being near Bombay. The three Tata concerns produce power to the extent of 232,000 kilowatts, i.e., almost half the power generated by all the hydro-electric installations in India. They serve the industrial centre of Bombay. Soon after this, the Provincial Governments of Madras, Punjab, Travancore and U.P., started their own hydro-electric plants. During the same period one hydro-electric installation, called the Malakand Power Station, with a capacity of nearly 10,000 kilowatts was constructed in N.W.F.P. The following table gives an idea of the major hydro-electric installations in India and Pakistan:—

TABLE 11. Major Hydro-Electric Station in India and Pakistan

	Name of installation	Province or State	Year of starting	Generating Capacity KW
INDIA	Darjeeling Power House	W. Bengal	1897	1,960
	Cauvery River Power Scheme	Mysore (G)	1902	59,200
	Mohora	Kashmir (G)	1907	3,000
	Mussorie	U. P.	1909	3,000
	Gokak Falls	Bombay	1914	2,600
	Tata Hydro-Elec. Power Supply	Bombay	1915	60,000
	Ganges Hydro-Electric Grid	U. P. (G)	1917	18,900
	Andhra Valley Power Supply	Bombay	1922	66,000
	Tata Power Co.	Bombay	1927	10,600
	Mandi Hydro-Electric Scheme	E. Punjab (G)	1933	48,000
	Pykara	Madras (G)	1933	38,750
	Mettur Dam	Madras (G)	1937	40,000
	Pallivasal	Travancore (G)	1940	13,500
	Papanasam	Madras (G)	1944	17,400
	Jog Falls	Mysore (G)	1947	12,000
PAKISTAN	Malakand	N. W. F. P. (G)	..	9,600

G=Government-owned

WATER POWER POTENTIAL IN INDIA

Compared to her vast water power resources, India has developed only a very limited extent of power potential. The following table, which gives an idea of the water power resources of different countries, shows that the total potential water power resources available in India are second to only those of the U.S.S.R.:—

TABLE 12. Water Power Potential at Ordinary Minimum Flow

Country	Potential water power (million H.P.)
U. S. S. R.	78.1
India	39.0
U. S. A. and Cuba ..	33.5
Canada and Newfoundland	26.1
China	23.0
Norway	16.0
Japan ..	7.2
France	6.0
Sweden	4.0
Switzerland	3.6
Germany	2.0
United Kingdom	0.7
Pakistan	0.5[1]

1. Tentative estimate.

Though the potential resources are vast, the actual generation of electrical energy in India and Pakistan does not compare well with other countries. Countries like the U.S.S.R., the U.S.A. and Canada have marched ahead. Countries like Switzerland, Germany, Norway, France and Sweden have exploited a larger portion of their water resources and are leading in industrial development. Most of the developments in these countries took place in the 20th century. Considering the rapidity of development in other countries there is certainly great future for development in India. The following table gives an idea of the relative development of hydro-electric power in various countries of the world:—

TABLE 13. Relative Development of Hydro-electric Power in Various Countries

Name of the country	Population (Millions)	Water power developed and installed		*Per capita* consumption of electrical energy (all types) kwh
		1920	Present	
		million kws.		
U. S. S. R.	170	..	22.4	215[3]
U. S. A.	133	3.8	14.5	1,660
Canada	10	2.5	7.7	1,000
Switzerland	4	0.5	2.4	1,944
Germany	70	0.6	3.2	1,240
Norway	3	0.9	2.4	3,090
France	42	1.1	3.7	431
Sweden	7	0.8	2.6	2,100
U. K.	44	0.2	0.5	938
Japan	75	0.2[1]	5.8	..
New Zealand	1	0.02	0.5	2,000
Australia	7	0.02	0.3	1,014
China	500	..	0.6[2]	3.7
India	330	0.08	0.5	11.0
Pakistan	76	..	0.01	1.7

1. Figures for 1912
2. Figures for 1935
3. Figures for 1938

Note :—Figures other than those specified in the table generally relate to the period 1942-47

Table 14 (p. 233) gives the estimates of Meares regarding the power potential in India, as also the indication of the power development that has taken place up till now and also the capacity of the proposed projects in the different provinces of India. Meares' estimates of the power potential of India were based on very megre data and survey. Present plans and projects have

put the figures at between 30 to 40 million kilowatts as the ultimate water potential of India.

TABLE 14. Water Power Potential in India
(figures in kws.)

Province or State	Meares' figures based on ordinary minimum flow			Later figures (1948)		
	Power Developed	Potential	Total Power	Power Developed	Projected or under investigation	Total
TOTAL	209,520	3,267,420	3,477,440	499,227	14,342,050	14,841,277
Assam	..	414,000	414,000	500	4,000,000	4,000,500
West Bengal ..	600	619,250	612,850	2,360	333,000	335,360
Bihar ..	..	62,550	62,550	..	1,800,000	1,800,000
Orissa				..	3,860,000	3,860,000
Bombay	71,400	572,910	644,310	235,714	600,000	835,714
C. P. & Central India	..	138,240	138,240	..	250,000	250,000
Coorg	..	1,500	1,500	..	..	..
Madras	740	91,570	92,310	98,290	500,000	598,290
East Punjab ..	1,880	688,400	690,280	49,750	500,000	549,750
U. P.	4,330	399,040	403,370	22,700	1,200,000	1,222,700
Baroda	..	4,000	4,000	..	8,300	8,300
Cochin	..	4,000	4,000	..	200,000	200,000
Gwalior	..	43,300	43,300	..	16,000	16,000
Jammu & Kashmir	930	199,500	305,330	4,315	9,000	13,315
Mysore	24,000	24,500	48,500	71,200	240,680	311,880
Patiala	290	..	290	240	16,000	16,240
Hyderabad	..	..	..	..	639,000	639,000
Rajputana	..	160	160	..	153,570	153,570
Sikkim	..	5,000	5,000	..	..	..
Travancore ..	450	..	450	13,900	..	13,900
Other States ..	..	..	..	258	16,500	16,758

The table clearly shows that Meares' estimate has already been exceeded. If we take the power potential value in the Narbada, the Tapti, Wainganga (C.P.) and in the Himalayas, it is certain that unexplored reserves may be indicated. It is necessary to lay stress on our water potential because India has large water resources, which, if properly utilised, will make her a leading industrial nation. Nature has been very bountiful to India in this respect. It will also be possible to exploit the idea of multi-purpose projects on the lines of the T.V.A. in which case more of raw materials like jute and cotton can be grown in India.

WATER POWER POTENTIAL IN PAKISTAN

The following table gives the water resources of Pakistan. The table has been constructed on the basis of the report of Meares.

TABLE 16. Water Power Resources of Pakistan
(in kws)

Province	Meares' figures based on ordinary minimum flow				
	Power Developed in 1920	Potential	Power Developed 1948	Projected or under investigation	Power Developed and under investigation
TOTAL	250	10,54,750	9,600	290,500	299,600
West Punjab	..	104,750	..	92,000	92,000
N. W. F. P.	250	1,000,000	9,600	135,000	144,600
East Bengal		50,000	..	40,000	40,000
Sind	..	..	..	23,500	23,000

POWER PLANNING IN INDIA: RIVER VALLEY PROJECTS

It is estimated that out of the 1,356 million acre feet[1] of water that flows annually through the rivers of India, only 76 million acre feet (5.6 per cent.) are at present being utilised for purpose of irrigation and power generation. The remaining 94.4 per cent. are running to waste, doing untold damage in their passage to the sea. The fact that only half a million kilowatts or less than 2 per cent. out of a total of 40 million kilowatts have been harnessed for purposes of power generation, and that only 47 million acres or 16 per cent. of the total cultivated area is under irrigation points at once to the great backwardness on the one hand and immense potentiality on the other. The food deficits and the continued drain that they involve on the slender foreign exchange resources of the country focussed attention on the need for fuller utilisation of India's water resources. During the period of the war itself, the Central and Provincial Governments thought of various river valley projects. Inspired by the success of the Tennessee Valley Authority of the U.S.A., projects came to be designed on a multi-purpose basis. Objectives of flood control, navigation, irrigation and power production were to be achieved by these projects. Both the Interim as well as the National Government encouraged these schemes and promised liberal financial aid to the provinces. Information collected in the middle of 1949 revealed that 160 river valley projects were either under construction or under investigation; these schemes involved an overall expenditure of Rs. 1,279 crores on river valley projects and Rs. 104 crores on thermal projects. By the end of 1956, a total expenditure of Rs. 951 crores and Rs. 84 crores respectively would have been necessary. These schemes were expected to result in an additional power capacity to the tune of 8.5 million kilowatts, an additional acreage of 31 millions to be brought under irrigation, resulting in an additional production of 10 million tons of foodgrains per annum. The overall requirements of the schemes were 1.7 million tons of steel and 14.7 million tons of cement. The outlay on foreign exchange was estimated at Rs. 167 crores worth of dollars and Rs. 112 crores worth of sterling.

The following table shows the electrical capacity in all public utilities in India by the end of 1948 and what it was expected to be in 1953 and 1958:

TABLE 15. Power Plant Position by end of 1948, 1953 and 1958 in India

(in million kilowatts)

Type of Power Plant	Installed capacity at the end of		
	1948[1]	1953	1958
TOTAL	1.422	2.785	4.499
Steam	0.774	1.570	1.808
Oil	0.104	0.147	0.147
Hydro	0.544	1.061	2.544

1. The installed capacity of private industrial plants estimated at 0.86 million kilowatts is not included here.

In Appendix I, Chapter IV, we have given a list of the various major irrigation schemes projected in India. Appendix I at the end of this chapter gives a list of the various electricity schemes in India. The colossal nature of the schemes formulated by the different governments becomes apparent,

1. One acre foot of water represents the volume of one foot depth of water spread over one acre.

when we note that the rate of progress that has been achieved has been very slow compared with what was projected. The different departments of governments formulated their plans without any reference to any notion of cost. This type of expansive planning has meant that the different schemes dispersed throughout the country have all to go slow. The requirements of steel envisaged by these projects, amount to more than 150,000 tons every year and the requirements of cement to more than 1.5 million tons a year. Unfortunately steel production in India has not yet expanded. The quota that has been actually allotted to the different electricity projects comes to only 32,000 tons as against the estimated need of 92,000 tons for power projects alone. It is only recently that cement capacity in India has increased and production has slightly moved up. But still the diversion of these resources for these projects would mean that the country will have to go without so many other types of production. Cost should not be reckoned in terms of money only. What the different multi-purpose schemes would contribute in terms of food and power (though important) is not the only criterion. What the monetary as well as real resources, would have contributed in other fields to the different productive activities in the country, if they were not employed for multi-purpose projects, is the economic criterion to be adopted. The practical difficulties in the way of the execution of the plans were not foreseen by the planners. An attempt to view all these different projects from a national point of view was not made, until recently. Such a survey would have revealed the impracticability of many of these schemes. At every stage the different projects have been slowed down on account of lack of steel, cement and other materials. The difficulties created by the partition and the transport bottlenecks have resulted in lack of adequate transport facilities. In respect of engineering personnel, particularly of those qualified in civil engineering, the different Provinces have almost competed in trying to attract and draw the technicians already employed in some other Province or State. More than anything else, it has not at all been found possible to get the necessary capital equipment within a short period from foreign countries. It is estimated that it will take nearly thirty months to import power plant from abroad after an order has been placed. Electricity being a concurrent subject and irrigation being a Provincial subject, there has been no coordination in the execution of schemes. In some cases the Provinces tried to execute the schemes of their own accord. In some cases they have sought the help of the Central technical organisations. Rivers recognise no boundaries. The creation of a Central body with a national outlook to develop river resources would be more economical. The Government has only lately realised the need for regulation of inter-State water-ways.

Even granting that the expected power development matures, which is a remote possibility, it can be reasonably asked whether there will be sufficient corresponding development in the industrial sector to utilise the energy that will be produced. The electrical authorities have assumed that the extent of electrical consumption would move up at the same rate as it did during the last ten years. This itself is open to doubt. The existing stagnation and the prospects of depression in industry do not warrant such estimates. The different industrial projects planned by the Government of India are also being slowed down on account of various factors. The electrical projects themselves are expected to require a rate of capital investment to the tune of nearly Rs. 100 crores a year. It is stated that to utilise one kilowatt of energy Rs. 7,000 crores will have to be invested in industry. If these figures are correct, it means that in order to utilise the additional three million kilowatts that

have been projected, industrial investment will have to take place to the extent of Rs. 2,100 crores in a period of 10 years. It is not unreasonable to doubt whether such a rate of capital formation would be possible at the present stage in India. Electrical planning should, therefore, be coordinated with the activities in the other sectors of the economy. Instead of formulating a number of spectacular projects, attention and resources should be diverted towards modest but practicable schemes. The mere fact that considerable preliminary expenditure has been already incurred on any scheme does not warrant its continuance under the difficult circumstances which India is facing today. There is an urgent need for a revision of the policy as regards electrical projects in India.

The Central Government has been to some extent alive to the need for coordination of electrical policy in India. The Government of India passed the Electricity Act in 1948, which attempts to coordinate the activities of the different Governments in regard to power generation and distribution. The Act empowers the different provinces to have Electricity Boards. The Central Electricity Authority which has been set up by the Government will be the chief medium for all power development schemes. This Authority and the Provincial Boards will be modelled on the principles of Public Corporations. The Government of India are intending to pass a suitable legislation for control over inter-State water-ways and have recently circularised a Bill for that purpose.

In the following paragraphs we have given an idea of some major multi-purpose projects under execution in India:

DAMODAR VALLEY PROJECT (BIHAR AND WEST BENGAL)

This is one of the major multi-purpose schemes in India. This project has been modelled on the famous Tennessee Valley Authority. The Central Government and the Governments of West Bengal and Bihar have jointly undertaken the work, which has been entrusted to the Damodar Valley Corporation. The main purposes of this project are the promotion and operation of schemes for:—

(a) Irrigation, water supply and drainage;

(b) Generation, transmission and distribution of electrical energy both hydro-electric and thermal;

(c) Flood control in the Damodar River and tributaries and the channels excavated in connection with the scheme and for the improvement of flow conditions in the Hooghly river;

(d) Navigation in the Damodar River and its tributaries and channels;

(e) Afforestation and control of soil erosion in the Damodar Valley; and

(f) Public health measures and the agricultural, industrial, economic and general well-being of the Damodar Valley and its area of operation.

The objectives of the Corporation closely follow those of the famous T.V.A. One of the main differences is that irrigation is one of the chief objectives of the Damodar Valley. Secondly, the different Provinces, West Bengal and Bihar are having a share in this project. In the U.S.A., the T.V.A. was undertaken mainly as a Federal venture.

The engineering programme for the development of the Damodar River includes the construction of 8 multi-purpose storage plants with hydro-electric plants, 2 additional hydro-electric plants called Konar No. II and Konar No.

III respectively, a steam power plant with a capacity of 200,000 KW, an irrigation barrage with a net work of irrigation canals and tributaries, an 18 mile long navigation canal and a power transmission grid, which will initially include over 200 miles of 132 KV, 30 miles of 66 KV and 90 miles of 33 KV lines approximately.

The Damodar Valley Corporation Act was passed by the Central Legislature in March 1948. The Corporation formally came into existence on 7th July 1948. In the first year, the Central Government contributed about Rs. 69 lakhs, West Bengal, Rs. 91 lakhs and Bihar, Rs. 61 lakhs. Of this amount, about Rs. 15 lakhs was spent for irrigation, Rs. 131 lakhs for power and Rs. 15 lakhs for flood control. A sum of Rs. 63 lakhs was the balance at the end of the year. This has been attributed to non-availability of capital goods. The total cost of the project was formerly estimated at Rs. 55 crores. The present calculations put it at Rs. 65 crores. According to present estimates, it is expected that nearly 1 million acres of land will be brought under cultivation. Power totalling 300,000 KW at 60 per cent. load factor is expected to be generated by the Damodar Valley Corporation. On account of the paucity of funds it was decided to approach the World Bank for a loan of $ 25 million for the Bokaro steam station. The World Bank sanctioned a loan of $18.5 million.

HIRAKUD PROJECT (ORISSA)

This dam, which was inaugurated in April 1948, is one of the most important dams proposed in the Mahanadi Valley development scheme. The Mahanadi is one of the large rivers of India and annually carries 74 million acre feet of water and has a mean annual discharge of about 1 lakh cusecs[1], which works out at nearly two-thirds of the total discharge of the existing canals and irrigation wells in India, which irrigate about 70 million acres each year. The Mahanadi has a catchment area of about 51,000 square miles. When this valley development scheme is complete it is expected that nearly 4 to 5 million KW's of power would be generated, the river would be made navigable over a length of 350 miles and every inch of land around it would be cultivated. The Mahanadi development scheme consists of three dams, Hirakud, Tikerpara and Naroj. The main province concerned with this scheme is Orissa, including the States that have been merged with it. When the Hirakud Dam is completed it will command an area of 1.3 million acres. The Dam will provide flood protection and will generate power to the extent of 350,000 KW's. The Hirakud Dam is expected to be 150 feet high and 3 miles long. The area submerged in the proposed Hirakud reservoir will be 135,000 acres. The total cost of the Hirakud Dam has been estimated at Rs. 47.81 crores.

BHAKRA AND NANGAL PROJECTS (EAST PUNJAB)

Bhakra Project:—This project comprises a dam 450 feet high across a gorge in the river Sutlej at Bhakra; the reservoir so formed will have a capacity of 3.5 million acre feet, sufficient to give a mean discharge of 6,600 cubic feet per second for a period of 270 days. The scheme is expected to cost Rs. 70 crores and will generate 160,000 KW's and irrigate 3.5 million acres. Work has already been taken in hand. The Bhakra project is being supervised by the Central Government. This project is of great importance in view of the poverty of East Punjab. The completion of the Bhakra Project will go a long way in solving the problems of the province.

1. Cusecs=cubic feet per second.

Nangal Power Project:—This project comprises a weir across the Sutlej at Nangal, 18 miles downstream of the proposed Bhakra Dam. It is proposed to have a power plant with a capacity of 48,000 KW's in the pre-Bhakra stage which will be augmented by 24,000 KW's in the post-Bhakra stage. The pre-Bhakra stage of the project including transmission and distribution is estimated to cost Rs. 22 crores.

POWER PLANNING IN PAKISTAN

As regards the development of electric power in Pakistan, the following projects are now under construction:—

(a) Hydro-Electric: (i) Rasul Project	22,000 KW's
(ii) Malakand Extension	10,000 „
(b) Steam and Diesel	45,500 „
Total	77,500 „

Appendix II gives an idea of the power projects of Pakistan. The Pakistan Industries Conference prepared in December 1947 a five-year scheme for an increase of the existing plant capacity by 0.5 million kws. This aditional capacity was to be distributed between the different provinces in the following manner:—

East Pakistan	100,000 KW's
West Punjab	200,000 „
N.W.F.P.	100,000 „
Sind and Baluchistan	80,000 „

A survey of the power resources of Pakistan and of the potential demand conducted in 1948, however, indicated the need for a less ambitious programme. The revised plan estimated the additional requirements upto 1955 at only 0.2 million kws distributed, as follows, among the different provinces:—

East Pakistan	40,000 KW's
West Punjab	75,000 „
Sind and Baluchistan	64,000 „
N.W.F.P.	20,000 „

A Hydro-electric Power Conference was held in April 1948 which recommended the establishment of a Central Engineering Authority to co-ordinate activities connected with engineering, irrigation, navigation and the utilisation of power resources. The Central Engineering Authority has entrusted the task of investigation of new power projects to Messrs. Merz Randel Vatten (Pakistan), a combine of two British and Swedish firms of consulting engineers.

A number of power development schemes are under investigation. So far as East Bengal is concerned, these comprise a multipurpose project for flood control and generation of hydro-electric power on the Karnafuli river and the construction of a steam power plant at Chittagong. Since the latter project is likely to take some time and since there is tremendous pressure on the available supply of electric power, temporary diesel plants are likely to be set up at Chittagong. As regards West Punjab and N.W.F.P., in addition to the Dargai and Mianwali Hydro-electric projects which have already been sanction-

ed, investigations are being conducted by the firm of consulting engineers, on the Warsak Hydro-Electric Project and the Ghazi and Darband schemes. In Sind, the schemes mainly envisage the construction of hydro-electric power stations on some of the irrigation canals. The development projects for Karachi aim at a fourfold increase in the present capacity of 8,110 kws. In view of the fact that the development projects will take considerable time to mature, a pool of generating equipment mainly consisting of diesel plant, costing about Rs. 3 crores is proposed to be set up to tide over the difficulties which will arise due to shortages during the period of construction.

An intensive survey of power requirements throughout Pakistan is being made in order to locate shortages in different centres and regions of the country. A plan is also being prepared for the creation of an electric grid which will transmit the electric power generated by new power stations. It is proposed to join up these grids into two large grids, one each for East and West Pakistan respectively.

WATER RESOURCES DISPUTE BETWEEN INDIA AND PAKISTAN[1]

The partition has resulted in a major dispute regarding the utilisation of the water resources of East Punjab. It has been contended by Pakistan that the Bhakra Project, when it materialises, will affect the water supplies of the Sukkur Barrage. Most of the rivers in West Punjab originate either from Kashmir or East Punjab. Any development of river resources in West Punjab will, therefore, be conditioned by the attitude of Kashmir and East Punjab. There has been no settled law in respect of international obligations as regards water utilisation and particularly for electrical generation. The International law that is in existence deals mainly with problems of navigation. The potentiality of water resources for unified development and its international significance has been recognised only in recent years.

Formerly when Undivided India had a single Central Government, there had been some investigations into the Sutlej and other projects and their effect on water reserves elsewhere. In 1929 a Committee called the Indus Discharge Committee, representing the Governments of India, Punjab and Bombay went into this question. This Committee did not arrive at any decision, but recommended a joint investigation on the probable effect of the Bhakra Scheme on water supply to Sukkur. Pursuant to this recommendation, the Nicholson Trench Committee was formed and it submitted its report in 1930. It came to the conclusion that the Sukkur Canals would not suffer any reduction of supply on account of the Bhakra Project. In fact, the Committee stated, these Canals would receive better supplies of water on account of the Bhakra Project. The Anderson Committee was appointed in 1935 to go into the question of the distribution of the waters of the Indus and its tributaries. This Committee did not make any final allocation, and it was silent on the Bhakra project as no objections were raised by any party before the Committee. In 1939, the Government of Sind complained to the Government of India about the effects of Bhakra and other projects. The Indus Commission which was appointed by the Government came to the following conclusion:—

> "Our general conclusion, subject as all long term predictions must be, to various assumptions, is that the withdrawals necessary for the Punjab projects mentioned in this issue, when superimposed upon the requirement of other projects already in operation or about to be completed are likely

1. See also pp. 159-161 above.

to cause material injury to Sind Inundation Canals, particularly in the month of September."

Though this was the finding of the Indus Commission, we must remember that no final allocation of waters was made. Since these Commissions and Committees functioned at a time when India was one unit, their findings cease to be legally binding after the partition. The relations between the water resources of the two countries henceforth will have to be decided on the basis of International law in this respect.

The international law in this respect has not been evolved. The U.S.A., for example, had a dispute with Mexico on the question of the right of an upper riparian State to take water from an international stream to the detriment of a lower state. The United States has never admitted the right of Mexico, the lower state, to prevent the construction of dams and the diversion of water from the Rio Grande and Colorado. But the U.S.A. has admitted that, as a matter of equity and comity, the rights of the lower riparian state should be considered. In the Convention of 1906 the U.S. Government agreed to assure Mexico a certain flow of water, although the Government declared expressly that this arrangement was not to be considered as the recognition of any right on the part of Mexico. Another case of an international dispute was that between the U.K. and Italy. Eritrea (upper riparian) was conceded its entire needs which were to be met in full. An agreement in the case of the Nile river was reached and the goal in this case was to find a practical working arrangement, which would fulfill the needs of irrigation and permit such programme of extension as would be feasible in the existing circumstances.

From the above, it appears that the Pakistan Government, in trying to dispute the right of the East Punjab Government to construct the Bhakra project, is not following any accepted convention or precedent. It must be remembered that East Punjab emerged out of the partition a very backward and poor province. It is, therefore, all the more necessary to grant priority to development in that province. The Government of India has suggested that disputes in respect of water resources should be settled by the findings of a joint commission which would go into the question of the entire water resources of the Indus. Pakistan, on the other hand, wanted that the issue should go to the International Court of Justice.

In this connection, we may point out that Pakistan has got alternative sources for the development of electricity. Her resources in the North Western Frontier Province, according to Meares, are nearly of a million kilowatt potential. In West Punjab, however, it may not be possible to find out suitable sites. The same is the case in East Pakistan also. Assam, on the other hand, has got large water potential. If there is co-operation between the two countries, it would be possible to develop water resources to the fullest extent. Pakistan provinces may create demand for the power produced, as they themselves may not undertake the construction of large power undertakings. Even in respect of the present situation, West Punjab has been depending on the East Punjab power station for electricity supply. There are cases where one country in Europe has supplied power to another country. Canada and the U.S.A. provide an example of mutual co-operation, so necessary for optimum utilisation of water resources. It may, therefore, be in her interest as well as in the interest of India to arrive at a workable agreement for the purposes of maximum utilisation of water resources.

APPENDIX I

Relative Electrical Development in Provinces/States of India, 1948

	Installed capacity ('000 KWs)						Electrical production (Million kilowatt hours)			Total Capital Expenditure to end of 1947 (Rs. crores)		
	Total	Steam	Oil	Hydro	State	Private	Units generated	Units Sold	Units sold to industry	Total	State	Private
INDIA	1,411	788	107	516	577	854	4,576	3,721	2,436	115.52	43.26	72.76
Ajmer-Merwara ..	2	..	2	..	..	2	5	1	1	.28	..	.28
Assam	3	..	2	1	..	3	5	4	1	.32	..	.32
West Bengal ..	357	353	2	2	2	355	970	833	602	22.40	.14	22.26
Bihar	33	29	3	..	..	33	99	90	71	1.77	.08	1.69
Bombay	367	113	22	233	3	364	1,541	1,298	869	30.14	.03	30.11
C. P.	29	24	5	..	2	27	50	42	23	1.80	.05	1.75
Delhi	35	28	7	..	35	..	108	87	21	1.95	1.95	..
Madras	160	58	5	97	157	3	537	405	232	14.56	9.46	5.10
Orissa	3	..	3	..	..	3	3	3	1	.23	..	.23
East Punjab ..	57	..	7	50	51	6	154	57	32	8.65	7.98	.67
U. P.	169	138	8	23	124	45	438	361	210	12.37	6.42	5.95
Baroda	8	..	8	..	6	2	11	9	2	.71	.40	.31
Hyderabad ..	21	17	4	..	21	..	37	33	19	1.62	1.62	..
Mysore	82	..	..	83	83	..	366	276	216	8.26	8.26	..
Travancore ..	24	..	1	23	24	..	124	110	98	4.27	4.23	.04
Rajasthan	16	11	5	..	15	1	42	30	7	..	..	..
Saurashtra ..	11	3	8	..	4	7	21	18	8	..	..	..
Madhya Bharat ..	13	9	4	..	11	2	24	20	5	..	..	..
PEPSU	3	1	2	..	3	..	4	6	1	..	..	..
Kashmir	6	2	..	4	6	..	21	13	4	..	..	..

APPENDIX II

Electricity Projects in India

Name of the Project	Capacity to be installed (thousand KWs.)	Estimated cost (Rs. lakhs.)	Remarks
ASSAM			
Gauhati Sub-division Electrification Project (S)[1]	8	1,02	The Government of Assam are planning to develop Manas and Dihaug schemes.
WEST BENGAL			
Calcutta Electric Supply Corporation (S)	280	24,10	The Calcutta concern has already added 100,000 KWs to its capacity. Its attempts to get capital in England were supported by underwriters. In India on the other hand there was over-subscription for the share issues. The old Bengal Government wanted to nationalise the concern but the Central Government refused to provide the necessary finances.
Gourepore Electric Supply Co. (S) ..	19	56	
Jaldhaka Hydro-electric Scheme (H)[2]	45	..	
BIHAR			
Fertiliser Factory Power Station, Sindri (S)	118	3,00	This factory is expected to start production shortly. The electricity plant is being established.
Unified Development of Damodar River:	411	65,00	The Damodar Valley Corporation was set up by the Government of India in 1948. Attempts were made to get a loan of $ 25 million from the World Bank. The Bank authorities have, however, sanctioned a loan of $ 18.5 million. The D. V. A. is a multi-purpose project. The Governments of India, West Bengal and Bihar are are the participants. The Government of India has appointed Mr. C. D. Deshmukh to examine the working of the Corporation.
1. Tilaiya Dam .. 6			
2. Konar Dam No. 1 20			
3. Konar Dam No. 2 10			
4. Konar Dam No. 3 10			
5. Aiyar Dam .. 45			
6. Maithon Dam .. 40			
7. Panchet Hill .. 40			
8. Bal Pahari .. 20 211(H)			
9. Bermo .. .. 20 200(S)			
10. Bokaro Steam stn.			
Kosi River Project (H) ..	1,800	..	Under investigation by the Central Waterways, Irrigation and Navigation Commission.
Construction Power D.V.A. (S) ..	9	..	
Patna Electric Supply Co., (Extn.) (S)	8	30	
BOMBAY			
The Tata Hydro-Electric Agencies (Extensions) (H)	40	4,50	The Bombay Government have not yet ventured on any of the Schemes. Very recently attempts were being made to provide Bombay City with larger power supply by extending Chola Power Station. The Bombay Government have also schemes for constructing two grids, North Gujerat and South Gujarat.
Kalyan Power Station, G. I. P. Rly. (Extension) (S)	20	2,50	
Koyna River Project (H)	280	35,40	
Kalinadi Scheme (H)	343	..	
Ahmedabad Electricity Co. (S) ..	30	1,30	
Surat Steam Stn. Project (B.G.) (S)	60	5,89	

1. S=Steam
2. H=Hydro.

Name of the Project	Capacity to be installed (thousand KWs.)	Estimated cost (Rs. lakhs.)	Remarks
C. P. & BERAR			
Government Central Thermal Station, Khaperkheda (S)	30	4,38	
Government Newsprint Factory Power Station, Chandni (S)	17	2,92	
Aluminium Factory Power Station, Katni (S)	23	1,50	
Jubbulpore Electric Supply Co. (Extension) (S)	4	25	
Government Eastern Thermal Grid Scheme (Raipur) (S)	5	94	
Wainganga Hydro Project (H) ..	850	70,00	This project in its ambitious form has now been shelved.
Bargi Hydro Project (H)	25	..	
COORG			
Barapole Hydro-Electric Scheme (H)	86	..	
DELHI			
Delhi Central Electric Power Authority (S)	31	2,70	
MADRAS			
Madras City Electric Supply (Extension) (S)	60	3,24	
Pykara Hydro-Electric Scheme (Extension) (H)	35	3,58	
Moyar Hydro-Electric Scheme (H) ..	36	3,58	
Papanasam HydroElectric Scheme (Extension) (H)	6	48	
Madura Thermal Scheme (S) ..	60	88	
Nellore Thermal Scheme (S) ..	8	1,01	
Machkund Hydro-Electric Project (H)	104	15,63	Orissa and Madras are concerned with this project. It is expected to be completed in two or three years time.
Bezwada Thermal Station (Extension) (S)	6	..	
Vizagapatam Station (Extension) (S)	3	27	
Tungabhadra Project (H)	40	17,00 3,50	(Madras) (Hyderabad)
Ramapadasagara Project (H) ..	1000	125,00	This multipurpose project also has been shelved at present owing to financial reasons.
Pericard Hydro-Electric Scheme(H)	78	..	
ORISSA			
Mahandi Valley Development Scheme 1. Hirakud Project 123 (H) 2. Tikarpara Project } 230 (H).. 3. Naraj Project }	353	47,50	The Central Electricity Commission is looking after the Project. Work has already been started. Economy cuts were imposed on this project, but it is reported that the Government has decided to go ahead with this scheme. This is also a multi-purpose project.

Name of the Project	Capacity to be installed (thousand KWs.)	Estimated cost (Rs. lakhs.)	Remarks
Construction power for Hirakud Project (S)	4	..	
Cuttack Thermal Scheme (S) ..	5	..	
EAST PUNJAB			
Nangal Scheme (H)	96	25,00	These projects were also affected by economy cuts. But it is reported that the Government will not be rigorous in this. Attempts were made to get loans from World Bank for these Projects. There is a dispute between the Central, East Punjab and Rajasthan Governments regarding the agency which should carry out the construction work.
Bhakra Dam Project (H)	480	70,00	
Madhopur Hydro-Electric Project (H)	34	..	
Panipat Thermal Project (S) ..	9	..	
Ferozepur Thermal Project (S) ..	1	..	
UNITED PROVINCES			
Kanpur Electric Supply Administration (S)	15	95	
Mohammedpur Hydro-Electric Project (H)	11	1,20	
Pathri Power Project (H)	20	3,50	
Sarda Canal Hydro-Electric Scheme (H)	41	7,00	
Yamuna Hydro-Electric Project (H)	257	25,21	
Pipri Dam Project (H)	230	26,35	
Sachwal Steam Station Extension (S)	2	..	
Extensions to Electric Supply Companies:			
Balrampur Raj .. .. 2 (S)		12	
Lucknow .. .. .. 8 (S)		51	
Benares .. .. .. 4 (S)		25	
Agra .. .. .. 4 (S)		25	
Bareilly .. .. .. 3 (S)	21	15	
Nayar Dam Project (H)	233	24,00	It is reported that this scheme has been given up. Considerable preliminary expenditure has been incurred on it.
Dhukwan Weir Project (H)	10	1,40	
Tons River Project (H)	60	..	
Ramganga Dam Scheme (H) ..	25	11,50	
STATES			
Bhopal			
Kolar Nadi Project (H)	17	4,00	
Thermal Station Project (S) ..	3	..	
Cochin			
Peringulkuthu Hydro-Electric Scheme (H)	200	20,00	
Hyderabad			
Nizamsagar Hydro-electric Project (H)	15	1,65	
Godavari Valley Thermal Scheme (S)	88	1,70	
Hyderabad City Power Station (Extension) (S)	5	50	

Name of the Project	Capacity to be installed (thousand KWs.)	Estimated cost (Rs. lakhs.)	Remarks
Jaipur			
Jaipur State Power House (New Steam Station) (S)	10	..	
Jodhpur			
Jodhpur State—Erinpura Hydro-electric scheme (H)	4	26	
Kashmir			
Sind Valley Hydro-electric Scheme (H)	6	..	
East Kashmir Valley Irrigation and Power Project (H)	1	..	
Kolhapur			
Radhanagari Hydro-electric Scheme (H)	5	1,61	
Madhya Bharat (Indore)			
Glancy Power House, Indore (Extension) (S)	15	1,21	
Mysore			
Jog Power Scheme (H)	120	10,60	The first stage was completed in 1948 and the station is in operation. Extensions are being planned.
Mekedatu Hydro-Electric Project (H)	80	4,00	This Scheme concerns both the Madras and the Mysore Governments.
Lakkavalli Project (H)	13	..	
PEPSU			
Dochi Hydro-electric Scheme, Patiala (H)	27	9,73	
Rajastan			
Chambal Hydro Eectric Scheme (H)	10	13,00	
Travancore			
Pallivasal Hydro-electric Scheme (H)	3	..	
Pallivasal Hydro-electric Scheme extension (H)	22	..	
Sengulam Scheme (H)	48	2,69	

APPENDIX III

Electricity Projects in Pakistan

East Bengal			
Karnafulli River Hydro-Electric Scheme (H)	40	..	The East Bengal Government is planning to finish the scheme at the earliest.
Chittagong Station Extension (D)[1] ..	5	..	
N. W. F. P.			
Malakand Extension (H)	10	..	

1. D=Diesel

Name of the Project	Capacity to be installed (thousand KWs.)	Estimated cost (Rs. lakhs.)	Remarks
Dargai Project	n. a.	n. a.	
Warsak Project (H)	125	..	
West Punjab			
Rasul Project (H)	22	..	These schemes had already made some headway in undivided Punjab.
Mianwali Project (H)	70		
SIND			
Rohri Canal Hydel Scheme (H) ..	9	..	
Eastern Nara Canal (H)	7	..	
Yusuf Dhri Hydel on Rohri Canal (H)	5	..	
Kumb Luma Hydel on Rohi Canal (H)	2	..	
Karachi Extension (S)	22	60	

CHAPTER VII

INDUSTRIES—TEXTILES

INTRODUCTION

In the preceding chapters we found that while the partition of the country had placed Pakistan in a relatively superior position in respect of agriculture and livestock resources, India was in a much stronger position in regard to mineral resources and electric power. In this and the following two chapters we shall examine the relative industrial strength of the two countries. It would be appropriate at the outset to indicate the scope of these chapters. In this chapter, the first section will give an idea of the relative industrial development in India and Pakistan as indicated by figures of industrial establishments and employment. This will serve as an introduction to all the three chapters relating to industries. We shall then attempt a detailed discussion of the effects of the partition on the more important industries. Attention will be concentrated on large-scale industries in view of the lack of reliable information regarding small scale and cottage industries.

For the sake of convenience the industries have been grouped into textile and non-textile industries. The former will be discussed in this chapter and the latter in the following. A suitable classification has been adopted for non-textile industries. Having surveyed the effects of the partition on individual industries, it will be possible to assess the relative industrial position of each country and the prospects of future development.

I. RELATIVE INDUSTRIAL DEVELOPMENT[1]

DISTRIBUTION OF INDUSTRIES

While Undivided India as a whole was industrially backward, the uneven distribution of industrial activity within it gave rise to wide disparities in the development of different regions. The regions, which now constitute Pakistan, were those which had lagged behind in industrial development. At the time of the partition, therefore, Pakistan was industrially worse off than India and will remain so for some time to come. The following table gives the number of industrial establishments and workers employed in both the countries in 1945, the latest year for which these statistics are available.

TABLE 1. Industrial Establishments and Employment, 1945

	Establishments		Employment	
	Number	% of Undivided India	Number	% of Undivided India
UNDIVIDED INDIA ..	14,677	100.0	3,141,774	100.0
India	13,263	90.4	2,935,729	93.5
Pakistan	1,414	9.6	206,045	6.5

1. This section is based on a similar discussion in "Economic Consequences of the Partition" by C. N. Vakil, (N.I.P. Ltd.), 1949.

India, which accounts for four-fifths of the total population of Undivided India had over nine-tenths of the total number of establishments and had an even larger share in the total number of workers. Pakistan, on the other hand, with one-fourth of the total population, had less than one-tenth of the number of establishments and only about one-sixteenth of the total number of workers in Undivided India. Two main characteristics emerge from these statistics. The average size of the factories in India is much larger than that in Pakistan. The average number of persons employed per factory in India is 223 as against 146 in Pakistan.

PERENNIAL AND SEASONAL FACTORIES

Let us analyse the nature of industrial employment in the two countries in somewhat greater detail. The following table gives data relating to perennial and seasonal establishments in India and Pakistan.

TABLE 2. Perennial and Seasonal Establishments, 1945

	Perennial		Seasonal	
	No. of factories	No. of workers	No. of factories	No. of workers
UNDIVIDED INDIA	10,566	2,793,383	4,111	348,391
India	9,734	2,445,290	3,529	290,439
Pakistan	832	148,093	582	57,952

The share of India in the total number of perennial factories is 92.1 per cent. while her share in the total number of establishments is 90.4 per cent. On the other hand, Pakistan's share of perennial factories, is 7.9 per cent., smaller than its share in the total number of factories which is 9.6 per cent. Thus a larger proportion of factories in India provide employment throughout the year.

The relative importance of seasonal factories in the two countries will be clear from the following table:

TABLE 3. Seasonal Factories, 1945

	% of seasonal factories to total factories	% of employment in seasonal factories to total employment
India..	26.6	9.9
Pakistan	41.1	28.1

One striking feature revealed by the table is that in each country the percentage of seasonal factories to total factories is higher than the percentage of seasonal employment, thus indicating that the average size of seasonal factories is considerably smaller than that of perennial factories. In Pakistan the proportion of seasonal factories to total factories as also the proportion of employment in seasonal factories to total employment are higher than in India, which implies that seasonal factories are relatively more predominant in Pakistan. It may be mentioned that seasonal factories include mainly sugar mills, tea factories, cotton gins, jute presses and rice mills. While Pakistan has a large share of employment in jute presses and a moderate share of the employment in cotton gins, rice mills and tea factories, its share in the employment which used to be provided in sugar mills in Undivided India is negligible.

DIVERSITY OF INDUSTRIES

From a closer examination of the distribution of individual industries in the two countries, it will be clear that while India has all the 86 factory industries listed in the "All India List of Factories", 1945, Pakistan has only 59.[1] The industries which have developed in India but are absent in Pakistan include jute manufactures, iron and steel works, tobacco factories, dyeing and bleaching concerns and paper mills.

SIZE OF INDUSTRIES

Pakistan's comparative industrial backwardness can be further seen from the following table which classifies industries in the two countries according to the size of employment provided:

TABLE 4. Size of Industries, 1945

Persons employed	Number of industries	
	India	Pakistan
Over 100,000	6	..
50,000 to 100,000	6	..
10,000 to 50,000	32	6
5,000 to 10,000	8	1
1,000 to 5,000	26	22
500 to 1,000	4	7
Below 500	4	23

Whilst in India there were six industries, viz. cotton spinning and weaving, jute manufactures, general engineering, railway workshops, ordnance factories, and cotton ginning, each of which employed one lakh or more persons, in Pakistan there was not a single industry in this category. Similarly, whereas there were six industries in India, which included iron and steel, rice mills, sugar mills and tea factories, each of which engaged between 50,000 and 100,000 persons, in Pakistan there was no such industry. On the other hand, there were 23 industries in Pakistan employing less than 500 workers each, while in India the number of such industries was only 4. Over half the number of industries in India employed more than 10,000 persons, while over half the number of industries in Pakistan employed less than 1,000 persons.

From the foregoing it will be clear that: (i) Pakistan's relative share in industrial employment falls short of its share in the total population of Undivided India; (ii) seasonal factories are more predominant in Pakistan than in India; (iii) the development of industries in Pakistan is less diverse than that in India and it also lacks several major industries, and (iv) even those industries which have been developed in Pakistan are of a comparatively smaller size than in India.

JOINT-STOCK COMPANIES IN INDIA AND PAKISTAN

The province-wise figures of the number of joint stock companies and the amount of capital invested in them are available for both the countries, though the breakdown according to each of the industries is not readily available. The following table gives an account of the paid-up-capital invested in joint stock companies in India.

1. *Vide* Appendix I at the end of this chapter.

TABLE 5. Joint-Stock Companies in India, 1947-48

	Number	Paid-up capital (lakhs of rupees)
TOTAL	22,674	569,53
West Bengal	8,514	193,59
Bombay	3,819	190,88
Madras	3,209	47,38
Delhi	905	25,43
East Punjab	1,607	15,95
U. P.	1,241	15,57
Travancore	665	15,05
Baroda	311	13,50
Bihar	413	11,02
Hyderabad	202	8,90
Mysore	374	8,32
Indore	115	5,85
Gwalior	93	4,42
C. P.	319	4,14
Orissa	97	2,77
Cochin	324	2,85
Assam	401	2,77
Ajmer-Merwara	48	76
Coorg	17	56

The figures for Pakistan are as follows:—

TABLE 6. Joint-stock Companies in Pakistan, 1947-48

	Number	Paid-up capital (lakhs of rupees)
TOTAL	2,867	15,96
East Bengal	1,352	3,25
West Punjab	1,204	7,08
N-W.F.P.	17	3,02
Sind	311	2,60
Baluchistan	5	1

The table shows that the total paid-up capital invested in the joint stock companies in Pakistan does not form even 3 per cent. of that in India.

II. COTTON TEXTILE INDUSTRY

IMPORTANCE OF THE INDUSTRY

The cotton textile industry is by far the largest industry in India and provides employment directly for 700,000 workers and indirectly for 18,000 power-loom weavers, and 250,000 hand-loom weavers. The total value of the output is estimated at over Rs. 244 crores annually. Of the 394 cotton textile mills in Undivided India, 380 are located in India and only 14 in Pakistan. Even after the partition, India possesses the second largest textile industry in the world and is second only to the U.S.A. The installed capacity of mill cloth production in India is nearly 4,500 million yards. It is estimated that in the calender year 1948, mills in India produced more than 4,319 million yards of cloth, and in 1949, 3,906 million yards.

SUPPLY OF RAW MATERIAL

The Indian cotton textile industry has been hard hit by the partition as a considerable portion of the raw material is grown in Pakistan. Though Pakistan has less than 5 per cent. of the total number of cotton textile mills of Undivided India, it produces 40 per cent of the total output of raw cotton of Undivided India.

Raw cotton is one of the most important textile fibres used in the production of various kinds of clothing materials. Good quality raw cotton is usually produced in sub-tropical countries. The chief cotton producing countries in the world are the U.S.A., India, Soviet Union, Brazil, China, Pakistan and Egypt. Cotton is also produced in 14 other countries. As cotton produced in such countries usually is consumed internally, it does not enter into international trade. The chief exporting countries in pre-war days were the United States, India, Egypt, Sudan, Brazil and the West Indies. The chief importing countries prior to the war were Japan and the United Kingdom. Raw cotton can be used to produce coarse cloth or fine fabrics. The quality of raw cotton depends on the length, strength and colour of the staple. The longest and finest staple cotton in the world is a specialised variety grown in the Sea Island of the West Indies. Next in the scale are the superior qualities produced in Egypt and the medium qualities of the U.S.A. and Brazil. The major production of the crop in Undivided India was short-staple cotton. Next to the U.S.A., Undivided India was the largest producer of cotton in the world. At the end of the war in 1945-46 the area under the crop in Undivided India was about two-thirds of the area under the crop in the U.S.A. but the production was less than 25 per cent. of that in the United States. Table 7 gives the area under cotton and table 8 gives the production of cotton in various countries of the world.

TABLE 7. Acreage under Cotton

(*'000 acres*)

Country	Average 1935-39	1940	1941	1942	1943	1944	1945
TOTAL	78,017	71,901	69,895	52,996	55,722	55,701	51,611
U.S.A.	27,788	23,861	22,236	22,602	21,652	20,009	17,241
Mexico	725	627	781	895	1010	1046	890
Brazil	562	6,740	4,942	5,180	6,200	6,000	5,000
Argentine ..	770	738	760	831	913	887	822
Peru	428	422	386	308	326	326	..
Paraguay	111	148	108	99	104	119	124
Soviet Union ..	5,087	4,942	4,448	..	..	2,865	2,995
India	20,972[1]	19,745	20,468	16,090	17,427	11,413	11,349
Pakistan	3,698[1]	3,566	3,683	3,113	3,659	3,430	3,319
Burma	428	359	399	..	387	..	260
China & Manchuria	7,038	6,108	6,135	..	..	5,600	5,600
Korea	564	713	801	834	776	752	705
Turkey	667	..	809	790	678	720	572
Iran	442	494	544	297	297	290	247
Egypt	1,182	1,749	1,706	733	740	885	1,020
Anglo-Egyptian Sudan	439	405	402	341	319	347	321
Uganda	1,477	1,284	1,287	883	1,234	1,072	1,146

1. Average for 3 years *i.e.* 1936-37 to 1938-39.

TABLE 8. Production of Cotton

(in '000 bales of 478 lbs. each)

Country	Average 1935-39	1940	1941	1942	1943	1944	1945
TOTAL	31,123	30,623	25,123	22,830	22,573	22,369	20,337
U. S. A.[1]	13,149	12,566	10,744	12,817	11,427	12,230	9,015
Mexico	334	302	375	458	515	520	428
Brazil	1,956	2,507	1,844	2,172	2,700	1,626	1,425
Argentine	289	232	373	498	553	332	307
Peru	384	383	322	262	310	325	329
Paraguay	40	29	32	30	72	40	44
Soviet Union ..	3,430	3,000	..	..	..	..	1,700
India[2]	4,059[3]	4,357	4,424	3,086	3,626	2,173	2,119
Pakistan[2]	1,504[3]	1,723	1,799	1,616	1,633	1,407	1,411
Burma	97	92	65	70	90	35	32
China & Manchuria	2,855	2,354	2,406	..	..	1,600	1,600
Korea	180	195	184	193	205	228	163
Turkey	275	218	297	340	325	231	166
Iran	59	208	91	34	42	69	92
Egypt	1,893	1,900	1,735	877	740	962	1,082
Anglo-Egyptian Sudan	248	247	234	274	175	290	206
Uganda	281	310	198	94	160	251	212

1. In thousand bales of 500 lbs. each.
2. In thousand bales of 400 lbs. each.
3. Average for three years 1936-37 to 1938-39.

It will be seen from the above data that the yield of the crop in recent years has been on the decline, particularly in India. With the loss of foreign markets for short-staple cotton, particularly Japan, and the increasingly difficult food position, as evidenced by the Bengal famine, it became necessary to divert the acreage under commercial crops like cotton and jute to the growth of food crops. By the operation of various Growth of Food Crops Acts, the area under cotton crop was reduced from time to time, with the twin object of growing more food and of preventing loss to the cotton grower because of the loss of the Japanese market. The cumulative effect of the legislative measures was a steep decline in the acreage under cotton. The total area of cotton in Undivided India declined from 24.7 million acres in the pre-war period to 14.9 million acres in 1946-47, and production, according to the estimates of the Indian Central Cotton Committee, decreased from 6.6 million bales to 4.2 million bales. This reduction in acreage was not uniform. From table 7 it appears that, whereas the area and yield of cotton in India declined by 50 per cent., in Pakistan there was no significant reduction. This was because the reduction was carried out mainly in the case of areas which used to grow the short-staple varieties. The main areas in which reduction occurred were Bombay (2.5 million acres), C.P. and Berar (.9 million acres), Madras (.8 million acres), Hyderabad (1.1 million acres), and Bombay States (1.3 million acres). As a result, the share of Pakistan in the total area and yield of cotton in Undivided India went up from 18 per cent. to more than 30 per cent. The diversion of acreage from short-staple cotton to foodgrains also resulted in a phenomenal change in the acreage of the cotton crop. While the total acreage under cotton decreased by about 40 per cent. at the end of the war in 1945-46, the reduction under short-staple cotton was as high as 60 per cent. The proportion of long and medium staple cotton to the total crop has therefore increased. Whereas short-staple cotton amounted to 64 per cent. of the crop on an average during the triennium 1936-37, it was only 27 per cent. in 1944-45; while the share of medium and long-

staple cotton has increased from 36 per cent. to 73 per cent. The following table gives the yield per acre in different countries:

TABLE 9. Yield per acre of Cotton
(*in lbs.*)

Country	Average 1935-39	1940	1941	1942	1943	1944	1945
U. S. A.	237	263	242	284	264	306	261
Mexico	220	230	230	245	244	238	230
Brazil	168	178	178	200	208	130	136
Argentine	179	150	235	286	290	179	178
Peru	426	434	399	407	455	477	..
Paraguay	172	94	142	188	331	174	170
Soviet Union	322	290	..	..	..	..	271
India	77[1]	88	86	77	83	76	75
Pakistan..	173[1]	193	195	208	178	164	170
Burma	108	110	78	..	111	..	95
China & Manchuria ..	194	184	187	..	..	137	137
Korea	153	131	110	111	126	145	111
Turkey	197	..	158	206	145	151	136
Iran	64	201	80	55	67	114	178
Egypt	497	519	486	572	478	520	507
Anglo-Egyptian Sudan	270	292	278	384	262	400	307
Uganda	91	115	74	51	62	112	88

1 Average for three years 1936-37 to 1938-39.

It appears that the yield per acre of cotton in both India and Pakistan is among the lowest in the world. The yield per acre of cotton in Egypt is thice as much as that in Pakistan, while that in the U.S.A. is larger by 60 per cent. Further, the yield per acre in India is less than 100 lbs. per acre as compared to more than 170 lbs. in Pakistan. This is because in India cotton is grown as a dry-crop with the help of rain water; in Pakistan it is grown in the fertile irrigated tracts of Sind and West Punjab. In 1946-47, of the total area under cotton in Undivided India amounting to 14.9 million acres, the acreage in India amounted to 11.6 million, while that in Pakistan amounted to 3.3 million acres. It is significant to remember that Pakistan has a preponderant share in the irrigated area. It is estimated that of the irrigated area under cotton in Undivided India in 1938-39, Pakistan accounted for nearly 66 per cent., while in 1946-47 she had nearly 80 per cent. of the total. It is the larger proportion of irrigated area which explains the larger productivity per acre of cotton in Pakistan as compared to that in India.

PRODUCTION OF RAW COTTON IN INDIA AND PAKISTAN

The following table shows the production of raw cotton in India and Pakistan after the partition.

TABLE 10. Production of Raw Cotton in India and Pakistan
(*in thousands*)

Year	India		Pakistan	
	Area Acres	Yield Bales[1]	Area Acres	Yield Bales[1]
1947-48 ..	9,472	1,981	3,091	1,090
1948-49 ..	9,846	2,350	2,799	1,019
1949-50 ..	10,496	2,862	2,811	1,172

1. Bales of 392 lbs. each.

From the table it is clear that raw cotton production in India is improving year by year and has increased from 2 million bales in 1947-48 to more than 3 million bales in 1949-50, showing an increase of 50 per cent. in two years. So far as cotton production in the year 1949-50 is concerned, there is a high discrepancy in the forecast. The official forecasts of cotton have been known to be under-estimates, and even the Government, for the purposes of policy relies on trade estimates. The Indian cotton crop estimate for 1949-50 issued by Volkart Brothers places the production of cotton during 1949-50 at 2.9 million bales. As compared with this, trade interests in Bombay estimate the total crop to be slightly more than 3 million bales.

DEMAND FOR PAKISTAN COTTON

The war brought about a significant change in internal consumption of raw cotton. Whereas mills consumed only about 2.8 million bales in the triennium ending 1938-39, by 1946-47 the consumption had gone up to 3.2 million bales. The following table shows the relative position of raw cotton and its consumption by mills for the season 1946-47:

TABLE 11. Raw Cotton in India, 1946-47

	India	Pakistan	Undivided India
Area (million acres)	11.5	3.4	14.9
Yield per acre (lbs.)	90.0	188.0	113.0
Production (lakhs of bales of 392 lbs. net)			
Total—All Staples	26.0	16.0	42.0
7/8″ and above	4.5	5.4	9.9
Below 7/8″ and above 11/16″	13.0	7.0	20.9
11/16″ and below	8.5	2.7	11.2
Consumption (lakhs of bales of 392 lbs. net.)	41.3	2.6	43.9
(*i*) Mills-Indian cotton	21.8	..	21.8
Pakistan cotton	9.8	0.7	10.6
Other foreign cotton	7.0	0.1	7.1
(*ii*) Extra-factory	2.7	1.8	4.5

From the above table it appears that India used to take Pakistan varieties to the extent of 9.8 lakh bales. The table also shows that more than 80 per cent. of the cotton grown in Pakistan is of long and medium staple varieties as compared to 60 per cent. in India. According to the estimates furnished by the Indian Central Cotton Committee, mills in India consumed 6.3 lakh bales of long staple cotton and 3 lakh bales of medium staple cotton produced in Pakistan. The table also shows that of a total mill consumption of about 4 million bales from all sources prior to the partition, the share of Pakistan cotton used to be 25 per cent., that of foreign cotton from other countries 23 per cent., and of cotton from internal sources 52 per cent. If the mills were to work to full capacity as they did in 1943-44, the peak year of cloth production in India, the amount of cotton required from abroad would be larger unless production within the country itself is increased.

DEMAND FOR PAKISTAN COTTON

Classified by varieties, requirements of Pakistan cotton by Provinces and States in India are shown below:

TABLE 12. Estimated Mill Consumption of Pakistan Cotton in India

(in '000 bales of 400 lbs. net)

	India	Indian States	Total
TOTAL	858	82	940
Punjab-American 4F	253	18	271
Punjab-American 289F/43, 199F, 124F, L.S.S. ..	370	42	412
Sind-American 4F	16	18	34
Sind-American 289F-1, M 4 and N.T.	219	4	223

On the basis of these estimates the Government of India at an Inter-Dominion Conference for the Exchange of Essential Commodities (May 1948) asked for a supply of 9 lakh bales of raw cotton from Pakistan. The Government of Pakistan agreed to supply only 6 lakh bales. Between May 1948 and May 1949 it was found that the Government of Pakistan could supply only about 4 lakh bales. This meant that the industry had to import more of foreign cotton than it had done hitherto. Lower world production of cotton and decontrol of cloth in India resulted in raising the prices of raw cotton. By June 1948 I.C.C. July was quoted at Rs. 720 which was nearly Rs. 290 per *candy* above the level that prevailed during the corresponding period in July 1947. The problems of price and customs duty did not receive any recognition in the terms of the Inter-Dominion Agreement of May 1948. Pakistan decided to levy an export duty of Rs. 60 per bale on raw cotton. Despite the fact that the Government of India exempted from any customs duty all cotton imports from Pakistan, the export duty on cotton levied by Pakistan raised its price and increased the cost of production in the Indian textile industry. The overall position in respect of raw cotton production and consumption for 1948-49 and 1949-50 is indicated in table 13. From the table it is clear that the share of Pakistan cotton in Indian mills, which prior to the partition was estimated at more than 9 lakh bales went down in 1947-48 to 6 lakh bales, and in 1948-49, was further reduced to 3.4 lakh bales. Consequently the share of other countries in imports of cotton has increased. It is also significant to note that stocks of raw cotton from year to year are going down, particularly after the partition. Whereas the carry-over of stocks with mills as well as the trade in the beginning of the season 1948-49 amounted to 29 lakh bales, in 1949-50 the stocks went down to 14.7 lakh bales. Unfortunately the raw cotton control administration in India is defective, in as much as while the prices of ginned cotton are controlled, the prices of unginned cotton are not. This leaves considerable scope for black marketing. The millowners have from time to time been agitating either for a complete control over prices of cotton both ginned and unginned, or else free forward trading and decontrol of cotton.

TABLE 13. Estimates of Cotton Position in India, 1948-49 and 1949-50

(lakh bales of 392 lbs. net)

	1948-49	1949-50
Total Supply ..	62.9	50.7
Estimated carry-over at beginning of season	29.5	14.7
With mills :	15.7	12.6
Indian cotton	11.6	8.4
Pakistan Cotton	2.1	1.6
Other foreign cotton	2.0	2.6

	1948-49	1949-50
With trade :	13.8	2.1
Indian cotton ..	12.5[1]	1.8
Pakistan cotton	0.7	0.1
Other foreign cotton ..	0.6	0.2
Estimated crop of India	23.5	28.0
Estimated receipts from Pakistan	3.4	..[2]
Estimated imports from other foreign countries	7.0	8.0[3]
Total Off-take	48.2	43.4
Mill Consumption :	42.5	38.7
Indian cotton ..	31.2[4]	28.0[4]
Pakistan Cotton	4.1	1.7
Other foreign cotton	7.2	9.0
Extra-factory consumption	5.7[5]	4.7[5]
Estimated carry-over at end of season :	14.7	7.3
With Mills :	12.6	5.6
Indian cotton	8.4	4.0
Pakistan cotton	0.1	nil
Other foreign cotton	2.6	1.6
With trade :	2.1	1.7
Indian cotton ..	1.8	1.5
Pakistan cotton	0.1	nil
Other foreign cotton	0.2	0.2

1. Revised.
2. Imports assumed to be negligible due to the present currency deadlock between India and Pakistan.
3. In view of the possibility of special steps being taken to augment imports, the actual imports may be higher than the estimated figure.
4. May perhaps be lower in case imports of foreign (other than Pakistan) cotton are higher than the estimated figure.
5. This is a conventional estimate and the actual figure for 1949-50 may be considerably lower, owing to scarcity of cotton.

EFFECTS OF DEVALUATION

After the devaluation of the Indian rupee and the non-devaluation of the Pakistan rupee, Pakistan cotton became dear. For the year 1949-50 (between the months of September 1949 and August 1950) it is expected that the internal production of raw cotton would amount to 28 lakh bales. It is feared that of the total carryover of stocks of 14 lakh bales from the last year, only half the quantity can be used by the mills. A total import of at least 10 lakh bales of raw cotton has therefore become necessary. India has already secured as her share, 2.20 lakh bales of cotton from East Africa by the bulk purchase system jointly with the United Kingdom Raw Cotton Commission. India expects to to receive from Egypt 3 lakh bales. Imports of foreign cotton (including Pakistan cotton) during 1948-49 amounted to 818,000 bales, and exports, 288,000 bales. India proposes o import the remaining quantity from dollar areas, particularly from California. This would mean an expenditure of foreign exchange to the tune of Rs. 50 crores in sterling and Rs. 25 crores in dollars. One of the baneful effects of the partition has therefore been that the country has

become heavily dependent on the outside world for the supply of nearly 25 per cent. of its raw material as compared to less than 10 per cent. prior to the partition. Whereas in 1946-47 India imported raw cotton worth Rs. 26 crores, in 1948-49 and 1949-50 she paid Rs. 64 crores and Rs. 63 crores respectively for imports of cotton. As compared to these imports, the exports of manufactured goods fetched nearly Rs. 40 crores in 1948-49 and Rs. 73 crores in 1949-50. Thus, so far as the cotton textile industry is concerned, the import of the raw material was somewhat of a net burden on our foreign exchange resources. As contrasted with this, despite the fact that India has to pay nearly Rs. 70 crores for her raw jute supplies to Pakistan, the total value of her exports of jute goods to other countries amounts to more than Rs. 120 crores. Besides, the exports of jute manufactures earn dollars, while the exports of cotton textiles earn soft currencies.

While the raw cotton situation in India is thus difficult in as much as there is considerable dependence on imports, it is necessary that the supply both of production and of imports should be equitably distributed among the various mills. One of the defects in the existing price control policy relating to raw cotton is the absence of control over the price of *kapas*. It is obvious that with the difficulties of getting ginned and pressed cotton at controlled prices, mills may buy unginned cotton direct from the farmers at prices above the controlled rates. This would defeat the purpose of price control. It is true that a control over prices of *kapas* hoarded or held by the farmers would be difficult to administer. Even then it is desirable that ways and means should be found whereby mills are enabled to get supplies at controlled rates. After the devaluation, the prices of raw cotton have increased all over the world. It appears that raw cotton prices in India are comparatively lower. This does not mean that the prices are uneconomic to the cultivators. If it is desired that cloth prices to consumers should not rise as a result of increased prices of raw cotton, steps should be taken to make the existing price controls over raw cotton effective. Care should be taken to see that while some marginal mills are starved of cotton supplies, the other units do not keep large reserves of raw cotton.

GROWTH OF MORE AND BETTER COTTON

In a memorandum submitted to the Government, the Indian Central Cotton Committee recommended an overall increase in the area of cotton by 40 lakh acres, viz., from 115 lakh acres in 1946-47 to a target of 155 lakh acres. The additional area was to be extended in Provinces and States as follows:

TABLE 14. Proposed Increase in Acreage of Cotton

(in lakhs of acres)

	Proposed increase in acreage
TOTAL	40.0
Bombay	15.0
C. P. & Berar	9.0
Madras	5.0
Hyderabad	4.5
Baroda	3.5
Deccan States	1.0
Rajpipla State	0.5
Central India States ..	0.5
Kathiawar States	1.0

It was estimated that of this increase in area of 40 lakh acres, 19 lakh acres would be under varieties, stapling 7/8" and above, and 21 lakh acres under the stapling below 7/8" but above 11/16".

The consumption of Punjab American 4F from West Punjab, and Sind American 4F of staple length between 3/4" to 7/8" by mills in India is estimated at about 3,05,000 bales. This can be made up by an increase in the production of similar varieties like *jarilla*. For example, in 1945-46 the production of cotton in East and West Khandesh and Nasik districts of the Bombay Province, which grow a major portion of *jarilla*, dropped for various reasons from 2,67,000 bales in 1941-42 to 47,000 bales. There is scope, therefore, for extension of area under *jarilla* in these districts to the tune of about 2,67,000 bales. Similarly in Central Provinces and Berar the production of raw cotton decreased from 9.8 lakh bales in 1941-42 to 5.1 lakh bales in 1945-46.

Apart from additional quantities, which can thus be obtained, it is possible to grow medium staple cotton and the 4F type in place of short-staple cotton in certain areas. For example, in the Ferozepur district of East Punjab, out of a total area of 1,30,000 acres under cotton 50 per cent. was under *desi* or short-stapled cotton and the rest under 4F. As the entire cotton tract in this district is irrigated, it would be feasible to replace the production of *desi* cotton by that of 4F. In addition, about 1.6 lakh bales of short-stapled cotton produced in the Dholera tract of the Ahmedabad district and the Mehsana Taluka of Baroda State can be replaced by K. 72-2 and *pratap* cottons which are similar to 4F. In Hyderabad State there is the possibility of increasing the area and obtaining a yield of 50,000 bales of *jarilla*. From the above, it will be seen that it is possible to increase the acreage and produce medium stapled cotton of Pakistan varieties of 4F or varieties similar to *jarilla* within India.

Besides medium-stapled cotton, India also takes from Pakistan other varieties, like 239F/43, 199F, 124F,289F-1, M-4, N.T. and I.S.S. (Staple length from 7/8" to 1.1/16") to the extent of more than 6 lakh bales. Of this quantity about 1 lakh bales are long stapled cotton over 1" and the remainder falls within the group 7/8" to 1". The areas, which at present supply long-staple cotton over 1" within India, are the Cambodia Tracts of the Madras Province and the Irwin Canal Tracts of the Mysore State. By extending these areas it would be possible, with the help of irrigational facilities, to produce an increase in the quantity by 1 lakh bales. So far as the deficit in the supply of cotton 7/8" to 1" is concerned, it could be met by increasing the production of such types of cotton as Cambodia and N. 14 in Madras Province, *Jayawant*, *Surti-Suyog* and *Broach*, *Vijaya* and *Gadag* 1 in Bombay Province, *Buri* in Central Provinces and Berar and *Gaorani* in Hyderabad State. The scope for this increase is illustrated in the following table, which compares their production in 1941-42 with that in 1945-46.

TABLE 15. Production of different types of Raw Cotton in India

Name of variety	Production in '000 bales of 400 lbs. net	
	1941-42	1945-46
TOTAL	1,042	509
Cambodia	256	159
No. 14	4	4
Kumpta Jayawant	152	34
Gadag[1]	29[1]	15
Surti-Suyog	151	60
Broach-Vijaya..	290	109
Buri (Including Cambodia)	18	44
Hyderabad Gaorani	142	84

1. Includes upland other than *Gadag*.

The feasibility of the plan may be questioned on the ground that it would conflict with the Grow More Food Schemes. As India is deficit both in foodgrains and in raw cotton, great caution is necessary in the alternative utilisation of cultivated area as between the production of raw cotton and that of foodgrains. An unfortunate result of the reduction of cotton acreage in India has been that the area available for foodgrains has not been completely utilised for the purpose. The following statement will confirm this view:—

TABLE 16. Reduction of Acreage of Commercial Crops and Increase in Acreage of Food Crop.

(*in thousands*)

	Pre-war normal (average 1936-37 to 1938-39)	1945-46	Increase or Decrease in 1945-46 over pre-war normal
(A) Bombay			
Total cropped area	29,531	28,391	—1,140
Area under cotton	3,758	1,165	—2,593
Area under Jowar and Bajra	12,204	12,720	516
Area under fallow	5,216	6,388	1,172
(B) C. P. and Berar			
Total cropped area	27,425	27,272	—153
Area under cotton	3,884	2,956	—928
Area under Jowar and Bajra	4,520	5,154	634
Area under fallow	3,834	4,267	433
(C) Madras			
Total cropped area	36,491	35,275	—1,216
Area under cotton	2,320	1,623	— 697
Area under Jowar and Bajra	7,564	6,467	—1,097
Area under fallow	9,601	9,779	178

From the table it is clear that, whereas the area under cotton decreased by 20 lakh acres in Bombay Province, that under food crops like jowar and bajra, which can be grown alternatively in the cotton area, did not increase by more than 5 lakh acres. Similarly in C.P. and Berar though the area under cotton was reduced by 9 lakh acres, the area under jowar and bajra did not increase by more than 6 lakh acres. It is obvious that while the acreage under cotton has shown a significant decrease, it has not been counterbalanced by an equivalent increase in the growth of jowar and bajra, which was the purpose of the Grow More Food campaign. An increase in the fallow land and a decrease in the total cropped area in some places indicate that some part of the cotton area is not utilised at all. At this juncture of acute deficit in raw cotton as well as of food grains, it is absolutely necessary that the area is utilised, if not for food crops, at least for cotton production. Further, a time may come when we will have to decide whether we should import more food or import more cotton. In a problem like this, the financial cost would be of paramount importance. It may be found, for example, that the same area, if devoted to the production of foodgrains would be of less financial advantage (both in terms of internal cost and in terms of foreign exchange) than if devoted to the production of long and medium-staple cotton. At the same

time, it should be remembered that though an extension of acreage under cotton is called for, there should be no haphazard increase, irrespective of the quality of the crop. It is also desirable that exports of long and medium staple cotton should be banned and only exports of short-staple cotton should be allowed. It would be better if arrangements were made to learn from Japan the technique and obtain the machinery for the utilisation of short-staple cotton in the production of finer quality cotton goods.

PRODUCTION OF CLOTH IN INDIA

Though the Indian cotton textile industry is the second largest in the world, its production in relation to the requirements of the country cannot be considered high. As compared to other countries, India is one of the most sparsely clothed country in the world. The total mill production varies between 4,000 and 4,500 million square yards. To this must be added about 1,300 million square yards of handloom production. On an average this would give an annual per capita consumption of less than 16 yards as compared to the annual per capita consumption of 55 yards in the U.S.A., of 45 yards in the U.K., of 30 yards in Western Europe, of 20 yards in Japan and of 25 yards in Eastern Europe. The low consumption is not so much due to low production as to low capacity to buy. In recent months stocks with the mills have been piling up. Between April 1949 and December 1949, 28 mills were completely closed down and 21 mills had curtailed their shifts. About 37,000 workers were affected by such closures among which 25,000 were in Bombay Province, of which 13,000 belong to a single mill in Sholapur. Among the various causes that can be ascribed for the closure of mills are the accumulation of cloth and yarn, financial difficulties and labour troubles. The following table gives the production of yarn and cloth in mills in India in recent years:

TABLE 17. Production of Yarn and Cloth in India

(*in millions*)

	1946	1947	1948	1949
Yarn (lbs.)	1,367	1,296	1,448	1,359
Cloth (yards)	3,909	3,762	4,319	3,904

As contrasted with India, Pakistan faces the problem of surplus cotton on account of her few mills. Compared with her requirements it is estimated that her internal production of cloth falls short by at least 3,00,000 bales or 5,000 million square yards. It is reported that the Government of Pakistan has plans for the establishment of 5 cotton textile mills by the end of 1950.

EXPORTS OF CLOTH BY INDIA

Besides meeting requirements of internal consumption, Indian mill cloth was being exported in large quantities during the war. The highest export figure on record is for the year 1942-43 when exports amounted to 819 million yards, as compared to the pre-war average of about 200 million yards. The increase in exports was due to the absence of competition, particularly from Japan. In 1943-44 Undivided India exported 870 million yards, in 1944-45, 423 million yards, in 1945-46, 440 million yards, in 1946-47, 380 million yards and in 1947-48, 192 million yards. It will be noted that the exports have been falling

from year to year. In 1948-49 the total exports amounted to only 341 million yards. In spite of the fact that Pakistan is now a foreign country and provides a new foreign export market, the monthly rate of exports sank to 22 million yards. Most of the hard-won markets in the Middle East were being lost and the 1948 figure of exports reached only 50 per cent. of the target of 300 million yards to countries other than Pakistan. It is the view of the Export Promotion Committee that India is capable of exporting 800 million yards of cotton piece-goods. The decline in exports during 1948 may be ascribed to the decontrol of cloth and consequent increase in prices and later on to the imposition of export duties. After the devaluation of the rupee, in September 1949, it appeared that exports of cotton piece-goods once again had a fillip, and exports during 1949-50 amounted to 690 million yards, more than double the exports in 1948-49. The natural markets for India are on the shores of the Indian Ocean, Arabian Sea, and Bay of Bengal, Australia and New Zealand in the South Pacific, China and Hong Kong in the North-east and the Middle Eastern countries like Egypt, Sudan and Turkey and East and West Africa.

In the interim-Indo-Pakistan Trade Agreement concluded in April 1950, raw cotton was not included as an export item from Pakistan. The production of cotton in Pakistan is estimated at 11 lakh bales in 1949-50. Of this quantity, by the end of March 1950, 5,06,150 bales had been exported by Pakistan. For the remaining 6 lakh bales, she appears to have committed herself to supply a substantial quantity to the United Kingdom Raw Cotton Commission.

III. JUTE INDUSTRY

IMPORTANCE OF THE JUTE TEXTILE INDUSTRY

Next to the cotton industry, the jute industry was the second largest industry in respect of the number of workers employed and capital invested in Undivided India. As a result of the partition, we find that all the jute mills of Undivided India are located in India. There are 99 registered jute factories located in India with a total capital investment of over Rs. 50 crores (fixed capital of nearly Rs. 20 crores and working capital of more than Rs. 30 crores).[1] More than 90 per cent. of these factories are located in the Province of West Bengal, round about the city of Calcutta and in the district of 24 Parganas, Howrah and Hooghly. The industry gives employment to 328 thousand workers. The total value of the output in 1947 amounted to more than Rs. 127 crores. Besides, the jute industry is important for India not merely for the employment that it provides but also for the foreign exchange it earns. In pre-war years the exports of jute manufactures accounted for nearly 16 per cent. of the total value of exports; the post-war annual average between the years 1946 and 1948 comes up to 27.9 per cent., while in the post-partition year 1948-49 they accounted for as much as 35.3 per cent. of the total value of exports. In 1949-50 the share of jute exports declined to 28 per cent. The earnings of foreign exchange by the export of jute manufactures amounted to Rs. 70 crores in 1946-47, Rs. 127 crores in 1947-48, Rs. 146 crores in 1948-49 and Rs. 127 crores in 1949-50. Further, as a major portion of exports are to the United States, jute manufactures account for nearly 60 per cent. of India's dollar earnings.[2] While in the production of raw jute Pakistan enjoys a semi-mono-

1 Directorate of Industrial Statistics, Government of India : First Census of Manufactures in India, 1947, Page 2.

2 "About a third of all India's foreign exchange earnings in 1948 came from this commodity and 66 per cent. of hard currency earnings had their origin in the same source." Report of the Export Promotion Committee, Government of India, 1949, page 27.

poly in the world market, in the production of jute manufactures India enjoys a similar position. The following table gives the distribution of jute looms among various countries of the world during the year 1940:—

TABLE 18. Distribution of Looms in Jute Mills Industry in Different Countries, 1940

Name of country	No. of looms	% of world's total
TOTAL	120,071	100.0
India	68,416[1]	57.0
Germany	9,600	8.0
Great Britain	8,500	7.1
France	7,000	5.8
South America	6,000	5.0
Italy	5,000	4.1
Belgium	3,000	2.5
North America	2,750	2.3
Czecho-Slovakia	2,000	1.7
Poland	1,600	1.3
Japan	1,500	1.2
Austria	1,100	1.0
Russia	1,000	0.8
Spain	800	0.6
China	400	1.6
Yugoslovia	400	
Sweden	300	
Estonia	230	
Canadia and Australia	200	
Norway	100	
Bulgaria	..	
Finland	75	

1. Excluding special looms. The total number of looms of hessian, sacking and 'others' was 71,324 in 1947.

The table shows that in the pre-war period, 57 per cent. of the total jute looms of the world were being worked in India. During and since the war, the importance of India in the production of jute manufactures in the world increased as a result of the dislocation of manufacturing establishments in Germany, France, Italy and other European countries, except in the United Kingdom.

The industry requires about 6 million bales of raw jute every year. Undivided India had a world monopoly in the production of raw jute. The total production of countries outside Undivided India, like Japan, Formosa, China, Manchukuo, Mexico, Brazil and others has been estimated at 40,000 tons per annum or a little more than 2 per cent. of the world supply. The rest was produced in Undivided India. No wonder then that raw jute was often called "The Golden Fibre" of Bengal in Undivided India. It is extracted as a bast layer round plant stems which grow up to a height of eight to twelve feet. The production and harvesting is usually done during the monsoon months, from June to October every year. It is interesting to note that despite such overwhelming importance of this commercial crop, raw jute occupied less than 10 per cent. of the estimated net cropped area in Undivided India before the war. Since then due to various legal restrictions in force to aid "Grow More Food Schemes", the proportion has gone down.

In commercial history, jute as compared to other fibres like flax, silk and cotton, is a modern fibre and has entered the realm of trade and industry only since the year 1820, when for the first time raw jute was spun into yarn at Abingdon, Oxfordshire, England. Within a few years, in view of its close simi-

larity to flax and hemp, manufacturers of Dundee made increasing use of it in producing both coarse and finer fabrics as packing material. While Dundee had the looms, the British Government propagated and spread the cultivation of raw jute in Undivided Bengal. The Province satisfied all the favourable conditions for its cultivation. Jute thrives best in damp heat, that is, in localities in which the maximum day temperature normally attains 100°F, and where humidity varies from 70 to 90 per cent. and in soils which contain sandy loam. There is plenty of rainfall in Bengal, added to which are the advantages of inundations by the rivers, Ganges and Brahmaputra. In addition there is available plenty of cheap labour. All this has made jute fabrics one of the cheapest packing materials in the world in normal times. The various processes of retting and the adverse climatic conditions, result in perpetual malarial conditions in jute growing areas. It is not surprising, therefore, that farmers of the West have hardly taken to jute cultivation.

PARTITION AND THE SUPPLY OF RAW JUTE

The partition has seriously dislocated the monopolistic position of Undivided India in jute trade and industry. Though all the jute mills of Undivided India are located in India, the major portion of raw jute is grown in Pakistan. Because of the partition, India has now become a heavy importer of raw jute, and Pakistan an exporting country. Raw jute is the most important raw material for the industry and accounts for 70 per cent. of the cost of production of jute goods.[1] In view of this, a detailed discussion of the problems presented by the separation of the raw material from the industry due to the partition is attempted here.

The total requirements of raw jute in India are placed at 70.5 lakh bales per annum as follows:—

Mill consumption	60.0	lakh bales
Export of raw jute	9.0	„ „
Non-mill consumption	1.5	„ „
Total	70.5	„ „

The following table gives the production of raw jute in India and Pakistan for the years 1940-41, 1947-48, 1948-49 and 1949-50:

TABLE 19. Production of Jute in India and Pakistan

(*figures in thousands*)

	Area (acres)				Yield (bales)			
	1940-41	1947-48	1948-49	1949-50	1940-41	1947-48	1948-49	1949-50
TOTAL	5,673	2,710	2,711	2,717	13,172	8,539	7,534	6,449
Pakistan	4,410	2,059	1,877	1,559	10,393	6,843	5,479	3,332[2]
India	1,263	651	834	1,158	2,779	1,696	2,055	3,117
% Share of Pakistan..	77	78	69	57	79	80	73	52

1. According to the estimates presented by the Indian Jute Mills Association to the Export Promotion Committee, Government of India, 1949.—See p. 32 of the Report.
2. During the year 1949-50 because of floods the crop in East Bengal is reported to have been abnormally low.

The year 1940-41 has been selected for the sake of comparison, because that was the year when there were no legal restrictions on the area under jute. The table shows that the share of Eastern Pakistan in the acreage as well as yield varied between 73 and 80 per cent until 1948-49. Apparently the incidence of the restriction of jute production due to the Growth of Food Crops Acts has fallen more on Pakistan than on India, with the result that the share of India in the total jute production has risen. It is estimated that as a result of various measures to encourage the growth of jute in India, the production in 1949-50 has gone upto nearly 31 lakh bales. From the table it also appears that as compared to India, the yield per acre in Pakistan is higher. Whereas the yield per acre of jute in India varies between 2.2 and 2.6 bales per acre, that in Pakistan is normally more than 3 bales per acre, and in some well-developed districts there have been occasions when it has gone up to nearly 4 bales per acre. So far as production in India is concerned, jute is grown mainly in the Provinces of West Bengal, Bihar, Orissa, Assam, and the States of Cooch-Behar and Tripura. The following table shows the acreage and yield of jute in the various Provinces and States:

TABLE 20. Production of Raw Jute in India

(*figures in thousands*)

Provinces/States	Area (acres)			Yield (bales)		
	1936-37 to 1938-39 Average	1940-41	1945-46	1936-37 to 1938-39 Average	1940-41	1945-46
INDIA	865	1,256	580	2,002	2,759	1,556
Assam	200	308	173	474	786	505
Bihar	408	284	159	805	571	274
Orissa	18	29	20	40	52	44
West Bengal	199	569	198	597	1,184	672
Cooch-Behar	32	48	20	69	123	36
Tripura	8	18	10	17	43	25
PAKISTAN (East Bengal)	2,115	4,417	1,842	6,360	10,413	6,235

From the above table, it appears that the share of West Bengal in the total production of jute in India varies between 35 and 50 per cent.

FACTORS DETERMINING THE QUALITY OF FIBRE

Raw jute can be used in the production of sacking and hessian bags, tarpaulins, carpet-backing, linoleum cloth, rugs and canvas, upholstery foundations, decorative fabrics, buckram, back-sheets, brattice-cloth, roofing fabrics and various classes of twines. For all these purposes either jute is spun into yarn and converted into sacking and hessian cloth by itself or else it can also be blended with other fibres like cotton, flax and silk. Various qualities of raw jute are utilised for these purposes. There are two main botanical varieties of jute known respectively as (a) *Capsularies* or white jute, and (b) *Olatorius* or *tosa* and *desi* jute. From the point of view of quality useful for the purpose of manufacturing processes various characteristics are considered important. Some of these are: (i) colour of the fibre, (ii) strength of the staple length, (iii) amount of wastage in the manufacturing processes, and (iv) the defects of dampness in the fibres. In all these aspects, it is found that *desi* jute grown in large parts of West Bengal, Bihar, Orissa, ond Assam in India is defective.

Colour of the fibre is the most important factor in its utilisation by mills. So far as East Bengal raw jute is concerned, it is ordinarily of a fair and nearly white complexion. This is particularly liked by Americans and other Western nations, because of the fact that bags made out of this fabric are so white in colour that names and addresses of commodities packed can be printed or written on them with ease. Such white jute is, therefore, used for the production of hessian jute cloth known in America as burlap. The most important factor affecting the colour of the fibre is the process of *retting*. Retting consists in the fermentation of the soft pith of the plant stems which dissolves and leaves the fibres, which can then be easily separated from the stock. It involves the process of submerging plants in water and of allowing them to remain there for a period which varies between ten days to three weeks at a time. "The type of water used in retting gives it white or dark colour. The nature of water is the principal colour factor in determining the colour of the fibre. So much is this the case that jute areas are commonly divided into two broad geographical divisions, viz., those served by each of the two great rivers, the Brahmaputra and the Ganges together with their tributaries".[1] The Brahmaputra, for the greater part of its course, flows through Eastern Bengal in the districts of Mymensingh, Dacca, and Tippera. The water of the river Brahmaputra is clear and hence it gives a fairly white colour to the fibre. It should be noted that Mymensingh was the largest jute growing district in the whole of Bengal and today accounts for nearly 25 per cent. of the total crop of Eastern Bengal. As contrasted with this, waters of the Ganges and its tributaries which flow through Murshidabad, 24-Parganas and Hooighly districts in West Bengal are muddy. The colour of the fibre, therefore, is grey and yellowish brown. Further, for purposes of retting, either running water of rivers or streamlets, or still waters of lakes and ponds may be used. When running water of rivers is used, the fibre has a better colour than when pool of stagnant or muddy water of lakes and ponds is used. In this respect, Eastern Bengal is very well supplied with a number of small rivers and their tributaries. This gives the fibre a fair colour. As contrasted with this, in different parts of West Bengal and in Bihar ponds and lake waters are used. Because of this, the shade of the fibre in these parts of Western Bengal and Bihar has a dark grey colour. Apart from retting and its consequent effects on the colour of the fibre, raw jute grown in India is defective in staple length. Plant stems are usually shorter in length and the fibre breaks in the process of spinning. Raw jute grown in India contains a larger proportion of cuttings which involve a greater waste in the manufacturing processes. For these reasons mills use a large proportion of jute of Eastern Bengal varieties in the production of hessian cloth. Even in the production of the coarser fabrics of sacking cloth, East Bengal raw jute has to be used to give strength to the warp.

EXTENT OF INDIA'S DEPENDENCE ON PAKISTAN

Factors noted above are usually ignored in estimating the requirements of Pakistan's raw jute by Indian mills. Very often, Government spokesmen consider that the solution in the task of lessening our dependence on East Bengal jute lies in the mere process of increasing the production of raw jute in India, irrespective of its quality. We often hear that because the mills require 60 lakh bales of raw jute, our requirements of Pakistan's raw jute are to the extent of 60—25=35 lakh bales only. This is a faulty analysis of the problem. Due to

1. Report on the Marketing and Transport of Jute in India, Indian Central Jute Committee, First Report, 1940, page 51.

the factors mentioned above, our requirements of East Bengal raw jute are likely to be, and, in fact, are, much more than this. Those in the know of jute manufacturing estimate that at least 70 per cent. of the raw jute consumed in the mills must be of the varieties produced in East Bengal. This means that India is dependent on East Bengal jute to the extent of 45 to 50 lakh bales if the looms are worked to capacity. In the first Inter-Dominion Agreement of May 1948, on the exchange of essential commodities, Pakistan agreed to supply to India 50 lakh bales of jute in a year. In a later agreement, this quantity was reduced to 40 lakh bales for the year 1949-50. Usually, the explanation for this reduced quantity, as given by official sources, is that we require less jute because our own production of raw jute has increased. It seems that this is not the correct explanation. The real fact is that since June 1949, as per an understanding between the Indian Jute Mills Association and the Government of India, 12½ per cent. of hessian looms were sealed, and mills worked for only three weeks in a months in the year 1949-50. This has reduced the demand. If the mills were to work to full capacity, there is no doubt that more than 40 lakh bales would be required. In 1947-48, mills in India consumed 49 lakh bales of Pakistan jute.[1] In the following year, 1948-49, because of reduced production due to floods, and high prices as a result of the levy of land export duties by Pakistan, the consumption of Pakistan jute amounted to about 40 lakh bales only. In 1949-50, between September 1949 and April 1950 only 6 lakh bales were imported, while in April the Pakistan Government as a result of the interim agreement consented to supply 8 lakh bales more to India by the end of July 1950.

MARKETING OF RAW JUTE

The partition has, however, not seriously affected the marketing agencies of raw jute in Eastern Bengal. Even today, the middlemen, viz., *adatias*, and balers are mostly Hindus. It is true that recently Europeans and Muslims are having a larger interest in the marketing of raw jute. In spite of this, it is safe to conclude that 75 per cent. of the *adatias* (commission agents), *dalals* (brokers) and *pucca* and *kutcha* balers are non-Muslims. Before raw jute reaches the mills, it has to be graded and pressed into bales. In this respect the capacity of Pakistan is very limited. Baling is the process of reducing loose jute by means of pressure into a compact form to facilitate handling and transportation. It may be done by hand and steel presses driven by steam or oil power. The weight of a *kutcha* bale is ordinarily about 3½ maunds whereas a *pucca* bale pressed by steam or oil power weighs 400 to 410 lbs. and is packed to a density of 10½ cubic feet. *Pucca* baling is done by hydraulic presses and is essential for export to foreign countries. The existing approximate baling capacity of East Bengal is estimated at 6,690 *pucca* bales per day, of which about 4,500 are pressed in Narayanganj and 1,250 at Mymensingh. On the basis of 25 working days a month, this gives a monthly turnover of 1,68,000 bales for the whole of East Bengal. If the presses were worked throughout the year, the total annual turnover would be about 20 lakhs bales. The fact that only 15 to 20 lakh *pucca* bales can be pressed in East Bengal itself is a serious limitation to the export of raw jute to countries other than India. Another additional handicap is the limited export capacity of the Port of Chittagong. The difference between raw jute pressed in *kutcha* bales with less weight and *pucca* bales of greater weight is very important for a factual analysis of the jute problem. For ex-

1. Monthly Summary of Jute and Gunny Statistics.

ample, there was a controversy between the Pakistan Government and trade interests in India over the quantity of raw jute sent from Pakistan to India during the 1948-49 season. The Pakistan Government informed the Government of India that, they had sent 50 lakh bales to India, whereas the trade interests maintained that they had not received more than 40 lakh bales between July 1948 and March 1949. Ultimately the controversy was resolved by the fact that whereas the Pakistan Government estimated that quantity in *kutcha* bales, mills in India took into account the same quantity when converted into *pucca* bales.

It would be interesting to know to what extent the farmer in East Bengal has profited by the partition of the country. It was estimated through a factual enquiry of the Indian Central Jute Committee that in pre-war days when the price of raw jute was Rs. 8 per maund, the farmer used to get only Rs. 4 or 50 per cent. The situation has now changed, partly as a result of the war and partly as a result of the partition. In 1945-46, by the time the war ended, it was estimated that the farmer used to get about 55 per cent. of the price of raw jute. After the partition there has been a further improvement. At present, even if the farmer sells his produce on peak days when the major portion of the supply is sold, he gets at least 60 per cent. of the price. If, however, he possesses waiting capacity and sells jute somewhere in February or March he can get as much as 80 per cent. of the final price.

EXPORTS OF RAW JUTE

Apart from its use in Indian mills, raw jute is also exported and a small quantity is used for domestic consumption. The following table gives the exports of raw jute by Pakistan during the years 1947-48 and 1948-49:

TABLE 21. Exports of Raw Jute from Pakistan

(*thousands of bales*)

Year	To mills in India	Export *via* Chittagong	Export *via* Calcutta (in transit)	Domestic	Total
1947-48	4,991	764	416	100	6,171
1948-49	4,150	1,110	602	100	5,952
1949-50 (July.-Feb.)	1,263	856	60	100	2,279[1]

It appears that the share of India in Pakistan's exports has gone down from 83 per cent. to 70 per cent. This is due to the fact that Pakistan wants to develop the port of Chittagong for the export of raw jute to other countries. Further, the mills in India could not pay the rising prices of raw jute. Whereas on an average the typical East Bengal raw jute was available at Rs. 27 per maund in August 1949, by March 1949 the price had gone up to Rs. 35/- per maund. Of this increase in price of Rs. 9/- per maund or nearly 30 per cent., the export duty contributed Rs. 4/- per maund. There is no doubt that the Government of Pakistan wants to give only stipulated amounts of raw jute to India. It is said that export from the port of Chittagong, through which jute is sent to countries other than India, is given priority No. I.

1. As per the terms of the Interim Indo-Pakistan Agreement, Pakistan promised to supply to India 8 lakh bales by July 1950. Between February and July 1950 her exports through Chittagong are likely to amount to nearly 8 lakh bales. Her total exports during 1949-50 are expected to be nearly 4 million bales including domestic consumption. From this it appears that the official forecasts of 3·3 million bales for 1949-50 as published by the East Bengal Government is an obvious under-statement. Trade interests in India feel that the total crop in East Bengal for 1949-50 would be nearly 5 million bales.

Jute in transit through Calcutta for the same purpose has priority No. II; whereas export to India is given No. III. All the *pucca* baling presses in Pakistan have to take up raw jute primarily for export *via* Chittagong or for transit under bond *via* Calcutta. Further, European countries including the United Kingdom consider jute as a profitable dollar earner. They are, therefore, prepared to buy raw jute at any price. Instances are not wanting to show that the United Kingdom and other countries actually subsidise their purchases of raw jute from East Bengal. For these reasons, despite the fact that India is the major traditional market, her share in the purchases of raw jute from Pakistan is going down from year to year.

It has already been noted above that a considerable quantity of raw jute produced in India is not consumed by mills in India. The following table gives the exports of raw jute from India:

TABLE 22. Exports of raw jute from India

(*figures in thousands*)

July-June	Jute bales	Cuttings bales	Total bales	Total tons
1947-48	1,752	43	1,797	320.8
1948-49	571	23	599	106.9
1949-50 (July-March)	571	12	583	104.0

From the table it appears that exports of raw jute from India have fallen. This is due to the greater production of sacking rather than hessian, which consumes greater quantities of jute of Indian varieties, and to some extent due to greater use of Indian jute for both hessian and sacking production.

PAKISTAN'S LAND EXPORT DUTY ON JUTE

It would be interesting to ascertain the advantages or disadvantages to the Pakistan farmer arising from the imposition of the Jute Export Duty on land trade by the Government of Pakistan. In calculating the incidence of the Jute Export Duty various difficulties arise. Conclusions inferred from price differences between two periods, one prior to the imposition of the levy, and the other after a reasonable time had lapsed, would be only a rough guide in as much as differences in prices may not be solely due to the imposition of the levy, but may also be due to various other factors of demand and supply. Broadly speaking, however, it can be said that for the present, so long as the terms of international trade are favourable to agricultural countries *vis-a-vis* industrial nations, the incidence of the duty would be shared between the Indian millowner and the foreign consumer of jute manufactures. For the time being, it appears that much the larger part of the duty is borne by foreign consumers of Indian jute manufactures. This is because of increased demand for jute manufactures as a result of increased trade activity in the post-war world and reduced production of jute manufactures on the European continent, particularly in Germany. This situation, however, cannot be expected to continue for a long time. The Pakistan farmer is in a weak bargain position as against the Indian *adatias*, *dalals* and balers. When the position of the mills improves, and price recession follows, raw jute prices are bound to fall. At the time of falling prices, a part of the duty would obviously be transferred to the Pakistan farmer. So far as the Government of Pakistan is concerned, they must have realised at least Rs. 12 to Rs. 15 crores by way of jute export duties in 1947-48.

JUTE INDUSTRY AFTER PARTITION

Table 23 (p. 270) gives the production trends in jute manufactures in India during the years 1946-47, 1947-48, 1948-49 and 1949-50. The table shows that the consumption of raw jute has varied between 5.7 and 6.2 million bales per annum. Of the total quantity of raw jute consumed by the mills, it is estimated that the mills received 4.9 million bales in 1947-48[1] and nearly 4 million bales in 1948-49. During the post-partition period there has been a significant change in the nature of gunny bag production. There has been an increase in the production of sacking as compared to hessian. Whereas in 1946-47 the production of hessian amounted to 43 per cent. of the total production and sacking accounted for 52 per cent., after the partition, the share of hessian went down to 37 per cent. while the share of sacking increased to 54 per cent. in 1948-49. This change in the character of production is partly due to the difficulties of getting raw jute of the requisite varieties from East Bengal at economic prices for the production of hessians for the American market. The tendency of the Indian mills to produce more and more sacking cloth in place of hessians has been further accentuated by the devaluation of the Indian rupee. At the beginning of the year 1949 hessian output accounted for nearly 45 per cent. of the total production. But in the second quarter of 1949 the production of hessian to total production of jute manufactures went down to 31 per cent. Although the year 1947-48 witnessed a larger production of jute manufactures, the exports have been falling. The exports of hessian went down from 1,736 million yards in 1947 to 1,689 million yards in 1948. After the partition the prices of jute manufactures, particularly hessians, increased. Whereas the weekly average price of the standard quality of hessian, 40"—10 oz. (Ready) used to be Rs. 49-14-0 per 100 yards in the first week of June 1947, by February 2, 1948 the price moved up to Rs. 59-4-0. Millowners complained that they were making considerable losses in hessian production which they could only recover by the sale of sackings. The American market changed from a sellers' to a buyers' market, and prices fell. By June 1949 hessian prices went down to Rs. 40-4-0. As contrasted with this the prices of raw jute in East Bengal went on increasing soon after the partition. This made the production of hessian almost uneconomic. Besides, there was too much moisture in the raw jute supplied by East Bengal. The President of the Indian Jute Mills Association complained, "Apart from the price factor, the mills have lost heavily because they have had to take whatever jute has been delivered against their contract. Quality has not been in accordance with the contract and more serious than anything else has been the moisture content in the jute, which the mills have had to pay for. I need not remind you that water cannot be processed and figures which I have taken out give a rough estimate that on jute received this season, the mills have lost Rs. 1,64 lakhs through moisture and have paid duty to Pakistan on water to the extent of Rs. 16 lakhs."[2] In view of the difficulties of the supply of raw material and the falling trend of export prices in relation to the rigidities of costs of production, the Indian Jute Mills Association suggested to the Government that the production of hessians should be reduced. As per a Working Time Agreement with the Government of India in April 1949, the mills sealed off 12½ per cent. of the total looms and after June 1949 closed the mills for one week in a month. The average monthly production was reduced from 87,000 tons to 67,000 tons as a result of this measure. Though the mills are not working full time, no

1. The jute season is from July to June.
2. Speech of Mr. J. B. Walker at the Annual meeting of the I. J. M. A. in June 1949.

TABLE 23. Production of Gunnies

	Hessian				Sacking				Others		Total		Total Production	Equivalent Jute consumption in lakhs of bales[1] (Estimated)
	Civil		Government		Civil		Government		Civil	Govt.	Civil	Govt.		
	Tons (000)	Yards (lakhs)	Tons (000)	Yards (lakhs)	Tons (000)	Yards (lakhs)	Tons (000)	Yards (lakhs)	Tons (000)	Tons (000)	Tons (000)	Tons (000)	Tons (000)	
1946-47	418.0	1,60,24	00.5	18	501.5	11,917	8.1	201	33.8	0.6	953.2	9.1	962.3	57.40
1947-48	449.4	1,74,60	32.4	1,221	502.8	11,892	17.6	407	32.3	0.1	984.4	50.2	1,034.6	61.72
1948-49	391.4	1,51,08	42.4	1,584	552.1	13,261	24.7	596	28.9	0.1	972.4	67.2	1,039.6	62.02
1947-48														
July-December	220.8	86,00	19.8	736	262.6	61,64	2.2	49	17.8	0.1	501.3	22.1	523.4	31.22
January	40.3	15,92	1.0	34	43.6	10,26	0.4	9	2.9	0.0	86.8	1.4	88.2	5.26
February	39.7	15,38	0.0	0	39.7	9,39	1.9	47	2.4	0.0	81.7	2.0	83.7	5.00
March	44.5	17,40	0.2	6	44.4	10,57	3.0	70	2.7	0.0	91.5	3.1	94.7	5.65
July-March	345.3	134,71	21.1	776	390.2	91,86	7.5	1,75	25.8	0.1	761.4	28.6	790.0	47.13
1948-49														
July-December	205.7	80,27	33.4	1,234	276.2	65,42	8.5	1,97	14.0	0.0	495.9	41.9	537.8	32.08
January	31.8	12,55	6.4	239	44.7	10,78	2.2	53	2.3	0.0	78.8	8.6	87.4	5.22
February	35.1	13,86	1.0	41	41.8	10,27	3.1	74	2.3	0.0	79.3	4.1	83.4	4.97
March	27.0	10,47	0.6	32	33.9	8,24	2.2	55	1.8	0.0	62.7	2.8	65.5	3.91
July-March	299.6	117,15	41.4	1,546	396.6	94,70	16.0	3,78	20.5	0.0	716.7	57.4	774.1	46.18
1949-50														
July-December	124.4	47,47	9.5	345	266.8	62,01	2.9	69	17.4	0.1	409.6	12.5	421.1	25.12
January	23.0	8,72	3.6	143	39.0	9,02	2.5	63	3.0	0.0	65.0	6.1	71.1	4.24
February	23.1	8,92	4.2	164	31.6	7,37	10.3	2,59	3.1	0.1	57.8	14.6	72.4	4.32
March	23.7	9,41	3.3	120	37.3	8,87	4.2	1,04	2.8	0.0	63.8	7.5	71.3	4.25
July-March	194.2	74,52	20.6	772	374.7	87,27	20.0	4,95	26.3	0.2	595.2	40.7	635.9	37.94

1. A ton of jute goods has been taken as equivalent to 29 mds. 1 bale=400 lbs. Previous figures have been accordingly revised.

involuntary unemployment has resulted. By agreement, it has been decided that even during the closed week the operatives would get 50 per cent. of the basic pay, 50 per cent. of the dearness allowances and food concessions in full. The minimum wage in jute mill industry is Rs. 54-5-0 for a full month of 26 working days, including dearness allowance.

Stocks of jute goods with the mills showed a gradual decline during the year 1949, largely on account of reduced production. At the beginning of the year 1949 mills had stocks of gunny bags to the extent of 113,600 tons. Stocks of gunny bags at the end of May 1949 had increased to 126,700 tons. At the end of October stocks went down to 50,000 tons. In other words, after devaluation, because of reduced production as a result of decreasing supplies from East Bengal, the exports have been maintained mainly by reducing stocks. Though this may enable the mills to maintain the export market in the short period, there is no doubt that unless satisfactory arrangements are made to increase internal production of raw jute and to supplement the necessary supply from East Bengal, it will be difficult to maintain the exports at current levels. These in effect would reduce available foreign exchange, particularly dollars. A reduction in foreign exchange would adversely affect the imports of food as well as of capital goods.

EFFECTS OF DEVALUATION

On 18th September 1949 the United Kingdom devalued the pound sterling and India followed suit. The Government of Pakistan, however, decided to maintain its old parity. Pakistan currency, therefore, appreciated in terms of Indian currency and became a hard currency for India. Whereas before devaluation, the Indian and Pakistan rupees were at par, after the devaluation the Government of Pakistan decided to fix the official rate at 100 Pakistan rupees for 144 Indian rupees. This meant that, if raw jute prices in Pakistan were maintained around levels prevailing in September 1949, there would be an increase of 44 per cent. in the cost of the raw material consumed by the Indian mills. Such a great increase in prices was too heavy for the industry and if paid, would have meant a complete neutralisation of the possible advantages of devaluation. Even on the eve of devaluation, jute exports were falling. Whereas in April 1948 the monthly rate of export was 38,900 tons of hessian, by April 1949 the rate of exports had gone down to 26,500 tons. The Export Promotion Committee and the Indian Jute Mills Association have maintained that one of the main reasons for the fall of exports in jute goods, particularly hessians, was the high price of raw jute. Whereas in 1940-41 the price of middle jute of East Bengal varieties was quoted at Rs. 8-6 per maund, in 1948-49 the cost rose to a minimum of Rs. 40 and a maximum of Rs. 44-8-0 per maund. In consultation with trade and industrial interests, the Government of India and the Indian Jute Mills Association decided that they would not buy East Bengal raw jute at such fancy prices. Since September 1949 there ensued an undeclared trade war between India and Pakistan. As India stayed off the East Bengal raw jute market, prices in East Bengal started falling. Between the end of September and the end of October 1949, prices of raw jute in East Bengal went down by nearly 28 per cent. The Government of Pakistan, therefore, apprehending that prices would fall still further, instituted price control and declared minimum prices for various categories, below which no bargains could be legally made. The following table shows the minimum rate fixed for a maund of raw jute by the Government of Pakistan, the overhead charges incurred by dealers per maund in Pakistan currency, the total cost of raw jute in Pakistan currency and the total landed cost in Indian currency.

TABLE 24. Cost of Raw Jute in terms of Pakistan and Indian Currency after the Devaluation.

		Pakistan minimum rates per maund		Overhead charges	Landed cost in Calcutta in Pakistan rupees	Landed cost in Calcutta in Indian rupees
		Rs.		Rs. a.	Rs. a.	Rs. a.
Jat-White	Ts	28	plus	8 8	36 8	52 9
	Ms	26	plus	8 8	34 8	49 11
	Bs	23	plus	8 8	31 8	45 6
District-White	Ts	27	plus	8 8	35 8	51 2
	Ms	25	plus	8 8	33 8	48 4
	Bs	22	plus	8 8	30 8	43 15
Northern-White	Ts	26	plus	8 8	34 8	49 11
	Ms	24	plus	8 8	32 8	46 9
	Bs	21	plus	8 8	29 8	42 8
Jat-Tossa	Ts	30	plus	8 8	38 8	55 7
	Ms	28	plus	8 8	36 8	52 9
	Bs	25	plus	8 8	33 8	48 4
District-Tossa	Ts	29	plus	8 8	37 8	54 0
	Ms	27	plus	8 8	35 8	51 2
	Bs	24	plus	8 8	32 8	46 9
Northern-Tossa	Ts	28	plus	8 8	36 8	52 9
	Ms	26	plus	8 8	34 8	49 11
	Bs	23	plus	8 8	31 8	45 6

The prices fixed by the Government of Pakistan in terms of Indian currency were higher than the maximum prices fixed by the Government of India at Rs. 38 per maund. Mills in India could not, therefore, purchase any raw jute at such prices. In the meanwhile, smuggling was on the increase and it is reported that between September 1949 and April 1950, the period during which the deadlock lasted, nearly 5 lakh bales of raw jute were smuggled into India. Prior to devaluation, India had purchased 12 lakh bales of East Bengal raw jute. Of this quantity, nearly 5 lakh bales had been received before devaluation. The Government of Pakistan refused to release the remaining quantity after devaluation. After the Indo-Pakistan Interim Trade Pact in April 1950 this jute was released, but was not delivered regularly in accordance with it.

BILATERAL MONOPOLY OF JUTE

The effects of the non-devaluation of the Pakistan rupee on East Bengal's raw jute trade between September 1949 and April 1950 have been fully described in Chapter XI. We shall refer to only one important factor here. Hitherto, the opinion had gained ground in Pakistan, India and the world outside, that so far as jute was concerned, Undivided India's world monopoly had passed on absolutely to Pakistan by virtue of the fact that East Bengal used to produce nearly 75 per cent. of the total raw jute produced in the world. Experience of the trade deadlock between September 1949 and April 1950 has belied this contention. Just as Pakistan is the major producer of raw jute, until such time as she has her own jute mills or her export capacity through the port of Chittagong increases three times, the problem of East Bengal raw jute trade is not one of an absolute monopoly of Pakistan, but of a bilateral monopoly between Pakistan as the major producer and India as the major buyer. Because of the physical limitation of the port of Chittagong, the quantity of raw jute

produced in Pakistan in excess of quantities exported through Chittagong, has to go to or *via* India. In view of this, there is no doubt that until such time as Pakistan establishes her own jute mills, the interests of India and Pakistan are more complementary than competitive. Pakistan depends upon India for the marketing of her crop. India depends on Pakistan for the supply of raw material to keep its jute factories going. Under conditions of bilateral monopoly, in the absence of any agreement over price between the buyer and the seller, the result can only be indeterminate. Knowledge of cost and demand curves are not enough; institutional considerations like the bargaining and staying power of the parties are also important.

FUTURE OF THE JUTE INDUSTRY

The jute textile industry is facing a grave crisis today. In the main, three difficulties have simultaneously cropped up in an acute form. These are (a) difficulties created by the partition in the form of dependence for raw material on a foreign country and the need for greater production of jute in India, (b) persistence of speculative activity at the wrong time, and (c) the evergrowing danger of substitutes.

PROSPECTS OF INCREASED JUTE CULTIVATION IN INDIA

India has to decide whether under the changed circumstances, it is worthwhile to carry on production of jute manufactures to the maximum capacity, and, if so, what steps should be taken to assure the industry of a steady supply of raw jute of the necessary quality and quantity. It has already been indicated that the production of jute manufactures is an important item in our earnings of foreign exchange, particularly of dollars, which we badly require to finance our food imports and imports of capital goods for industrial expansion. The tax on profits earned by the industry and the revenue derived from the levy on exports of jute goods has contributed substantially to the income of the State. Above all, it gives employment to a large number of labourers in the densely populated areas of West Bengal and Bihar. What are the prospects of improving jute cultivation in India? From the figures of production in 1940-41 it appears that given free scope, we can produce at least 27 lakh bales. The war and pre-war reduction in production is due to the diversion of jute area to the growth of food crops. Would it be practicable to redivert the area to jute? In view of the existing food shortage the common man would be tempted to vote against it. Some compromise or *via media* is necessary. To decide a course of action, we should take into account the relative profitability of these two alternative courses. An increase of jute area by half a million acres would mean an increase in production by a million bales. At existing prices it would be worth Rs. 25 crores. The same area, when given to food crops would mean an increase in production of three to four hundred thousand tons. If imported, it would cost about Rs. 15 crores. It is clear, therefore, that in terms of cost, it would be more profitable to divert the area to the production of raw jute. Apart from this, there would be a saving in foreign exchange, and our dependence on a foreign country for the supply of an essential raw material would also be reduced. Apart from the diversion of area under food crops to the production of raw jute, there are various other ways of increasing the production of jute in India. The output can be increased by (1) increasing the yield per acre by the use of seeds of improved strains and by the

application of correct fertilisers, and (ii) increasing the acreage under jute by reclaiming wastelands in existing jute growing Provinces or by growing jute in areas like Malabar, Travancore and Bombay where it is successfully grown at present.

Application of Fertilisers: It has already been noted that whereas the yield per acre in India varies between 2.2 to 2.6 bales per acre that in Pakistan is as high as 3 bales. It would be possible to improve our cultivation by the application of lime and potash on the old alluvial soil. Further, improved strains in larger quantities should be used. According to Dr. Kundu, Director of Jute Agricultural Research Institute of the Indian Central Jute Committee, "If improved strains and fertilisers were used, we could have reasonably expected a 50 per cent. increase in the yield of fibres, that is from 2.4 bales per acre to 3.6 bales per acre in 1946 and from 2.6 bales to 3.9 bales per acre in 1947."[1] There is no doubt that even if the above comment errs on the optimistic side we can raise the average yield per acre by at least 20 per cent. in the near future, by the application of correct fertilisers and improved strains.

Increase in Jute acreage: Increase in jute acreage can be brought about by (a) utilising culturable wastelands and current fallows in the jute growing areas, (b) extending jute cultivation to other Provinces and States, (c) practising a system of double-cropping, that is growing jute in addition to the usual crop, let us say, *aman* paddy, in the earlier part of the season, and (d) providing increased irrigational facilities.

Utilisation of Culturable Wastelands: According to Dr. Kundu, about 1.9 million acres in West Bengal, 2 million acres in Bihar, 0.8 million acres in Orissa and about 5 million acres of culturable wastelands in the six jute growing districts of the Brahmaputra Valley in Assam are available. Among all these, the prospects of growing jute in Assam are the best, because, the conditions there are similar to those in Eastern Bengal. Unfortunately politics might come in the way. It is reported that Assam is very reluctant to allow large number of East Bengal refugees to settle in the Province. But these are matters of organisation which can very well be looked after by the Government of India. All that one can suggest is that, in a scheme of reclamation of wastelands described earlier, the Government of India should set apart a number of tractors for reclamation of land for jute cultivation in the jute growing Provinces.

Jute Cultivation in other Provinces and States: No serious attempt was ever made until recently to extend the cultivation of jute to Southern India. There are vast tracts in Southern India where rainfall conditions and retting facilities are available in plenty. Jute can be successfully cultivated in Malabar and South Kanara areas of Madras Province and in the irrigated areas around Poona, Western parts of Deccan and Karnatak, particularly Belgaum and Dharwar and the Konkan tract on the Western coast of Bombay Province and also in Southern Gujarat and Saurashtra.

Favourable retting facilities are available in Malabar, Kanara and the State of Travancore. In many talukas of Vizagapatam in ~~Madras~~ Andhra, an inferior variety of fibre known as *hiliscous* is now grown. In such areas improved varieties should be grown. A start can be made with an area of at least 8,000 acres. There are four jute mills in ~~Madras~~ Andhra which get most of their supplies at present from Orissa and Calcutta. If the area under jute in Malabar and South Kanara is increased, these mills can get supplies from their neighbouring sources.

1. Jute Bulletin, January 1948, Volume X No. 10, page 282. Issued by the Indian Central Jute Committee, Calcutta.

Retting facilities in Travancore are very satisfactory. The Government of India conducted experiments of jute cultivation in this area during the year 1949. Apart from extension of cultivation, the area under jute can also be increased by a system of double-cropping.

Double Cropping of Jute with Paddy: It is possible to grow jute as a second crop in some of the low lying areas of West Bengal (about 50,000 acres), where only one crop is grown at present between the months of November and April. It would be possible to grow the *capusulary* varieties in rotation with *aman* paddy in such places, where there is early rainfall or irrigation facilities are available and where the rivers are not flooded between July and August. In Eastern Bengal and Assam a very large area of the jute land is double cropped with *capusulary* jute sown in March and reaped in July and transplanted with *aman* paddy thereafter. This would be possible in Western Bengal and even in Bihar after the great river projects like the Damodar and Kosi River Projects are completed. Even as it is, there are possibilities of double cropping in West Bengal and Assam. We have already offered a number of comments to the effect that attention should not merely be devoted to an increase in the quantity of jute produced but also to its quality. At present only 30 to 40 per cent. of the crop in India is of a quality that can be consumed by the mills. To improve the quality of the fibre, the seeds sown must be of improved varieties. In addition, plentiful retting facilities should be made available to the farmer so that the colour of the fibre may be improved. It is controversial whether in respect of the colour, the staple length, that is, the quality ratio of the yarn from the Indian jute is low or not. But it is possible to remove such difficulties, and to persuade the cultivators not to harvest jute until the stems have attained a particular length so as to reduce the proportion of cuttings.

The Government of India are alive to the necessity of increasing raw jute production in India itself. The production of raw jute in India has been increasing from year to year since the partition. Whereas in the year 1947-48, the jute growing Provinces in India produced only 1.7 million bales of raw jute, in the year 1948-49 the production increased to 2 million bales and during the year 1949-50 the total outturn of the crop is estimated to go up to 3.1 million bales, which shows an increase of more than 85 per cent. as compared to the production in the year 1947-48. During the year 1950-51 it is expected that the total internal supply would go up to 5 million bales. The increase in production has been achieved by extending the area under cultivation. The total acreage under jute, in the jute growing Provinces and States for 1949-50 amounted to 1,098,488 acres as against 766,000 acres in 1948-49. The largest rise in the acreage was recorded in Bihar where the area moved up by 125,000 acres to 288,200 acres. In West Bengal there was an increase of 119,669 acres to 434,589 acres. In Assam the area increased from 218,000 in 1948-49 to 272,500 in 1949-50. The area in Orissa, Tripura and Cooch-Bihar aggregated 47,444 acres, 16,800 acres and 38,985 acres respectively. Besides these jute-growing areas, jute has been grown on an experimental scale in Travancore State (South India), certain places on the Konkan coast, the Surat District in Bombay Province and in the United Provinces. For the year 1950-51, Orissa is planning to grow jute to the extent of 100,000 acres, U.P., 60,000 acres and Travancore State 24,000 acres. Assam proposes to bring under cultivation an additional 100,000 acres under jute. Apart from the production of jute, efforts are also being made to grow *Meshta* jute in Bombay Province. Particularly after devaluation, when supplies from East Bengal came almost to a stand-still, more and more *Meshta* jute was being used in the mills.

THE DANGER OF SPECULATION

The Export Promotion Committee have very aptly and succinctly described how jute of all commodities is the one in which almost all concerned, be they *adatias, dalals,* balers, manufacturers, exporters or importers are traditionally used to 'taking a view'. The apotheosis of view-taking is to be found in the *Fatka* market, the venue for speculation in jute goods futures. Though it purports to provide a hedge market, "almost everyone is agreed that in reality it serves no purpose except that of encouraging gambling at present. It accentuates trends. When prices are high it pushes them higher; when they tend to go down it depresses them further. Its effect on exports is particularly disastrous when the prices of jute goods are high on account of high costs."[1] Even in America, according to the Digest of Marketing Survey of the U.S.A. and Canada, prepared for the Indian Jute Mills Association, "next to horse-racing burlap trading is the greatest speculation in the world."[2] The *Fatka* market is a futures market and should be clearly distinguished from a forward market which has an economic purpose. In the former market, goods are bought and sold in advance. In the futures market only hypothetical claims to commodities are bought and sold. Such a market in one of the most important industries of the country which has great export potentiality has no justifiable basis for existence today. It is high time that the Government and the industry cooperate in reducing speculative activity to the minimum in the jute trade and industry.

THE DANGER OF SUBSTITUTES

Ever since the beginning of the large-scale organisation and development of the jute textile industry in India, efforts have been made from time to time all over the world to counteract this monopoly through substitutes. These attempts were particularly accelerated on occasions when prices of jute manufactures were high. The efforts have generally proceeded along three lines:—(a) In some countries there has arisen the development and use of an acclamatized variety of jute itself. Among such fibres the important ones are *Sisal* in East Africa, *Henequen* in Mexico; the New Zealand Flax or *Phormium*; *Fique* in Colombia and the National Fibres of Brazil. (b) In some countries there has been developed the use of other fibres and material likely to do the work of jute. The most important among these are cotton and paper bags used in the United States. (c) Attempts are made to dispense with any packing material altogether by resort to practices like bulk handling. The creation of grain elevators is an instance in point.

The danger of substitutes has been accentuated by various factors, such as (1) price: Usually price has been the most important factor in the substitution of jute by cotton and paper bags. For example, in 1926 when cotton prices became comparatively favourable as compared to jute prices, Osnaberg cotton bags were used in large numbers in the United States. Even during World War II the increase in the use of cotton and paper bags was attempted due to high burlap prices. As packing material "jute won leadership on prices; it is losing it for the same reason."[3] (2) Choice of the consumer: Once a substitute has come into common use, its existence is helped and established by the irrational preferences of the consumers. The United States Department of Agriculture has often subsidised the production of cotton bags and instances

1. Report of the Export Promotion Committee, Government of India, 1949, pp. 28-30.
2. *Ibid*, page 30.
3. *Ibid*, page 28.

are not wanting to show that the Federal Government has made intense propaganda to promote the use of paper bags. Such efforts are usually motivated by a policy of national self-sufficiency in respect of packing materials. Very often, as in war time, the scarcity and uncertainty in the matter of regular supply of jute goods have given a further spurt to such attempts. Sometimes a country like the United States has also helped in these efforts because of the necessity for a profitable use of its surplus materials like cotton. Whenever there is a bumper crop of cotton in the United States, in order to safeguard cotton prices a part of the surplus cotton has been diverted by the Department of Agriculture to the production of cotton bags.

The danger of these substitutes has become very real and acute in recent times. The following table shows the increasing use of cotton and paper bags in the United States, one of the major consumers of jute goods:

TABLE 25. Consumption of Jute Goods (Burlap) Cotton and Paper Bags in the U.S.A., 1939-47

Year	Cotton Fabrics (Million yards)	Burlap (Million yards)	Paper (1,000 tons)
1939	816	712	201
1940	890	648	195
1941	972	620	270
1942	1,183	306	251
1943	1,283	373	315
1944	1,052	609	392
1945	938	826	424
1946	702	897	550
1947	....	....	571

If jute goods were available at reasonable prices, there is no doubt that they would oust all substitutes. The field of competition, though large, is not such as would oust the use of jute altogether. In the transport and trade of heavy machinery or iron and steel goods with spikes and wheels, jute will maintain its market unless it becomes too dear. Burlap is not likely to rip when snagged and because it is very inelastic, bags made of it do not creep so readily when sacked. In this particular matter the advantage of burlap is especially great for containers used for the transport and trade of sand, grain, or other materials composed of small particles. Cotton fabrics are closely woven and are therefore suitable for commodities which are pulverized. They are also suitable for certain types of foodstuffs where the shedding of particles of jute fibre would be objectionable. Designs and lettered wordings can be printed more easily on cotton bags. Cotton bags have, therefore, been found particularly suitable for flour, sugar, salt and cement. For materials of heavy weight jute alone is suitable. Paper is used principally in small light-weight packets for products sold in retail. Recently, however, large multi-walled paper bags have also been produced. But paper has less re-use or salvage value. It cannot take heavy machinery which has spikes and wheels.

COTTON AND JUTE AS EXPORT INDUSTRIES OF INDIA

Whereas Undivided India was a net exporter both of raw cotton and cotton piecegoods as well as raw jute and jute manufactures, because of the partition, India has become a heavy importer of raw cotton and raw jute and continues to be an exporter of cotton piecegoods and jute manufactures. The following table compares the importance of the two industries from the point of view of foreign exchange.

TABLE 26. Foreign Exchange Position due to Changes in Cotton and Jute Textile Industries

(in lakhs of rupees)

		Value		
		1947-48	1948-49	1949-50
I	**Cotton Textile Industry :**			
	Total foreign exchange payments	40,71	81,83	81,67
	(*a*) Imports of raw cotton	31,20	64,23	63,26
	(*b*) Imports of cotton yarn & manufactures ..	9,51	17,60	18,41
	Total foreign exchange receipts	60,20	59,01	91,57
	(*c*) Exports of cotton yarn & manufactures ..	20,52	39,86	72,23
	(*d*) Exports of cotton, raw & waste ..	39,68	19,15	19,34
	Net loss (—) or gain (+) in foreign exchange ..	19,55	—22,82	+ 9,90
II	**Jute Textile Industry :**			
	Total foreign exchange payments	78,00	70,00	20,20
	(*a*) Imports of raw jute	78,00	70,00	20,20
	Total foreign exchange receipts	153,65	169,53	142,74
	(*b*) Export of Jute, raw and waste	25,63	23,97	15,76
	(*c*) Export of jute manufactures	127,82	145,56	126,98
	Net loss (—) or gain (+) in foreign exchange ..	+75,65	+99,53	+122,54

In the above table the figures for the year 1947-48 include the figures for Pakistan upto August 1947 and are therefore not comparable. But from the trends in 1948-49 and 1950-51 it is obvious that of the two industries jute manufactures is by far the more important export industry. In the cotton textile industry there was a net loss in foreign exchange in the year 1948-49 because of the reduction of the quantum of cloth exports. In the year 1949-50, however, cloth exports were pushed up and the balance has been just maintained with the help of raw cotton exports. Whereas the jute textile industry earns nearly a third of the foreign exchange in hard currency particularly dollars, the exports as well as imports in the cotton textile industry are carried on with soft currency areas. Whereas over 90 per cent. of the production of jute manufactures in the country is available for exports after meeting internal requirements, the same cannot be said for the cotton textile industry. In the cotton textile industry, increased exports of cloth beyond a particular limit can only be pushed up at the cost of internal consumers. In the year 1948-49, the exports of cloth amounted to 8 per cent. of the internal production. In the year 1949-50, however, internal production was reduced from 4319 million yards to 3906 million yards or by about 10 per cent. Despite reduced production, however, the exports increased from 341 million yards to 690 million yards amounting to about 18 per cent. of the internal production. On account of reduced production on the one hand and increased exports on the other, the internal supply of Indian cloth decreased. During the year 1949-50 this did not, however, create scarcity of cloth. It should be remembered that an increase of exports despite decrease in production does not portend favourable signs for the industry particularly from the point of view of internal consumers. At present Indian cloth is among the cheapest in the world and finds a ready market, and there is a great disparity between the internal price of Indian cloth and available export prices to traders. There is a tendency therefore to shift from internal sale to export trade. Because of the continuance of inflationary conditions, the hard-hit middle-classes and even the low-paid workers are postponing their purchases of cloth. This would not however continue indefinitely. Unless production improves, any further pushing up of exports of cloth would create conditions of scarcity and black markets. The cloth industry and trade as well as the Government would do well to keep a care-

ful watch over the repercussions on the internal market of decreasing production and increasing exports.

The devaluation of the rupee has given a great fillip to exports of jute manufactures.[1] There appears to be some disparity however in the controlled prices of exports of jute manufactures and the prices which the foreigners are prepared to pay. There are reports that India is losing foreign exchange because the controlled export prices are low, and that jute manufactures are being sold in foreign markets by Indian exporters in the black market. This situation should also be investigated. It should not be forgotten, however, that India's monopolistic position in the world market as the supplier of jute manufactures has been shaken by the partition, and great care is necessary to see that the long-term interests of the industry are not ignored in preference to short-term advantages of price.

IV. WOOLLEN INDUSTRY

Ever since 1876, when the first woollen mill was set up in the country, the woollen industry has tended to concentrate in the areas now located in India. The raw material of the industry has been an important factor in determining the location of the industry. It may be classified under three heads:—(i) woollen mill industry, (ii) the cottage woollen industry and (iii) the carpet industry. The mill industry is well organised and there were at the time of partition 17 major and 22 minor units engaged in the production of woollen goods. The number of woollen spindles, worsted spindles, and power looms in the mill industry were 50,000, 37,500 and 2,300 respectively. Pakistan does not possess a single well-organised mill producing any kind of woollen goods. In addition to the mill industry, there is a flourishing cottage industry in many parts of the country with approximately 100,000 hand-looms engaged mainly in the production of coarse woollen goods. The carpet industry is run both as a factory industry and as a cottage industry. So far as the mill industry is concerned, the approximate number of persons employed is 25,000. In the cottage industry the number employed may be estimated at 100,000. The carpet industry has over 10,000 looms and is estimated to give employment to over 40,000 persons.

The annual production of raw wool in Undivided India was about 86 million lbs. a year. After the partition the production of raw wool in India and Pakistan may be estimated at 60 and 26 million lbs. respectively. The production capacity of the woollen mills in India is 30 million lbs. a year. The actual production from 1946 to 1949 is given in the following table:

TABLE 27. Production of Woollen Manufactures in India

Year	Production (million lbs.)
1946	27.0
1947	24.0
1948	23.6
1949	20.1

As a result of the partition there has been a shrinkage of output in the woollen industry of India. In this connection the Census of Manufactures, 1947 gives some interesting figures. The productive capital employed in the 29 reporting factories was Rs. 3.8 crores.[1] There were 17,000 persons employed in the in-

1. The Government of India increased the export duty on jute manufactures from Rs. 80 to Rs. 350 in September 1949, in order to retain the value of foreign exchange earnings as export of jute goods was inelastic.
2. The figures given by the Census refer to 66% of the total registered factories.

dustry. The number of man-hours worked in East Punjab was 7.5. million as against 11.6 million in the preceding year. The total salaries and wages paid in East Punjab also decreased from Rs. 36 lakhs to Rs. 29 lakhs.

The total consumption of raw wool showed a remarkable decrease. About 140 lakhs lbs. of raw wool was consumed by the Indian industries in 1946 but the offtake in 1947 came down to 95 lakh lbs. In East Punjab itself the consumption was reduced from 35 lakh lbs. in 1946 to 23 lakhs in 1947. On the other hand quantities of scoured wool (35 lakh lbs.) and wool tops (44 lakh lbs.) consumed, showed an increase. About 6.8 lakhs lbs. of worsted yarns were consumed in 1946, but the figure came down to 2.0 lakh lbs., in 1947. The total value of all basic material consumed amounted to Rs. 2.85 crores in 1947 as against Rs. 2.97 crores in 1946.

The following table gives an account of the quantities of products manufactured. Figures for East Punjab are also given for purposes of comparison.

TABLE 28. Products Manufactured in the Woollen Industry, 1946 and 1947

(in thousands)

Product	Unit	India		East Punjab	
		1946	1947	1946	1947
Woollen Yarn	lbs.	2,280	2,650	1,410	1,360
Knitting wool	lbs.	914	131	12	15
Worsted Yarn (weaving)	lbs.	540	30	..	..
do (hosiery)	lbs.	230	420	..	..
Suitings	yds.	1,920	1090	400	150
Tweeds	yds.	410	560	185	185
Broad cloth & twill	yds.	426	190	170	20
Blazer cloth	yds.	120	130	74	56
Woollen flannel	yds.	970	730	380	210
Overcoating	yds.	450	320	350	80
Surges	yds.	980	1,250	170	760
Lohis & Shawls	Nos.	980	940	230	110
Shawl Cloth & ruffle cloth ..	yds.			60	10
Rugs & Blankets	Nos.	940	720	250	90
Socks, stockings and hose ..	Pairs	1,190	1,080	340	200
Jersey, pullovers etc.	Nos.	710	750	140	100
Comforters, scarves, mufflers, etc.	Nos.	750	650	80	30

The total value of products manufactured in the industry was Rs. 6.9 crores in 1946; it went up to Rs. 8.2 crores in 1947. On the other hand the share of East Punjab decreased from Rs. 2.2 crores in 1946 to Rs. 1.4 crores in 1947. The value added by manufacture was Rs. 4.4 crores in 1947 as against Rs. 3.1 crores in 1946 for the industry as a whole. But in East Punjab it decreased from Rs. 86 lakhs in 1946 to Rs. 59 lakhs in 1947.

The woollen industry which was one of the best organised of the industries in East Punjab was thus considerably dislocated as a result of the partition. Some of the Indian Mills owned by Muslims prior to the partition changed hands as the owners migrated to Pakistan, but the continued tension and disturbances in East Punjab and the non-availability of sufficient quantities of raw materials resulted in a steep decline of output. Before the partition the majority of the skilled workers employed by the industry in Amritsar, Dhariwal and Panipat were Muslims. All these workers migrated to Pakistan. The woollen industry depends upon skilled workmen to a great extent; the migration of the workers also dislocated the woollen industry in East Punjab. On the

other hand, the loss of East Punjab is Pakistan's gain, as it may be possible for Pakistan to develop a woollen industry in a short period with the help of the skilled workers.

In regard to the raw material supplies, the industry has been dislocated to a great extent, as it was getting a good proportion of its long staple wool from Pakistan. The cold areas of West Punjab and N.W.F.P. are ideal for experimentation in cross-breeding with the merino sheep. Experiments in this connection have not proved successful elsewhere in India. Thus there is great scope for Pakistan to develop her resources. Moreover, Karachi has for a long time been a collecting centre for raw wool produced in Pakistan. At present, as mentioned elsewhere, the facilities for producing woollen goods in Pakistan are very limited. But it is possible for Pakistan to establish factories and organise industries on a workable basis. When this is done, India may not be able to obtain the long staple wool of Pakistan as freely as before. She may have to depend upon increased imports from other countries. As it is, many Indian woollen products such as light-weight woollens and worsted are being manufactured from wool imported from Australia, New Zealand and the United Kingdom.

The loss of the Pakistan market is a serious handicap to the Indian industry. It is estimated that Pakistan, particularly West Pakistan used to absorb nearly 30 per cent. of the total production of the Indian industry. In the long run this difficulty may be got over as India can find alternative markets in the Middle East and the Near East and also tap the large potential internal market. In course of time, by better and more scientific breeding of sheep, rationalising the manufacturing process and engaging foreign experts to improve the quality and design of the production, the industry can make good progress.

So far as the manufacture of worsted goods is concerned, India is temporarily at a distinct advantage. The development of this particular branch of the industry is dependent on the simultaneous progress of the cotton textile industry. But Pakistan's position is potentially strong in this respect as some of the areas producing the best varieties of raw cotton are now in Pakistan. It is reported that 3 woollen factories are expected to be established in India shortly to produce fine types of goods.

India's carpet wool is one of the finest in the world but the development of the carpet industry has not progressed to the extent to which it could have done. The greatest impediment to the progress of the industry has been the difficulty of securing modern machinery.

V. SILK INDUSTRY

The most interesting feature as regards the silk industry, which distinguishes it from most of the other industries so far as the effects of the partition are concerned, is that all major centres of both the handloom and the mill industry are located in India. The partition has, therefore, worked to the complete detriment of Pakistan. But there is one difference between other industries and the silk industry. In Undivided India there were 280 mills producing silk, out of which, after the partition 274 are in India and only 6 in Pakistan. Besides, all the 68 important mills are also situated in India and Pakistan does not possess a single big unit. The employment in the silk mill industry in India is about 50,000 persons, the corresponding figure for Pakistan being negligible. Before the partition there were 12,000 silk and artificial silk power looms in India out of which, Pakistan's share was less than 100. The approxi-

mate annual production of raw silk in India is 2.4 million lbs., and the principal centres of production are Mysore, Madras, West Bengal and Kashmir. The figures for actual production are not available, but for the power looms, production may be estimated at about 150 million yards of silk and artificial silk.

The disturbance following the partition did not involve the destruction of any silk mills, though here and there some damage to the property was unavoidable. There was no transfer of any silk mills from one country to another. Though the loss in production capacity was, therefore, negligible, the actual production did suffer. As in the case of the woollen mills, a good proportion of the skilled workers in East Punjab, who were mainly Muslims, went over to Pakistan, with the result that the industry was dislocated to some extent.

The problems of the silk industry are very complicated. For building up an efficient industry, the report of the Panel on Silk appointed by the Government of India suggested the following measures:—(a) Improvement of mulberry cultivation; (b) Adequate supply of improved quality of disease-free seed; (c) Control of silk worm diseases; (d) Improvement of rearing, seeding, organisation and marketing; (e) Development of the spun silk industry and full utilisation of by-products; and (f) Inter-Provincial and State co-operation in regard to these objects.

In order to bring about improvements on all these fronts, the Government of India set up, on the recommendation of the Silk Panel, a Central Silk Board to function under Central control. The Board has to advise the Central Government on all matters relating to the development of the raw silk industry and it is empowered to levy a cess on the industry.

Though the industry has remained unaffected so far as the supply of raw materials is concerned, it is dependent on the Pakistan market, a large part of which has, however, been lost on account of the deadlock in the trade between the two countries. While it is true that shortage of skilled labour and the possible loss of a good market may not prove permanent, the industry will have hard times in the face of increasing competition from Japan. The time, has therefore, come for making every endeavour to consolidate the benefits which accrued during the war by concentrating on the internal market. This should not prove difficult in view of the fact that the annual production of silk in India, which amounts to 2.4 million lbs. can meet only 60 per cent. of the demand in the country. The rest is imported in spite of a prohibitive duty of 150 per cent. because the cost of production of silk in Japan and Italy is less as compared to that in India. The price of imported silk from either of these places would be about half of the Indian price. The most essential condition for maintaining the internal market would be a reduction in the high price of raw silk, which has already resulted in the closing down of several silk mills in India. A Technical Development Committee has been constituted under the aegis of the Central Silk Board, to go into the possibility of doubling the present output as well as of effecting a reduction in the high price of Indian silk.

So far as Pakistan is concerned, the prospects of the establishment of a prosperous silk industry in the immediate future are not bright. The problems of the silk industry are different from those of other textile industries, in as much as many more stages are involved before the fibre is woven into cloth. Because of these, as also the allied problem of mulberry cultivation, it will not be possible to establish the industry in Pakistan in a short space of time.

VI. THE RAYON INDUSTRY

Before the partition, while all the rayon weaving mills were situated in India, Pakistan provided a considerable market for rayon piecegoods. During 1948-49 India exported 24.3 million yards of artificial silk cloth to Pakistan valued at Rs. 5 crores. During the latter part of 1949 owing to strained relations between the two countries and also perhaps due to the accumulation of cloth stocks in Pakistan, the exports dwindled. But the production of rayon cloth in India reached new heights as alternative markets were found in the Middle East and Africa.

Rayon production in India is carried on with imported artificial silk yarn. There are 38 weaving mills which are mainly concentrated in Bombay, Ahmedabad and Surat. There are 8 mills in Amritsar (East Punjab) suitable for weaving rayon goods. During the post-war period 3 concerns were floated, one each in Travancore, Hyderabad and Bombay, for the manufacture of rayon yarn.

Rayon was used formerly as a substitute for natural silk. But with the realisation of its potentialities, sarees, shirtings, suitings, underwear, hosiery, neckties, linings, brocades and parachutes came to be manufactured out of rayon. The main species of rayon is the staple fibre which can be easily mixed with other varieties of yarn. The staple fibre being uniform in length, fineness and diameter constitutes an ideal spinning material. The rayon weaving industry was estimated to have had more than Rs. 2.5 crores invested in it in 1944.

India is very favourably placed for the production of rayon. Cellulose is the main raw material required for the manufacture of viscose or acetate rayon. India is rich in cellulose bearing material—cotton, bamboo, wood, baggasse, jute, reeds, sun hemp, etc. Abundant supplies of wood pulp can be got from the spruce and firewood trees grown in Kashmir and Tehri-Garhwal forests. Samples of bamboos grown in Karnatak forests have been found suitable. The chemicals required in the manufacture of rayon like caustic soda, sulphuric acid, carbon bi-sulphide, sodium sulphate, sodium sulphide, can also be manufactured in the country. The development of a heavy chemical industry is a precondition for rayon yarn production. Plentiful supplies of coal, power and water are also necessary. Power required for one pound of rayon varies between 3.5 to 4.2 kwh. About 12 tons of coal would be required for production of one ton of yarn. One pound of viscose and acetate yarn require nearly 70 and 1,000 gallons of soft water respectively.

Pakistan also has the necessary raw materials for rayon yarn production. She has also resources necessary for development of the heavy chemical industry. But she will have to depend upon imported coal. In the long run, even if the Pakistan market is lost, the Indian producers have bright prospects in the Middle Eastern countries. Besides, we must also consider the existence of a large potential market within India. The internal market for rayon products in India is likely to expand with increase in incomes.

Recent trends in rayon cloth industry in India are encouraging. Upto July 1949 Pakistan was the chief importer of rayon goods from India. Her share was 91 per cent. in the first half of the year. It came to 55.6 per cent. in July, 7.5 per cent. in August and was practically nil by October. But meanwhile India's exports to other countries were increasing. During the first half of 1949 India's exports averaged about 4 hundred thousand yards per month. In July they went upto 544,000 yards, in August they came down to 446,000 yards,

but in September they recovered to 774,000 yards, and in October they reached a peak of nearly 2 million yards. The main countries which bought the goods were Straits Settlements, Zanzibar, Ceylon, Anglo-Egyptian Sudan, Arabia, Aden, and Mauritius and other Indian Ocean Islands. Thus the rayon cloth industry is an example of rapid recovery in spite of the loss of a big market.

VII. HOSIERY

The hosiery industry in Undivided India was mainly concentrated in the Punjab, Ludhiana, Lahore and Rawalpindi being the leading hosiery centres. The partition has, therefore, resulted in a considerable amount of dislocation. Most of the Muslim workers from Amritsar, Hoshiarpur, Ludhiana and Ambala districts migrated to Pakistan.

The origin of the industry in the Punjab dates back to the time when a number of families left Kashmir after a severe famine. They settled in parts of the Punjab and their womenfolk who knew the art of knitting socks on wooden or steel rods laid the foundations of a craft which later developed into a very important industry. The first world war saw the production of woollen sweaters and pullovers. Power driven machinery was gradually installed. The hosiery industry later established itself in U.P., Bombay, Madras, Bengal and some of the leading States. The industry passed through a period of hardship in the inter-war period. World War II, however, witnessed a recovery of this industry, though there was acute shortage of hosiery knitting needles.

One consequence of the partition is that the hosiery industry lost a big market. This has particularly affected the units in East Punjab. It will take some time before Pakistan can develop a full-fledged hosiery industry, though she is well provided with supplies of raw cotton and raw wool. At present Pakistan has to depend on imported yarn, as there are few cotton and woollen mills in Pakistan.

VIII. GOLD AND SILVER THREADWARE INDUSTRY

This industry, which is popularly known as *Jari* industry, is one of the important cottage industries of India. Surat and Benares are the leading centres of manufacture. According to unofficial estimates, nearly Rs. 3 crores worth of capital has been invested in this industry in Surat alone. It gives employment to nearly 40,000 workers. The total number of factories has been estimated at 1,500. The annual production of 1945 was put at Rs. 3 crores worth of finer gold thread, Rs. 70 lakhs worth of other silver and gold threadware and Rs. 2.3 crores worth of other allied products. The Tariff Board recommended protection for this industry in 1930 when the average production was worth only about Rs. 20 lakhs. Since then the industry has made remarkable progress. The total imports of gold and silver threadware were 465,000 lbs. in 1930-31 and were valued at Rs. 27 lakhs. In 1949-50 the imports were valued at less than Rs. 2,000. The leading competitors for the Indian industry were France, Germany and Japan. On account of the fact that these countries are not in a position to compete with the Indian industry, the Tariff Board has recommended that protection to the industry should not be continued.

This industry employs highly skilled artisans and craftsmen. Apart from *jaris, chalak, tiki, salam, badla,* laces, ribbons and *kinkhab* are manufactured in this industry. The main raw materials necessary for this industry are gold and silver. The total quantity of gold used in the industry is estimated at

45,000 *tolas* valued at Rs. 52 lakhs. 6,000 bars of 2,800 *tolas* each of silver valued at Rs. 2.8 crores are used in this industry. Apart from gold and silver, 600 tons of copper wire valued at Rs. 17 lakhs are also utilised. 1 million ibs. of cotton yarn, 60,000 lbs. of silk yarn and 50,000 lbs. of rayon yarn valued at more than Rs. 55 lakhs are consumed in the industry. A large number of chemicals are also necessary in the manufacture of gold and silver threadware products. The industry manufactures its own ruby and diamond dies at Benares and Surat.

The partition has considerably affected the demand for the products of this industry. It is estimated that the territories which comprise Pakistan used to consume more than half of the products of the industry. It is also learnt that a number of merchants and artisans conversant with the industry have migrated to Pakistan. After the partition, Pakistan levied heavy import duties on gold and silver threadware, thus affecting the market for this industry. The migration of skilled artisans to Pakistan will enable Pakistan to set up its own factories. The loss of the Pakistan market has made it necessary for the industry to seek other foreign markets. The industry has a large potential market in the U.S.A. During the war American soldiers who were stationed in India familarised themselves with the *Jari* and other allied products. If gold and silver are made available to the indigenous craftsmen and proper marketing arrangements are made, the loss of the Pakistan market can be more than made good.

APPENDIX

INDUSTRIAL ESTABLISHMENTS AND EMPLOYMENT IN INDIA & PAKISTAN, 1945.

INDUSTRY	India		Pakistan		Total	
	Factories	Workers	Factories	Workers	Factories	Workers
TOTAL	13,163	2,935,739	1,406	206,45	14,569	3,141,784
I. Textiles	1,656	1,193,929	46	32,068	1,702	1,225,997
1. Clothing	6	11,516	3	11,018	9	22,534
2. Cotton Mills	926	782,364	14	19,551	940	801,934
3. Hosiery	136	9,550	20	952	156	10,502
4. Jute	89	307,394	....	....	89	307,394
5. Silk	144	17,986	7	121	151	18,107
6. Woollen Carpets ..	26	20,643	....	....	26	20,643
7. Woollen Mills	44	18,342	1	182	45	18,524
8. Miscellaneous	285	26,134	1	244	286	26,378
II. Engineering	1,734	429,430	278	52,598	2,012	482,018
9. Coach Building	169	23,464	15	954	184	23,618
10. Dockyards	11	14,735	1	237	12	14,972
11. Ele. Engineering	65	12,756	9	1,143	74	13,899
12. Ele. Generating ..	124	15,795	19	2,704	143	18,400
13. Gen. Engineering	774	147,024	147	15,772	921	162,796
14. Kerosene Tining	37	10,681	9	3,714	46	14,395
15. Metal Stamping	74	10,683	....	....	74	10,683
16. Rly. Workshops	175	129,555	33	25,240	208	154,795
17. Ship-building	23	32,483	1	353	24	32,836
18. Steel trunks etc.	13	2,754	....	....	13	2,745
19. Tramway workshops ..	5	2,702	1	108	6	2,810
20. Miscellaneous	264	26,806	43	2,363	307	29,169
**III. Minerals & Metals .. ..

	India		Pakistan		Total	
	Factories	Workers	Factories	Workers	Factories	Workers
47. Matches	127	17,538	6	435	133	17,973
48. Oil Mills	467	35,044	26	1,851	493	36,895
49. Paints and Varnishes ..	29	3,731	4	336	33	4,607
50. Soaps	41	4,441	1	53	42	4,494
51. Turpentine	2	474	1	140	3	614
52. Miscellaneous	105	11,088	3	121	108	11,209
VI. Paper and Printing ..	616	72,016	57	4,783	673	76,799
53. Paper Mills	35	22,235	..	..	35	22,235
54. Printing	535	45,679	54	4,489	589	50,168
55. Miscellaneous	46	4,102	3	294	49	4,396
VII. Wood, Stone, Glass ..	1,035	142,067	65	10,517	1,100	152,584
56. Bricks and Tiles ..	259	27,676	2	115	261	27,791
57. Carpentry	88	10,617	20	1,338	108	11,955
58. Cement, Lime	87	33,523	8	3,261	95	36,784
59. Glass	169	30,230	2	576	171	30,806
60. Stone Dressing	207	16,211	19	3,935	226	20,146
61. Saw Mills	39	7,839	1	42	40	7,881
62. Miscellaneous	186	15,971	13	1,250	199	17,221
VIII. Hides and Skins ..	294	38,707	8	2,223	302	40,940
63. Leather and Shoes ..	34	21,164	2	80	36	21,244
64. Tanneries	220	14,784	3	1,954	223	16,738
65. Miscellaneous	40	2,759	3	189	43	2,948
IX. Ginning and pressing ..	2,123	141,470	353	38,974	2,476	180,444
66. Cotton Gins	1,960	123,092	296	31,183	2,256	154,275
67. Jute Presses	27	8,831	51	7,419	78	16,250
68. Wool Presses	..	..	2	140	2	140
69. Miscellaneous	136	9,547	4	232	140	9,779
X. Miscellaneous	600	312,120	33	26,164	633	338,284
70. Brushes	8	1,628	..	..	8	1,628
71. Canvas Proofing ..	5	516	..	..	5	516
72. Forage Presses	9	877	1	38	10	915
73. Grain crushing	1	200	2	314	3	514
74. Gramaphone Records ..	2	986	..	..	2	986
75. Industrial Schools ..	9	728	..	..	9	728
76. Jewellery workshops ..	19	1,374	..	..	19	1,374
77. Laundries	8	1,088	..	..	8	1,088
78. Mints	2	5,692	1	1,621	3	7,313
79. Ordnance Factories ..	60	164,674	15	20,931	75	185,605
80. Reeds and Combs ..	2	183	..	..	2	183
81. Repairs etc.	137	15,089	2	107	139	15,089
82. Rope	23	3,583	..	..	23	3,583
83. Rubber	41	12,559	5	595	46	13,154
84. Sappers and Miners workshops..	1	1,156	..	..	1	1,156
85. Stores works	4	1,206	..	..	4	1,206
86. Telephone Works ..	3	4,730	..	..	3	4,730
87. Miscellaneous	266	95,851	7	2,558	273	98,129

CHAPTER VIII

INDUSTRIES: NON-TEXTILES

INTRODUCTION

In the preceding chapter, we have found that though India emerged out of the partition with a relatively larger share in the extent of industrial employment and with a greater diversity in the number of industries, the textile group has been considerably affected on account of the loss of the regions producing raw materials for them. In this chapter we shall give an account of the impact of the partition on the other major industrial groups of India. We shall consider the larger number of heterogeneous industries under the following functional classification:—

I. FOOD, DRINK AND TOBACCO:—Tea—Sugar—Vegetable Oils—Tobacco —Fruit Processing.

II. INDUSTRIES USING FOREST PRODUCTS:—Paper—Plywood—Match—Rosin and Turpentine—Lac.

III. INDUSTRIES USING SAND, STONE AND CLAY:—Cement—Glass—Ceramics and refractories.

IV. CHEMICALS AND ALLIED INDUSTRIES:—Chemicals—Fertilisers—Fine chemicals, drugs and pharmaceuticals—Soap—Alcohol—Paints and Varnishes—Plastics—Synthetic Petrol.

V. INDUSTRIES USING RUBBER AND REQUIRING SPECIAL SKILL:—Sports Goods—Rubber goods—Surgical Instruments—Scientific Instruments.

VI. METALLURGICAL AND MINERAL INDUSTRIES:—Iron and Steel—Non-ferrous metals—Antimony—Enamelware—Expanded metal.

VII. ENGINEERING INDUSTRIES:—Structural Engineering—Industrial Plant Manufactures—Locomotive—Automobile—Aircraft—Machine tools —Light Engineering—Electrical Goods and appliances—Diesel Engines—Power Plant—Radio Receivers—Telephone Equipment.

VIII. MISCELLANEOUS INDUSTRIES:—Tanning and leather—Motion Pictures.

At the outset it would be appropriate to mention the nature of the treatment that will be followed in connection with each industry. In each case, a brief account has been given of the development and importance of the industry, the nature of the raw materials that are utilised in the industry, the distribution of raw materials, factories, installed capacity and production between the two countries and the plans of the Governments to offset the effects of the partition and to expand the industry. Hitherto, one of the difficulties in attempting such an account, was the lack of adequate, accurate and comprehensive statistical data. The industrial panels appointed by the Government of Undivided India at the end of the war collected, for the first time, a lot of relevant information about the less known, but nevertheless important, industries of India. The various Tariff Board reports have also collected much

useful statistical material. The commencement of the publication of the Census of Manufactures by the Directorate of Industrial Statistics, is a landmark in the history of industrial statistics in India. The Census gives province-wise data about productive capital, employment, consumption of fuel, power, raw materials and chemicals, quantities and value of products and by-products manufactured in the industry and the value added by manufacure. But it covers only the Provinces and a few States excluding Mysore, Hyderabad, Travancore and Kashmir. Moreover, the data given by the Census relates only to the factories from which returns were received. As contrasted with this, the Monthly Statistics of the Production of Selected Commodities gives the installed capacity and production figures for All-India. We have given both the figures wherever necessary. But they may not tally on account of the non-comprehensive nature of the coverage and the difference in its extent.

I. FOOD, DRINK AND TOBACCO

TEA:—Organisation: North-East India, the home of this industry, was one economic unit. This industry contributed more than any other industry to the revenues of that region. Nearly three-fourths of the industry is owned by non-Indian planters and their objectives have been common and well-defined, resulting in orderly progress of the industry. In many cases the same interests own tea gardens in India and in Pakistan. The partition has, therefore, come as a particularly disturbing factor to its unified structure and organisation. This is mainly because the industry will now be subject to dual control by India and Pakistan and uniformity of development is not likely to be assured in future.

Output: In reviewing the production of tea in India and Pakistan in recent years, we may take account of the same in its world setting. The following table may prove of interest in this connection:—

TABLE 1.—Production of Tea in various Countries

(*in million lbs.*)

Country	Average 1935-39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
India[1] ..	425	464	501	564	555	510	530	593	557	568	595
Pakistan ..	..	..	..	..	..	..	..	..	43	44	45
Ceylon ..	231	265	248	291	269	297	277	283	299	299	280
Indonesia ..	170	181	194	55	4	10	..	..	3	28	60
Africa ..	17	27	29	32	27	30	31	30	32	30	28
Japan (Exports)	43	36	27	11	19	15	16	8	7	9	9
Formosa ,,	22	19	17	15	14	..	..	..	13	21	21
China ,,	79	76	20	3	3	1	..	15	36	39	39

1. Figures up to 1947 refer to Undivided India.

The table reveals certain interesting developments such as, (i) the considerable increase in the production of Indian and to an extent also of Ceylonese tea during the war, an increase which more than offsets the loss of production in Indonesia, (ii) the increase in India's production since partition, which has more than made good the loss by partition, and (iii) the progress made by Formosa since the end of the war. A return to normal production in Formosa,

China and Indonesia, is likely to have its effects on the markets for Indian tea. Among the producers in the world, the first five countries mentioned in the table are signatories to the International Tea Agreement while the last three do not participate in it. India has given its assent to the latest Tea Agreement which came into force from April 1, 1950.

Transport: The immediate effect of the partition may be characterised more as dislocation than destruction. For, in spite of the civil commotion which enveloped the country after the partition, the tea industry remained mostly unaffected. Nevertheless, the indirects effects of the partition were many and were of a serious nature calling for urgent solution.

Prior to the partition the two ports of Calcutta and Chittagong, now in India and Pakistan respectively, handled the bulk of the export. A simple arrangement was followed whereby tea grown in Assam found its way to the port of Chittagong, while tea grown in Sylhet as also the Northern areas of the present province of West Bengal was sent to the port of Calcutta. This arrangement resulted in maximum economies in the transport costs of tea, as tea was sent from the gardens to the nearest ports.

The partition, however, changed the entire set up. With the termination of the standstill agreement between the two countries in March 1948, many customs barriers grew up. At the same time the strained relations between the two countries rendered the transport of tea along its pre-partition routes difficult, if not impossible. It was found that Indian tea could not get effective priority in booking, particularly in view of the new traffic which the Pakistan railway system had to carry, because of the diversion of jute from Calcutta to Chittagong. Besides, a number of railway employees who were working in the Pakistan railways opted for India, and others who took their place were not familiar with bulk handling of tea. The shortage of wagons also added considerably to the difficulties.

In view of these difficulties, new routes had to be found for the transport of tea but the choice was severely limited. The only alternative left for the North Bengal gardens was to send the tea by rail all the way through Bihar and West Bengal, on the outskirts of Eastern Pakistan. For Assam, the difficulties were still greater as there was no direct rail link with India. From this point of view, the new Assam-Bengal Rail link is indeed a boon to the tea industry in Assam. It is true that, the new 'link' is a circuitous one and would have normally resulted in increased transport costs. But the Government has come to the aid of the industry, by adjusting freight rates for the transport of tea from Assam through the new rail link in such a way that the charges would be equal to the rates previously in force for the movement of goods through the East Bengal Railway. Besides, special concessional rates have also been introduced for the transport of fertilisers from Calcutta to the tea gardens in Assam. It may be recalled in this connection that immediately after the partition, the movement of fertilisers and of other tea garden accessories to the Assam gardens was considerably hampered. It was found necessary to send coal from Siliguri by lorries, an experiment which proved very costly and needed enormous quantities of petrol. At one stage the situation became so critical that some badly needed machinery had to be sent to Assam by air. From this point of view, no doubt, the rail link has considerably benefited the tea industry by minimising the dependence on the East Bengal Railway. In spite of the fact that the Government has guaranteed the old freight rates for transporting tea, which amounts in effect to a subsidy, arrangements will have to be made

in the long run to do without this help. At a time when a situation is developing in which world supplies are catching up with demand, it is very necessary to bring about economies on all fronts. It may be said that it would be in the interest of both India and Pakistan to remove the present barriers, and to facilitate the movement of tea along the natural and least expensive routes.

Despite the improvement that has been brought about in the transport of tea, the situation cannot be said to have been totally remedied. When all the consignments of tea finally arrive at the port of Calcutta, another difficulty crops up, namely, the limited capacity of the port of Calcutta for handling tea. When the port was severely congested during the war, the Commissioners of the port, almost overwhelmed by their numerous commitments, expressed their inability to manage the business of tea warehousing. Fortunately for the industry, a firm of planters, Messrs. Balmer Lawrie & Co. took upon themselves this unenviable job. But for this timely aid, the tea trade would have been considerably jeopardised. Of the 70 million lbs. of tea which the port of Chittagong was handling prior to partition, more than half has now been diverted to Calcutta. The warehousing facilities in Calcutta today fall short of requirements. The Government of India have lately realised the situation and are making efforts to increase warehousing facilities at Calcutta.

So far as Pakistan is concerned, the diversion of all Pakistan tea to Chittagong, has in practice resulted in a considerable amount of difficulties. The port of Chittagong is now handling a very large quantity of Pakistan's raw jute and is therefore fully occupied throughout the year. The handling of nearly 35 million lbs. of tea every year has therefore presented considerable difficulties. Apart from its limited port capacity, facilities for warehousing and auctioning in Chittagong are also limited. Though a committee appointed earlier by the Indian Tea Association, to enquire into the possibility of opening tea auctions in Chittagong reported against the proposal, the Government of Pakistan are keen on making Chittagong a centre for tea auctions. The Government has worked out plans for increasing the port capacity of Chittagong. Work on a short-term plan has already been completed while a long-term plan has been taken up. A combine of three foreign engineering firms, Messrs. Merz Rendall Vatten has been entrusted with this task. But until this is carried out, the export of tea will continue to cause concern to Pakistan.

Fuel: Coal and wood are vital necessities for the industry. Tea leaves have to be baked within a specified time after they are plucked. It is, therefore, very necessary, in order to avoid losses, to have a ready stock of coal in all the factories. With the partition of the country, almost the entire coal resources have gone to India thereby resulting in the complete dependence of Pakistan on Indian coal, unless she chooses to import it from elsewhere. The annual requirements of the tea industry, and the allotments made to it, are as follows:—

TABLE 2. Coal Requirements of the Tea Industry
(Figures in tons)

Area	Sources of supply	Quantity needed 1947	1948
INDIA			
	(*a*) Bengal and Bihar coal fields	234,000	218,500
	(*b*) Assam Coal fields	..	..
PAKISTAN			28,500

It is true that enough allocations of coal were made to keep the industry going. But the transport bottleneck came in the way of the success of this scheme. In 1947, though the requirements of the Darjeeling and Terai gardens were met, supplies of coal to the more distant Doars and Surma Valley gardens could not be met in full. This was because these supplies had to be sent through East Pakistan along the East Bengal railway, which imposed restrictions on the volume transported on account of the increased domestic pressure on the system. During 1947 the supplies of coal to these gardens were only 60 to 75 per cent. of their normal requirements. In 1948, for five months it was impossible to supply any coal to the Doar gardens over the East Bengal railway, with the consequence that they got only 64 per cent. of their annual requirements. In many cases this loss was sought to be made good by using wood fuel and this resulted in considerable deforestation.

One particularly disturbing development from the point of view of the supply of coal to tea gardens is the decision of the Assam Railways to rely on coal produced in Assam. This would mean that the quantity available for tea gardens in Assam would be considerably reduced. To make good this shortage, it is estimated that at least 36,000 tons of coal would have to be transported from West Bengal coal fields. Considering the hardship to which the industry was subjected in 1947 and 1948, on account of its dependence on the East Bengal Railway, such a proposition does not appear feasible. Now that the Assam rail link is ready, it may be possible to send some supplies of coal to Assam from West Bengal and Bihar. But this would involve considerable transport costs. It may be mentioned in this connection that recently some excellent coal deposits have been discovered in the Garo Hills in Assam. When these are exploited the shortage of coal experienced by the railway as well as the tea industry in Assam will be considerably minimised. The immediate need of the industry is an increase in the output of the Assam coalfields.

Transport dislocation had its effect on East Pakistan also. It is estimated that in 1948 nearly 3 million lbs. of tea were lost to the estates in this area on account of lack of coal, thereby causing a loss of revenue to the Provincial Government to the extent of Rs. 8 lakhs.

Tea Chests: The supply of chests to the Indian tea industry deserves a close study as the export of Indian tea in large quantities, particularly to the dollar and hard currency markets, is intimately linked to the quality of chests that are being used for exporting tea. There is at present a controversy between the Indian Tea Association (I.T.A.) and the Indian Plywood Manufacturers' Association (I.P.M.A.) as to the supply position of tea chests.

The I.T.A. has estimated indigenous production at 1.5 million chests while the I.P.M.A. puts this figure at 2.5 million chests. So far as the annual requirements of tea chests by the industry are concerned, the I.T.A. estimates it at 5.5 million chests as also a reserve of 2 million chests, which it feels is the absolute minimum stock the industry should hold. The I.P.M.A. however, feels that the annual requirements of the industry are of the order of 4.5 million chests and states that the industry is already holding sufficient stocks. Regarding the quality of the Indian chests, the I.T.A. feels that their standard is inferior to that of the imported chests, and believes that indigenous chests do not admit of rough handling which inevitably is the case when exported to distant markets. The I.T.A. therefore makes out a case for importing 5 million chests.

In discussing the merits or otherwise of this question it is difficult to decide in favour of either of these bodies to the exclusion of the other. It must be

admitted that indigenous production has increased considerably during the last two years. Besides, the price of lactic casein which is the most important raw material in the production of tea chests has recently gone down sharply, and this will have the effect of augmenting internal production of tea chests. It would be relevant to mention here that the Plywood Industry Target Committee has recommended a production target of 3.5 million chests for 1950. Further, attempts are bring made to get ply-logs from Burma and the Andaman islands. If this materialises, the production target may be revised by raising it to 3.8 million chests. The inadequacy of internal production as put forth by the I.T.A., does not appear to be a plausible argument. This increase in production also serves as an answer to the second point in question, namely the exact annual requirements of the industry. For even if, as the I.T.A. estimates, the annual requirements are of the order of 5.5 million chests, the bulk of it could be met from indigenous production. During the first half of 1950, licenses were issued for the import of 1 million chests, only from soft currency areas. At the end of this period it would be possible to review the position regarding the supply of chests, so that licenses could be issued only for the exact quantity needed. The stipulation attached to the issue of licenses, namely that the parties to whom they are issued should buy an equal number of locally produced chests, seems realistic and is calculated to prevent the extravagant building up of stocks in the tea gardens, at the same time encouraging the Indian tea chests industries.

On the other hand, if the complaint against Indian chests is that they do not stand rough handling, it could be pointed out that they could be used at least for stocking tea in the gardens. The view that the quality of the local chests is inferior to that of the imported variety has not been questioned by any party, including the I.P.M.A. The I.T.A. has been fully justified in its complaint against the quality of Indian chests. There has been a fall in the export of tea to the United States and Canada. The use of inferior chests has greatly contributed towards this fall in exports. In July 1949, the Consul-General for India in New York sent a communication to the Commerce Ministry that American importers had repeatedly complained regarding the inferior quality and workmanship of the chests in which Indian tea was exported. Ceylon and Pakistan teas are exported in foreign chests and are thus at a distinct advantage over Indian teas. Among Indian exports, tea is perhaps one of the promising dollar earners and it is necessary to safeguard the markets for this commodity. Possibilities of using increased quantities of Indian chests for supplying tea to the domestic markets, as well as markets nearer home should be explored. While promoting the use of indigenous chests, care should be exercised to see that the advantages which the country derives from the local production of tea chests are not more than offset by the loss of foreign exchange resulting from fall in exports.

Pakistan does not have to face any such problem as she does not produce any chests at all and as all her requirements are met by imports. Her main concern is to get assured supplies of chests and she has concluded agreements with Finland, Canada and Yugoslavia for this purpose.

Labour: The construction of the Assam-Bengal rail link, created a large demand for a labour force, estimated at 7,000. The daily wages that were paid to labour employed in its construction were much higher than those paid in the tea gardens. Labour was lured away from the tea gardens by means of higher wages, creating a serious situation for the tea industry. The matter was promptly taken up by the Indian Tea Association with those in charge of

construction work and a contract system was evolved, whereby every estate was to spare a certain percentage of the labour it employed, for railway construction work. This arrangement prevented considerable amount of dislocation which would otherwise have been caused to the tea industry.

The following table gives an idea of the employment in the tea gardens in Bengal and Assam:—

TABLE 3. Employment in Tea Plantations in Bengal and Assam[1]

	Average daily employment (in '000's)		Average daily employment. (in '000's)
INDIA	535	PAKISTAN	80
West Bengal	215	East Bengal	6
Assam	320	Sylhet	74

1. Employment figures for 1948 in the case of Assam and for 1942 in the case of Bengal.

Thus Pakistan has only about 80,000 workers in tea plantations as compared with 535,000 workers in India (excluding plantations in South India).

Home Consumption: The consumption in India as well as Pakistan has been fluctuating. The following estimates of consumption of tea in Undivided India may be of some significance in this connection:—

Year	Million lbs.
1915	30.5
1945	120.0
1948	150.0

Of the total consumption of 150 million lbs. in 1948, the consumption in India is estimated at 125 million lbs. and that in Pakistan at 25 million lbs. According to the Indian Tea Market Expansion Board, the consumption of tea within the country is steadily increasing and the potential demand is stated to be of the order of 200 million lbs. Though there is no rationing of tea in India, the supply for internal consumption is being regulated by the Tea Controller, though the quality offered in the home market is of inferior variety. Domestic demand is so high that it has resulted in increased prices in the home market and this is greatly hindering the export of tea. Regarding Pakistan, though her annual production is over 45 million lbs., she exports about 35 million lbs. The quality of the tea produced in the Sylhet gardens of Pakistan is much inferior to the tea produced in the Doars or Darjeeling gardens of India. Pakistan teas are mainly used for blending with Indian teas. On the other hand Western Pakistan consumes a large quantity of superior Indian tea. She has therefore a deficit of 15 to 20 million lbs. which is made good by imports from India. Further, there seems to be good scope for expanding the consumption in Pakistan, in which case her dependence on India will increase, unless Pakistan increases her tea acreage.

Exports: The partition has not affected the markets of either country. Before the partition the bulk of the Indian teas were bought by the U.K. Ministry of Food with the assistance of the Tea Controller for India. In 1947-48 the U.K.'s offtake of Indian tea was 296 million lbs. and Pakistan accounted for 28 million lbs. During the year 1949-50 the Government of India had agreed to supply U.K. with 300 million lbs. of tea. Of late foreign countries importing Indian teas have repeatedly complained about its bad quality. Apart from damage

caused by its being packed in inferior tea chests and deliberate fraud which some of the exporters might have indulged in, there are some other explanations. The main reason given for the deterioration in quality is that, during the war, with the cessation of supplies from the Netherlands East Indies and Chinese gardens, the Indian gardens had to cope up with increasing demand. For a time therefore quantity and not quality was the prime consideration.

Tea is one of the most important export commodities of India. During the war, in particular, India was the principal source of supply to every consuming country in the world. Because of world shortage which was being experienced consequent upon the cutting off of the supplies from Indonesia, India was allowed to export to the extent of 125 per cent. of its standard quota. The following table-shows the actual quantity and value of her tea exports:—

TABLE 4. Tea Exports, 1946-1950

Year	Exports	
	Quantity (million lbs.)	Value (Rs. lakhs)
1946-47	327	34,56
1947-48	384	54,90
1948-49	406	63,68
1949-50	440	72,06

The table reveals that exports of tea from India are on the increase. In terms of value, the export of tea accounted for 10 per cent. of the total exports in 1946-47, 13 per cent. in 1947-48 and 15 per cent. in 1948-49 and 16 per cent. in 1949-50. At present India's production has exceeded even that of Undivided India and hence there is great need to consolidate her export markets. In this connection, the following table which shows the countrywise breakdown of the exports of tea may be of interest:—

TABLE 5. Export of Tea, Undivided India
(million lbs.)

Country	1939	Average war years 1940-45	1946	1947	1948[1]	1949[1]
United Kingdom	274	270	204	262	295	360
United States ..	20	35	45	31	27	23
Ireland ..	17	9	16	23	25	N.A.
Canada	28	27	21	22	13	13
Australia ..	4	14	15	16	9	6

1. India only.

The table reveals that though exports to the United Kingdom have remained constant, exports to the U.S.A., Canada and Australia have decreased during 1948 and 1949. So far as the United Kingdom market is concerned, an agreement has already been arrived at with the U.K. Ministry of Food which has been buying Indian tea in bulk during the past few years. During 1950, however, India asked for higher prices. The U.K. Government agreed to grant an increase in the price by ¼ d per pound for the purchase in 1949. Exports to Australia have shown a decrease because that country is now able to import her requirements from Indonesia. But the real cause for concern is the fall in our exports of tea to the two dollar areas, the U.S.A. and Canada. There is about 50 per cent. fall in our exports of tea to the U.S.A. and Canada between

1946 and 1949. Apart from the natural disinclination on the part of Americans for consuming tea, bad packing of Indian tea has also told on the quantity of exports. The (International)Tea Market Expansion Board has taken up this problem and in 1949 detailed investigations were also carried out by an *ad hoc* committee in India, for finding out suitable ways and means for increasing exports to dollar areas.

So far as supply and demand in the world market are concerned, opinion in India is divided regarding her acceptance of the restriction scheme which has come into effect in April 1950 for a period of five years. The fear expressed is on the ground that production is increasing in the non-participating countries and that they would be able to offer effective competition in the world market. But the following table should amply bear evidence to the fact that the ability of the latter groups in this direction is limited.

TABLE 6. Tea Production in Participating and Non-participating Countries.

Year	A Production in participating countries (million lbs.)	B Production in non-participating countries (million lbs.)	C Percentage of B to C
1933	770	120	16
1940	910	215	24
1947	905	136	15
1948	934	136	14
1949	993	69[1]	..

1. Exports only.

It is significant in this connection that India has asked the International Tea Association for an increase in her export quota to the extent of 130 per cent. of the standard quota, as against the present limit of 125 per cent. Pakistan's exports are of order of about 35 million lbs. per year. Out of this the United Kingdom takes nearly 70 per cent. Pakistan teas are of an inferior variety and are imported mainly for blending with Indian and Ceylon teas. After the devaluation of the pound sterling in September 1949, Pakistan teas have become dearer in the U.K. market, and that country has therefore negotiated with India for increased supplies.

Future Outlook: The future of the industry in India and Pakistan is tied up with world trends. The virtually monopolistic position which India and Ceylon had come to enjoy during the war, in the absence of supplies from the Netherlands East Indies and China, is now tending to disappear. The N.E.I. gardens are said to be making steady progress in the direction of recovery and tea-growing circles anticipate a steady increase in production from next year so that the supply of tea would outstrip demand within the next six years. It is, therefore, necessary to plan the working of the tea industry in both India and Pakistan with a view to consolidating the position attained during the war.

The partition of the country more or less coincided with the expiry of a number of agreements of international importance and which had therefore to be renewed. Pakistan has also become a signatory to the International Tea Agreement, though in the immediate period she gains nothing by it. She is also considering the setting up of a Tea Market Expansion Board as the scope for such a body is practically unlimited. But today the tea industry in Pakistan is beset with a number of difficulties, the most urgent of them being the setting up of proper machinery to finance the tea industry. At present Paki-

stan's tea industry is financially in an unsatisfactory condition. In May 1949, more than half of the 1948 crop had remained to be cleared. The banks which had all along been financing the industry in this area had expressed their inability to continue advances any further, as the previous advances had not yet been repaid.

It is obvious, therefore, that in Pakistan the very foundation of the industry has to be strengthened while in India the problem is one of consolidating the wartime gains. Whatever their individual problems may be, it is necessary for each country to extend the utmost co-operation to the other. Disagreement on the major issue of transport can only add to the problems of the industry. The Government of India appointed a Committee under the Chairmanship of Mr. Chettur to make a thorough enquiry into the problems of the tea industry, and particularly to examine the question of tea as a dollar and hard currency earner. The Committee recommended that if something positive is to be achieved in this direction, it would be necessary to surmount some of the fundamental difficulties which have arisen as a consequence of the partition. It would be essential to cut down our transport costs as also to improve our packing. With Russia, Brazil, Kenya and Turkey seriously engaged in the task of augmenting local production and with the N.E.I. and Chinese tea production returning to normal, only timely and effective measures will enable us to maintain the position attained during the war. In this respect the Indian Tea Board which was established in 1949 has a difficult task. So far as the work of reorganisation of the tea industry is concerned, Pakistan is not lagging behind. Early in 1949, the Pakistan Tea Conference was convened in Sylhet and it was decided to appoint several Committees to suggest measures for promoting the output, consumption and export of tea.

SUGAR:—Production: This industry was one of the leading industries of the country. The history of the industry began in 1932 when the Government of India decided to give protection to the industry for an initial period of fourteen years. On account of the availability of large quantities of sugarcane and the advantages of cheap labour and a large market, the sugar factories came to be mainly concentrated in U.P. and Bihar. The area under sugarcane in India which was 2.4 million acres in 1930-31 steadily grew and today it amounts to nearly 3.7 million acres. The estimated area for Pakistan is between .6 and .7 million acres. Though Pakistan had nearly 17% of the sugarcane area of Undivided India, it had only about 6% of the sugar factories, as the following table indicates:—

TABLE 7. Sugar Mills in India and Pakistan, 1948

	Cane Factories	Gur Refineries	Total
INDIA	158	7	165
West Bengal	4	..	4
Bihar	32	1	33
United Provinces	71	2	73
East Punjab	1	1	2
Madras	13	2	15
Bombay	10	..	10
Orissa	2	1	2
Indian States	25	1	26
PAKISTAN	9	..	9
East Bengal	5	..	5
West Punjab	2	..	2
N.W.F.P.	2	..	2

Whereas India produced 1,075 thousand tons of sugar in 1947-48, Pakistan's production was only 29,587 tons. The following table gives sugar production in India and Pakistan during the last few years:—

TABLE 8. Sugar Production in India and Pakistan
(000 *tons*)

Year	India	Pakistan
1939-40	1,207	..
1940-41	1,046	..
1941-42	751	..
1942-43	1,051	..
1943-44	1,200	..
1944-45	942	..
1945-46	922	..
1946-47	901	..
1947-48	1,075	30
1948-49	1,000	53

High Sugar Prices: Though India has the largest area under sugarcane, her production of sugar is not so great, as the following table which gives the sugar production in some countries of the world clearly shows:—

TABLE 9. Sugar Production in some of the Leading Countries of the World, 1948

Country	'000 metric tons	Price in U.S. cents per lb. (March 1949)
Cuba	6,056	8.87
Brazil	1,720	8.68
India	1,202	12.70
Puerto-Rico	1,005	..
Germany	783	..
Australia	744	..
France	664	15.86
Argentina	606	5.30
Poland	550	19.84
Union of South Africa	533	6.25
Pakistan	50	..

The table also shows that the price of sugar in India is among the highest in the world. Though the retail price of sugar in India compares favourably with the prices prevailing in European countries, it is appreciably higher than that of the important sugar producing countries of the world, such as Australia, South Africa, Brazil, Cuba and the U.S.A. The high price of sugar not merely entails a sacrifice on the part of the consumer, but also comes in the way of the development of export markets, particularly in Pakistan. It would be appropriate, therefore, to analyse briefly the causes that are responsible for this state of affairs in India.

The most important raw material in the production of sugar is sugarcane. The cost of sugarcane amounts to nearly 60 per cent. and 66 per cent. of the total value of sugar in the case of U.P. and Bihar respectively, the two important sugar producing provinces of India. The high prices of sugarcane and of sugar are due to many factors:—(1) low yield, (2) poor quality of sugarcane, (3) fixation of minimum prices of sugarcane by the U.P. and Bihar Governments, (4) the competition from *gur* manufactures, and (5) arbitrary elements in price like sugarcane cess and excise.

Low yield: The average yield of cane per acre India is very low. This is because most of the sugarcane is grown in areas which are not climatically suited for sugarcane cultivation. The following table gives an idea of the yield of cane in different provinces in 1943-44:—

TABLE 10. Yields of Cane in Different Provinces in 1943-44

	Area under sugarcane in 1943-44 ('000 acres)	Yield of cane in 1943-44 ('000 tons)	Yield of cane per acre in 1943-44 (tons)
TOTAL	4,268	59,110	13.8
U.P. (including Rampur)	2,192	27,900	12.7
Punjab	553	5,750	10.4
Bihar and Orissa	456	5,380	11.8
Bengal	339	4,800	14.2
Madras	148	4,180	58.2
Bombay and Sind	169	5,290	31.3
N.W.F.P.	90	1,000	11.1
Assam	45	500	11.1
C.P. and Berar	29	430	14.8
Delhi	3	20	6.7
Hyderabad	37	800	21.6
Mysore	40	700	17.6
Baroda	4	160	40.0
Bhopal	7	50	7.1
Miscellaneous Areas	156	2,170	..

The fragmented type of cultivation that is prevalent in U.P. and Bihar contributes to the low yield. In this connection some of the Bombay factories working on plantation basis have been able to produce better results. The factories in Cuba are largely owned by sugarcane plantations. Efficient mechanical appliances are being employed in the farms and better results have been obtained.

One notable and welcome trend in the regional distribution of the area under sugarcane is the increase in the relative shares of Bombay, Hyderabad and Madras.[1] During the last ten years, U.P. and Bihar have lost their shares. Thus while the share of U.P. and Bihar in the cane area has decreased from 75.6 per cent. to 67.5 per cent. the share of Bombay has increased from 2.34 per cent. to 4.60 per cent., that of Madras from 3.19 per cent. to 6.10 per cent. and that of Hyderabad from 1.18 per cent. to 2.57 per cent. In respect of cane production the share of U.P. and Bihar has declined from 71.80 per cent. in 1938-39 to 55.72 per cent in 1948-49. The shares of Bombay, Madras and Hyderabad have increased from 4.23 per cent., 6.68 per cent., and 1.87 per cent. in 1938-39 to 10.74 per cent., 12.25 per cent. and 3.48 per cent. respectively in 1948-49. The percentage share of Mysore in respect of area declined from 1.49 per cent. in 1938-39 to 1.23 per cent. in 1948-49. On the other hand, the percentage share in production increased from 1.39 per cent. to 1.55 per cent. during the same period. These figures also make it clear that while the average yield of cane per acre has gone down in U.P. and Bihar, the yield in Bombay has increased. The yield per acre showed a decline from 14.5 tons to 11.7 tons in U.P. and from 10.4 tons to 9.8 tons in Bihar. The yield in Bombay and Mysore showed an increase from 25.4 tons and 10.4 tons to 32.9 tons and 18.2 tons during the same period. If some parts of the Deccan take to sugar cultivation the yield may be improved, as climatically South India is more fitted for sugar cultivation.

1. Report of the Indian Tariff Board on the Continuance of Protection to the Sugar industry, Bombay, 1950, pp. 25-26.

Pakistan, being situated in the sub-tropical region, also experiences the same difficulty as U.P. and Bihar. But there is greater opportunity for India in this respect, as she has possibilities for diversified cultivation. If some of the big irrigation projects materialise in India, an opportunity will be provided for growing sugarcane on plantation basis with proper supply of water, power, etc.

Quality of Cane: The quality of Indian cane is the lowest in the world and very poor in sucrose content. An acre of sugarcane gives 1.6 tons of sugar in India, whereas 6.4 tons of sugar are obtained from one acre in Java and Hawaii. Better varieties of sugarcane should be grown and proper supplies of fertilisers are necessary. In this connection, we may refer to the pioneering work done by the Indian Sugarcane Committee in breeding better qualities of sugarcane. Much might have been achieved if the U.P. and Bihar Governments had spent on research in sugarcane the funds which they collect as cesses. The lengthening of the sugarcane season might also cheapen the cost, as the factories can work for a longer period; for example, some of the Deccan factories have a longer season.

Cane Prices: The cost of cane forms nearly two-thirds of the cost of sugar. So long as the price of cane is institutionally fixed and tends to be rigid, there is very little hope for reducing the price of sugar. The Government of India, empowered the Provinces in 1934 to fix the minimum prices of sugarcane. This step undertaken in order to give to the farmer a share in the profits of the sugar industry. Today any proposal to reduce the minimum price of sugarcane meets with powerful opposition from the strongly entrenched vested interests. No sound basis on which sugarcane prices can be fixed has been evolved. These prices have been fixed on the basis of the market price of sugar. High prices of sugar tend to exert a two-fold influence on sugarcane prices. Apart from starting a spiral of high sugarcane prices, scarcity of sugar leads to increased consumption of *gur* and so for increased demand for sugarcane from *gur* manufactures. Though more than 50 per cent. of sugarcane grown in the country is used for *gur* manufacture, there is a natural tendency to substitute *gur* for sugar when the prices of the latter are high. In such circumstances the sugar factories are not provided with sufficient cane supplies and the cane prices will have to be increased to attract larger quantities of sugarcane, thus ultimately leading to increased prices of sugar. The Tariff Board has suggested various factors for determining the prices of sugarcane. The criteria to be included are the cost of cane cultivation, the estimated return to the grower if he converts his cane into *gur*, the quality of cane, the probable estimated return to the grower from alternative crops, the parity prices of important articles of consumption for the cane grower, such as food grains, cloth, kerosene, etc., and the expected price for sugar.

Cess and Excise: Added to this are other items of cost which are rather arbitrary. The cane cess levied by the Provinces is one such element. The total revenues that the two Provinces U.P. and Bihar have realised since the imposition of the sugarcane cess ten years ago, amount to nearly Rs. 8 crores in U.P. and Rs. 3 crores in Bihar. Out of this amount, U.P. has spent barely Rs. 1.7 crores on cane development research and Bihar about Rs. 1.5 crores. The levy of cane cess raises the important issue as to whether the consumers all over India who bear the cost of protection, should pay for the tax levied by these two Provinces. Along with the cane cess is the excise duty on sugar imposed by the Central Government. Formerly this duty was imposed in order to offset the loss through customs on account of protection. The sugar excise has today become a fruitful source of revenue. The commission given to the Co-

operative associations for purchasing cane also adds to the cost of sugarcane. Finally we must not forget that technical efficiency of some of the factories in India leaves much to be desired.

The strength of the above remarks are amply borne out in Table 11. It shows that out of the total of Rs. 45 crores of capital employed in the sugar industry in India, the shares of U.P. and Bihar amount to nearly Rs. 39 crores. The sugar industry provides direct employment to nearly one hundred thousand workers and indirectly to more than 20 million cultivators mostly in U.P. and Bihar. The yield of sugarcane per acre in Bombay is nearly twice that in U.P. and more than thrice that in Bihar. The price paid per ton of sugarcane is Rs. 47 in Bombay, Rs. 52 in Madras, Rs. 61 in U.P. and Rs. 58 in Bihar. The cost per ton of sugar is the lowest in Bombay (Rs. 531) and the highest in U.P. (Rs. 722). The recovery per cent. is the highest in Bombay (11.5) and the lowest in Madras (9.2), where the average cost per ton of sugar produced is the highest (Rs. 960).

If the other provinces are supplied sugarcane at the same rate as in Bombay the cost per ton of sugar would amount as follows:—Madras—Rs. 643, U.P.—Rs. 582 and Bihar—Rs. 578. Granting further that the other provinces have the same recovery per cent. as Bombay, the cost per ton of sugar would be as follows:—Madras—Rs. 517, U.P.—Rs. 506, and Bihar—Rs. 532.

But, there are definite limits beyond which the yield of sugarcane per acre cannot be increased in sub-tropical regions. Ultimately the cost of sugar can be reduced only in two ways: (i) by increasing the yield per acre of sugarcane and (ii) by increasing the recovery per cent. The former is possible if the sugar factories are shifted to South India and more of sugarcane instead of other crops are grown in these areas. Increased recovery is possible if better quality of sugarcane is supplied to the factories. Such sugarcane requires employment of fertilisers and breeding of sugarcane with high sucrose content.

TABLE 11. Relative Efficiency in Sugar Production in Different Provinces, 1947

	Bombay	Madras	U.P.	Bihar	India
Area under sugarcane[1] ('000 acres) ..	211	273	2,285	366	4,047
Percentage of total area[1]	4.60	6.10	57.38	10.19	..
Production of sugarcane[1] ('000 tons) ..	6,950	7,530	27,560	3,620	52,780
Percentage of total production[1] ..	10.74	12.25	48.54	7.18	..
Yield per acre[1] (tons)	32.9	27.6	15.9	9.9	14.3
Proportion of cane crop[1] utilised in sugar production	16	12	24	70	53
Total number of factories[2]	10	12	91	43	166
Total number of workers	5,692	5,625	52,893	29,443	97,005
Total productive capital employed (Rs. lakhs)	2,76	1,66	30,38	8,22	44,69
Total quantity of sugarcane consumed ('000 tons)	618	575	5,404	1,525	8,373
Total value of sugarcane purchased (Rs. lakhs)	2,94	2,99	32,91	8,88	49,12
Price paid per ton of sugarcane (Rs.)	47	52	61	58	59
Total expenditure incurred in the factories (Rs. lakhs)	3,77	3,70	39,00	10,99	59,24
Cost per ton of sugar (Rs.)	531	698	722	682	695
Recovery per cent	11.5	9.2	9.99	10.6	10.2
Total value of products and by products (Rs. lakhs)	6,80	5,47	50,01	14,74	79,54
Total value of sugar (Rs. lakhs) ..	6,63	5,09	49,57	14,68	78,41
Value per ton of sugar (Rs.)	934	960	903	912	920
Value of sugarcane as per cent of above	45	59	66	60	62

1. Figures refer to All-India.
2. Figures in this and the succeeding items refer to the factories covered by the Census of Manufactures, 1947.

State Policy: The Government of India has not followed any consistent policy in controlling the production and prices of sugar. During 1947-48 the Central Government removed the control on prices of sugar, with the consequence that they rose up to nearly Rs. 35/- per maund. Control was later reimposed and prices were fixed at about Rs. 28 per maund. This reduction in price coincided with the large influx of refugees in India, and the consumption of sugar increased.

The prices of sugarcane are fixed by the Provincial Governments which have the interests of sugarcane cultivators in their Provinces at heart and ignore the necessity for cheapening the cost of sugar. The activity of the Sugar Syndicate, which had been granted statutory recognition, have not been above suspicion. It was stated that there was a fear of over-production in 1948-49 as there was a surplus of 2 lakh tons. It was reported that nearly 50,000 tons of sugar were smuggled to Pakistan. The Government of India referred to the Tariff Board the issue of the grant of protection to the sugar industry. It also asked the Tariff Board to investigate the causes for the sugar muddle. The report of the Tariff Board suggested withdrawal of protection for the sugar industry from April 1, 1951. The Government of India has accepted the Tariff Board's recommendation. The protective duty has been cancelled and in its stead a revenue duty of the same amount has been imposed. The Tariff Board strongly criticised the Government, the industry and the cultivators for their complacent attitude. "We have felt, that the continuance of protection for the last 18 years has produced the attitude of complacency on the part of the three parties, viz., Government, the industry and the cultivator, who are responsible for the efficiency of the industry and consequently they have not taken sufficient steps to improve the overall efficiency of the industry so as to bring down its cost of production." The Tariff Board very strongly criticised the activities of the Sugar Syndicate. "In its dealings with the Government of U.P. and the Sugar Commissioner regarding the releases of 1949 the Syndicate was far from being straight forward. By its improper policy of quota-releases and by approaching the Government of India last year to negotiate for the export of sugar, the Syndicate created psychology of scarcity in the country, which led to hoarding by merchants and consumers." The Board recommended the withdrawal of statutory recognition of the Sugar Syndicate. Apart from the indiscriminate releases of quota and the alleged smuggling to Pakistan, one of the reasons for the creation of a psychological idea of scarcity was the series of unco-ordinated measures taken by the Provincial Governments and the complacent attitude of the Central Government. The Central Government was paying no heed towards the sugar situation as they remained contented with fixing a statutory price. The Provincial Governments were therefore expected to use their legal powers to control sugar production; the U.P. Government, when it froze sugar stocks on 23rd August 1949, did not work in co-ordination with other sugar producing provinces of the country. Therefore suitable opportunity for sending large stocks of sugar underground was created. Even then most of the sugar stocks had been despatched by August. The Tariff Board therefore suggested that an enquiry should be held to account for the excess release of wagons which enabled the diversion of sugar to Eastern and Western Pakistan. The Government of India has appointed a committee of enquiry.

Future Outlook: This report is very significant. Though the sugar industry may not face competition on account of world conditions,[1] the Tariff Board

1. The Government of India is reported to have decided to import 100,000 tons of sugar in 1950.

has very strongly indicted the industry. Henceforth the sugar industry cannot be certain of a sheltered market. If prices of sugar are brought down, India can regain the lost market in Pakistan and also develop markets in other countries. It may be mentioned in this connection that though a quota of 50,000 tons of sugar was allotted for Pakistan in the first inter-Dominion Commodity Agreement for 1948-49, Pakistan did not avail itself of the quota fully. The principal reason was that the Indian sugar prices compared very unfavourably with those of Cuba or Brazil. The price of Brazilian sugar in Pakistan was Rs. 17 c.i.f. per maund, while that of Indian sugar was Rs. 30 to Rs. 31 c.i.f. per maund. Because of this wide disparity, Pakistan found it to be advantageous to buy sugar from other countries.

By following the remedies suggested by the Tariff Board, by growing sugar cane in larger quantities in Bombay, Madras and other South Indian areas, by utilising the large quantities of by-products that are released in the manufacture of sugar and by greater attention to the quality of sugarcane, it is possible to bring down the prices of sugar. It is known that the large quantities of by-products can be profitably utilised for industrial purposes. Molasses can be used to produce power-alcohol. Bagasse which is used as a fuel in sugar factories can be used for the manufacture of insulating materials and pressboard, writing paper and straw-board. It can also be used for manufacture of plastics and resins. Much research can be carried on in this direction. Regionalisation of the sugar industry will bring down the costs due to the large element of transport charges which have contributed to increased prices.

Pakistan's estimated requirements are 265,000 tons. The actual production is not even one-fifth of this. The sugar panel appointed by the Pakistan industrial convention proposed the starting of ten sugar mills with a total production capacity of 135,000 tons per annum. The new sugar factory under construction at Mardan (N.W.F.P.) capable of producing 50,000 tons per annum, is stated to be the biggest and most modern in Asia.

VEGETABLE OILS:—Undivided India was one of the leading producers in the world in respect of oils and oilseeds. Large quantities of the oils are consumed as food. Vegetable oils are also used in the manufacture of soap, paints and varnishes, *vanaspati* and tallow substitutes, lubricants and turkey-red oil. Castor oil is used in medicine. Vegetable oils have been produced in India in *ghanis*. During the war, expellers became prominent. Punjab particularly had specialised in the manufacture of expellers. Because of the increase in population and the non-availability of *ghee*, butter, etc., the *vanaspati* industry expanded during the war and the indigenous manufacture of expellers facilitated the production of *vanaspati*.

In respect of India, the Census of Manufactures gives some interesting details. There were 910 factories in 1947 in this industry as against 570 in 1946. The productive capital employed in 1947 was Rs. 31.3 crores. About 53,000 workers, were employed in the industry. Table 12 shows the quantities of raw materials consumed and of the products manufactured in this industry.

The main products of the industry were groundnut oil, rape seed oil, linseed oil and edible hydrogenated oils, their values being 26%, 18%, 6% and 20% of the total value of products and by-products. The gross value of the products manufactured in this industry was Rs. 84 crores. The value added by manufacture was Rs. 6.7 crores.

Large quantities of chemicals are required in the production of vegetable oils. India is well provided in respect of the supplies of chemicals. As

TABLE 12. Materials Consumed and Products Produced in the Industry

Material Consumed	Quantity (thousand tons)	Material manufactured	Quantity (thousand tons)
Groundnut	534	Linseed oil	33
Coconut	29	Rape seed oil	84
Rape seed	256	Castor oil	19
Linseed	106	Sesame oil	6
Sesame	17	Coconut oil	18
Cotton seed	6	Groundnut oil	171
Mowah	12	Mowah oil	5
Unrefined groundnut oil ..	101	Refined oils	16
Chemicals	4	Edible hydrogenated oils	87
		Linseed cake	160
		Castor seed cake	32
		Groundnut cake	263

regards oils, except for coconut oil, she has plentiful supplies of others. Groundnut which was largely exported prior to the war came to be used for internal production and consumption during the war years.

Pakistan's requirements of edible oils are about 250,000 tons and of hydrogenated oil 60,000 tons. The production capacity of the organised and unorganised sections is 60,000 to 80,000 tons. Pakistan is not well supplied with many of the oilseeds except cottonseeds. The capacity of production is highly insufficient for her total requirements. She will therefore have to be dependent upon India for supplies of these oils. East Bengal particularly is a large consumer of mustard oil. There is, however, no certainty about the Pakistan market. It is reported that Pakistan bought hydrogenated oil from the Netherlands after getting it specially prepared. This shows that the Indian industry will have to plan for alternative export markets.

TOBACCO:—With the partition, 1,021 thousand acres of the area under tobacco are in India. East Pakistan is left with 199 thousand acres while in West Pakistan only few acres are devoted to the producction of tobacco.

The production of tobacco in India is concentrated in four main areas:—(i) Guntur—Flue-cured Virginia tobacco was introduced in this area in 1928. There are nearly 6,000 flue-curing barns and the tobacco is cured by hot iron pipes. This quality of tobacco finds a ready market in the United Kingdom, the Middle-East and Pakistan and is used for the manufacture of cigarette and pipe tobacco. Indian cigarette manufacturers are also large consumers of this variety; (ii) North Bihar—A major portion of the tobacco grown here is utilised for chewing and for cigarette manufacture; (iii) Gujarat—Tobacco grown here is utilised for the manufacture of *bidis*, *hookas* and snuffs; (iv) Nipani (Belgaum Dist.)—This tobacco is utilised for *bidi* manufacture.

The *bidi* industry is carried on mainly as a cottage industry, and so the figures of employment are, therefore, not available. But as regards *bidi* factories, the partition left Pakistan with only a few concerns, most of the factories being located in India. According to the Marketing Report on Tobacco 25 per cent. of the output of *bidis* was turned out by C.P., about 20 per cent. each by Bombay and Madras and the remaining 35 per cent. by the rest of the country, amongst which Hyderabad and Mysore were important. Plentiful supplies of *bidi* leaves are necessary for manufacturing *bidis*. C.P., is well placed in this respect. Pakistan has to import *bidi* leaves from India.

The cigarette industry is a large-scale factory industry requiring large capital equipment. During the war this industry made tremendous progress due to the difficulty of importing cigarettes. It is concentrated mainly in a

few big cities like Calcutta, Saharanpur, Monghyr, Jullundur, Allahabad, Hyderabad, Baroda, Bezwada and Gwalior. The factories in India are capable of producing 30,000 million cigarettes per annum. The actual production was 19,000 million in 1947, 22,000 in 1948 and 1949. In Pakistan, Lahore and Sukkur were the chief centres. But these centres depended upon tobacco imported from India. Although Pakistan's present requirements of cigarettes are stated to be about 3,000 million cigarettes, she has the capacity to produce only 360 million cigarettes. A factory with a capacity to make 1,500 million cigarettes is under construction. Tobacco suitable for cigarettes has not yet been grown in Pakistan. Experiments conducted in East Pakistan gave disappointing results, because the very heavy rainfall resulted in the loss of colour in the flue-cured tobacco. In West Pakistan experiments are being carried on in the Montgomery and Attock districts, where some encouraging results have been achieved. But the difficulty of supply of fuel for the barns will always be there.

Pakistan depends upon supplies from India in respect of manufactured tobacco, flue-cured tobacco and *bidi* leaves. The following table indicates the total exports of tobacco and its products from India and exports to Pakistan:—

TABLE 13. Exports of Tobacco from India

	Quantity (million lbs.)			Value (Rs. Lakhs)		
	1947-48	1948-49	1949-50	1947-48	1948-49	1949-50
Total tobacco exports	53	56	76	6,41	8,26	10,80
Exports to Pakistan ..	..	6	8	18	2,08[1]	1,60

1. They would amount to Rs. 6 crores if land exports are included.

If the relations between the two countries are strained, India will perhaps lose a valuable market. The export duty levied by India and the import duty levied by Pakistan are likely to contribute towards shrinkage of demand for Indian tobacco and tobacco products in Pakistan.

FRUIT PROCESSING:—The fruit preservation industry is of recent origin in the country. In the pre-war period a few firms in Bengal, Bombay, Madras and the Punjab were engaged in this industry. The heavy reduction of imports during the war and the increased demand for preserved fruits on the part of the defence services and the civilian population, gave a stimulus to the industry and canning factories came to be established all over the country. It was estimated that there were about 186 factories in existence in Undivided India in 1947. The total value of products manufactured was estimated at nearly Rs. 17 crores.

The following table shows the distribution of leading manufacturers in India and Pakistan:—

TABLE 14. Fruit Processing Factories in India and Pakistan

INDIA	83	PAKISTAN	33
Bombay	19	West Punjab	22
Madras	4	N.W.F.P.	7
C.P.	6	Baluchistan	4
West Bengal	23		
U.P.	5		
Delhi	12		
East Punjab	7		
States	7		

Areas forming West Pakistan had developed this industry to a relatively greater extent. Some of the best fruit growing areas are located in Baluchistan

and N.W.F.P. The factories in India used to derive a large portion of fruit supplies from Baluchistan and N.W.F.P. The proximity to Kashmir which is well known for its fruit gardens, was one of the reasons for the flourishing state of the industry in West Punjab. Research in fruit presevation was being conducted in Lyallpur and Quetta. Some of the best fruit processing factories are now situated in Pakistan.

The partition has affected the industry in two ways. It has reduced the size of the domestic market. It has also affected the flow of fruits to Indian factories. Besides fresh fruits and sugar, containers like glass bottles and tin cans and chemical preservative are the other raw materials required in this industry. In this respect India is better provided than Pakistan. On account of the lack of supplies of bottles, canning materials, jars, tinplates and sugar, the Pakistan factories are not in a position to produce upto the full extent of the installed capacity. After the construction of the sugar factory at Mardan (N.W.F.P.) the supply position may become easier in respect of sugar. The Pakistan Government has planned the erection of bottling units in the different provinces. In India, after the partition a few new factories came into existence in East Punjab, whose rich fruit gardens at Kulu Valley, had hitherto been untapped.

II. INDUSTRIES USING FOREST PRODUCTS

PAPER:—At the time of the partition all the paper mills were situated in India. Though Pakistan was feeding the paper mills with appreciable quantities of raw materials like bamboo, rags and rosin, there was not a single factory in Pakistan. West Bengal has the largest number of mills in India, and accounts for more than 50 per cent. of the output of paper. The existing paper mills in India are located as under:—

TABLE 15. Location of Paper Mills in India

Province/State	No. of mills	Province/State	No. of mills
West Bengal	4	East Punjab	1
Bombay	8	Hyderabad (Deccan)	1
U. P.	2	Mysore State	1
Orissa	1	Travancore State	1
Bihar	1	Madras	1

The Panel on Paper and Board appointed by the Government of India during the War had evolved a scheme for expanding production and consumption in two five-year periods. The following sites were suggested by the Panel for the different sections of the industry:—

TABLE 16. Suggested Sites for Paper Industry

Section of Industry	Suggested site
Printing and writing paper ..	.. Madras, Bombay, Assam, Punjab, C.P., Bihar, Rewa State and Eastern State Agency or Orissa.
Cheap writing paper	.. U.P., Bihar, Bengal, Bombay, Madras, Sind, Punjab C.P., and Berar.
Kraft paper	.. Bombay, C.P., and Orissa.
Newsprint	.. Hyderabad, Punjab, Kashmir State, U.P.
Straw and other boards	.. Bombay, Bengal, Orissa, Sind, Punjab, C. P. and Berar, Madras and Hyderabad (Deccan).

India depends upon other countries for supplies of newsprint, the annual consumption of which is more than 30,000 tons and involves foreign exchange to the tune of Rs. 3 crores. Some provinces have recently started the manufacture of newsprint. Two factories were started in C.P., one at Chandni and another at Chanda. The C. P. Government has been taking very active interest in these concerns. The Nepa Mills have been taken over by them. In West Bengal also an attempt is being made to manufacture newsprint, and orders for machinery have already been placed. It has been estimated that the Indian paper industry would require capital goods worth nearly £24 million from the U.K. and £91 million from the U.S.A. and Canada.

The quality of Indian paper being superior, protection to the paper industry was withdrawn as it was expected that the Indian industry would be able to stand on its own legs. The present annual consumption of paper and boards in India is estimated at about 200,000 tons. While the potential capacity for production was stated to be 125,000 tons, the actual production during 1947-48, however, was only 93,277 tons due to strikes, transport difficulties and particularly due to lack of raw material supplies from Pakistan. The rate of production in 1947-48 varied from 7,500 tons to 8,600 tons per month.

According to the Census of Manufactures there were 22,000 persons employed in this industry which had a productive capital of Rs. 6.7 crores.[1] The following materials were consumed in the industry:—

TABLE 17. Raw Materials Consumed in Paper Industry.

Material	Quantity consumed 1946	1947
	Tons	Tons
Wood pulp	4,600	3,100
Grass	56,000	42,000
Bamboos	130,000	110,000
Rags	9,200	7,300
Waste paper	31,300	19,700
Jute waste	3,225	3,800
Bagasse	319	2,200
Straw	5,216	8,700

The following quantities of products were manufactured:—

TABLE 18. Products Manufactured in the Paper Industry

Product	1946		1947	
	Quantity '000 tons	Value Rs. lakhs	Quantity '000 tons	Value Rs. lakhs
Writing & Printing paper	57	5,14	45	3,99
Wrapping paper	12	96	14	1,15
Boards	30	2,10	34	2,33

The total value of all the products was Rs. 8.08 crores, as compared with Rs. 8.78 crores in 1946, West Bengal's contribution being Rs. 4.67 crores and Rs. 3.65 crores respectively. The value added by manufacture diminished from Rs. 2.27 crores in 1946 to Rs. 3.00 crores in 1947.

1 The data given by the Census refer to 84% of the total registered factories.

The following table gives the production of paper in all factories in India from 1946 to 1949:—

TABLE 19. Installed Capacity and Production of Paper in India

Year	Capacity ('000 tons)	Production
1946	90	106
1947	110	93
1948	110	98
1949	135	103

The table reveals that though there was an increase in the installed capacity, there was a decrease in output in 1946 and 1947 compared to the output in 1946. The Central Advisory Council of Industries has fixed a target of 275,000 tons (180,000 tons of paper, 20,000 tons of newsprint and 75,000 tons of boards) to be achieved within a period of five years. The short-term target is put at 200,000 tons. Expansion schemes are expected to give 28,000 tons additional capacity. Another 44,000 tons capacity is expected by 1952.

The paper mills were drawing large supplies of rosin, rags, salt and lime from West Pakistan and the West Bengal paper mills were drawing nearly 40,000 tons of bamboos from East Bengal forests. The flow of raw material supplies to West Bengal paper mills was interrupted and the share of West Bengal in the value added by manufacture diminished from Rs. 1.87 crores in 1946 to Rs. 1.37 crores in 1947. The export duties levied by Pakistan on bamboos and the non-co-operative attitude on the part of East Bengal Railway largely contributed to the smaller quantities of raw materials supplied from East Bengal. Thus the West Bengal paper mills which were formerly ideally located for paper production have now been placed in an unfavourable situation. India is rich in bamboo supplies but these bamboo supplies have to be obtained from distant areas in order to feed the West Bengal paper mills. Undivided India's annual production of bamboos was estimated at nearly 600,000 tons. Bombay, Mysore, Bengal (particularly areas now forming part of East Pakistan), Orissa, Madras and C. P. were leading producers. West Bengal mills have now to draw their supplies from Madras, Orissa and C. P. A long term policy as regards supplies of raw materials to this industry is necessary. Freight concessions will have to be given to the movement of materials. Otherwise these mills will be faced with severe handicaps. Adequate grant of forest concessions and facilities for transport will bring the West Bengal mills once again into prominence. Dispersal of factories in other parts of India will also facilitate production and distribution at low price.

Pakistan's demand for paper, cardboard and pulp products is estimated at 20,000 to 25,000 tons, while she has no capacity for production. The Pakistan Government invited technical missions from Sweden and Canada to prepare project reports. The East Bengal Government are making attempts to instal a pulp and paper mill with a capacity of 30,000 tons at an estimated cost varying between Rs. 4½ crores and 7 crores depending upon the process adopted. Although the main raw materials are available here, Pakistan will have to depend on other countries for chemicals, coal and dyes. The fulfilment of the scheme depends upon the generation of power from the Karnafulli project. West Pakistan has no resources for the production of paper. Transporting paper from East Pakistan to West Pakistan will be very costly.

PLYWOOD AND TEA-CHESTS:[1]—All the plywood factories fell to India as a result of the partition. But as Pakistan exports 35 million lbs. of tea she requires tea chests. In the first Inter-Dominion Commodity Agreement she asked for 3 lakh tea-chests from India. The production in India itself is only about one-fourth of India's requirements. India imported tea-chests to the value of Rs. 1.89 crores in 1948-49 and Rs. 1.27 crores in 1949-50. As tea is one of the most important commodities which earn exchange for India, this industry has got an added significance.

Plywood came to be used for tea-chests just after the World War I. As timber is the most important raw material, forest concessions were given to the first few factories. In 1938 there were three factories, two in Assam and one in South India. Just before the World War II five new factories came into existence. West Bengal, Madras, U.P. and Bihar became prominent centres. At the beginning of the war the total production was 13 million square feet, but it reached a peak figure of 50 million square feet in 1944. The Tariff Board recommended protection to the industry till March 1950 and production increased to 54 million square feet in 1948. But the industry was not facing a happy time in 1949, on account of lack of demand, as the tea growers were reluctant to buy Indian tea chests because of low quality. Total production declined to 47 million square feet, though the installed capacity was 100 million square feet.

The principal raw materials required are timber and adhesives. It has been found that enough timber (i.e. 150,000 tons of wood) of the right quality is available in India. The principal adhesive used is casein. This was once produced in India but recently prices went up and imports had to be allowed. According to the Census of Manufactures Rs. 1.2 crores of productive capital was employed in the industry in 1947, giving an employment to 3,300 persons. About 1.7 million cubic feet of timber costing about Rs. 28 lakhs and 10,000 cwts. of casein costing about Rs. 10 lakhs were used in the factories. About 1.5 million tea-chests and 5 million square feet of commercial plywood were produced valued at Rs. 70 and 20 lakhs respectively.

The Government of India are considering the installation of plywood factories in the Andamans in order to make India self sufficient in plywood. With proper quality of tea chests it may not be difficult to satisfy the needs of tea-growers. The Pakistan market may also be retained. Pakistan, meanwhile, has made arrangements for purchasing tea-chests from Finland and other countries.

MATCH:—The match factories in Undivided India were very unevenly distributed at the time of the partition. Accurate figures of the number of production units are not available as a large portion of the industry is worked on a cottage industry basis. The following table gives the location of the factory section of the industry:—

TABLE 20. Location of Match Factories in India and Pakistan

	No. of factories.		No. of factories
INDIA	36	PAKISTAN	8
Madras	11	East Bengal	4
West Bengal	8	West Punjab	3
U. P...	4	N-W.F.P.	1
Bombay	3		
C. P. & Berar	2		
Assam	2		
Bihar	1		
States	5		

1. See also the section on Tea-Chests in Tea industry.

The leading producer in the match industry is WIMCO, a Swedish firm which has its branches in the prominent cities of India and also one branch at Lahore in West Pakistan.

According to the Census of Manufactures, which gives details of output for 64 per cent. of the match industry in India, there were 12,000 persons working in the industry, which employed productive capital worth Rs. 2.11 crores in 1947. The following were the chief raw materials consumed:—

TABLE 21. Raw Materials Consumed in the Match Industry

Material	Unit.	Quantity (*in 000's*)
Wood	c. ft.	3,700
Amorphous phosphate	cwts.	1,900
Chlorate of Potash	,,	29,000
Glue	,,	7,000
Paraffin Wax	,,	34,000
Starch	,,	26,000

The total value of raw materials and chemicals was Rs. 1.98 crores, the cost of wood being Rs. 1.12 crores. 19.6 million gross match boxes valued at Rs. 4.7 crores were manufactured.[1] The value added by manufacture was Rs. 7 crores, the contribution of Madras and West Bengal being Rs. 74 lakhs and Rs. 61 lakhs respectively.

A number of varieties of trees suitable for the manufacture of splints or boxes are found in India. In this connection the Tariff Board remarked in 1928 that the factories in India were not properly located with regard to the economic utilisation of wood.

According to sea-borne trade figures issued by Pakistan, Pakistan is reported to have imported matches worth nearly Rs. 24 lakhs from India in 1948-49. But in the annual figures issued by the Government of India there is no report of export of matches to Pakistan. It is reported that the Government of Pakistan is thinking of giving protection to the indigenous match industry. In that event the Indian industry will lose a large section of its market.

ROSIN AND TURPENTINE:—Prior to the partition, all the rosin collected in East Punjab forests used to be sent to the factory at Jalo in West Punjab. Many of the industries in India, like paper, textiles, paints, varnishes and soap, drew their supplies of rosin from this factory. After the partition the East Punjab Government made efforts to collect the rosin and established a rosin and turpentine factory at Hoshiarpur, capable of manufacturing 60,000 maunds of rosin. Thus the temporary loss which arose on account of the partition has been made up and Indian industries have been assured adequate supply of rosin. The West Punjab factory, therefore, may have to remain idle as there are no rich forests in West Punjab. Most of the forest wealth has come to be concentrated in East Punjab. Pakistan has also no need of rosin at present as no industries requiring this product have yet been developed. Besides the factory at Hoshiarpur, there is also another rosin factory in the U.P. which processes rosin collected from the U.P. forests.

The following figures give an idea of the consumption of rosin by Indian industries:—

1 The total production capacity in the match industry is 40 million gross boxes per annum, the actual production in 1949 being 26 million gross boxes.

TABLE 22. Consumption of Rosin in Indian Industries in 1946 and 1947

Industries.	1946 (in tons)	1947
Soap	2,074	1,390
Paints and Varnishes	1,300	1,200
Paper	1,802	1,409
Cotton Textiles	1,300	1,100

There is a decrease in the quantities of rosin consumed by these industries. This must have been due to the post-partition disturbances and dislocation as a result of which supplies of rosin from the factory at Jalo in West Punjab could not be obtained.

LAC:—India was supplying 90 per cent. of world's requirements of lac prior to the war. Siam, Indo-China and Burma, supplied the rest. The refining of raw lac into shellac and sticklac was the monopoly of India and other countries used to send raw lac to India for processing. It is reported that in recent years Siam has made tremendous progress. A large number of shellac factories have been started there. Thus India's monopoly position is being threatened. Whereas India exported 542,000 cwts. of lac products in 1947-48 valued at Rs. 9.11 crores, in 1949-50 the exports decreased to 455,000 cwts. valued at Rs. 8.08 crores.

Lac is a resinous substance secreted by an insect which lives on the twigs of certain trees. The insects are extensively cultured in Bihar and Central India. The lac industry provides employment to nearly 30,000 workers in India in the processing field and to nearly 3 million families in villages for collecting lac. India's production and potentialities in respect of lac have not been affected by the partition, though East Pakistan has some resources of lac.

III. INDUSTRIES USING SAND, STONE AND CLAY

CEMENT:—The cement industry in Undivided India is hardly 40 years old. Portland cement was first manufactured on a small scale in Madras in 1904. But the foundation of the present industry came to be laid in 1912. At the time of the Second World War the industry had a productive capacity of 1.5 million tons, controlled by 5 well-organised companies, of which the Associated Cement Companies and Dalmia Cements were prominent. Cement factories lay scattered throughout the country but most of them were in Central and Northern India. The war period saw a tremendous development of the cement industry due to the increased internal and foreign demand. The Government of India appointed a Cement Advisory Council and Regional Cement Advisers to assist them in connection with cement supplies, the Government offtake being nearly 90 per cent. of the total output. As the war ended, private demand gradually replaced Government demand.

In 1947 there were 25 cement factories with a capacity of 2.8 million tons per annum. As a result of the partition, 19 factories with a capacity of 2.1 million tons are located in India and the rest are in Pakistan. The following table gives the distribution of cement factories between India and Pakistan at the time of the partition:—

TABLE 23. Cement Factories in India and Pakistan

INDIA	19	PAKISTAN	5
Bihar	6	Sind	2
Madras	4	West Punjab	2
States	8	East Pakistan	1
Central Provinces	1		

Table 24 gives an idea of the production of cement in India and Pakistan during the last few years. The capacity of Undivided India and of India after the partition are also given.

TABLE 24. Production of Cement in India and Pakistan

(in thousand of tons)

Year	Capacity	Production	
		India	Pakistan
Pre-partition			
1943	2,555	1,699	417
1944	2,615	1,659	425
1945	2,615	1,656	518
1946	2,615	1,537	473
1947	2,715	..	..
Post-partition			
1947	2,115	1,441	N.A.
1948	2,115	1,553	334
1949	2,815	2,100	N.A.

It will be seen that Pakistan has been placed in a relatively more favourable position as compared to India in as much as her production capacity is far in excess of her requirements. Her present capacity is stated to be of the order of 670,800 tons. Her production in 1948 was 320,000 tons. Thus she has a surplus of nearly 134,000 tons judged by her present needs estimated at 200,000 tons. An additional capacity of 100,000 tons is being planned at Wah (West Punjab). East Bengal is deficient with regard to cement. Pakistan does not produce asbestos cement or cement sheets.

According to the Census of Manufactures, 1947 the productive capital employed in the Cement Industry in India was Rs. 7.5 crores in 1947.[1] The total number of persons employed was 14,000. The following were the materials consumed in the industry:—

TABLE 25. Materials Consumed in the Cement Industry

Material	Quantity consumed ('000 tons)
Limestone	1,560
China Clay	17
Laterite	4
Gypsum	89
Other basic materials ..	116

The total value of the basic materials consumed was Rs. 74 lakhs, the share of limestone being Rs. 29 lakhs and gypsum Rs. 12 lakhs. Packing materials worth Rs. 87 lakhs were used in the industry. 1 million tons of Portland cement worth Rs. 5 crores were manufactured. The value added by manufacture was Rs. 1.5 crores, Bihar contributing Rs. 45 lakhs and Madras, Rs. 37 lakhs.

On the basis of the estimates of consumption, the Government of India drew up a plan in 1945 for the expansion of the cement industry and sanctioned 37 schemes for increasing the capacity of the industry by 3 million tons per annum. 29 out of these 37 schemes involving a total capacity of 2.8 million tons were earmarked for India, and 8 schemes involving a capacity of 0.8 million tons for Pakistan. The schemes meant for India are now being reviewed and 9 additional schemes involving a capacity of nearly 1 million tons are likely to

1. The figures given by the Census of Manufactures do not cover the cement factories in some leading Indian States.

be sanctioned. When all these materialise, the total capacity of the country will be about 5.7 million tons.

The cement industry was dislocated to some extent due to the immediate consequences of the partition. In one factory in Patiala State there was a shortage of labour on account of constant disturbances. The output which was normally 9,000 tons per month in that factory came down to 1,700 tons within a few months after the partition. The output was increased gradually, though not to the former extent. In a factory in Jind State, the same reduction in output was noticed. The production came down from 4,000 tons to 200 tons within a few months. Lack of adequate transport facilities for supply of raw materials was also a bottleneck. The production in Dalmianagar (Sind) came down on account of the lack of supplies of the raw materials.

The principal raw materials necessary for cement manufacture are limestone, gypsum and coal. One ton of cement requires 1.6 tons of limestone, and requires 4 per cent. of gypsum and 30 per cent. of coal. Pakistan has abundant supplies of limestone as well as gypsum. In fact after the partition Indian factories had to depend upon Pakistan for the supplies of gypsum. But as there are large supplies of gypsum in Rajputana and as new sources have been discovered in Saurashtra, it is possible for India to make up for the gap in its supplies. Thus India will be not entirely dependent upon Pakistan for the supply of this material. On the other hand, Pakistan is not well provided with coal, which plays an important part in the production of cement. In fact the Sind factories had to work much below their capacity as they depended upon coal supplies from India. The dependence on coal cannot be reduced by resorting to hydro-electricity. Thus in the immediate future, the prospects of an expansion of the cement industry in Pakistan cannot be envisaged, because of lack of regular supplies of fuel. The Sylhet factory in East Pakistan draws its supplies of limestone from Assam. The East Bengal Government entered into an agreement with the Assam Government for the supplies of limestone and also granted a loan to the Assam-Bengal Cement Factory. The prospects of East Bengal becoming self-sufficient in cement are gloomy as even its requirements of coal have to be obtained from India.

Within few months after the partition, it was found that India was not producing enough cement to meet her requirements. She therefore imported cement from Pakistan. But the latest position in India shows improvement. In fact, recently the Chairman of a leading cement company in India visualised the possibility of a failure of demand resulting in over-production. The following table gives the latest position (December 1949) as regards the production capacity in India.

This shows an increase of 730,000 tons within 2½ years after the partition. New works have been started in Saurashtra (Jamnagar), Travancore and

TABLE 26. Distribution of Production Capacity of Cement in India, December 1949

Region	Capacity thousand tons
TOTAL	2,815
Bihar	680
Madras	610
C. P. & Central India..	400
Kathiawar	320
East Punjab	270
Hyderabad	240
Rajputana	225
Travancore	50
Mysore	20

Madras. The other proposed factories are the U.P. Government's factory at Mirzapur and the Government of India's factory at Sindri. At present the Cement industry is facing a crisis as the Government demand, which forms the major item is shrinking owing to economy cuts. But the fear of over-production does not appear to be justified as with low prices this country can absorb the available supplies. In fact India imported in 1948-49 and 1949-50, 147 and 304 thousand tons of cement value at Rs. 2.81 and Rs. 4.26 crores respectively. If the factories work to capacity their costs also will come down. It is heartening to note that cement production in the first four months of 1950 averaged at 210 thousand tons per month, which was 90% of installed capacity.

One anomaly has resulted on account of the partition. Before the partition, though Pakistan as a whole had surplus capacity, East Pakistan did not produce enough cement and had to depend upon the Bihar and West Bengal factories. On the other hand, Western areas of India were accustomed to draw their supplies from Sind factories. But now after the partition, this arrangement has been upset. Another complication is that all the cement factories in Pakistan are the branches of leading Indian combines.

GLASS:—The partition of the country has resulted in a very uneven distribution of the glass industry between India and Pakistan. Almost the entire industry is concentrated in India and Pakistan's share is negligible. In 1945 there were 175 glass factories in Undivided India, more than half of which were in U.P., Bengal and Bombay having a considerable share. The number of factories functioning at the time of the partition in India was 235 of which 92 were devoted exclusively to the production of bangles and the other 143 to production of other glassware. After the partition the number of units in Pakistan was 3, but later, the Hardeo Glass factory of Dacca migrated to India.

The exact production of glass and glassware in India as well as Pakistan is not accurately known. The statistics compiled in this respect are scanty and inadequate. The Panel appointed by the Government of India on the glass industry experienced the same difficulty. According to the Census of Manufactures there were 144 factories in 1947 in India, U.P., West Bengal and Bombay having 58, 31 and 21 factories respectively. The productive capital employed was Rs. 2.7 crores.[1] About 22,000 persons were employed in the industry. The

TABLE 27. Raw Materials Consumed and Products Manufactured in the Industry

Material	Quantity '000 cwts.	Product	Unit	Quantity (thousands)
Arsenious oxide ..	1.6	Bangles	doz.	470
Limestone	54.0	Bulbs	gross	32
Saltpetre	5.0	Shades	nos.	1.5
Sand	645.0	Other lampware ..	gross	238
Soda Ash	19.0	Bottles and jars ..	gross	1,098
		Tumblers	gross	129
		Laboratory ware ..	gross	270
		Refractories ..	cwts.	5.7
		Sheet glass[2] ..	sq. feet	3,247

1. These details refer to the reporting factories only *i.e.* 79% of the registered factories.
2. The total production capacity in all the factories of India for the manufacture of sheet glass is 20.4 million square feet. The actual production is as follows:

Year	Output (million sq. ft.)
1946	5.7
1947	6.3
1949	8.5

Thus there is a large gap between installed capacity and actual output.

following were the quantities of raw materials consumed and products manufacture in the glass industry.

The total value of raw materials was Rs. 67 lakhs of which the share of soda ash was 36 per cent and sand of 15 per cent. The total value of products was Rs. 346 crores, the value of bottles being nearly 50 per cent. The value added by manufacture was Rs. 1.70 crores, the contributions of Bombay, West Bengal and U.P., being Rs. 38.7 lakhs, Rs. 36.3 lakhs and Rs. 33 lakhs respectively. Figures are not available for the Pakistan factories though the production capacity of one of the two factories is put at 1,200 tons.

This industry did not suffer any major dislocation as the result of the partition. This was mainly because of the fact that the bulk of the industry was situated in places which are far remote from the disturbed areas. No factory was wantonly destroyed. It is estimated that nearly 5,000 workers employed in the bangle factories in Firozabad left for Pakistan. This was a boon to Pakistan as glass bangles could be locally manufactured. Regarding the Hardeo Glass factory, it is possible that, when the factory is finally set up in India, some of the non-muslim workers originally employed in Dacca may again find employment.

The partition has affected the industry to some extent in respect of the raw material supply. A soda ash plant in Khewra with an installed capacity of 24,000 tons and an actual output of 20,000 tons is in Pakistan. Some of the glass factories in Bombay depended for their supplies of soda ash on the Khewra plant. But the gap has been already made up and the capacity of Indian soda ash plants has been increased almost to the pre-partition capacity of Undivided India. Some of the Indian factories also got their supplies of potassium nitrate from West Punjab where it is available in large quantities. But new sources have been developed in East Punjab and U.P. Thus the overall dependence of India on Pakistan for raw materials is negligible.

Pakistan was a valuable market for Indian glass products. In 1948-49 she imported glassware worth Rs. 45 lakhs, the imports from India being worth Rs. 19 lakhs. The Indian factories might be considerably affected if the Pakistan market is lost. As Pakistan has got the necessary resources like soda ash and glass sand for the development of the glass industry, it is reasonable to expect that she will make early attempts to develop the industry. If that materialises, the Indian industry which is already suffering on account of the lack of demand due to increased foreign competition and of substitute goods, will have to find new markets in other countries.

CERAMICS AND REFRACTORIES:—This industry which comprises the manufacture of crockery, sanitary ware, insulators and refractories and miscellaneous clay products has developed mainly in India. The following table gives the location of these factories in different provinces and States:—

TABLE 28. Distribution of Ceramic Factories in India and Pakistan

Province	Pottery and Porcelain	Refractory	Province	Pottery and Porcelain	Refractory
INDIA	47	15	PAKISTAN ..	2	1
West Bengal ..	11	2	West Punjab ..	1	..
Central Provinces	4	3	N.W.F.P. ..	1	..
Bihar	..	7	Sind	..	1
Bombay ..	9	..			
Madras ..	6	2			
Other Provinces	5	..			
States	12	1			

The main raw materials necessary in this industry are, kaolin, fire-clay, ball-clay, gypsum, felspar, quart, magnesite, etc. Adequate survey has not yet been made in India as regards good quality kaolin. As regards other raw materials India is well placed. Pakistan has large resources of gypsum. According to the Census of Manufactures for 1947, which gives figures only for India, the total productive capital employed was Rs. 2 crores.[1] 13,700 persons were em-employed in this industry. The following were the quantities of raw materials consumed and products manufactured in 1947.

TABLE 29. Raw Materials Consumed and Products Manufactured in the Industry

Material	Quantity consumed ('000 tons)	Products.	Quantities (in thousand tons.)
China clay	5	Domestic ware	1100
Fire-Clay	99	Electrical insulators ..	8.3
Pipe and red clay	14	Sanitary equipment ..	55
Felspar	8	Pipes	1,096
Quartz	9	Refractories[2]	86
Magnesite	3	Tiles	2
Gypsum	1	Earthern and stone-ware for chemicals	0.1
Other basic materials ..	9	Jars	0.6

The total value of products manufactured was Rs. 1.81 crores, refractories contributing nearly Rs. 81 lakhs and domestic ware Rs. 41 lakhs. The value added by manufacture was Rs. 1 crores approximately.

We have no information about the demand from Pakistan for the products of this industry.

IV. CHEMICALS AND ALLIED INDUSTRIES

HEAVY CHEMICALS: The chemical industry is regarded as a key industry in the economic life of a country. Compared with the progress achieved in other countries, the progress of India in this respect has been very meagre. The *per capita* consumption of chemicals is very low in India compared with that in other countries.

Though the position of Undivided India as a whole was far from encouraging, the partition brought into hold relief the relative backwardness of Pakistan as compared to that of India. The following table shows the distribution of chemical factories in India and Pakistan at the time of the partition:—

TABLE 30. Chemical Factories in India and Pakistan.

	India	Pakistan
Sulphuric Acid	38	2
Soda Ash	2	1
Super-Phosphates	5	..
Caustic Soda	8	..
Liquid Chlorine	3	..
Bleaching powder	4	..
Bichromates	11	..
Photographic chemicals		
Sodium Thiosulphate	5	..
Sodium Sulphite	1	..
Sodium Bisulphite	2	..
Phosphoric Acid and Phosphates ..	1	..

1. The figures given in the Census refer to 90% of the total registered factories.
2. The production capacity of all factories in India for manufacturing refractories is 269,000 tons per annum. The actual production of all the factories was 201,000 tons in 1949.

In so far as the location of industrial units is concerned, the partition has worked to the advantage of India. It may be interesting to note in this connection that several changes which occurred in the distributional pattern of the chemical industry since 1921, were not to the advantage of the areas which now constitute Pakistan. While in 1921 the industry was practically undeveloped in States, in 1939 they had over 2/5ths of the total units. Though there was a reversal of the shifts during the war, and the share of the States was halved, Pakistan did not have any share.

The following statement compiled from the Census of Manufactures, 1946, gives an account of the quantities of chemicals consumed in various Indian industries in 1946:—

TABLE 31. Chemicals Consumed by various Indian Industries.

Chemical	Industry	Quantity (thousand tons)
Sulphuric acid	Iron and Steel	2.3
	Cotton Textiles	2.0
	Woollen textiles	1.2
	Electrical & general engineering	0.8
	Distilleries and breweries	0.3
	Vegetable oils	0.3
	Tanning	0.2
Hydrochloric acid	Cotton Textiles	0.6
Caustic Potash	Soap	0.028
Zinc Chloride	Cotton Textiles	0.4
Sodium Silicate	Soap	2.1
Sodium Bichromate	Tanning	0.14
Barium Carbonate	Glass and Glassware	0.13
Saltpetre	Glass and Glassware	0.63
Aluminium sulphate	Paper	3.20
Amorphous phosphorous	Match industry	0.09
Chlorate of Potash	Match industry	1.5
Sodium Hydrosulphite	Cotton Textiles	0.8
Caustic Soda	Paper and Board	7.8
	Soap	6.6
	Vegetable oils	1.8
	Cotton Textiles	1.04
	Non-ferrous metals	0.4
Soda Ash	Cotton Textiles	13.0
	Glass	11.1
	Paper	3.2
	Soap	0.9
	Woollen Textiles	0.4
	Vegetable oils	0.01
Bleaching Powder	Cotton Textiles	58.4
Bleaching Earth	Vegetable oils	1.2

Figures of consumption in the Pakistan industries are not available. But as there is no well-developed textile industry in Pakistan, the need for large quantities of chemicals may not be so urgent. But there is still a great need for chemicals in the other industries. Table 32 gives an idea of the production capacity and the annual output of the units located in India and Pakistan:

One of the major units producing soda ash went to Pakistan as a result of the partition. But this concern is the branch of a leading chemical company of India. As in the case of cement, this has caused some dislocation in the management of this industry. As regards the other chemicals, India has not been affected in any manner. All the raw materials that are necessary for the

TABLE 32. Production Capacity and Output in the Chemical Industry in India and Pakistan.

(in thousand tons)

Chemical	INDIA						PAKISTAN	
	Production Capacity		OutPut				Production Capacity	Output
	1947	1949	1946	1947	1948	1949	1948	1948
Soda Ash	..	54.0	12.0	13.6	29.2	17.9	24.0	20.0
Caustic Soda	10.5	17.6	2.9	3.3	4.4	6.4	0.3	0.3
Chlorine Liquid ..	..	6.5	1.5	1.7	1.8	2.6	..	..
Bleaching Powder ..	4.2	5.2	2.0	2.6	2.8	2.5	..	..
Superphosphates ..	60.0	107.7	4.5	5.0	21.4	46.7	..	..
Sulphuric Acid ..	100.0	150.0	60.0	60.0	80.0	79.6	..	..
Bichromates	..	5.5	2.1	2.3	2.9	1.7	..	..
Hydrochloric Acid[1] ..	..	..	2.3	2.1	..	..	..	..
Nitric Acid[1]	..	..	0.8	0.7	..	..	..	..
Aluminium Compounds	..	..	12.2	13.6	..	..	..	..
Fertilisers	17.0	78.0	32.0	60.4	35.2	46.0	..	..

manufacture of chemicals are available in India. Pakistan possesses good resources for the production of chemicals. But the important motive force for the development of the industry is the existence of a large number of big industries creating a demand for the chemicals produced. In this respect India has been placed in a more favourable position.

Though Pakistan has got potential resources for manufacturing chemicals she had to depend upon India during the last two years for her supplies of chemicals. The following table gives an idea of the requirements of both the countries which were to be met by each in respect of chemicals:—

TABLE 33. Mutual Requirements of Chemicals, India and Pakistan

(in thousand tons)

Supplies from India to Pakistan			Supplies from Pakistan to India		
Item	Quantity 1948-49	1949-50	Item	Quantity 1948-49	1949-50
Magnesium sulphate ..	1.6	0.8	Soda ash	10.0	....
Sulphuric acid	1.0	2.0	Potassium Nitrate ..	0.5	....
Aluminium Sulphate ..	*Nil*	0.8	Rock salt (maunds) ..	2,000.0	2,000.0
Nitric acid	0.4	0.2			
Ferrous sulphate	0.8	0.4			
Hydrochloric acid	0.54	0.27			

This table reveals that India's dependence on Pakistan for supplies of soda ash and potassium nitrate decreased in 1949-50. This was due to the installation of fresh capacity in the chemical industry and the discovery of alternate sources of supply.

Pakistan was a good market for Indian chemicals. After the partition the position of Pakistan market has become uncertain. The Indian Chemical industry has to face stiff competition in the face of increasing supplies from other countries. This necessitates greater attention towards internal consumption.

1. Figures of production are taken from the Census of Manufactures, India, 1947 and so do not refer to all the factories.

Attempts are being made in Pakistan to develop sulphuric acid plants, the present capacity being only of the order of 330 tons. In respect of caustic soda a plant with a capacity of 6,000 tons is under construction.

Manufacture of calcium carbide, hydrogen peroxide, artificial abrasives, artificial graphite and electrodes, ferro-manganese and ferro-silicon by the electrolytic process can take place only if cheap and abundant power is available. This is possible only in the vicinity of large hydro-electric stations as are being planned in India. Another factor of importance is the existence of a large market.

FERTILISERS:—The average yield of crops per acre in India is very low, The need for large-scale production of fertilisers in India is therefore urgent. About 10 years ago India hardly produced any chemical fertilisers. Even now, the bulk of the fertiliser requirements have to be imported as shown below:—

TABLE 34. Import of Fertilisers in India.

Fertiliser	Quantity ('000 tons)			Value (Rs.) lakhs		
	1947-48	1948-49	1949-50	1947-48	1948-49	1949-50
TOTAL	190	178	247	4,64	4,93	6,54
Sulphate of Ammonia	137	133	171	3,45	3,94	5,05
Ammonium Phosphate	8	4	17	28	15	17
Sodium Nitrate ..	11	22	26	25	41	79

The Mysore Government made a beginning by helping to establish a factory at Belagula with a capacity of production of 6,000 tons of ammonium sulphate per annum. Another plant with a capacity of 50,000 tons per annum was set up in Travancore at Alwaye with the aid of the Travancore Government. This plant went into production in June 1947. Another venture in the field is that of the Government of India at Sindri in Bihar, the establishment of which was suggested by the Technical Mission which visited India in 1944. The Sindri factory is planned to produce 350,000 tons of ammonium sulphate annually. The cost of the project has been revised from Rs. 10 crores to Rs. 21 crores. The different Provincial Governments have contributed their quota for financing this project. Construction work on this factory was started in 1945. The pilot plant is expected to commence production in 1950, and full production will start in 1951. A total amount of Rs. 16.2 crores (Rs. 10.8 crores in foreign exchange) had been spent by the end of 1949. In order to utilise fully calcium carbonate sludre, which will be a by-product of the manufacture of fertilisers, a cement factory capable of producing 300 tons of cement a day will be established in Sindri as auxiliary to the fertiliser factory. This factory is estimated to cost an additional sum of Rs. 1.3 crores.

Along with the ammonium sulphate factories, a good number of superphosphate factories have also grown up in India.

The Government of Pakistan has consulted technicians regarding ammonium sulphate production. It has decided to install a one lakh ton plant. Pakistan has ample supplies of bonemeal necessary for super phosphate manufacture. Three technical missions, one from U.K., one from U.S.A. and one from Belgium have surveyed the conditions for establishing these industries.

FINE CHEMICALS, DRUGS AND PHARMACEUTICALS:—Though this industry got a great impetus during the war, it is still in its infancy. The synthetic

drugs produced in India are being made out of imported materials. The following raw materials are necessary for the development of the fine chemicals and drugs industry:—(1) Inorganic chemicals:—Most of the inorganic chemicals are available in India. Pakistan has also resources in some of the compounds and minerals. (2) Coal distillation products:—The main recovery plant for coal products are in the iron and steel works. (3) Wood distillation products:—There is one wood distillation plant in Mysore. (4) Fermentation Products:—The fermentation products are available in sugar distilleries. India is well provided in this respect. (5) Petroleum products:—There were two firms in Undivided India, one in Assam and another in Punjab. (6) Animal Products:—These can be obtained from slaughtering houses. Plenty of them are situated in both the countries, especially in Pakistan. (7)Vegetable products:—Trees like *chaulmoogra,* castor, linseed, sandal, citronella, eucalyptus palmrosa, lemongrass and cardamom are all grown in India. There is great need for increased production of cinchona trees. (8) Synthetic chemicals:—With respect to the production of synthetic drugs like D.D.T. and sulpha drugs, expert trained staff is necessary.

The Census of Manufactures, 1947, gives the following figures of the production in this industry:—

TABLE 35. Products Manufactured by the Pharmaceutical Industry 1947

Product	Unit	Quantity
Emetine	'000 c.c.	123
Injectules	,,	33,438
Quinine	'000 lbs.	115
Tinctures and galenicals	,,	7,663
Proprietory medicines	,,	2,894

The total value of drugs and pharmaceuticals amounted to Rs. 6.43 crores, the shares of West Bengal, Bombay and U.P. being Rs. 2.28, Rs. 1.68 and Rs. 1.59 crores respectively.

The Government of India have decided to establish a State factory for the manufacture of penicillin, sulpha drugs and anti-malarials at Bombay in collaboration with the Provincial Government. An agreement has been entered into with a reputed Swedish firm for giving technical advice and assistance in the design and construction of the factory. The cost is estimated at Rs. 11 crores. By the middle of 1949, the Government had spent Rs. 61 lakhs on this project.

As a consequence of the partition, the Indian pharmaceutical industry has lost a considerable market in Pakistan. The levy of export duties by India added to the loss. As early as March 1948 the Indian Chemical Manufacturers' Association sounded a note of warning to the Government about this. East Bengal, particularly was a large consumer of Indian drugs.

SOAP:—The history of the soap industry in India began in 1879 when a factory was started at Meerut by a British manufacturer. Gradually the industry developed and the imports of soap dwindled. During the year 1933-34, Undivided India imported about Rs. 78 lakhs worth of soap but in 1945-46 the imports came down to about Rs. 4 lakhs. In fact Undivided India was fast developing an export trade to the Middle East.

The Panel report on Oils and Soaps gives the following information about the distribution of manufacturing capacity in the soap industry in Undivided India:—

TABLE 36. Distribution of Soap Industry in India and Pakistan

Location	Production capacity ('000 tons)
Bombay	4
Calcutta	4
U. P.	1
Madras	1.3
Karachi	3

According to the Census of Manufactures there were 43 factories in the industry in 1947; West Bengal had 14 and Bombay 10. The productive capital employed was Rs. 5.2 crores. About 7,000 persons were employed in the industry. The chief raw materials consumed and products manufactured were:—

TABLE 37. Raw Materials Consumed and Products Manufactured in the Soap industry[1]

Raw Materials.	Quantity ('000 tons)	product	Quantity ('000 tons)
Tallows..	15.6	Toilet Soap[2]	12
Mowah Oil	4.0	Industrial Soap[2]	1
Cocoanut Oil	11.0	Laundry Soap[2]	37
Rosin	1.4	Glycerine	5
Caustic Soda	5.5		
Groundnut oil	6.0		
Soda Ash	2.3		
Sodium Silicate	2.0		

The total value of products was Rs. 10.5 crores, household and laundry soaps accounting for nearly 50 per cent. of the total value. The value added by manufacture was Rs. 1.9 crores, the Bombay factories contributing nearly 90 per cent. of it.

As regards raw materials, India is favourably placed since it produces the largest quantities of oilseeds in the world. But as regards caustic soda, the position is not one of self-sufficiency. India upto now has been depending upon other countries in this respect for part of its requirements. In respect of soda ash, part of India's requirements was being met by the soda ash plant at Khewra in Pakistan. As regards oils like lemon-grass oil, palmrosa oil, citronella oil, sandalwood oil and rose oil, which can be distilled here without much difficulty, India is well provided. But unfortunately these oils are exported and aromatic chemicals extracted out of these very oils are imported. As regards cocoanut oil which is one of the important vegetable oils necessary in soap manufacture, India produces a limited quantity and imports it from other countries. Most of the raw materials necessary are not available in Pakistan.

India had a large market for soaps in Pakistan. But on account of the levy of import duty by Pakistan, a cake of soap costing Rs. 0-6-6 in India would cost Rs. 0-8-0 in Pakistan. The market for Indian goods is therefore seriously affected on account of the partition. It is reported that the loss of the Pakistan market has resulted in an accumulation of stocks with the Indian manufacturers. During 1947-48 India exported 26,000 cwts. of soap valued at Rs. 17 lakhs. The exports increased in quantity and value to 52,000 cwts. and Rs. 52

1. The total production of soap in all factories of India was 75,400 tons in 1948 and 75,000 tons in 1949 and the total capacity 244,000 tons per annum.

2. Besides these, 684 tons of toilet soaps, 874 tons of laundry soaps and 407 tons of industrial soaps valued at Rs. 43 lakhs were manufactured in 1947, in some sections of the chemical industry.

lakhs in 1948-49. On account of the levy of import duty by Pakistan and the trade deadlock, the exports came down in quantity and value of 27,000 cwts. and Rs. 25 lakhs in 1949-50. Western Pakistan which imported 52,000 cwts., valued at Rs. 34 lakhs in 1948-49, imported only 27,000 cwts. of soap valued at Rs. 12 lakhs in 1949-50. In spite of this, efforts are being made to export soaps to European countries. Proper propaganda and advertisement will help to build up a good market for Indian soaps in foreign countries. India will be able to earn also some quantities of foreign exchange. Besides, there is also a large potential internal market, as the *per capita* consumption of soap is likely to rise with a rise in the standard of living.

ALCOHOL:—Alcohol has three important uses. It is used as a drink. It is used for industrial purposes in the manufacture of chemicals. It is also used as motor fuel mixed with petrol.

(a) **Alcohol as a drink:** With the adoption of the prohibition policy by some Provincial Governments in both India and Pakistan, the use of alcohol for drinking has diminished in importance. C.P., Madras, U.P., Bombay and some of the States have undertaken prohibition programmes. East Bengal in Pakistan has introduced prohibition. According to the Census of Manufactures, 1947, the number of distilleries and breweries in India in 1947 was 53. The total productive capital employed in them was Rs. 2½ crores. The industry was mainly concentrated in Madras and U.P. The chief raw materials used were molasses, mohwa seeds, barley, sugar and hops. Nearly 1.15 lakh tons of molasses were used in the various breweries. 5.1 million gallons of country spirits valued at nearly Rs. 1.22 crores were the major items of production, as against 6.3 million gallons in 1946 valued at Rs. 63 lakhs. Pakistan too has some breweries. She has plentiful supplies of barley, though she is somewhat deficient in molasses. One of the consequences of the partition was that the supply of barley to Indian units was reduced. But Pakistan is dependent on India for supplies of molasses as most of the sugar factories are in India.

(b) **Alcohol in Industry:** Industrial alcohol is a very valuable material and is used in the manufacture of chemicals like acetone, acetic acid, ether, chloroform and ethyl acetate. It is also necessary as a solvent in the manufacture of some fine chemicals and medicinal preparations. It is very essential in the manufacture of ammunition and rubber. The production of industrial alcohol in India is very low. The production of industrial alcohol was 3 million gallons in 1949 as against 4.9 million gallons in 1948. On account of the excise duty on industrial alcohol the cost tends to be very high. Inter-provincial restrictions on the movement of molasses have also affected this industry adversely.

(c) **Power Alcohol:** The petroleum resources of many countries in the world are very scanty. Some of these countries, therefore, have devised schemes to conserve oil. Power alcohol is mixed with petrol in a given proportion and is used in automobiles and other vehicles. Potatoes, wheat and molasses are the sources from which power alcohol can be manufactured. Some Western countries like France, Czechoslovakia and Germany are very much advanced in the use of power alcohol. India and Pakistan are also large importers of petrol. The oil supply in these two countries is barely sufficient to meet the indigenous needs. In India, U.P. and Bihar, being the chief centres of sugar production, produce large quantities of molasses as a by-product. At present this valuable material is being wasted. U.P., Bihar and Mysore State have already passed legislation enforcing mixture of alcohol and petrol. The capacity of the dis-

tilleries in India is limited and they cannot undertake large production of power alcohol owing to uncertainty in its demand. Unless the Central Government takes a bold step in this direction, molasses will continue to be wasted. The Sugar, Power Alcohol and Food Yeast Industries' Panel suggested that the admixture of power alcohol with petrol should be made compulsory. As seen above, some provinces have taken a lead in this direction. The cost of power alcohol which is now being produced is also high because the production of sugar is concentrated in a few Provinces, and the heavy transport charges increase the price that the final consumer has to pay. Smaller units are not economical for the production of power alcohol and large-scale production is necessary. About 417,000 tons of molasses are being produced in India every year. About 24 million gallons of power alcohol can be distilled out of these molasses. The installed capacity of the distilleries is about 9.5 million gallons. Not even 4 million gallons have been manufactured in any year. Lack of demand coupled with the lack of storage and other facilities is responsible for the low production. The Government of India have fixed a target of 18 million gallons for 1950. They expect that the production will increase to 23.6 million gallons in the next five years. A uniform excise policy as regards power alcohol is very necessary if the targets are to be achieved.

Sugar factories and distilleries in Pakistan have a capacity of producing 2 million gallons of power alcohol. But actual production is only about 7.7 million gallons. The Pakistan Government is contemplating the establishment of a large sugar factory in the North West Frontier Province. They are also planning to erect a distillery there. Pakistan imported large quantities of molasses from India in 1948-49.

PAINTS AND VARNISHES:—At the time of the partition a major portion of this industry was concentrated in India. The following table gives the distribution of paint manufactures in 1945.

TABLE 33. Distribution of Paint Manufactures in India and Pakistan

	No. of factories		No. of factories
INDIA	28	PAKISTAN	4
West Bengal	16	West Punjab	4
Bombay	4		
Hyderabad	2		
Other area	6		

Of these 32 concerns, 15 were large and well-established factories, 13 being in India and 2 in Pakistan. The present annual production capacity of the paints industry in India is 60,000 tons and that in Pakistan is 5,000 tons. The manufacturing capacity of all kinds of varnishes in Undivided India was 2.5 million gallons a year. The Panel on Paints and Varnishes Industry had recommended a decentralisation of this industry. It had suggested the location of 75 units and about 20 units in areas now constituting India and Pakistan respectively. The object of the Panel was that every region should enjoy some self-sufficiency so far as its requirements were concerned.

According to the Census of Manufactures, there were 30 factories in India in 1947, nearly 60 per cent. of them being in West Bengal. The total productive capital employed was Rs. 2.7 crores and the industry gave employment to 4,400 persons. The main materials consumed in the industry were barytes, lithophone, chrome colours, zinc oxide, white lead, red lead, red oxide, ochres

and other earth colours, rosin, linseed oil, white spirit, turpentine and naphtha. The chief products were:—

TABLE 39. Products Manufactured in the Paint and Varnishes Industries.

Product.	Quantity '000 cwts.
Paste Paints	161
Ready mixed paints	394
Red Lead	4
Yellow chromes	2
Enamels	23
Varnishes	65

The total value of the products was nearly Rs. 5 crores, the value added by manufacture being Rs. 1.71 crores.

Among the raw materials needed for this industry, like pigments, drying oils, rosins, solvents and thinners, the supply of rosin alone was affected immediately after the partition. It was calculated that approximately half the pre-partition production of rosin came from the Lahore factory. East Punjab has recently started a factory at Hoshiarpur for the production of rosin and consequently the Indian paint industry need not suffer for want of raw materials. India is at a relative advantage in respect of other raw materials, particularly pigments. If the large quantities of ilmenite and rutile, which are in abundance in Travancore are properly utilised for making titanium whites, the latter can very easily replace lithophone and zinc oxide. The same is the case with drying oils and driers. India's annual production of linseed oil is about 40,000 tons and castor oil, which by processing can also develop drying powers, is available in India in plenty. India enjoys a monopoly in respect of lac reserves. The supply of alcohol is quite abundant in India, and she is, therefore, in a much better position than Pakistan in respect of solvents and thinners. Pakistan's position in respect of all these materials is not quite satisfactory. As a consequence of the partition, it was reported that three units migrated to India, thereby causing depletion in the meagre capacity of Pakistan.

The Indian paints industry had a considerable market in Pakistan. During the year 1948-49, Pakistan imported Rs. 42 lakhs worth paints and painters' materials, imports from India being worth nearly Rs. 18.5 lakhs. If there is an expansion in Pakistan in railway, building construction and in ship-building,[1] Pakistan will require large quantities of paints and varnishes.

PLASTICS:—During the last few decades the plastics industry has attained the status of a basic industry. Plastic articles are required in the manufacture of machine parts, electric gear, automobile and aircraft construction, besides a multitude of domestic requirements. Before the war there were a dozen moulding concerns in Undivided India manufacturing celluloid and other articles out of imported moulding powders and semi-fabricated plastic goods. During the war the Bangalore electric factory started manufacture of moulding powder. Some other concerns at Bombay and Satara followed suit. The important basic material in the manufacture of plastics is phenol-formaldehyde moulding powder. Though phenol is manufactured in India, formaldehyde has to be imported from the U.K. The Industrial Plastics Corporation of Bombay has a capacity

1. The Government demand for these purposes forms an important portion of the total demand for paints and varnishes. In India it is estimated that the Government purchases annually 40,000 gallons of synthetic enamel and Rs. 1,25 lakh worth other paint materials.

of 900 tons per annum for producing phenol-formaldehyde though the actual production was only 125 tons in 1948. Plans are under way for manufacturing other moulding powders like urea-formaldehyde. The fertiliser factory is expected to produce 3,000 tons of urea. The acetate rayon plant in Hyderabad will provide cellulose acetate. The cordite factory at Aravankadu has succeeded in producing industrial cellulose-bearing materials.

According to unofficial estimates the total capital invested in the plastics industry which manufactures mainly domestic goods and electric accessories is Rs. 3 crores. There are about 80 concerns in India, about 40 in Bombay and 16 in Calcutta. The installed capacity for production is 4,000 tons. The industry lost a considerable market in Pakistan after the partition, owing to competition from plastic goods imported from other countries.

SYNTHETIC PETROL:—The indigenous supplies of petroleum in India meet only a fraction of India's oil requirements. Every year India imports oil to the tune of about Rs. 30 crores of rupees. The total consumption of all oils in India is put at 4 million tons, of which rationed consumption accounts for 3 million tons. In order to stop this drain on the foreign exchange resources of India and to make the country self sufficient in respect of this vital mineral so necessary for strategic purposes, the Government of India consulted foreign technical experts on the feasibility of manufacturing petrol from coal. In 1949 the Government decided to instal a synthetic petrol plant in the country, costing Rs. 55 crores of rupees and capable of producing 1 million tons of petroleum. Later the Government decided upon a modest estimate and a plant with a capacity of 100,000 tons per year. It is reported that the Governing Body of the Council of Scientific and Industrial Research at a meeting in April 1950 recommended that the Government should give top priority to the question of manufacturing synthetic petrol. It has recommended the acceptance of a project involving a capital investment of Rs. 22 crores, and capable of producing annually 70,000 tons of petrol, and 0.5 million tons of domestic coke and considerable quantities of other petroleum products per annum. The Government of India have appointed a committee of industrialists and experts to go into the merits of the project report. India has got unlimited resources of low grade coal, which is the main basic material in the manufacture of synthetic petroleum.

In this connection a reference may be made to the remarks in the report on the Petroleum and Synthetic Oil Industry of Germany published by the Ministry of Fuel and Power in U.K. After a thorough examination of the German plants, it was found that the cost of production of synthetic petrol would be twice as much as that of imported natural petroleum. Germany had developed the process mainly for strategic purposes. Apart from Germany, it is only in the U.S.A. that some experiments are being made in synthetic petrol manufacture. Technical progress has not yet been sufficiently advanced to make production of synthetic petrol a commercial proposition.

V. INDUSTRIES USING RUBBER AND REQUIRING SPECIAL SKILL

SPORTS GOODS:—In Undivided India the sports goods industry was mainly concentrated at Sialkot in West Punjab. There were a dozen factories which were manufacturing sports goods on a large scale. The main centre of production, Sialkot had four big factories employing 874 persons. But factory employment is hardly a clue to the total number of workers dependent for their living on this industry. It has been estimated that before the partition, the industry employed as many as 72,000 persons who worked on a cottage industry

basis. India lost this well-organised industry on account of the partition. It has, therefore, become necessary for India to start from the scratch in this field, and it is encouraging to note that a beginning has already been made in this direction. The importance of a flourishing sports goods industry to India is obvious. Indian sports goods have reached an excellence and compare favourably with goods manufactured anywhere else in the world. The leather goods in particular may be exported with advantage.

The main raw materials that are needed for this industry are two kinds of wood; willow wood grown mainly in the mountainous regions of Kashmir and mulberry wood from the Changa Manga ofrests of West Punjab and N.W.F.P. So far as the willow wood is concerned, the industry has to depend on Kashmir for quite some time to come and thus there is cause for concern as long as the political future of Kashmir hangs in the balance. But it has been found that the Kulu Valley in East Punjab is suitable for developing willow plantations, and thus in course of time it may be possible to meet the needs of the industry by using the willow grown in this region. So far as mulberry wood is concerned the Indian industry is well placed. Extensive mulberry plantations, (which go together with the established silk industry), may help in solving the problem. The other main raw material needed is leather, and in this India is in a much better position than Pakistan inasmuch as the bulk of the organised leather industry is located in India. With regard to timber, India is relatively better placed than West Pakistan.

Skilled labour constitutes another very important requisite in reorganising the industry in India. It is true that immediately following the partition, a large number of non-muslim skilled workers as well as factory workers left Pakistan for the neighbouring Indian province of East Punjab. For want of sufficient encouragement and finance they had to seek new avenues of employment or in many cases to migrate to other provinces. There is urgent need to give maximum facilities to these people by way of land, cheap power, financial aid, etc. If necessary, the industry may be organised on a co-operative basis.

According to recent reports, displaced persons have almost re-organised the sports goods industry. Jullunder, Meerut, Batala and Agra are the new centres. More than 100 firms distributed in these centres are reported to have developed manufacturing capacity to meet 90 per cent. of India's needs. More than 40,000 workers are engaged in this industry. A good portion of goods like cricket and hockey balls, footballs, of all kinds, hockey sticks, shuttle cocks, nets, badminton rackets, and guts, cricket bats, boxing gloves, are being exported. In the manufacture of these goods, skill plays an important part and Indian goods are therefore assured of their markets, though in some, British Zealand, West Indies, Malaya and Straits Settlements are the chief markets for the popularity of Indian goods was their cheapness. For example, in U.K., English shuttlecocks cost 20 shillings per dozen, whereas India's best cost only 15 shillings. An English cricket ball cost between 13 to 23 shillings while Indian balls cost between £2 to £4 per dozen. U.K., Australia, the U.S.A., Africa, New Zealand, West Indies, Malaya and Straits Settlements are the chief markets for Indian goods. The Indian gut industry has been famous for nearly 30 years. The United Kingdom Board of Trade has fixed a bulk quota for £7,500 for the import of sports goods from India. With proper credit and banking facilities the Indian industry can very soon acquire the status which it enjoyed in Undivided India.

Pakistan exported sports goods to the tune of Rs. 2 lakhs during the year 1947-48. She has presumably lost a large market in India. If East Punjab

manages to develop the industry to the same extent as was done in Sialkot before the partition, then Pakistan will have to compete with Indian products in the export market. Besides, Pakistan is not well placed with regard to supplies of rubber and leather goods.

RUBBER GOODS:—Rubber goods have been manufactured in India since 1920. The real beginning of the industry, however, can be said to have taken place during the 1930's when the International Rubber Restriction Scheme came into force, restricting rubber exports from the main producing countries and thereby gradually bringing about a rapid improvement in the price of raw rubber. During the same period the large overseas manufacturers decentralised their production and established units in India.

The rubber manufacturing industry consists of five main sections, viz., (a) motor car and aero tyres, (b) cycle tyres, (c) rubber covered cables, (d) footwear, and (e) general and mechanical rubber goods. Before the partition, there were 114 factories engaged in the production of rubber goods in Undivided India. After the partition, 93 came to be located in India and 21 in Pakistan. The following table gives the location of rubber factories in India and Pakistan in 1940:—

TABLE 40. Rubber Factories in India and Pakistan

	No. of factories		No. of factories
INDIA	93	PAKISTAN	21
Travancore	3	West Punjab	19
West Bengal	30	Sind	2
Bombay	40		
Hyderabad and South India ..	11		
Delhi	6		
C. P. and U. P.	3		

Of these 21 factories in Pakistan, four factories, two from Sialkot and one each from Wazirabad and Lahore, later on migrated to India. Pakistan's rubber factories being too small, have no facility for the manufacture of the first four of the categories of goods stated above. This is because the factories in Sialkot, which account for most of Pakistan's production, were started as subsidiary to the sports goods industries.

The production capacity of factories, both in India and Pakistan, are given in the following table:—

TABLE 41. Production Capacity of Rubber in India and Pakistan, 1947

Description	Unit	India	Pakistan
Motor cars, giant aero tyres & tubes[1] ..	million sets	1	*nil*
Cycle tyres and tubes[1]	,,	5	..
Wrapped hoses	million feet	7	1.3
Moulded goods	lakh pieces	6	160[2]
Dipped goods	tons	400	100
Sales and neels	lakh gross		..
Calendered articles	tons	1,000	..
Extruded articles	tons	3,000	1,000
Built up goods	numbers	2,060	..
Ebonite rods and tube sheets	tons	150	..
Surgical goods	tons	120	..
Proofed fabrics	million yards	4.2	..
Football bladders	million numbers	2.2	..
Canvas shoes	million pairs	23	..
Gum boots	lakh pairs	1.5	..

1. The production capacity at the end of 1949 for motor tyres and tubes was 2 million sets and for cycle tyres and tubes 12 million sets.

2. Tons.

The following table gives the production in some sections of the rubber industry in India:—

TABLE 42. Production of Rubber Goods in India

(*Figures in millions*)

Section of the industry	unit.	Production			
		1946	1947	1948	1949
Cycle tyres and tubes	numbers	6.7	7.6	7.2	7.7
Motor, giant tyres and tubes ..	,,	1.5	1.6	1.5	1.4
Lipped rubber goods	dozens	n.a.	n.a.	23.7	6.8
Rubber footwear	pairs	14.4	n.a.	18.7	17.7

The number of workers employed in the rubber factories in India and Pakistan was 20,642 and 840 respectively. After the partition most of the technical experts who were employed in Pakistan in the Hindu owned factories migrated to India.

The entire rubber industry in Pakistan is concentrated in West Punjab. In the pre-partition days, the industry was mainly financed by the Hindus, upto the extent of Rs. 2 lakhs. The factories were engaged chiefly in the manufacture of general mechanical and surgical goods. The disturbances that followed the partition considerably affected the production of these goods.

As regards raw materials, the position of Pakistan is not quite sound. Pakistan has to import the main materials needed for the categories of goods which her firms are manufacturing at present, viz., smoked rubber and latex. The other items used are accelerators, anti-oxidants, carbon blacks, sulphur, pigments, dyestuffs, softeners, mineral rubbers and stearic acid. Of these only sulphur is available in Pakistan. Some of the other materials are available in India. India gets its entire supply of rubber from Travancore and Cochin. Proximity to the markets is the deciding criterion for location in this industry. Consequently factories are situated in West Bengal and Bombay, though the supply of raw material has to come from Travancore.

The market for Indian tyres and tubes, covered cable and footwear in Pakistan is quite good. But due to the high cost of raw rubber, our factories are unfavourably placed. The heavy duty on imported chemicals also adds to the cost. Therefore, Indian goods are at a disadvantage in the foreign markets. India's actual production of tyres and tubes falls short of her capacity and complaints of accumulation of raw rubber stocks are common. If prices of our goods are brought down, then the Indian goods can capture the markets in Pakistan and in the Near and Middle East.

SURGICAL INSTRUMENTS:—The surgical instruments and hospital appliances manufacturing industry was concentrated in West Punjab, particularly in Sialkot. With the partition, India has been rendered very deficient in this respect. The extent of the dependence may be gauged from the fact that nearly 90 per cent. of the requirements of Undivided India were met by Sialkot. The total number of persons employed in this industry in Pakistan was 1,527 whereas the figure for India was only 425.

The industry developed mainly during the war. In peace time the industry consisted of small-scale manufacturers working with ill-equipped plants. Simple instruments like aseptic furniture, sterilisers and splints were being manu-

factured. With the advent of war, India had to rely on indigenous sources as the position in respect of imports became difficult. A director and a technical adviser were appointed by the Government to give advice as regards the selection of steel and of heat treatment. A Committee known as the Surgical Instruments Standardisation Committee was also constituted. Schedules of standard instruments of surgery were prepared and a minimum number of patterns was evolved. By June, India became a leading producer of surgical instruments and a large amount of hospital appliances came to be manufactured locally. A Committee called the Grant-Massie Committee, was convened in November 1942 to post suitable technicians in different manufacturing centres. The development of firms in Sialkot, Lahore, Bombay and Calcutta was undertaken. The firms were assisted in adopting heat treatment methods, in obtaining necessary machine tools and were instructed in the manufacture of dyes, jigs, fixtures and gauges. Machine processes displaced hand methods.

In pre-war days Undivided India had a considerable export trade in this industry. The quality of the products improved during the war, but still they were inferior when compared to imported goods. At the time of the partition, the Punjab Government was thinking of providing proper assistance to the industry. After the partition some firms from Pakistan migrated to India. Seven of these were chosen by the Governments of India and East Punjab to establish manufacturing units in India; land and other assistance is being given to them in Kalka.

It is estimated that Pakistan is capable of producing goods of the value of Rs. 10 lakhs whereas the value of her present requirements as also the production of goods is only Rs. 5 lakhs. Thus the partition has resulted in excess capacity in this industry in Pakistan. The raw materials necessary for the industry, like special quality steel and rubber goods, are not available in Pakistan. The partition gave a serious setback to the industry as some of the raw materials and major portion of the demand used to come from India. The effects on India are only of a temporary nature. India can establish manufacturing centres and the demand for the products will be on the increase with the development of hospital facilities and better health services.

SCIENTIFIC INSTRUMENTS:—The manufacture of scientific instruments also developed mainly during the war. Prior to the war, the four leading firms that were in Undivided India were situated in Madras, Bombay, Benaras and Roorkee. There was also a Government factory, called the Mathematical Instruments Factory, in Calcutta, producing scientific stores and implements. The number of factories increased during the war. Calcutta, Agra and Lahore came into prominence. At present the industry in India is mainly concentrated in Calcutta. Among the leading centres in the pre-partition period was Lahore, with nearly 21 firms, some 5 of them being major concerns. A high degree of technical precision is necessary in the manufacture of scientific instruments. The quality of Indian goods was not at all comparable to the foreign goods. The Pakistan concerns will lose a considerable market on account of the partition.

VI. METALLURGICAL AND MINERAL INDUSTRIES

IRON AND STEEL:—The *per capita* consumption of iron and steel in any country is considered an important index of industrial development. As a consequence of the partition all the primary producers in this important industry are located in India. Though there are a good number of foundries and re-rolling mills in Pakistan, the major share of the output in these branches

is accounted for by India. This lacuna in the economy of Pakistan is very significant and is bound to limit the pace of her industrial development.

The development of this industry is an important land-mark in the economic history of India. It was in 1908 that the Tata Iron and Steel Company was started. In 1918 the Indian Iron and Steel Company came into being and in 1923, the Mysore Iron and Steel Company was founded. As a result of the various measures of tariff protection, the industry gathered momentum and during World War II proved to be the important producer of defence requirements in Asia. The annual production capacity of these factories is as follows:—

TABLE 43. Production Capacity in Iron and Steel Industry in India.

(*in thousands of tons*)

	Pig Iron	Steel (ingots & castings)	Rolled Steel Products	Ferro-Silicon
TOTAL	2,475	1,574	1,170	2
Tata Iron & Steel Co. (Jamshedpur, Bihar)	1,533	1,116	816	..
Indian Iron and Steel Co. (Kulti & Hirapur, West Bengal)	913	..	..	..
Steel Corporation of Bengal (Barupore, West Bengal)	..	420	324	..
Mysore Iron and Steel Works[1] (Bhadravati, Mysore)	29	38	30	2

1. Government-owned.

The following table shows the production of iron and steel products in India since 1939:—

TABLE 44. Iron and Steel Production in India.

Year	Pig Iron	Ferro-Alloys	Direct Castings	Steel Ingots & Castings	Semi-Manufactures	Finished Steel
1939	1,756	1	....	1,050	....	844
1940	1,994	18	....	1,291	....	1,033
1941	1,997	32	23	1,407	....	1,138
1942	1,800	22	27	1,342	....	1,060
1943	1,717	11	31	1,401	....	1,156
1944	1,426	6	12	1,366	....	1,085
1945	1,356	8	41	1,365	1,111	1,141
1946	1,334	16	76	1,296	1,031	997
1947	1,320	18	97	1,256	1,026	974
1948	1,405	7	51	1,254	1,012	953
1949	1,517	19	63	1,353	1,105	1,028

The peak of production was reached in 1941. During the post-war period iron and steel production has been on the decrease. The iron and steel plants have been worn out on account of the intensive production during the period of the war. The installed capacity for production of steel ingots and castings is put at 1,644 thousand tons. The actual production in 1949, which was the highest in the post-war period, was 300,000 tons short of this. It is evident that the replacement needs of this basic industry should claim first attention from the Government of India.

India possesses great natural advantages in respect of raw materials required for the production of iron and steel, viz. (i) iron ore, (ii) coking coal, (iii) fluxes, (iv) modifying metals, and (v) refractory materials. Four different kinds of iron ore are found in India, viz. magnetite, laterite, clay iron stone and hematite. The iron content of the Indian ores is one of the best in the world. India, however, does not possess rich deposits of coking coal. The reserves of high grade coal were formerly estimated to last only for sixty years. But recent investigations have shown that, if used carefully, these resources might last much longer. A great amount of care and caution is, therefore, necessary in respect of the utilisation and conservation of coking coal.[1] Limestone and dolomites are the commonly used fluxes for removing impurities in the iron ore. Modifying metals like manganese and silicon are used for giving the necessary mechanical properties. Fire clay is available throughout the country. Thus India has large resources of the raw materials required for the production of iron and steel.

According to the Census of Manufactures, in 1947,, the productive capital employed in this industry was Rs. 33.1 crores.[2] About 76,000 persons were employed in it. The quantity of important raw materials and products manufactured is given below:—

TABLE 45. Raw Materials Consumed and Products Manufactured by the Iron and Steel Industry.

(in thousand tons)

Materials consumed	Quantity	Products	Quantity
Iron ore	2,550	Pig iron	1,434
Pig Iron	245	Steel ingots	1,205
Scrap	53	Blooms, billets & slabs	124
Blooms, billets, slabs and bars	142	Heavy & light structurals	117
Spelter	12	Rails, fish plates and sleepers	141
Limestone	739	Tin plates	40
Magnesite	8	Sheets	196
Manganese	74	Plates, bars and rods	334
Dolomite rock	93	Wires	23
Sulphuric acid	4	Pipes and Tubes	38
Sulphur	3	Wheels, tyres and axles	25
		Scrap	180
		Coal tar	57
		Ammonia sulphate	17

The total ex-factory value of the products and by-products manufactured in the industry came to Rs. 38 crores in 1947 as against Rs. 34 crores in 1946. The value added by manufacture was Rs. 18 crores in 1947 as against Rs. 16 crores in 1946.

Table 46 gives the allocation of steel for different purposes in the last four years. The quantities of iron and steel produced in India are barely enough to meet the indigenous needs. The various housing, irrigation, electric and multipurpose schemes of the Government of India and of the Provincial and State Governments and the large scale constructional and developmental programmes, envisaged by both the Government and private authorities require large quantities of steel and steel products. The total requirements of steel for the com-

1. *Vide* section on coal in chapter V.

2. The Census figures refer to 80% of all the registered factories and excludes the factory in Mysore State.

TABLE 46. Allotment of Steel in India.

(*in thousand tons*)

Consumer	1947	1948	1949	1950
TOTAL	966	785	1,215	1,321
Railways	377	217	321	204
Industrial maintenance and packing	120	81	98	113
Steel processing industries	212	205	233	320
Government Development schemes	93	83	152	185
Industrial Development schemes	57	60	70	66
Provincial quota	161	93	90	120
States	37	22		
Exports	9	24	79	42
Housing Schemes	..	19	34	34

pletion of the river valley projects is estimated at 1.7 million tons. India imported about four hundred thousand tons of iron and steel, and steel products valued at Rs. 31.31 crores during the triennium ending March 1950. In order to stop this heavy drain on our foreign exchange resources and to make the country self-sufficient both for present as well as for developmental purposes in this basic material, the Government of India invited three well known foreign firms to prepare project reports for starting two steel plants with a capacity of 0.55 million tons each. The cost of these projects was originally estimated at Rs. 117 crores. The two plants were to be located one each in the Central Provinces and in Orissa. These cost estimates were revised just prior to the devaluation period and were put at Rs. 180 crores. The Government has approached the World Bank for financial assistance. In order to help the SCOB and Indian Iron and Steel Company in their programme of expansion of installed capacity by 270,000 tons, the Government of India has given these concerns a loan of Rs. 5 crores. The first stage of 70,000 tons capacity is expected to be completed by 1952-53. The Tata iron and steel concern has a scheme of replacement of the plant and of expansion by 200,000 tons. The estimated cost of the scheme is Rs. 15 crores. The scheme is held up on account of lack of finance. The Mysore Iron and Steel Works have also planned a scheme of expansion of 72,000 tons.

In the manufacture of ferro-alloys also considerable progress has been made in India. Fortunately, maganese is available in plenty in India, and ferro-manganese is manufactured at Jamshedpur. Ferro-tungsten is also manufactured there, though in small quantities. Ferro-silicon is being manufactured by the Mysore Iron and Steel Works, and ferro-chrome will be manufactured by the same concern. Experiments and researches are being conducted in order to make possible the production of other ferro-alloys.

The requirements of Pakistan with regard to pig iron, billets, blooms and other products are estimated to be of the order of 350,000 tons. Pakistan has got remelting and rolling plants having a capacity of 80,000 tons. She has undertaken plans to expand the capacity in other spheres. Iron ore in very limited quantities is available in West Punjab and N.W.F.P. and is only 40 per cent. pure. But it is not possible under the present circumstances to develop a full-fledged iron and steel industry as coke is not at all available. Electric energy can be used in place of coke but only to a limited extent; the dependence on coke is, therefore, absolute. Pakistan can only have re-melting and re-rolling mills working with scrap as the raw material. At Lahore there are two electric steel melting furnaces, each with a capacity of 5 tons and have their own rolling mills. A firm in Karachi is reported to be installing an oil-fired furnace for smelting steel and this will add 6,000 tons to Pakistan's existing capacity

of 12,000 tons. The other mills are all working on scrap, which is in short supply throughout the world. The Government of Pakistan is also making efforts to establish a smelting plant with a capacity of 3,000 tons, but its fruition will take some years. Even if some beginning is made in West Pakistan, East Pakistan will have to depend on imported iron and steel. The Pakistan Government, however, engaged the services of a leading American steel export company for preparing a report on the feasibility of starting an iron and steel industry in Pakistan. It is reported that the Mission found that it was inadvisable to start a steel industry in Pakistan.

A large number of foundries were scattered throughout Undivided India. At present there are about 150 small and medium sized foundries in Pakistan, using out-of-date cupolas. Iron foundries in Pakistan have a capacity for producing goods valued at Rs. 1.5 crores whereas the value of requirements of Pakistan are estimated at nearly Rs. 2 crores. There are no malleable iron foundries in Pakistan. The raw materials necessary for this industry, like pig iron, cast iron scrap, scrap and coke have all to be imported, though some quantities of local scrap are available.

Thus, while Pakistan is very unfavourably placed as regards iron and steel manufactures, conditions in India are very favourable for the expansion of the industry. It will, therefore, be possible to provide sufficient iron and steel for various developmental projects like irrigation, hydro-electricity and road building. Further, large supplies of iron and steel are absolutely essential for industrial expansion. But Pakistan is not in such a position. Though she can depend upon imports, during times of stress and emergency she will have to fall back upon her own meagre capacity. The indispensability of iron and steel industry was fully demonstrated during the war.

It may be interesting to note that at a recent session of the ECAFE held at Singapore the spokesmen of some Western countries pointed out that the development of iron and steel capacity in Asia was not desirable as the European countries after their recovery would have excess capacity. But it will not be in the interest of Asian countries to be dependent upon Western countries, and the objection of Western interests should not be taken seriously, particularly by countries like India with an insatiable demand for iron and steel. The Government of India appear to be in right earnest about the proposed iron and steel plants and are trying to get foreign loans and capital for that purpose. Although India itself was deficient as regards supplies of iron and steel she was exporting some quantities of iron and steel to Pakistan. If the Indian iron and steel industry develops sufficiently, it would be possible for Pakistan to import iron and steel from India. In fact the costs of steel produced by the Tata Iron and Steel Company are the lowest in the world. When production expands in future there will be scope for developing an export market for Indian iron and steel products.

NON-FERROUS METALS:—The production of important non-ferrous metals like copper, aluminium, tin, zinc, lead, magnesium and nickel and the fabrication of metal products had not developed to any great extent in Undivided India at the time of the partition. Virgin metal production was confined only to limited quantities of copper and aluminium. There were, however, numerous metal works all over the country which specialised in the manufacture of utensils from these metals and their alloys. The semi-manufactures industry had also developed to some extent. Most of the metal was recovered from scrap or was imported. As India is very rich in reserves of bauxite there are great prospects for the aluminium and alloys industry. As aluminium is

becoming one of the most important and useful metals and some of the basic industries like aircraft, automobiles, etc. depend upon supplies of aluminium and its alloys, India is really fortunate in having large reserves of bauxite. Pakistan has no known reserves of bauxite.

Copper: The resources of copper pyrite, which is the principle ore of copper, are meagre in India. The present supply of 6,000 tons per annum available in India is hardly 1/10 of her requirements. The Indian Copper Corporation at Ghatsila is the only concern which smelts indigenous ore. The corporation also manufactures brass sheets. But costs of smelting are high and imports are cheaper. The Panel on Non-Ferrous Metals suggested the prospecting of copper deposits in Sikkim and Jaipur. Pakistan has no resources of copper pyrites.

Tin: Neither India nor Pakistan have any economically workable deposits of tin. Both have to depend upon imports. There are some concerns in India manufacturing tinplates.

Zinc: Zinc sulphite occurs in Kashmir, but systematic prospecting is necessary.

Lead: Reserves of lead ores in India are meagre. The production capacity in India for lead is 7,200 tons per annum, the actual production in 1949 being only 600 tons.

Magnesium: India possesses immense reserves of magnesite (magnesium carbonate) in the chalk hills of Salem, and near Mysore City. Magnesium can also be successfully recovered from sea water. There is a great future for magnesium metal industry in India in view of her meagre supplies of other non-ferrous metals, apart from aluminium.

Aluminium: This metal has become indispensable to daily life. Its lightness and hygienic qualities, freedom from rust, and suitability for heat conduction have made it very essential in aircraft, automobile, electrical, chemical and metallurgical industries. In India more than 90 per cent. of the aluminium is used in the manufacture of utensils. There are three stages in the manufacture of aluminium goods:—(i) primary production; (ii) fabrication of sheets from the metal; (iii) manufacture of consumer goods. Though India possesses immense reserves of bauxite, there are only two concerns which have tried to produce virgin aluminium in India. The rest of the concerns manufacture utensils etc., from imported metal and sheets. The Indian Aluminium Company which was started before the war, planned to produce alumina from bauxite at Ranchi, to convert alumina into aluminium ingots at Travancore and to roll the ingots into various shapes at Calcutta. The second and the third stages have materialised. The site at Travancore was chosen because of the availability of cheap hydro-electric power. Anather concern, the Aluminium Corporation of India, was started with the help of Canadian and British experts. The factory is located at Asansol (West Bengal). The cost of this concern has tended to be high on account of the use of thermal power. The C. P. Government has very recently started an aluminium concern.

The raw materials necessary for this industry are (i) bauxite, (ii) cryolite, and (iii) caustic soda. One pound of aluminum requires for its production 4 lbs. of bauxite, 4 lbs. of coal and 10 KWH of electrical energy.

Electric power is the determining factor in this industry. Canada imports bauxite but because of the availability of cheap hydro-electric power it has become one of the leading aluminium production centres in the world. The cost of power in India is not low enough for developing a big aluminium in-

dustry. With the fruition of various hydro-electric projects it may be possible for India to develop a full-fledged aluminium industry. Along with that will be developed basic industries like aircraft and automobiles.

According to the Census of Manufactures, Rs. 12.4 crores of productive capital was employed in the industry in 1947 in India.[1] 23,000 persons were employed in it. The following were the materials consumed and products manufactured in the industries.

TABLE 47. Materials Consumed and Products Manufactured by the Non-Ferrous Metal Industry

(*'000 tons*)

Materials Consumed		Metal	Product	Quantity
Aluminium materials	18.9	Aluminium	Ingots	1.6[2]
Copper Materials	343.0		Sheets, strips, discs and circles	1.9
Brass materials	12.0		Domestic utensils	7.9
Zinc	7.4			
Tin	0.7	Copper	Ingots slabs and billets	1.2
Lead	1.7		Sheets, strips, discs & circles	1.9
			Rods and Bars	9.1
			Wires	2.3
			Cables (in yards)	1,788.0
		Brass	Ingots	1.8
			Sheets, strips, discs and circles	12.7
			Domestic utensils	5.3
		Gun Metal		1.8

The total value of products manufactured was Rs. 17 crores in 1947 as against Rs. 14 crores in 1946. The value added by manufacture was Rs. 4.5 crores in 1947 as against Rs. 4.8 crores in 1946.

With the partition, India has lost a considerable market for non-ferrous metalware in Pakistan. But this is only a temporary set-back, and the potential demand in India which is quite considerable is likely to make good the loss. The Government of India have decided to subsidise virgin aluminium production in the country. Unless power costs are brought down, there will be great difficulty in producing cheap aluminium.

Non-Ferrous Metal Semi-manufactures: During World War II, India made great progress in the production and processing of non-ferrous metal alloys: (1) Brass and copper wires: Almost all the major firms are situated in India: (2) Brass sheets and strips: The Indian Copper Corporation is the largest producer of hot rolled sheets. Brass sheets are in demand for utensils, stoves and sterilizers. Cold rolling is done by many Indian firms. (3) Rods and bars (Brass and Copper): Except for one firm at Moghalpura in Pakistan, the rest are situated in India: (4) Lead Pipes: There is only one firm of importance, situated in Calcutta: (5) Lead sheets: The principal firms are in India; (6) Bearing metal, gun metal, phosphor-bronze etc.: These firms are centred mainly in Bombay and Calcutta: (7) Brass and Copper tubes: Among the few firms that manufacture tubes, only one is in Karachi: (8) Crucibles and electroplating: The principal firms manufacturing crucibles are in India. The electroplating industry made good progress during the war but the ingredients have still to be imported.

1. The figures of manufacture refer to 85% of the registered factories.
2. The total production capacity for aluminium was 4,000 tons per annum in 1949, the actual production being 3,500 tons.

Non-Ferrous Metals in Pakistan: As regards the manufacture of virgin metals, Pakistan is in the same position as she is in the case of iron and steel industry. Pakistan does not have any factory specialising in the refining, rolling and extraction of non-ferrous metals from ores and scraps. She is also deficient in the supply of ores. Even if she imports bauxite, the development of water power resources must first take place. West Punjab has some rolling mills which roll brass and aluminium sheets for the utensils industry. The production capacity is not even 1/10 and actual production is about 1/20 of her requirements. The fabrication of non-ferrous metal products only, particularly of utensils, however, is well developed in Pakistan. The capacity and production are still short of requirements. The supply of sheets, circles and sections is not adequate. Certain types of manufactures, like that of brass water fittings, are quite well developed. Gujranwala and Sialkot have centres of organised production. The quality is supposed to be quite satisfactory and the Government is thinking of developing an export market.

ANTIMONY:—Though the antimony industry is a minor one, it has been confronted with major problems on account of the partition. As in the case of the jute industry, the raw material is almost entirely situated in Pakistan, while the manufacturing capacity is wholly located in India.

Prior to World War II, the bulk of the supplies came from China and to a small extent from the United Kingdom. The first attempt at developing antimony resources was made in 1903, in the Kangra District of East Punjab. But the work was very expensive and difficult and not much progress was achieved in that direction. The development of antimony resources in India, however, received a great fillip during World War II. Fortunately, just when the war started, new deposits of antimony ore were discovered in Shagor in Chitral State in N.W.F.P. The ores are situated at an altitude of 7,500 feet and are at a distance of 175 miles from Durgai, the nearest railway station. But the interesting point about this industry is that there are no facilities for smelting the ore in Pakistan. The only factory for smelting antimony ore is located in Bombay, at a distance of several hundred miles, from the mines in Shagor. Before the partition, crude antimony (zincknite) with a 30 to 40 per cent content was taken by road, muleback and train to the Star Metal Refinery Company in Bombay where it was converted into 99 per cent pure antimony. The refinery was designed to produce 200 tons per annum but, for many years production had not exceeded 160 tons. The industry applied for protection in 1944 and the Tariff Board, after a detailed examination, recommended in 1946 that a specific duty of Rs. 60 per cwt., should be levied on all imported antimony, to bring the prices of the imported ore in tune with that of the locally produced metal.

There is a difference of opinion as to the annual demand for antimony. The Tariff Board (1946) estimated the demand for antimony in Undivided India at 300 tons per annum. The Directorate General of Industries and Supplies, New Delhi, has estimated the present requirements at 1,000 tons per annum. The Tariff Board (1949) has estimated the demand at 600 tons composed as follows:—

Requirements of ordnance factories	55	Tons
Requirements of railways	200	,,
Requirements of the indigenous storage battery industry	250	,,
Other civil requirements	95	,,
Total	600	,,

The bearing metal industry, the type metal industry and the match industry are the chief consumers among the civilian users of antimony metal. With the exception of the railways, the other consumers of this metal are to be found wholly in India.

The partition had a very disturbing effect on this industry. Ever since the partition the supplies from Pakistan, the only source of antimony, began to dwindle and ultimately the refinery in Bombay had to virtually close down. This was unfortunate in so far as Indian antimony was much superior to the Chinese variety and compared very well with the British variety. Antimony production which was 132 tons in 1946, gradually increased to 235 and 350 tons in 1947 and 1948 but came down to 100 tons in 1949.

The future of the antimony industry in India is very uncertain. If the supplies from Pakistan are permanently cut off, the only alternative would be to resort to imports of ore from South America and Burma.[1] The metal refinery at Bombay managed to get some quantity of ore from South America. In view of the uncertain supply position from South America and Burma, it would be, perhaps, advisable to tap the hitherto neglected resources in the Kangra district. As stated earlier, this may prove expensive but looking to the fact that the annual consumption is over 600 tons and that the manufacturing facility is already there, it may be worthwhile making an attempt in this direction.

Antimony presents a case of lack of co-ordination between the two countries. Unless Pakistan sets up its own refineries, she will have to export her ore and import finished metal. Meanwhile the Indian industry may suffer for want of ore.

ENAMELWARE:—This industry lost a valuable market on account of the partition. The main raw material for this industry consists of mild steel sheets. Adequate quantities of steel sheets will have to be made available to the industry if the production is to be increased from its present low ebb. The Indian industry has a capacity for producing nearly 25 million pieces of enamelware. But actual production has gradually decreased from 8.5 million pieces in 1947 to 6.8 million in 1948 and 6.6 in 1949.

Since there are no primary producers of iron and steel in Pakistan, there are no prospects for starting this industry there. Pakistan will have to import enamelware from India or other countries.

The cost of production of enamelware in India is very high and the sales of Indian enamelware in Pakistan have suffered in consequence, particularly after the imposition of import duty on the same by Pakistan. The cost of production can be lowered if output is undertaken on a large scale by bigger units. But the size of the units in turn depends upon demand.

EXPANDED METALS:—There were four factories manufacturing expanded metals in Undivided India, Calcutta, Bombay and Lahore being the centres. During the war, there was an acute shortage of expanded metals in the country. The Government of India, therefore, imported two plants for the manufacture of expanded metals. The plants arrived too late to be of any use for war purposes and the Government sold them to private manufacturers and Lahore came to possess one concern. The total production capacity of this industry was estimated at 3,000 tons; the actual output was about 1,500 tons per annum in 1946-47 and

1. Attempts were made in 1949 to enter into an agreement with the Government of Pakistan whereby India agreed to supply a certain quantity of antimony metal to Pakistan in return for which the latter would meet the entire requirements of ore of the Star Metal Refinery. Besides, the Refinery is reported to be making every effort to form a joint stock company to operate the mines at Chitral.

1947-48. Adequate supplies of steel are necessary for the production of expanded metals. Pakistan has been placed unfavourably in this respect. The case for protection for the expanded metals industry of India was examined by the Tariff Board but as there was no keen foreign competition and also as the internal demand was sufficient to absorb the indigenous production, the Tariff Board refused to grant protection to this industry.

VII. ENGINEERING INDUSTRIES

STRUCTURAL ENGINEERING:—Structural engineering firms undertake the construction of bridges, steel structures, hangars, traction towers, oil wells, supporting structures and all other types of steel work. This industry was first developed mainly in Calcutta, thanks to British enterprise. With the expansion of other industries these firms also expanded. The starting of the iron and steel industry in India gave them a great fillip. The Government is the principal buyer of the services of these firms. During the war, there was a great expansion in the structural engineering industry. Among the leading structural engineering firms, 19 are situated at Calcutta, 3 at Madras, 6 at Bombay, 2 in South India and 4 at Karachi. Pakistan thus has been left with four major firms. All the raw materials that are necessary for this industry are produced in India. With the expansion of the developmental activities of the Central and Provincial Governments these firms have a great future. But during 1949 the engineering industry faced an acute crisis as the demand for their services was on the wane due to the cut in development plans. Efforts must, therefore, be made to put the industry on an even keel. Compared to her requirements, the capacity of Pakistan is about one third, while her production is only one twelfth of the capacity at present. Pakistan lacks essential raw materials like steel and steel products.

INDUSTRIAL PLANT MANUFACTURES (HEAVY AND SMALL):—The machinery manufacturing industry is of fundamental importance to the industrial development of the country. In the past India has been accustomed to depend upon imported machinery. In this vital field both India and Pakistan have not advanced much. But India being relatively more industrialised offers greater scope in this respect than Pakistan. Undivided India imported machinery worth Rs. 39 crores in 1946-47. Between 1947 and 1950 India has imported machinery worth Rs. 239 crores. Machinery imports increased from Rs. 77 crores in 1948-49 to Rs. 103 crores in 1949-50. In the corresponding period Pakistan imported machinery worth Rs. 5.72 and Rs. 8.25 crores respectively.

The main materials for the development of the plant manufacture industry are large quantities of iron and steel, brass, bronze, aluminium alloys, white metals, castings, forged steel products, die-castings, rivets, pipes and tubes, bars and gears. India has ample supplies of most of these materials. Pakistan is deficient in iron and steel primary production. Her position in respect of raw materials is therefore extremely unfavourable compared with India. More important than raw materials is the availability of technical skill. With the development of the various technological institutes in India and with the increasing number of foreign-trained personnel this gap is also being filled. The most essential factor in the development of this industry, however, is the size of demand. With proper attention to quality and the latest designs, this industry can well hope to satisfy the requirements of consumer goods manufactures.

The following table gives an idea of the location and capacity of the concerns in India:—

TABLE 48. Industrial Plant Manufactures in India

Type	Location	Number	Capacity (value in Rs. lakhs)
Sugar mills industry	Bihar	2	25
	W. Bengal	2	
	Bombay	3	
	Madras	1	
Oil crushing	Madras	3	20
	Bombay	3	
	W. Bengal	5	
	U. P.	3	
	Bihar	2	
Saw mill and wood-working	Ludhiana	..	
	Delhi	..	
	Calcutta	..	
Tea processing	West Bengal	2	7
Printing and lithography	W. Bengal	1	5
Unclassified mill work	Bombay	3	32
	W. Bengal	15	
	Delhi	3	
	U. P.	2	
	Bihar	2	
	Madras	6	
	East Punjab	2	
Jute textiles	West Bengal	4	15
Textile plant & machinery	West Bengal	3	32
	Bombay	8	
	Madras	1	
	Gwalior	1	
	Indore	1	
Road rollers	W. Bengal	1	..
	Bombay	1	..

The most important concern in this field is the Textile Machinery Corporation Ltd., which has set up two factories, one at Gwalior and another at Belgurla (W. Bengal). The production capacity of the company is about 2,000 looms and 100,000 spindles annually, representing only 20 per cent. of India's replacement needs. About six major firms are engaged in the production of various kinds of textile machinery with an existing capacity estimated at 300,000 spindles per annum. Construction has started on a factory for the manufacture of 100,000 spindles per annum and production is expected to commence by 1950. The Industrial Finance Corporation has advanced a loan of Rs. 53 lakhs to this industry.

Pakistan has a good deal of manufacturing capacity in respect of oil expellers. It can manufacture goods worth about Rs. 80 lakhs while her requirements are estimated at only Rs. 15 lakhs. These concerns are situated in West Punjab. Pakistan has a few centres for manufacturing saw mill and wood-working machinery; Sialkot, Gujranwala and Lahore have some capacity in this

respect. Pakistan has some capacity for manufacturing sugar and agricultural machinery. The centrifugal pump industry has been encouraged by the Pakistan Government.

There are ordnance factories in both India and Pakistan. During the war these factories were used for producing war equipment. But it is not advisable to solely rely upon ordinance factories, for during the war their main purpose is different and the needs of the industries will suffer if the factories are diverted to war work. The same is the case with railway workshops. Incidentally we may mention that Pakistan possessess one of the best workshops of Undivided India at Lahore.

India was not drawing any raw material supplies from Pakistan. But with the partition, Pakistan industries have to depend upon imported iron and steel and coal. There was also considerable migration of skilled workers from some of the factories in India. One of the immediate consequences was that the Ludhiana hosiery knitting and machinery industry suffered considerable damage. The effect on India is only of a transitory nature. But Pakistan oil expeller manufacturers have lost a large market because of partition. It has been stated that nearly 70 per cent. of Undivided India's needs of oil expellers were being met by the Pakistan manufacturers. It will take a long time for the local demand in Pakistan to catch up with the capacity.

LOCOMOTIVES:—One of the important reasons for the bottle-neck in railway transport in recent years in India has been the shortage of locomotives. The Government of India had in the past been making plans to establish a locomotive manufacturing plant in India. An attempt was made by a British firm in 1920's but the report of the Tariff Board was unfavourable and the firm went out of business without manufacturing any locomotives. In 1939 the Indian Railway Board appointed a Committee to go into the question of manufacturing broad-gauge locomotives and boilers in India. The report of the Committee was very favourable. In 1945 the East Indian Railway workshop at Singhbhum was handed over by the Government to the Tatas to enable them to manufacture locomotives and a new company called the Tata Locomotive and Engineering Company came into being. The Government has agreed to buy the locomotives manufactured by this company for 16 years and to help the company to import the necessary equipment. After World War II the Government of India evolved a scheme to start a plant for manufacturing locomotives. A site near Asansol (West Bengal) called Mihijam was chosen. The World Bank was approached for a loan but the report was unfavourable as the bank considered the extension of locomotive production capacity as not of prime importance at present in India. The locomotive factory at Mihijam was, however, inaugurated on January 26, 1950.

Pakistan has no plans for manufacturing locomotives. The necessary raw materials like iron and steel are not available there. If the Indian concerns expand, Pakistan will benefit as she will be able to get supplies very easily from India.

AUTOMOBILES:—The manufacture of automobiles is one of the basis industries. In times of emergencies automobile manufacturing plant can be used for manufacturing essential war equipment. Attempts to start a plant in India were made for many years but they were not successful. Some branches of Western concerns (like the General Motors assembling plant at Bombay) started assembling and body-building plants in India. In 1946 the Premier Automobiles Ltd., was started in Bombay under Indian initiative. The Chrysler Corporation of the U.S.A. agreed to give it technical assistance. Another firm (Hindustan

Motors) was registered in Baroda State with a paid-up capital of Rs. 5 crores. This has contacts with Nuffields, a leading British firm. The various plants in India assembled 10,439 cars and 9,418 trucks in 1947. The total number of vehicles assembled in India in 1949 was 36,854. The Government has given protection to the section of the industry which manufactures motor accessories. Recently some new firms with foreign collaboration have come into existence. The installed capacity of the leading concerns is as follows:

Hindustan Motors	16,200	Vehicles
General Motors	15,000	,,
Ford Motor Co.	14,400	,,
Premier Automobiles	12,600	,,
Ashok Motors	6,000	,,
Rootes Group	3,000	,,

Pakistan has no plants for manufacturing automobiles. She has one repairing and servicing factory in Rawalpindi belonging to a foreign firm.

AIRCRAFT:—India has no factory for manufacturing aircraft. The only Indian concern in this field is the Hindustan Aircraft Ltd., which was started in 1940, primarily as a commercial venture by some industrialists in collaboration with the Mysore Government, for assembling accessories imported from abroad. Later, with the progress of the War, the Government of India entered the field as a partner in the concern. The entry of Japan into the war made this concern one of the most strategic ones. It became primarily a Government concern and the American army authorities agreed to train Indian technicians. Many of the planes were sent to the Bangalore factory for repairs and overhaul. After the war the factory was also used for the purposes of manufacturing railway coaches. With the advent of independence, the basic importance of the concern was recognised and its paid-up capital was increased to nearly Rs. 1,75 lakhs. The manufacture of Percival-Prentice Aircraft is being contemplated at present. India has one very important raw material necessary for aircraft manufacture, viz., aluminium and its alloys. With the growth of the aluminium industry, we can well hope for a large output of aeroplanes to meet the local demand for aeroplanes due to the increase in air services.

The Hindustan aircraft factory employs 6,250 men. The sales turnover in 1948-49 was about Rs.1.75 crores and in 1949-50 it is expected to be about Rs. 2 crores. A further increase is expected during 1950-51. The profits and losses of the company have been as follows:

Year	Profit or loss (*in Rs. lakhs*)
1945-46	—16.38
1946-47	— 6.00
1947-48	+ 9.30
1948-49	+14.50
1949-50	+ 8.80

Pakistan does not possess any aircraft factory nor does it have any plans in this respect. In view of the separation of East Pakistan from West Pakistan by over a thousand miles of Indian territory, Pakistan will require more aircraft for commercial purposes.

MACHINE TOOLS:—The term machine tool applies to all mechanical contrivances for cutting, polishing, working or treating wood or metal. These tools are very essential for the functioning of modern industry. World War II conclusively demonstrated the basic nature of this industry to a nation. Before

the war, the majority of the machine tools were imported into India. But the war gave a tremendous impetus to the development of this industry within the country. With the collapse of France and the entry of Japan into war, imports were curtailed and India had to depend on her own resources. A Machine Tool Controller was appointed by the Government of India and he devised various schemes. Bulk orders were placed with some 25 firms who could produce quality grade tools. The annual production increased to nearly 11,000 machine tools a year. Machine tools are graded into three classes depending on their quality. As the war progressed greater and greater number of quality machines came to be produced. In 1946 there were about 11 producers of Grade II tools of which 8 were in India and 3 in West Pakistan. The chief centres of manufacture in India are Calcutta, Bombay, Satara, Harihar, Batala and Ludhiana. The production of indigenous machine tool industry is on the decline during the last four years. The total value of machine tools manufactured in India was Rs. 31 lakhs in 1946. It showed a gradual decrease to Rs. 46 lakhs in 1947, slightly went up to Rs. 55 lakhs in 1948 but again came down to Rs. 48 lakhs in 1949.

The raw materials required for the industry are pig iron, rolled steel products and non-ferrous metals. Coal, coke, limestone and timber are also necessary. With increase in the tempo of industrial expansion, the production of machine tools has to increase. In fact the availability of machine tools conditions the rate of expansion. Realising the essential nature of this industry the Government of India have evolved a scheme for machine tool manufacture by the State. The estimated cost of the proposed Government venture is nearly Rs. 12 crores and the production is expected to start within four to five years. The annual production of the factory, which is to be located in Mysore State is expected to be of the value of Rs. 7 to Rs. 8 crores. The Government of India have entered into a contract with two firms, one from Czechoslovakia and another from Switzerland, for giving technical assistance. There are five stages in the programme; in the first two stages, the manufacture of high speed lathes, shaping machines, heavy duty drilling machines, milling machines and turret lathes will be undertaken. In the third and fourth stages, planing machines and grinding machines will be manufactured and while during the last stage, it is contemplated to manufacture patterns, jigs, tools, fixtures, all tool room lathes, and radial drilling machines. With the end of the war and with the cancellation of bulk purchases of indigenous machine tools and with the arrival of imports, the industry is having a bad time, particularly as the quality of indigenous tools is inferior to that of imported ones.

The value of the production capacity of Pakistan machine tools manufacturing establishments is: (i) General purposes machines, Rs. 20 lakhs and (ii) Precision tools, gauges, etc., Rs. 5 lakhs, as against the requirements of Rs. 55 lakhs and Rs. 10 lakhs respectively. There are no establishments manufacturing precision machines and special machines. The raw materials necessary for the machine tools industry have to be imported from outside. There are only 7 graded machine tool manufacturers in Pakistan. Messrs. Batala Engineering Company are reported to have established a plant at Lahore for the manufacture of 300 all geared head central lathes per annum. But this capacity being more than what is required in Pakistan, the company will have to export some of the lathes.

LIGHT ENGINEERING: Sewing Machines:—There were six concerns in India, two in West Bengal, two in East Punjab and two in PEPSU with a total capital of Rs. 46 lakhs in 1947. India's estimated needs are 100,000 sewing machines per year. About 18,000 machines are being produced by a leading

Calcutta concern.[1] The chief raw materials used are steel and cast iron. The manufacturers of sewing machines have lost a considerable market in Pakistan. As the necessary basic materials are not available there, it is doubtful whether she can start sewing machine factories.

Bicycles: This industry was started at Calcutta in 1938; it made a modest beginning by manufacturing bicycle parts. The war gave a great fillip and two firms, one at Bombay (Hind) and another at Patna (Hindustan) were started. The Government of India assisted these firms by importing steel tubes, free wheels, chains, spokes, and steel balls. These concerns produced 50,000 bicycles per year during the war period. The estimated demand for bicycles in India is 3 lakhs per annum while the manufacturing capacity (for bicycles and accessories) of the Indian concerns is about 94,000 per annum. According to the Census of Manufactures, 1947, there were 11 factories in this industry employing 1,900 persons. The total productive capital employed was Rs. 70 lakhs. The principal raw materials used were steel and rubber tyres and tubes. About 32,000 men's bicycles (as against 43,000 in 1946) 240 women's bicycles and 600 children's bicycles and 8,200 tricycles were manufactured by the industry.[2] The total value of the products manufactured was Rs. 60 lakhs, the value added by manufacture being Rs. 23 lakhs.

Recently attempts are being made to manufacture bicycles with the co-operation of leading British firms like Raleigh, B.S.A., and Hercules. Three factories have been started.

Hurricane Lanterns: There are six organised factories manufacturing lanterns and their production capacity is about 3.3 million lanterns per annum, the actual production in 1949 being 1.7 million lanterns as against 0.98 millions in 1948, 0.91 million in 1947 and 0.47 millions in 1946. The country's total needs are estimated at 5 million lanterns per annum.

ELECTRICAL GOODS AND APPLIANCES:—With the growth of electricity consumption in India, the need for electrical goods has also increased. Even prior to the war a good number of factories had been started to produce fans, bulbs and other accessories. The following table gives an account of the distribution of some important branches of the industry at the time of the partition:—

TABLE 49. Distribution of Electrical Industry in India and Pakistan.

	India			Pakistan		
	No. of concerns	Capacity '000	Production '000	No. of Concerns	Capacity '000	Production '000
Fans (nos.)	28	350	130	4	38	15
Electric lamps (nos.)	9	12,000	7,271	1	1,800	842
Accessories (gross)	6	12		1	n.a.	n.a.
Flashlights (nos.) ..	5	30	29	1	16	n.a.

After the partition 4 units situated in India producing flashlights migrated to Pakistan. At the same time a considerable number of skilled workers in all the branches of the industry migrated to Pakistan. We may now go into

1. The total capacity for production in India was 37,200 mechines per year, actual production being 20,000 and 25,000 in 1948 and 1949 respectively.

2. The total production in India in terms of complete bicycles was 65,000 and 88,000 in 1948 and 1949.

details regarding the electrical goods that have been manufactured in the different branches of the industry.

Fans: Before the war, although the great bulk of fans and their parts were imported into India, there were 7 firms in India manufacturing fans, of which 1 was at Lahore. During war time because of lack of supplies from other countries, existing factories in India expanded, and many new companies were also started. Of the 7 new companies that were started, 1 was in Lahore. India produced 105,000 ceiling fans and 30,000 table fans in 1944. One of the Lahore firms produced 4,161 ceiling fans. The following table gives an idea of the location and capacity of units in India in the year 1948:—

TABLE 50. Production Capacity of Fans in India

	Units	Capacity ('000)
TOTAL	26	260.8[1]
Bengal..	11	181.8
Bombay	3	22.8
Delhi	3	19.2
E. Punjab	8	25.0
U. P.	1	12.0

Most of the raw materials necessary for this industry, like stampings, winding wire, ball bearings, insulating materials and aluminium sheets, were and are being imported from abroad. Efforts are being made to manufacture ball bearings in India. Shortage of essential raw materials has prevented Pakistan firms from working to their full capacity. Pakistan does not produce any table fans.

Lamps: Prior to the war, Indian producers were only assembling articles imported from abroad. But with the outbreak of war the increased demand from Indian factories had to be met by indigenous production. There were about 10 leading concerns producing lamps, of which only 1 was at Karachi. The raw materials necessary for the production of electrical lamps are glass shells, lead-in-wire, molebdenum wire, tungsten filament, brass caps, glass tubes and rods, capping cement, mandril wires and gases (nitrogen and argon). Only glass shells are being manufactured in India. The indigenous capacity for the manufacture of glass shells can meet the requirements only of a few factories in India. Efforts are being made to manufacture brass caps in the country. In 1948 about 9 million lamps were produced in India. The following table gives an idea of the location and capacity of units in India in the year 1948:—

TABLE 51. Production Capacity of Lamps in India.

	Units	Capacity ('000)
TOTAL	10	13,350[2]
West Bengal	6	11,150
Bihar	1	200
Bombay	1	400
Mysore	1	1,000
U. P.	1	600

1. The total production capacity in 1949 was 200,000 fans per annum, the actual production being 165,000.
2. The total production capacity in 1949 was 18 million lamps, the actual production being 14 million.

Motors: These are required for power drives in every industry and also for domestic and irrigation purposes and in cottage industries. During 1948 India imported nearly Rs. 3 crores worth of motors. Firms which manufacture motors are all in India. Most of the raw materials are being imported. Silicon sheets, ball and roller bearings, stampings, insulating materials are some of the raw materials. Cotton covered copper wire is the only locally available raw material. There is bound to be a large demand for electric motors as the various electrification schemes in India materialise. The following table gives an idea of the location and capacity of units in India in 1948:

TABLE 52. Location and Capacity of Electric Motor Industry in India

	Units	Capacity (No. of motors)
TOTAL	9	20,000
Baroda	1	900
West Bengal	2	5,300
Bombay	3	10,800
Madras	3	3,000

The actual production in 1948 and 1949 was 60,000 H.P. and 68,000 H.P. respectively.

Wires and cables: In this branch of industry also most of the pre-war needs of the country were met by imports. There was only 1 factory in India producing a small fraction of Undivided India's total requirements. During the war the Government set up a factory near Tatanagar and a new private concern also came into existence. The chief raw materials required for manufacturing cables and electric wires are lead, rubber, hessian, French chalk, barium sulphate, paraffin wax, naptha, sulphuric acid, cotton, copper rods and galvanised iron. Some of the raw materials are being produced in India. The capacity of Pakistan is only about 1/8 of its requirements and actual production is only 1/20.

Accumulators and dry cells: Electric accumulators are used largely in the motor car industry, the wireless industry, hospitals and cinemas. Before the war a few firms were producing lead acid electric accumulators. The raw materials required, like refined lead, antimony, red lead, litharge, sulphuric acid and sealing compound, were obtained from indigenous sources. Containers, lids, plugs and separators are imported. During the war some new concerns came into existence, thanks to Government assistance.

Abnormal war demands led to the expansion of the two principal manufacturers of electric cells, located at Baroda and Bombay, having a capacity of manufacturing 102 million cells. Raw materials like carbon electrodes, lamp black, manganese di-oxide, manganese chloride, zinc chloride, mercuric chloride zinc sheets and strips were imported. Cardboard, paper, wheat flour, corn starch, resin and asphalt were partly imported and partly obtained locally. Copper wires and cables were obtained from local sources. The total production capacity of all firms in India was 187 million units in 1949. The actual production was 124 million units in 1948 and 151 million units in 1949. Pakistan's requirements of electric cells are estimated to cost Rs. 50 lakhs. It, however, does not have any production capacity, particularly because the necessary raw materials are not produced in Pakistan. The Government is making some efforts to start a few concerns in this field.

Electrical accessories: Electrical accessories include switches, fuses plugs, cut outs, sockets, lamp holders, etc. Bakelite, copper and brass are the chief raw materials. Prior to the war there were two firms manufacturing these goods of which one was at Lahore. During the war many concerns were started, one of them being located at Lahore. The difficulty in producing these goods was the non-availability of bakelite powder in sufficient quantities. Brass and copper have also to be imported. But one of the Lahore firms was producing its own copper and brass screws. If the plastics industry expands, it will be possible to produce bakelite powder in India. But until then we shall have to depend upon external sources. Pakistan's requirements of electrical accessories are estimated at Rs. 40 lakhs. Its capacity and production are about ⅛ of the requirements. The raw materials required for the manufacture of these goods are not available in Pakistan.

Transformers: Prior to the war there was only one concern at Bangalore in India, producing electric transformers. Some new concerns came into existence during the war period. The following table gives the location and capacity of units in India in 1948:—

TABLE 53. Location and Capacity of Transformer Industry in India

	Units	Capacity KVA
TOTAL	7	102,000[1]
Bengal..	8	28,500
Bombay	3	43,500
Mysore	1	30,000

Black Tapes and Conduit Pipes: These industries also grew during the war. Most of the concerns are situated in India only. The necessary raw materials are also available in India.

This brief review shows that the principal branches of the electrical industry, which advanced due to the war stimulus were located mainly in India. Although Pakistan needs these products, in view of the non-availability of raw materials, she has to import them. India also has to import many of the raw materials, but with the expansion of ancillary industries she can hope to meet her needs. This industry has a great future because, with the completion of the major electricity schemes in both the countries and the quickening of the pace of industrialisation, the electrical industry will have to meet increased demands. India can develop an export market in some of these goods if proper attention is given to quality and cost.

DIESEL ENGINES:—Diesel engines have gained popularity in the industrial world because of simplicity of design and operation as well as cheapness. They are extensively used as engines for land power, ferry, for rail and road transport. In rural areas they can be used for pumping water and for agricultural purposes. This industry had developed to some extent at the time of the partition. Some of the leading manufacturers are situated in India, the main centres being Satara, Delhi and Kolhapur, the total production capacity of all firms being 5,200 engines per annum in 1949. The actual production was 1,000 engines in 1948 and 2,100 in 1949. It is estimated that India is in need of 5,000 engines per year. At present most of them are being imported from Western countries. Essential

1. The total production capacity in 1949 was 225,000 KVA., the actual production in the same year being 109,000 KVA.

materials like crank shafts, fuel injection equipment, pistons and piston rings have to be imported. The Government of India, have, therefore, been exploring the possibility of starting a state-owned factory in India at an estimated cost of Rs. 10 crores. Negotiations are being carried on with leading Austrian and Italian firms. Some of the private concerns also are planning expansion.

So far as Pakistan is concerned, there are many small manufacturers of oil engines in West Punjab. Formerly they were manufacturing kerosene oil engines and had acquired considerable amount of popularity. With the advent of diesel engines these firms had to undertake that line of production. By 1945 some 20 firms had specialised in the manufacture of diesel engines of small capacity, which were in great demand owing to the restriction of imports. The Government of Pakistan is planning to organise this industry on a sound basis and to maintain the quality of indigenous engines at a high level. As Pakistan has no coal reserves, she has to depend upon oil to a great extent as a source of power. The development of this industry is, therefore, very necessary. The raw materials necessary for manufacturing diesel engines, like pig-iron, steel, non-ferrous metals and coke, are, however, not available in Pakistan.

POWER PLANTS:—As the various governments in India, as well as private companies have planned for a huge expansion of electricity generation and as most of the plants have to be imported from abroad, the Government of India evolved a scheme to manufacture heavy plant in India itself. The requirements of India were estimated at the rate of 0.3 million kilowatts per annum. The cost of this scheme was originally put at Rs. 15 crores and then revised to Rs. 24 crores (before devaluation). It was expected that it would take five years for the factory to go into full production. The Government requested a few foreign firms to prepare project reports. But with devaluation, the need for stringent economic arose, and the Government of India had to curtail, *inter alia*, the power plant manufacturing scheme. It is very unfortunate that the scheme has been kept in abeyance, because one of the important pre-requisites of industrial development is electrical power, and India is blessed with huge water power resources. But the capacity of Western countries to provide these plants is limited. This may come in the way of the early completion of these schemes. The development of the generation plant manufacturing industry would have solved the problem of India and Pakistan both of which badly require large quantities of electrical plant. Recently the Government of India have been negotiating with firms in Japan for the import of power plants.

RADIO RECEIVERS:—In 1947 India had capacity for manufacturing about 8,000 radio receivers of which only 800 were large sets while the remainder were People sets. West Bengal had 2 firms with a total capacity of 800 sets, and Bombay 1 firm with a capacity of 7,200 sets per annum.

At the end of 1949, the total production capacity in India for manufacture and assembling of radio receivers was 60,000 per annum, the actual production being 16,000 in 1949 as against 25,000 in 1948 and 3,000 in 1947.

The Government of India requested a few foreign firms to prepare project reports on the manufacture of wireless equipment (excluding radio receiving sets). The cost of the factory has been estimated at Rs. 3 crores. It is expected to produce equipment valued at Rs. 2 crores per annum. Pakistan has no factory for the manufacture of radio sets.

TELEPHONE EQUIPMENT:—There are three factories manufacturing telephone components. These are located at Bombay, Calcutta and Dehra Dun. The

Government of India having decided to start a factory for the manufacture of telephones, entered into an agreement in May 1948 with the Automatic Telephone and Electric Company of England for a period of 15 years in the first instance, under which the company would allow the Government of India full use of all its patents and of other technical information. The company agreed to act as consulting engineers for establishing a fully equipped factory in India. A telephone factory, named Indian Telephone Industries, was established at Bangalore in July 1948. The Government of Mysore provided all facilities by way of land, and electricity. Work in connection with the assembly of telephones was started in the beginning of 1949. About 15,000 telephones have been assembled so far. The factory is being equipped for a production capacity of 50,000 telephones and 30,000 exchange lines per year. The factory which was formerly started as a Central Government venture has now been converted into a partnership concern. The Mysore Government, the Central Government and the Automatic Telephone and Electric Company are the partners. According to the budget, a sum of Rs. 56 lakhs will have to be spent in 1949-50 and a sum of Rs. 50 lakhs will be spent in 1950-51.

The Government of India has signed a contract with the Standard Telephone Company, London, involving technical assistance for 20 years in order to construct a factory for manufacturing telephone cables. The cost of the factory is estimated at Rs. 1 crore and it is expected to produce cables worth Rs. 5 crores every year.

VIII. MISCELLANEOUS INDUSTRIES

TANNING AND LEATHER:—The tanning and leather industry provides an example of the essential interdependence of the economies of the two countries. While the supply of raw hides and skins is abundant in both India and Pakistan, the raw material available in Pakistan is of superior quality. The entire manufacturing capacity is more or less concentrated in India. Pakistan is, therefore, left with little or no choice in the disposal of her supplies; she has to export locally produced raw hides and skins to India or to other countries.

Production of Hides and Skins: An estimate of the annual production of raw hides and skins in India and Pakistan is given in the following table. It must be remembered that available statistics are inadequate and also inaccurate, but an attempt has been made to give a general idea of the present distribution of the production between India and Pakistan.

TABLE 54. Estimated Production of Hides and Skins in India and Pakistan
(million pieces)

	Cow hides	Buff hides	Goat skins	Sheep skins
India ..	15.52	5.17	29.70	11.80
Pakistan ..	3.18	0.53	3.10	2.30

It will be seen from the table that Pakistan produces 15.6% of the total hides and over 12% of the skins produced in Undivided India.

Hides: It could be said that in Undivided India the production of slaughtered hides was unimportant in as much as 19 out of 25 million pieces were obtained from fallen or dead animals. The proportion of slaughtered hides has tended to decrease in India because of the Hindu sentiment against the slaughter of cattle. In Pakistan, on the other hand, the scope for obtaining slaughtered hides is very much greater. As regards the quality of hides, it may be

said that prior to the partition the best quality cow-hides were obtained in U.P. and Bihar, but the supply is now dwindling on account of the prohibition of cow-slaughter in general and of cattle below 14 years of age, in particular. Thus in spite of her huge cattle population, India actually suffers from a shortage of good quality hides. This is because of the marked superiority of slaughtered hides over 'fallen hides'. Regarding the supply of buffalo hides of the heavier type, Pakistan enjoys an advantage as its production, particularly in N.W.F.P. is substantial. The Punjab hides are of very superior quality and are used in some of the best tanneries in the world. The lighter type of buffalo hides are obtained, in fairly good quantities in India, in Bihar and U.P. But the method of flaying leaves very much to be desired in both India and Pakistan and there is great need to introduce improved methods of curing and flaying.

Skins: The production of skins in India is mainly concentrated in U.P., Bihar, Bengal, Rajputana and Madras, which together contribute 55.7 per cent. of the supplies. The production of sheepskins is concentrated in Madras, Bombay, U.P., Hyderabad and Deccan States, which together account for 53.9 per cent. of the total production. So far as the supply of slaughtered skins in concerned, they are generally obtained in the urban areas which account for nearly 62 per cent. of the production, though in some of the areas like Kashmir, Bombay, Central Provinces and Assam the percentage of slaughtered skins is greater in the villages than in the urban areas. Dead skins account for only 15 per cent. of the total supply of skins. In N.W.F.P., in Pakistan about 60 per cent. of the slaughtered skins come from villages. It may generally be said that, so far as Pakistan is concerned, the availability of supply of skins is distributed fairly equitably between urban and rural areas. This is because of the prevalence of an essentially meat-eating population throughout the territory. For this reason, again, Pakistan has greater proportion of slaughtered skins than India. Substance, thickness and plumpness are the three more or less similar qualities which go a long way in determining the suitability of skins, for making different kinds of leather. As in the case of hides, the present practices in the handling of sheep and goats, both before and during slaughter, leave much to be desired. Imperfect methods of handling injure the skin and make it more liable to disclouration and subsequent putrefaction. There is, therefore, great need to do away with primitive methods and to develop the industry on modern lines. The goat skins produced in India at present are useful for the production of glazed skins.

Tanning Industry in India: The tanning industry in India may be broadly classified into the following sections:—

1. **Village tanners:**—These produce vegetable tanned cow and buff and leather and leather from goat and sheep skins. The number of village tanners is unknown but in most villages tanning is carried out on a cottage industry basis. It is estimated that village tanners in India process about 8 million raw hides and about 2 million raw skins annually.

2. **Chinese chrome tanners producing chrome-tanned upper leather:**—There are 243 chrome tanneries, all owned and mainly worked by Chinese. These are situated in the Tangra Area of Calcutta. It is estimated that this section of the industry has a capacity to process annually about 2.5 million raw hides for the production of chrome upper leather and the value of the finished product is estimated at about Rs. 4 crore annually. This section of the industry employs about 3,000 labourers.

3. **Tanneries producing East India tanned leather:**—This section of the industry is almost entirely situated in South India and is run mostly on a semi-cottage industry basis. There are about 378 tanneries producing this type of leather. It is estimated that their annual production capacity is 8.6 million East India tanned hides and 19 million East India tanned skins, valued at approximately Rs. 12 crores annually. It is estimated that these tanneries employ about 34,500 labourers.

4. **Tanneries producing finished vegetable tanned buff leather and chrome tanned upper leather:**—The number of tanneries comprising this section is 34. It is estimated that they have a capacity to process annually 2 million buff hides for vegetable tanning and about 2.5 million hides and calf-skins for chrome tanning and employ about 8 000 labourers. These tanneries are mainly concentrated at Kanpur and in West Bengal and Madras.

Leather Industry: The following are the main branches of the leather industry.

1. **Hand-made footwear:**—Handmade footwear is manufactured both on factory and cottage industry basis. Agra is the best known and probably the largest producing centre of handmade footwear on a factory basis in India. It has nearly 150 such factories. Calcutta and Bombay are the next largest producing centres for this type of footwear in order of importance. Footwear is produced on a cottage industry basis in most parts of India and accounts for the largest proportion of the total footwear produced in India. The main producing centres in this case also are Agra, Calcutta and Bombay. The Leather and Leather Goods Panel of the Government of India estimated the annual production at 100 million pairs of indigenous type footwear and 30 million pairs of Western type of footwear. The production in Pakistan is very small. The entire quantity of indigenous type of footwear and about 80 to 90 per cent of the Western type of footwear in India is handmade.

2. **Machine-made footwear:**—There are only 9 factories in India producing machine made footwear, 2 each at Agra and Kanpur and one each at Calcutta, Batanagar, Madras, Bombay and Bangalore.

3. **Leather goods industry:**—The production of leather goods in India is mainly by handmade methods and is largely carried on a cottage industry basis. Production on a fairly large scale is carried out in factories situated at Kanpur, Bombay, Agra and Madras. These centres are also the largest producing centres of leather goods on a cottage industry basis.

Tanning and Leather Industry in Pakistan: Pakistan has very few tanneries compared to her large production of hides and skins. After the partition only Narayanganj in East Bengal had an established tannery. The Muslim proprietors of the Kanpur tannery, who sold their establishments to Hindus interests, are busily engaged in the task of setting up the industry in Hyderabad (Sind). There are excellent prospects for setting up tanneries at many places in Pakistan. The position in regard to the manufacture of footwear and leather goods is similar to that of the tanning industry and the only established factory in Pakistan is the Bata Shoe Co., at Lahore. The development of a large and organised footwear industry is engaging the attention of the Pakistan Government. Pakistan's leather industry has a bright future. The processes followed by local tanners at present are crude and unscientific and so the products are poor in quality. By employing better processes it would be possible to establish the leather industry on a sound basis.

Effects of the Partition: Output:—The partition had adverse effects on the production of tanned hides and skins and of leather goods in India. The following table shows the production in the various sections of the tanning and leather goods industry in 1947, 1948 and 1949.

TABLE 55. Output in the Tanning and Leather Industry in India
(figures in thousands)

	1947	1948	1949
Vegetable tanned buff and cow hides in terms of cow hides (numbers)	3,124	1,958	1,658
Chrome tanned hides by organised section (numbers)..	1,076	1,087	518
Western type leather footwear by mechanised units only (pairs)	4,878	3,202	2,505
Indigenous type leather footwear by mechanised units only (pairs)	n.a.	2,068	1,889

Thus there has been nearly 50 per cent. decline in output in vegetable tanned buff and cow hides and Western type leather footwear. The decline in chrome tanned hides is nearly 75 per cent. The chief reason for this decline was the dislocation caused by the partition as a large portion of the raw material supply to the tanning and leather goods industry used to come from Pakistan.

Enterprise:—A large number of Muslims who were playing an important role in the organisation of this industry migrated to Pakistan. But very soon non-Muslim proprietors took over the industry and no serious repercussions on the trade occurred.

Labour:—In view of the fact that Muslim workers accounted for a large percentage of the total number of skilled workers, the Indian leather industry was fortunate in that there was no large-scale migration of Muslim workers to Pakistan. In some cases where there was migration, those workers have been replaced by *chamars*. Only in the case of the shoemakers in Agra was there an almost wholesale migration.

Raw Materials:—We have seen the extent to which India was dependent on Pakistan for her supplies of raw hides and skins. It is estimated that India obtained normally about 2.5 million pieces of hides and 1.5 million pieces of skins from areas which are now in Pakistan. The experience of India after the partition shows that there is considerable difficulty in getting raw heavy buffalo and heavy cow hides, particularly from West Pakistan. Peshawar and Lahore in Pakistan were the largest hide markets, and India also used to obtain high quality hides from Turkey and Afganistan *via* Pakistan. This trade has been considerably affected by the partition. The Madras tanning industry was very seriously affected after the devaluation deadlock. So the Government of India permitted liberal imports of hides and skins from other countries, like Afganistan, Aden, Burma, Bahrein Islands, Ceylon, Iraq, Jawa, Kuwait, Kenya, Muscat, Straits Settlements, etc. The Export Promotion Committee strongly criticised the indiscriminate stoppage of cattle slaughter, which contributed to the low supplies of quality hides and skins in India.

Market:—Pakistan was almost wholly dependent on India for its supplies of leather goods. After the partition, however, there has been a steep fall in India's exports to Pakistan for two main reasons. In the first place, in the initial stage after the partition unprecedented transport difficulties had to be encountered. Secondly, the Pakistan Government imposed an import duty of 10 per cent. on leather goods imported from India. There was a move to increase that

duty to 40 per cent. It is expected that production of leather goods will be organised in Pakistan at an early date, thanks to the enterprise and experience of some of the Muslims who have now migrated there. The scope for producing good quality leather in Pakistan is indeed great.

Another consequence of the partition is that India's capacity to export raw and tanned hides and skins and leather goods has been affected. The following table gives an idea of the exports of these commodities in 1946-47, 1947-48 and 1948-49:—

TABLE 56. Export of Raw Hides and Skins, Tanned Leather and Leather Goods from India

	Quantity (*in thousands*)				Value (*Rs. in lakhs*)			
	1946-47	1947-48	1948-49	1949-50	1946-47	1947-48	1948-49	1949-50
Total raw hides & skins (pieces ..	27,716	21,525	17,586	19,095	8,49	7,47	5,59	6,78
Buffalo hides, raw	197	67	10	5	53	12	1.7	.5
Cow hides, raw	772	834	479	179	84	106	44	19
Calf skins, raw	121	149	76	23	6	7	3	2
Goat skins, raw	18,578	19,774	16,685	18,429	4,07	5,64	4,73	6,27
Sheep skins, raw	6,210	1,093	414	155	2,30	37	15	6
Other skins, raw	2,987	658	487	510	62	12	10	11
Total leather & manufactures (tons) ..	..	..	..	..	18,86	14,48	12,69	18,39
Tanned buff hides	1.5	1	1.2	1.3	77	40	41	49
Cow hides ..	15	12	8	11	7,61	5,62	4,10	6,10
Goat skins ..	4.9	2.7	3	4	5,13	3,06	3,74	4,95
Sheep skins ..	1.9	2.0	1.9	3	2,68	3,00	3,12	4,61
Calf skins ..	1.2	1.5	.7	1.3	81	1,09	44	91

Thus there was a great reduction in 1948-49 in the quantity and value of India's exports of raw hides and skins and tanned leathers and leather goods when compared with Undivided India's exports in 1946-47. This affected the ability of India to earn foreign exchange. In this connection we must remember that these goods were earning a considerable quantity of dollars. Owing to the stimulus given by devaluation, the quantum and value of exports of these goods increased and in 1949-50 the total value amounted to about Rs. 25 crores, slightly less than that in 1946-47.

Pakistan is making systematic attempts to utilise internally her large quantities of raw hides and skins. She is also exporting increased quantities of good quality raw hides to foreign countries, to the detriment of the Indian tanning industry. Ultimately this may mean that India will have to reduce her own exports of superior hides and utilise them locally.

MOTION PICTURES: Prior to the partition the prominent centres of the motion picture industry were Bombay, Poona, Kolhapur, Calcutta, Madras, Coimbatore, Salem and Lahore. The partition separated Lahore from the others. Apart from the loss of a big producing centre, the film industry in India lost a good market. Nearly 50 per cent. of the demand for Hindi and Hindustani pictures was reported to have come from Pakistan. Not merely were there losses on this account, but also there were losses due to shifts to production of pictures in other Indian languages.

The motion picture industry is one of the leading medium scale industry in India. It is estimated that nearly Rs. 10 crores are invested in this industry

and that it provides employment to nearly 15,000 people. India produces more pictures during a year than the U.K. and is next only to the U.S.A. The total footage of raw film imported into India was 75 million feet in 1937-38 and in 1947-48 it had increased to nearly 175 million feet. But soon after the war, there was a slight recession, followed by recovery. The communal disturbances that took place prior to and in the wake of partition resulted in the closure of many theatres in some of the leading cities. In 1947, for example, about 283 pictures were produced but only 80 could be released. The financiers who provided funds suffered huge losses. The partition itself took away a big slice of the internal market. Some studios at Lahore were reported to have been burnt.

As the demand for the Hindi pictures diminished, producers turned towards other languages. The number of pictures produced in Bengali increased from 14 in 1946 to 33 in 1947 and 27 in 1948. In Gujarati more than 39 pictures were produced in 1947 and 1948 as against 1 in 1946. But this excess of pictures in other Indian languages resulted in losses to the producers.

The total number of theatres is estimated at 2,200 in India and 400 in Pakistan, and the number of studios is estimated to be 55 in India and 5 in Pakistan. There is no doubt that the Indian industry has lost a valuable market. But considering the fact that India has a large number of towns without any theatres, and the possibility of increase in the picture going habit with an improvement in the standard of living, there is good reason to believe that the loss of the Pakistan market may be offset soon. The adoption of Hindi as the State language may also bring prosperity to Hindi pictures. There is a move to subject films to central regulation and censorship. If Indian producers concentrate on a small number of quality pictures rather than a large number of mediocre productions, there is no doubt the industry will improve financially. The loss of skilled actors and technical personnel that occurred on account of the partition can also be easily made up.

Attempts are being made to start a raw film manufacturing factory in Mysore State with the technical aid of Swiss experts. This will help to stop the drain on foreign exchange resources of India, as we are importing large quantities of raw film from hard currency areas.

Chapter IX

INDUSTRIAL DEVELOPMENT AND PLANNING

COMPLEMENTARY NATURE OF INDUSTRIAL LIFE IN INDIA AND PAKISTAN

We have seen that all aspects of economic life of Undivided India were affected by the partition. This is specially true of industrial activity in the two countries. The economies of India and Pakistan were complementary to each other. Pakistan supplied raw materials for the industries of India. More than 70 per cent. of raw jute that was grown in East Pakistan used to go to the Calcutta jute mills. Almost all the supplies of long and medium staple cotton from Sind and West Punjab went to the cotton mills in Ahmedabad and Bombay. More than 40,000 tons of bamboos were transported from East Pakistan forests to feed the paper mills of West Bengal, which also derived supplies of rags and rosin from West Punjab. Large quantities of wool produced in the cold regions of West Pakistan used to go to East Punjab, U.P., and Bombay mills. Mineral ores like antimony, mined in the hilly tracts of Chitral, were sent all the way to Bombay for refining. Gypsum that was mined in Sind was carried to cement works all over India and also to fertiliser factories in different parts of the country. Over 2 million tons of coal mined in Bihar and West Bengal went to East and West Pakistan areas to feed railways, steamer services and industries. Limestone mined in Assam was sent to the Sylhet factory for production of cement. Large quantities of soda ash used to go from the Khewra works to the glass factories in U.P. and other parts of India. Potassium nitrate mined in West Pakistan was carried to the different glass factories all over India. The tobacco that was grown in East Pakistan went to cigarette and *bidi* factories of Calcutta. Large quantities of raw hides used to be sent from Western Pakistan to tanneries in Madras and leather works in Cawnpore. Similarly, large quantities of sheep and goat skins from East Pakistan used to go to the Calcutta chrome tanning works. The distilleries of U.P. derived their supplies of barley from West Pakistan. The sports goods industry of West Pakistan drew its supplies of raw rubber from Travancore and of leather from Cawnpore. The non-ferrous metal works all over Pakistan drew their supplies of semi-manufactures of metals from India. Foundries situated in different parts of Western and Eastern Pakistan drew their supplies of iron and steel from the Indian industry in Bihar and West Bengal. More than 70 million kilowatt hours of electrical energy was sent to the industial consumers of West Punjab from the Jogindernagar Power Station of East Punjab.

The products that were manufactured in India by making use of some of the raw materials supplied from Pakistan had their markets in both the countries; similarly, some of the products that were produced in Pakistan with the aid of some of the raw materials and fuel supplies from India had their markets in India. Tea that was grown in West Bengal and Assam, sugar that was manufactured in U.P. and Bihar, the large quantities of vegetable oils that were manufactured all over India, the cigarettes that were produced in Calcutta and Bombay, the boots and shoes and other leather goods produced in U.P. and at Calcutta, the paper that was manufactured in West Bengal and U.P., the

textiles that were woven in the mills of Bombay, Ahmedabad and Madhyabharat, the handloom fabrics that were designed and woven in South India, the iron and steel products that were manufactured in West Bengal and Bihar, the enamelwares that were produced in the different parts of India, the woollen cloth that was manufactured in East Punjab, U.P., and Bombay, the tea chests of Madras and Mysore plywood factories, the gold and silver threadwares of Surat, the rubber goods that were manufactured in the different parts of the country and many other consumer goods like soap, matches, etc., found a large market in East or West Pakistan or both. The sports goods and surgical goods manufactured in Sialkot, and the oil expellers that were manufactured in West Punjab and the cement produced in West Punjab and Sind found a market in India. The marketing arrangements had been developed into a smooth and convenient pattern by which the demands of the provinces of India or Pakistan were being met with ease from their neighbours.

We have so far seen the complementarity between raw materials and industry and between product and consumer. The entrepreneurial ability, technical personnel, skilled and unskilled labour employed in different industries of Undivided India, used to come from the different parts of the country and there was not one part which was self-sufficient in this respect. The various technical institutions were concentrated in India and they provided training facilities for the workers from Pakistan provinces also. The various industrial ventures all over the country drew their supplies of funds from all parts of Undivided India. The Governmental loan programmes were strongly supported by the prosperous landholders of Sind and West Punjab in Pakistan, as well as by the rich and middle classes in India. The transport system in Undivided India had been geared to this relationship of inter-dependence of carrying raw materials and taking back finished products. There was complementarity in the port facilities of Chittagong and Calcutta in the East and of Karachi and Bombay in the West. On account of the specialisation of the different parts of India in different productive activities, there was no part of economic life in India which was not in one way or another interlinked with that in Pakistan and *vice versa.*

IMPACT OF THE PARTITION

The partition acted as a powerful shock, shaking to its foundations this economically unifying relationship. It was fondly believed that this relationship in the economic field would continue undisturbed even after the partition. Recent events have given the lie to these hopes. Each country is trying to be self-sufficient and in trying to be so, has to deny its products to the other or to deny itself the products of the other. Questions of cost have been disregarded largely due to considerations of nationalism. The specialisation that had been evolved over a period of centuries has been shattered, and new economic patterns and relationships are being evolved in the two countries. Politics based on communal hatred and suspicion is systematically undoing the work of generations by defying the facts of economic geography and the laws of economic science.

In order to have a fuller idea of the trends indicated above, we shall attempt a brief review of the effects of the partition on the industrial structure of the two countries. The industrial policies of both the countries will also be discussed

I. SHORT-TERM EFFECTS

SUPPLY OF RAW MATERIALS

While dealing with textile industries, particularly cotton, jute and woollen, as well as tanning and leather and paper industries, the extent to which the partition separated the raw materials in Pakistan from the industrial centres in India has been indicated. Before the war, we exported short staple cotton and imported long staple cotton. Because of the partition, for some time to come at any rate, the industry will have to export cloth and import long staple cotton in larger quantities. Similarly, whereas Undivided India exported both raw jute and jute manufactures, after the partition the industry in India has to import raw jute to be able to manufacture and export jute goods. As between the cotton and the jute industries as export industries, there is one difference. Whereas cotton cloth is exported to soft currency areas, jute manufactures are a valuable dollar earner. The capacity to earn dollars, however, is heavily conditioned by supplies of raw material from Pakistan, until such time as India grows her own jute in sufficient quantities. Both in the case of the production of raw jute as well as raw cotton, agricultural production in India has shown rapid improvement. The production of raw jute has increased from 16 lakh bales in 1947-48 to 31 lakh bales in 1949-50. The production of raw cotton has increased from 17 lakh bales in 1948-49 to 21 lakh bales in 1949-50. With the help of research, propaganda and special incentives, it is hoped that in the supplies of both these raw materials, India will take less time for self-sufficiency than is usually imagined. As regards cotton in recent years the production of improved varieties of cotton has increased, and India is also getting raw cotton from Egypt and Kenya. The Indian paper industry was for a time heavily dependent on supplies of bamboos from East Bengal. The loss of the raw material has been made good within the last two years. In the tanning and leather industry India was dependent on Pakistan areas for supplies of raw hides and skins. Until such time as the methods of slaughter and the breed of animals in India improve, the industry will feel the insufficiency of internal sources of supply. Immediately after the partition, the supply of gypsum to cement and fertiliser works was considerably affected. Now that alternative supplies have been discovered in Rajputana and Saurashtra, India is no longer in a dependent position. In the woollen industry the position is yet uncertain. Prior to the partition antimony ore mined at Chitral in N.W.F.P. used to be sent to Bombay for smelting purposes. The quantity of antimony produced in India is negligible and after the partition the industry in India has to be supplied antimony ore from Bolivia and Mexico.

Areas in Pakistan were not highly industrialised, and thus did not suffer any major breakdown. The absence of coal, however, adversely affected the existing industries. Cement factories, baling presses and other concerns had to depend on coal imported from India. There was some dislocation and slowing down of output after the partition, as coal could not be transported in adequate quantities. The engineering and electrical concerns that are situated in Pakistan have to depend upon India and other countries for supplies of iron and steel. The absence of coal and iron in Pakistan will be felt more acutely as Pakistan tries to build up her industries. Her infant machine tool industry and diesel-engine manufacturing concerns have to depend upon imported iron and steel and other non-ferrous metal products. Her highly developed sports goods industry has to depend upon imported rubber supplies.

EFFECTS ON DEMAND

A considerable portion of the products manufactured by different industries in India used to be sold in Pakistan areas. Punjab and Sind were fairly prosperous provinces, particularly during and after the war. Pakistan used to absorb large quantities of textiles, glass, aluminium, brass, copper and enamelware, plywood, ceramics, rubber goods, diesel engines, sewing machines, vegetable oils, footwear and hosiery products. With the partition some of these industries in India, had to suffer a serious gap in their demand. Among those which have been affected to a major extent are glass, soap, cotton, silk and woollen textiles, hosiery and enamelware industries. As regards sugar and matches, India is not in a position to export large quantities to other countries. The value of the loss of the market in these commodities cannot be estimated. The industries in India appear to have suffered temporarily. As regards cotton textiles, tobacco products and even coal, it is possible for India to export her products to other countries. In fact attempts are being made to find alternative markets, as the Pakistan market is at present uncertain owing to the strained relations between the two countries. It is encouraging to note that India has achieved notable progress in this respect.

As for Pakistan, the effects on demand for some of its industrial products have been serious and disconcerting. Industries like sports goods, oil expellers, lathe manufactures, rubber goods, surgical instruments and cement used to depend mainly upon the Indian market. After partition, attempts are being made to start similar concerns in India itself, particularly sports goods and surgical instruments. Thus the industries of Pakistan which had a natural advantage in Undivided India will have to face the loss of markets. In addition, the products of Pakistan will now have to compete with the products of Indian industries in third markets. The cottage industry products of Pakistan also face the same disadvantages. The potential demand in Pakistan is not as extensive as in India. Moreover, the two parts of Pakistan are separated by more than a thousand miles. Transport costs will always be heavy and, however economic a unit may be in one part, the sale price of the product will be higher in the other. The same applies to the transport of raw materials.

MIGRATION OF SKILLED LABOUR

One of the consequences of the partition was the large scale migration of workers from one country to the other. This was particularly the case with border provinces like East and West Punjab, and East and West Bengal. Engineering concerns, hosiery industry, woollen industry, glass factories, tanneries, and leather works in East Punjab, U.P. and West Bengal felt the shortage of skilled labour due to the migration of Muslims. Pakistan also to some extent felt the shortage of engineering and technical personnel in her industries. But its loss was mainly in terms of managerial and entrepreneurial skill. Factories in East and West Punjab were dislocated in the wake of the partition. But attempts have been made to start technical schools and to see that the loss is made up. As the facilities for training in Pakistan are limited, her loss of technical personnel to whatever extent it may be, will take time to be made good.

DISLOCATION OF PLANT

During the course of the disturbances preceding and following the partition, some of the plant and machinery of factories were destroyed or damaged. There is no adequate information on this problem. It may be said, however,

that the destruction that took place in India could be repaired. India is a vast country with capacity to produce some of the machines. As regards Pakistan, this facility is not available. This type of loss must have mainly occurred in the Punjab where the major disturbances took place.

II. LONG-TERM EFFECTS

BASIC RESOURCES

While dealing with minerals, it was remarked that Pakistan is not left with any relative advantage as regards mineral resources (except in chromite), India retained the major resources in coal, iron ore, mica, manganese and other minerals. Pakistan has got only some resources of sulphur, antimony, coal and salt. The lack of adequate coal resources, as we have pointed out, will prove to be one of the permanent handicaps for Pakistan. The sulphur that was at one time produced in Pakistan was very costly as her mines are situated at inaccessible heights. As regards supplies of salt, India has already made up for her deficit after partition. Attempts are being made to see that India is self-sufficient in salt. It is known that there are extensive reserves of rock salt in Mandi near East Punjab. Pakistan being without iron ore and bauxite or any other light metal ores will be handicapped in industrial development. She will have to depend upon scrap for smelting and re-rolling. The fact that large reserves of mineral ores are available in India holds out prospects for a brighter industrial future for this country.

As regards installed electrical capacity we have seen that India is in a favourable position. After the partition she has more than made good the loss in capacity. Pakistan on the other hand has no major producing units except oil plants. Her water-power resources have not yet been fully tapped. The existing development is meagre and one of the important difficulties in Pakistan is the limited availability of power. The supplies of water power resources are also not evenly distributed. N.W.F.P. has somewhat large resources. But that province is not well suited for industrial development. Some of the rivers of Pakistan flow from Kashmir, East Punjab, and Assam. This will introduce an uncertain element as regards the development of water power resources in Pakistan. The partition has created a major dispute regarding the utilisation of water resources of the Indus and its tributaries. Pakistan has claimed absolute rights over all the rivers that flow to Pakistan, whereas India has suggested that a Joint Commission on the Indus river resources should be established, which should go into the question whether Pakistan can have recourse to alternative water supplies or not. Pakistan areas were getting electricity supply in bulk from the East Punjab power house at Jogindernagar. The power supply is gradually being reduced and the supply is scheduled to be finally discontinued from the middle of 1950. As the large industrial concerns in Lahore and other West Punjab cities used to draw their supply from this source, this might result in considerable dislocation of industrial life in West Punjab. East Pakistan with rich raw material supplies will be backward in industrial development as she has very meagre electrical development. The potential water power resources of East Pakistan are also relatively small.

From the point of view of climate, Pakistan areas lie in sub-tropical regions. India fortunately has areas with diverse climatic conditions so that raw materials and resources can be grown in suitable areas. Excepting perhaps to some limited extent in the case of raw jute, the partition has not resulted in the lack of climatic conditions conducive to the growth of any specific raw material.

Pakistan also does not have adequate forest resources. Her forests are mainly situated in the Chittagong area in East Pakistan. This will make the development of industries which use forest materials difficult in West Pakistan.

TECHNICAL SKILL

We have already noted that the effects of migrations on the availability of technical skill in India are of a temporary nature. In fact prior to the partition, India had the major share of most of the technical institutions. With a progressive policy the growth of these institutions and the supply of requisite personnel is also assured. India has a large number of engineering and agricultural colleges. She has various occupational and vocational institutes. The Geological Survey, the Bureau of Mines and the Dhanbad School for Mining and Applied Geology assist in training students in mineral subjects and research. The Central Electricity Authority and the Central Water Power, Irrigation and Navigation Commission deal with problems connected with the development of electrical power and of irrigation. Various scientific and technical institutes like the Indian Institute of Science (Bangalore), the Central Leather Research Institute (Madras), the Central Electro-Chemical Research Institute, (Karaikudi), the Central Glass and Ceramic Research Institute (Calcutta), the Indian Institute of Sugar Technology (Cawnpore), the Fuel Research Institute (Dhanbad), the Central Food Technological Research Institute (Mysore), the Central Road Research Institute (Delhi), and the Central Building Research Institute (Roorkee), and a large number of scientific institutes and associations sponsored by public and private organisations will contribute towards quicker industrial development in India. The network of laboratories like the National Physical Laboratory (Delhi), the National Chemical Laboratory (Poona) and the National Metallurgical Laboratory (Jamshedpur), as well as the Technological Departments of Universities will help to train students in advanced scientific research. The Indian Forest Institute (Dehra Dun), the Indian Council of Agricultural Research, the various Central Commodity Committees in Cotton, Jute, Lac, Arecanut, Sugarcane, Tobacco, Oilseeds and Cocoanut and the Central Boards of Tea, Rubber and Silk are conducting intensive scientific investigations in their different subjects. The establishment of the Indian Standards Institute has rendered possible the classification and grading of industrial products. An adequate number of scientific institutes and of trained men is an absolute prerequisite for industrial development. Though India, as seen above, possesses considerable facilities in this respect, she is poor when compared with Western countries. With partition, Pakistan has been rendered wholly deficient in these facilities. It is possible for Pakistan to obtain help from the Indian institutions as starting them in Pakistan will involve time and money. In fact, this was the arrangement that prevailed prior to the partition.

SUPPLY OF RAW MATERIALS

We have already seen that attempts are being made to grow more raw jute and raw cotton in India itself. The future of these two major industries depends to some extent on the success of these efforts. Unfortunately the partition has coincided with acute food shortage in India. It is very difficult to divert food areas for growing jute or cotton. The various provincial governments are making efforts at land reclamation and irrigation and when these plans materialise, large areas would be released for additional production. The partition has presented a dilemma to India, whether to concentrate on food crops and achieve food self-sufficiency or to grow more raw jute and more raw

cotton. The future in this respect cannot be foreseen but there is reason for optimism. In fact there is the danger that with the existence of strained relations between the two countries, overproduction of some of these articles may result. If, for example, enough jute is grown in India to feed her jute mills, Pakistan and India would be competing to bring down raw jute prices. It remains to be seen whether other countries can establish more jute mills to take up the raw jute supplies of Pakistan. It is obvious that the tension between India and Pakistan will encourage other countries to develop substitute products to replace jute goods. U.S.A., the chief consumer of jute goods is making headway in this direction. Unless the two countries come together, it is certain that the jute industry as well as the raw jute growers in the province of East Bengal will have to face a crisis. Both countries must realise that until Pakistan has her jute mills, the interests of India and Pakistan in the disposal of the major portion of the East Bengal crop are complementary and not competitive.

LOSS OF MARKETS

As we stated earlier, the areas which now form Pakistan provided a considerable sector of demand for many of the industries of India. The immediate effect of the partition on the markets which the Indian producers had in Pakistan was not manifest in the first few months after the partition. This was due to many causes. Along with the partition and the transfer of a large number of refugees from each country, India received on the whole a greater number of refugees than it sent. The Government by its large-scale relief and rehabilitation expenditure maintained the purchasing power of these people to some extent. Secondly, there was no apprehension of any trade deadlock between the two countries when the partition took place. There was a mutual exchange and flow of commodities between the two countries. In fact there were two Inter-Dominion Conferences and Agreements to deal with this matter. But it soon became very clear that Pakistan would not be a stable and a certain market for Indian products. The Pakistan Government imposed import duties on a large number of consumer goods and other products like tea, sugar, manufactured tobacco, chemicals, paints, matches, soap, leather, rubber, tyres and tubes, tea chests, paper, silk, woollen and cotton fabrics, fabrics containing gold and silver thread, hosiery, boots and shoes, glass and glassware, stoneware, aluminium circles and sheets, iron and steel metal products, hurricane lanterns, sewing machines, etc. Indian products were formerly protected by the legislation of the Government of India which extended to all parts of Undivided India. With the partition, the Pakistan market became a foreign market. It became also clear that the Pakistan authorities were making earnest efforts to start industrial concerns in their own areas. The above duties were imposed in order to give an impetus to indigenous production in Pakistan, though it meant that the Pakistan consumer had to pay a higher price for many of the products which he was accustomed to get cheaply. The products of countries other than India also began to compete with the Indian products in Pakistan on account of these duties. It became evident that in due course the Pakistan market might be completely lost or closed for many of the products of India. The Government of India also contributed to the loss of the market by imposing export duties on certain articles.

PRODUCTIVE CAPACITY AND DEMAND

During the last three years Indian industries have imported large quantities of machinery in order to replace worn-out machines or to make extensions or to start new ventures. Imports of machinery in India aggregated to Rs. 278

crores during the period 1946-50. In 1947-48 machines worth Rs. 55 crores were imported. The value of machinery imports increased to Rs. 103 crores in 1949-50.[1]

During the last four years the productive capacity of many industries of India has increased. This is particularly true in the case of cement, chemical engineering and electrical industries. Table 1 at the end of the chapter shows the expansion of installed capacity in some industries during the period 1946 to 1949.[2] But actual production appears to be less than the capacity that has been installed. The loss of the market on account of partition may be one of the important reasons for this gap. It may become more serious in course of time.

In this connection we may also refer to a new tendency that is visible in connection with the disposal of the products of some of the major industries. The products that were formerly marketed in Pakistan are gradually being exported to other countries. We may quote the examples of cotton and rayon goods in this respect. For a considerable time to come India herself may need many of the important consumer goods like sugar, tea and matches for her own consumption. But if the standard of life in India and the level of expenditure is reduced, there will be a large scale gap for the markets of many of the industrial products, and coupled with the loss of the Pakistan market, this might result in a crisis for industries. It may also be noted that many of the Indian products that were formerly sold in Pakistan were of a special variety which were specially suited for Pakistan consumers. If Pakistan adopts a non-co-operative attitude with India in respect of trade, India will not be able to market her products in other countries unless the standard of quality, and the price factor show a definite improvement.

As the potentialities of the Indian market are very large, some of the industries which have suffered on account of the loss of market in Pakistan will be able to make up with a rise in the standard of living in India. The large population in India is both an asset and a liability. If a large scale industrialisation programme is to be carried out the presence of a large market will be a distinct advantage. But if there is no attempt at improving the standard of life, the surplus man power will act as a drag. In any case, the partition had added to the population problem of India. Some degree of population control has become necessary in India in the interest of the economic utilisation of her resources. Pakistan on the other hand has also lost some of her markets. India has been making efforts to see that the products supplied by Pakistan are manufactured in India. Moreover, the potential market in Pakistan is not very extensive. The rural urban ratio is greater there than in India. The market for industrial products and consumer goods comes to a great extent from the middle classes who live in cities and towns. India is more favourably placed in this respect. With the partition, most of the well-to-do middle classes in the Pakistan cities migrated to India.

The fact that the two parts of Pakistan are separated by a large distance will act as a drag upon Pakistan's industrial aspirations. It would have been possible to make arrangements in such a way that the neighbouring areas supplied the demands of Pakistan as in the pre-partition period. But the partition has result-

1. Pakistan imported Rs. 6 crores worth of machinery in 1948-49 (and Rs. 8 crores worth in 1949-50), the proportion of machinery imports to total imports being less than 6%. On the other hand the proportion of machinery imports to total sea-borne imports in India was about 15% during 1948-49, and 18% during 1949-50.

2. The statistical tables are given in the appendix at the end of the chapter.

ed in a cry for self-sufficiency. The East Pakistan consumer will therefore have to pay a higher price for certain products. The Tariff Commission of Pakistan will have an arduous task. What may appear as an advantage to the West Pakistan producer may be detrimental to the interests of the East Pakistan consumer, unless two different policies are adopted with respect to these two areas. The absence of adequate facilities like fuel and power supplies will not make it economical to develop industries in East Pakistan. The facilities for industrial development are mainly in West Pakistan, but the larger market is found in East Pakistan. The prices of Indian products if supplied to the East Pakistan consumer will be low as compared with those of West Pakistan products.

MANAGERIAL AND ENTREPRENEURIAL SKILL

One of the chief effects of the partition was that the entrepreneurs and managers from Pakistan areas went over to India, and Pakistan got rural artisans and labourers in return. The industrial development of Pakistan areas, as we have seen, is very limited. On account of the fact that Indian industries are diverse in character and scope, a relatively larger number of industrialists will be of great help to India in her future development. The entrepreneurs and managers who came over from Pakistan can organise labour, mobilise capital and start industries. In the past, Muslims in the Punjab and other Pakistan regions were not noted for large industrial ventures. This will act as a handicap to Pakistan, as the enterprising class appears to have left the country. In India, assistance can be had from different industrialists with mature experience, which is lacking in Pakistan. The Government of Pakistan will therefore have to take a major share and play a leading role in industrialising Pakistan. Whereas in Pakistan the cry is that the Government is not doing enough, in India the common complaint of the industrialist is that the Government is entering too much in the field of industry.

CAPITAL RESOURCES

Prior to partition the rich landholders of Punjab and Sind were important investors in Government and other securities. There was a flight of capital from Pakistan areas. Pakistan has not been able to take up any big industrial ventures in consequence. The shyness of capital in India is alleged to be due to Governmental interference and nationalisation programmes. In Pakistan, on the other hand, capital has not been forthcoming in spite of Government help. The Government of Pakistan has, however, started an Industrial Finance Corporation as in India to encourage industrial development.

Immediately after the partition there was an atmosphere of uncertainty and hesitancy, particularly in East and West Punjab, which prevented the flow of investment to these areas. The Governments of India and East Punjab made great efforts to see that a proper atmosphere was created for industrial development in East Punjab. Proper credit and capital facilities are very necessary. Some of the concerns which have been dislocated have to be helped to start again. East Punjab was an industrially backard province; attempts should therefore be made to check the outflow of capital and encourage rapid industrial development. West Bengal is leading in industrial development. But it is overburdened with surplus man power with consequent heavy congestion. To maintain a proper atmosphere for incentives in industrial enterprise in both the

areas, economic remedies must be devised so that the people who have already suffered so much are enabled to become effective productive agents and thus attain a higher standard of life. The recent tendencies in West Bengal are very disquieting. Calcutta, the leading industrial city of India, has been having a disturbed life continuously. This atmosphere is not conducive to proper industrial development. The problems of both these provinces must be handled tactfully and, we may add, humanely. At the same time, in Pakistan, the commercial and trading communities should be trained to take the initiative and venture into industrial investment.

FOREIGN CAPITAL

The prospects of foreign capital flowing into either country will depend upon the relative rates of return in the home country and the country which requires foreign capital, the facilities for convertibility of currency, the sphere of state control and the degree of state assistance, the attitude of the state towards private property, the political conditions that are expected to prevail and also the availability of resources in the country which wants foreign capital. In this connection, India is placed in a more favourable situation as there are available plenty of raw materials, plenty of labour, which is relatively cheaper than labour in the advanced countries, and also some amount of technical personnel. Pakistan, on the other hand, is placed favourably with respect to some of the raw materials and unfavourably with respect to fuel and power supplies. The prospects for starting large scale jute and cotton industries in Pakistan will to a great extent depend upon the aid of foreign capital. But as has been shown earlier, foreign private capitalists may be reluctant to enter into these fields, as they will have to compete with the products of Indian industry, which is already highly advanced. The market within the country itself is smaller in Pakistan when compared to that in India, where it is extensive. Besides, the existing number of large industries will create a demand for many of the new products.

In this connection, we must point out that the continued strained relations between the two countries will act as a damper to the flow of foreign capital. This might react unfavourably particularly on Pakistan. One of the members of the British Delegation which visited Pakistan in the beginning of 1950 is reported to have stated that foreigners were hesitating to invest on account of of the unstable and disharmonious relationship between India and Pakistan. The figures of capital investment show that nearly 6.57 crores of foreign capital entered India during 1948-49. British investment was about two-thirds of the total foreign capital. Switzerland took the second place and the U.S.A. the third place. Apart from direct investment which takes the form of capital goods projects like electric power establishments and also consumer goods industries, foreign co-operation has been forthcoming by way of technical collaboration. U.K., U.S.A., Sweden, Switzerland, Canada, Italy, Japan and France, have all offered technical advice to India in different projects. Some foreign investment has been forthcoming by way of joint enterprise of Indian and foreign interests. Agreements have been entered into with some Western firms for joint exploitation of the natural resources of India. Though this is not a flattering record, and much remains to be done to attract foreign capital in India, it shows a tendency in the right direction. The International Bank has also granted some loans to India for development purposes. We do not have information about the trend of flow of foreign capital in Pakistan.

AVAILABILITY OF CHEAP TRANSPORT AND PORT FACILITIES

The partition upset the smooth arrangement that existed in Undivided India for the transport of raw materials and finished goods to and from the industrial centres. Between West Bengal and Assam came alien territory and between the two parts of West Bengal itself there was no continuous rail link. This disturbed the free flow of materials. The jute and tea that was grown in Assam used to be carried to Calcutta by rail and river. Coal from West Bengal and Bihar was transported to Assam through East Bengal. Steamer services were particularly a cheap and convenient means of transport. The two ports of Calcutta and Chittagong were complementary to each other. The materials that were produced nearer Chittagong, whether in East Bengal or in Assam, were exported through that port. But after the partition the freight from Assam had to be diverted through Calcutta, just as Chittagong had to bear the increased burden on account of the concentration of raw jute exports of Pakistan through that port. A new rail link had to be built to connect Assam and West Bengal for strategic reasons as well as for carrying supplies of materials and products. As this new rail link (a metre gauge one) has to take a circuitous route and passes through hilly country, transport has become very costly. Freight concessions had to be granted by the Government to the affected industries, but ultimately the burden of subsidies will have to be borne by the tax-payer. In a similar manner, the goods that have to move between the two parts of Pakistan have now to be sent by sea around the Indian peninsula. This will add heavily to the costs of raw materials and finished goods, thus ultimately slackening the pace of industrial development in Pakitsan. The ports of Karachi and Bombay were also complementary from the point of view of the trade of Undivided India. Partition has forced a distortion of this relationship which was of economic advantage to the areas concerned. Now Bombay has to bear an increased burden as some exports formerly going through Karachi are diverted to Bombay. A new port at Kandla in Cutch is being constructed by the Government of India in order to relieve this congestion. Though it is true that in the long run both the countries might develop alternative facilities, this will prove costlier than the cheaper routes that prevailed in Undivided India. The costs and prices of industrial raw materials and finished products will be thus raised.

DISTORTION OF THE LOCATION PATTERN

The availability of cheap fuel and power supplies as well as of transport and port facilities, the proximity of raw material supplies as well as of markets, and strategic considerations are all factors governing the location of industries. In Undivided India, Calcutta and Bombay had developed a disproportionately large concentration in industrial activity. This was due to the availability of the above facilities. On account of the existence of external economies, new industries tended to concentrate in and around these areas. Attempts were being made by the Government of Undivided India to bring about a proper regionalisation of industrial distribution in India by encouraging the construction of new units in other parts of the country. It was hoped that this would bring about in the long run a more balanced utilisation of resources in the land. The National Planning Committee, the Post-war Reconstruction Plans of the Centre and the different Provinces and the various Industrial Panel Reports stressed the necessity for a proper redistribution of industrial activity in the country. Except for Bombay and Bengal, the other parts of the country were more or less depressed areas from the point of industrial development. A number of new industrial

schemes were suggested for the Punjab and Bengal. With the partition the responsibility of the Government of India has become heavier, as it is not advisable to encourage the starting of industries involving heavy capital equipment and having strategic importance near border areas. Particularly in East Punjab most of the existing industries are located near the border areas. From the point of view of military safety, it is desirable to revise the plans to take these industries into inland zones. But while this is being done, proper attention and thought must be bestowed on the question of industrial development of these provinces. East Punjab emerged out of the partition a relatively less industrialised province than West Punjab. It also suffered great dislocation owing to migration of labour and capital and destruction of equipment. Assam is also a neglected area from the point of view of industrial development. The heavy concentration and influx of displaced persons in these and other areas make it necessary to develop industries in them. Between the two methods of shifting of displaced persons to already congested industrial centres or of shifting industrial units towards the displaced persons, the latter appears less costly and less irksome.

Though the partition has rendered Calcutta an unsafe zone from the point of view of strategy, it must not be forgotten that industries tend to concentrate around this area on account of the large number of advantages they derive. It will also be difficult to take industries away from Calcutta. It is, however, possible to encourage development in West Bengal, particularly in places other than Calcutta with due precautions for defence.

The partition has shattered the locational advantages which some industries, particularly those situated in the divided provinces, enjoyed. Their superiority in respect of proximity of raw material or of markets, and their advantages by way of smooth transport arrangements have been destroyed. This will place some of these industries on unfavourable terms of competition with others. The jute, paper, tobacco, tanning and leather industries are among those which have suffered on this account. The large number of engineering industries and the woollen and hosiery industries of East Punjab have also suffered for the same reason. To some extent this is also true of the industries of West Punjab and East Bengal.

Pakistan will have to face another peculiar difficulty. Industrial planning will be complicated on account of the separation of East and West Pakistan. If regional self-sufficiency is taken as the aim of Pakistan, then duplication of plants in respect of consumer goods and light industries will become necessary. The same difficulty will also persist in the case of strategic and basic industries.

EXPANSION IN INDIA'S EXPORT INDUSTRIES

The importance of industries as earners of foreign exchange for India has increased after the partition. The tardy recovery of European countries and of Japan created opportunities for Indian products to gain markets in the Middle East, East African and East Asian countries. Indian industries gained additional advantage after devaluation. Indian textile products are reported to be on competing terms with British goods. In order that the new pattern of development may be nurtured and maintained, it is necessary that proper attention towards quality and price should be given. It is unfortunate that in India speculation tends to neutralise the advantages that arise out of the existence of large markets. If the Indian export industries concentrate on long-term advantages rather than short-term profits, it is possible for them to maintain goodwill and retain the new markets. Such an expansion will enable them to reduce costs to

the ultimate benefit of the industries and the nation. It must be mentioned that the demand for Indian products may be inelastic in the short run; but in the long run, they will have to face stiff competition from products of other countries. It is necessary that the export industries should be supplied with adequate quantities of raw materials, which will mean that a decision has to be taken by the Government as regards the proportion of the internal consumption of raw materials and their export. Another problem has also been created as quotas have to be fixed between the amount of industrial products which can be consumed inside the country and the surplus which can be exported abroad. These problems should be tackled after taking note of the relative advantages and disadvantages of either course from the long-term point of view.

III. SIGNS OF RECOVERY

A study of the trends indicated above will reveal that the long-term effects of the partition in India are not of a character which can stifle the growth of the economy, though it is true that in the immediate period following the partition, the economy of the country was subjected to severe shocks. In 1947 there was a serious decline in industrial activity. The country is gradually recovering, and by the end of 1949 there were signs of expansion all round. In this connection a series of tables (Tables 2 to 7) have been given in the appendix, which give an idea of the course of industrial activity from 1946 to 1949. The total employment in perennial factories (private) was about 1.76 million in Undivided India. At the end of 1948 the employment figures for India alone had risen to 1.84 million.[1] Expansion was noticed particularly in textile and chemical industries. The total paid up capital in all the indutries in Undivided India in 1946-47 was of the order of Rs. 455 crores, and at the end of 1947-48 the figures for India alone had mounted to Rs. 520 crores, showing an increase of nearly 30 per cent. in one year. There was an increase in the level of industrial profits. Compared with 160.2 (base year 1928=100) the level came down to 137.5 in 1947 but rose to 186.7 in 1948. This was the highest during the last ten years. Profits in the cotton textile industry in particular showed a remarkable increase. In 1947 the level of profits had come down to 419.9 compared with 631.9 in 1946. In 1948 it went up to 912.5. Similar increases were noticed in sugar, paper, iron and coal industries. With respect to the production of industrial raw materials also there was a noticeable increase during the last four years. There was considerable increase in the production of raw jute and raw cotton. The production of raw jute in India increased from 1.3 million bales in 1946-47 to about 3.1 million bales in 1949-50. There was a phenomenal increase in the production of electricity. In 1946, 4,032 million kilowatt hours were generated in Undivided India. In 1948, 4,572 million kilowatt hours were generated in India alone. In 1949, the figure had mounted to 4,920 million kilowatts. The industrial consumption of electricity increased from 2,160 million kwh in 1946 to 2,388 million kwh. in 1948, and to 2,498 million kwh. in 1949. There was also increased production and despatches of coal. From 29 million tons in 1946, the coal raisings increased to 31.5 million tons in 1949, the highest during the last ten years. There was improvement in the amount of coal despatched to the different consumers. Partly due to the beneficent labour legislation passed by the Central and the Provincial Governments and to the industrial truce, the

1. In the latter half of 1949, the employment level had gone down, owing to the retrenchment and economy drive of governments. Difficulties of raw material supply and also some shrinkage in markets were also responsible for the above trend. Textiles and engineering industries were mainly affected. Attempts must be made to check trends towards a cumulative contraction.

number of stoppages on account of industrial disputes came down from 1,632 in 1946 to 1,176 in 1949. The total man days lost in 1946 was 12.7 million. It reached the peak of 16.6 million in 1947, but came down to 6.5 million in 1949. In respect of transport facilities also the same recovery was noticeable. The total wagons loaded in Undivided India in 1946 were 5.2 million. In 1949 the figure had risen to 6.1 million wagons in India alone. During 1949 adequate facilities were given for the transport of tea, coal, coke, cotton, oilseeds, iron and steel and other products. The tonnage handled by the shipping companies increased from 4.9 million tons in 1946 to 7.8 million tons in 1948 and to 8.9 million tons in 1949. These signs of recovery were also manifest in the manufacture of industrial products. There were large scale increases in the production of many products like cotton textiles, cement, matches, electrical goods, chemicals and tea. Due to the increase in imports of machinery, made possible on account of the relaxation in import restrictions, the industrial capacity in different plants also increased. In many cases where the partition had affected the total industrial capacity in India, India's increase in capacity during the last two years made good the loss. The value of foreign trade also increased from Rs. 656 crores in 1946-47 in Undivided India to Rs. 1,117 crores for India alone in 1948-49, the value of exports of manufactured goods showing a remarkable increase.

There was thus recovery in many fields of industrial activity in India. This was partly due to the attempts of the Government of India to restore confidence among the industrialists and to assist the industries by proper supplies of raw materials, transport facilities and in other ways. The recovery was also due to the inherent capacity of resilience in the economy of the country manifesting amazing ability to sustain shocks. But considering the absolute size of India and its needs this expansion is only a fraction of the requirements. In order that the pace of industrialisation is quickened, well-directed and co-ordinated efforts are necessary on the part of the Government. During the last three years attempts have been made by the Government of India to frame an industrial policy and to decide a pattern of state participation and control. The story of these attempts will be the subject matter of the next section.

IV. INDUSTRIAL POLICY OF INDIA

EVOLUTION OF THE INDUSTRIAL POLICY

The period of the war saw a notable expansion in many of the industries of Undivided India. In 1944 the Government of India set up a Planning and Development Department under Sir Ardeshir Dalal. This department issued a statement of Industrial Policy in April 1945. This was the first attempt on the part of the Government of India to formulate a clear-cut policy regarding the role of Government and private enterprise in the future industrial development of the country. One of the objects of this announcement was to remove the uncertainty which appeared to impede the plans of development of private industries. The statement defined the objectives as the increase of national wealth by the maximum exploitation of the country's resources, the preparation of the country for better defence, and the provision of a high and a stable level of employment. With respect to the division of spheres between the private and the Government sectors the resolution stated: "Apart from ordnance factories, public utilities and railways, basic industries of national importance may be nationalised provided adequate private capital is not forthcoming and it is regarded as essential in the national interests to promote such industries." Among the list of basic industries were included the following:—Aircraft, auto-

mobiles and tractors, chemicals and dyes, iron and steel, prime movers, transport vehicles, electrical machinery, machine tools, chemical and non-ferrous metal industries. Apart from these key industries, it was laid down that certain industries where the tax element was more predominant than the profit element might be taken over by the Government. All other industries would be left for private enterprise under varying degrees of control. Certain industries of national importance like ship-building and the manufacture of locomotives and boilers were to be run by the State as well as by private enterprise. Normally the State was to be the medium for operating State enterprises and in some cases the experiment of public corporations was to be tried. To prepare specific targets in the field of industrial development the Planning and Development Department appointed a number of industrial panels. Almost all the panels recommended private ownership for most of the industries. The Advisory Planning Board of the Interim Government of Undivided India made a fresh attempt towards defining the boundaries between State and private enterprise. The Board remarked in its report that industrial development of the country might not be very rapid if the State attempted to take into its own hands the ownership and management of a large range of industries. It suggested the following industries for nationalisation:—Coal, mineral oils, iron and steel, motor, air and river transport. The Board thus included only iron and steel in the list of industries to be nationalised, deleting the rest from the list given in the 1945 Policy statement. But four new industries were included in the Advisory Planning Board's list of industries for State enterprise.

INDUSTRIES CONFERENCE

When the National Government came to power in August 1947, they had to start with this background. In the first few months after the partition the Government was engaged in the immediate problems arising out of the partition like those of refugee relief and rehabilitation. Owing to the inadequacy of transport, the unsatisfactory relations between management and labour, the shortage of raw materials and defects in their procurement and distribution, the difficulties in obtaining capital goods and constructional materials, the limitations in the supply of imports of machinery and the paucity of technical personnel, an industrial crisis was slowly developing in the country. The Industries Conference of December 1947 noted that there was an all round decline in productive activity. The investing public in India had been offered no clear-cut statement about the industrial policy of the new Government. The large number of statements of different leaders and ministers, sometimes mutually contradictory, had succeeded in creating confusion in the minds of the investors and industrialists and there was virtual stagnation in the investment market. The Industries Conference recommended to the Government that a clear-cut statement about the demarcation of the roles of private and Government enterprise was essential, if proper development were to take place in India. The conference also passed a resolution in favour of an industrial truce between labour and capital.

CONGRESS ECONOMIC PROGRAMME COMMITTEE'S REPORT

The atmosphere of goodwill and harmony that was created by the Industries Conference was short-lived; for in the meanwhile the report of the Economic Programme Committee of the All India Congress Committee was published. This Committee recommended the starting of all new concerns in public utilities, defence and key industries under public ownership. They suggested that the

transfer from private to public ownership in these fields should commence after a period of five years with a provision for earlier transfer in special cases. They recommended the abolition of the managing agency system and measures for the limitation of profits and the division of surplus profits between workers and shareholders. This report indicated a strong bias towards nationalisation and equal distribution of incomes and created a feeling of panic in the minds of industrialists. Grave concern was expressed by representatives of Indian industrialists who met in Calcutta and Bombay thereafter. In an attempt to allay these apprehensions, it became necessary to issue a statement giving the objectives and allocation of spheres of private and Government sectors in future industrial activity. The Industrial Policy Resolution, issued by the present Government was published on April 6, 1948. The following is a summary of the main points in the resolution:—

INDUSTRIAL POLICY RESOLUTION

Objectives: The general objectives have been defined as (1) the establishment of a social order where justice and equality of opportunty shall be secured to all the people, (2) promotion of a rapid rise in the standard of living of the people by exploiting the resources of the country, (3) increasing the production, and (4) offering opportunities to all for employment in the service of the community. So far as the industrial field is concerned, an increase in national wealth was emphasised, as redistribution of existing wealth would merely mean the distribution of poverty. It was laid down that dynamic national policy must be directed to a continuous increase in production by all possible means, side by side with measures to secure its equitable distribution.

State Enterprise vs. **Private Enterprise:** It was stated that the State must play a progressively active role in the development of industries. The ability to achieve the main objectives should determine the immediate extent of State responsibility and the limits to private enterprise. It was realised that under the existing conditions the mechanism and the resources of the State might not permit it to function forthwith in industry as widely as might be desired. It was, therefore, felt that for some time to come the State should contribute more quickly to the increase of national wealth by expanding its present activities wherever it was already operating, and by concentrating on new units of production in other fields, rather than on acquiring and running existing units. It was stated that in the meanwhile, private enterprise, properly directed and regulated, had a valuable role to play.

Allocation of Spheres: In order to implement this policy industries were classified as under:—

(a) **Industries reserved for the exclusive monopoly of the Government of India:** In this category were included the manufacture of arms and ammunition, the production and control of atomic energy, and the ownership and management of railway transport. It was also laid down that Government would have the power in an emergency to take over any industry vital for national defence.

(b) **Industries reserved for State initiative:** The State was defined as including Central, Provincial and State Governments as well as public authorities like Municipal Corporations. State initiative meant that the State would be exclusively responsible for the establishment of new undertakings in certain industries, though it was further laid down that in those cases where the State itself found it necessary in the national interests to secure the co-operation of private enterprise, it

would do so subject to such control and regulation as the Central Government might prescribe. The industries in this category were: (i) coal, (ii) iron and steel, (iii) aircraft manufacture, (iv) ship building, (v) manufacture of telephone, telegraph and wireless apparatus, excluding radio receiving sets, and (vi) mineral oils.

So far as the existing private enterprise in the above industries was concerned, the inherent right of the State to acquire any existing industrial undertaking was emphasized. But it was mentioned that Government had decided to let existing undertakings in these fields develop for a period of ten years, during which they were to be allowed all facilities for efficient working and reasonable expansion. At the end of this period, the whole matter was to be reviewed and a decision taken in the light of circumstances obtaining at the time. Compensation on a fair and equitable basis would be given if the State decided to acquire any unit.

So far as the management of a State enterprise was concerned, it was laid down that as a rule it would be through the medium of public corporations under the statutory control of the Central Government, which would assume such powers as might be necessary to ensure this policy. The generation and distribution of electric power was to be regulated in accordance with the Act already passed, which had brought into existence the Central Electricity Commission for the purpose.

(c) **Private Enterprise:** Industrial activities other than those indicated above would normally be open to private enterprise. It was, however, laid down that the State would also progressively participate in this field; and that it would not hesitate to intervene if the progress of an industry under private enterprise was unsatisfactory. In this connection, the undertaking by the State of multi-purpose projects such as the large river valley development schemes was mentioned.

State Regulation of Industries: It was felt that besides the industries mentioned above, there were certain basic industries of importance, planning and regulation of which by the Central Government was necessary in the national interests. Industries whose location must be governed by economic factors of all-India importance or in which considerable investment or a high degree of technical skill were required were included in this list. While retaining the ultimate direction over this field of industry, the Government of India was to consult the Provincial and State Governments at all stages as well as representatives of industry and trade. The industries included in this list are:—

1. Salt
2. Automobiles and Tractors
3. Prime movers
4. Electrical engineering
5. Other heavy machinery
6. Machine Tools
7. Heavy chemicals, fertilisers, pharmaceuticals and drugs
8. Electro-chemical industries
9. Non-Ferrous metals
10. Rubber Manufactures
11. Power and Industrial alcohol
12. Cotton and Woollen Textile
13. Cements
14. Sugar
15. Paper and Newsprint
16. Air and Sea Transport
17. Minerals
18. Industries related to Defence.

Cottage and Small-scale Industries: The role of these industries in the national economy was emphasised and though they fell within the provincial sphere, the Government of India agreed to investigate how far and in what manner these industries could be co-ordinated and integrated with large-scale

industries; for example, how the textile mill industry can be made complementary, rather than competitive, to the hand-loom industry. The creation of a Cottage Industries Board at the centre, as well as of a Cottage and Small-scale Industries Directorate was envisaged. The encouragement to these industries by means of industrial co-operatives was suggested.

Labour-Capital Relations: The Government of India accepted the resolution of the Industries Conference which among other things laid down:

> "That the system of remuneration to capital as well as labour must be so devised that, while in the interests of the consumers and the primary producers, excessive profits should be prevented by suitable methods of taxation and otherwise, both will share the product of their common effort, after making provision for payment of fair wages to labour, a fair return on capital employed in the industry and reasonable reserves for maintenance and expansion of undertaking."

In accepting this resolution the Government observed that labour's share of the profits should be on a sliding scale normally varying with production. They thought of the establishment of machinery for advising on fair wages, fair remuneration for capital and conditions of labour.

Central Advisory Councils: It was proposed to have a Central Advisory Council and corresponding bodies in the provinces. Below the Provincial Council, there were to be Workers' Committees and Production Committees attached to each major industrial establishment. The Central and Provincial Councils were to have representatives of Government, employers and workers. The other committees were to have equal number of representatives of employers and workers. It was expected that by this machinery industrial disputes would be reduced. Steps were also taken to strengthen the industrial relations machinery and to create permanent industrial tribunals. At the same time special attention was given to the schemes for improving industrial housing and a Housing Board was to be constituted. A scheme for the construction of one million workers' houses in ten years was under contemplation.

Foreign Capital: It was recognised that participation of foreign capital and enterprise, particularly as regards industrial technique and knowledge, would be necessary for the rapid industrialisation of the country. It was proposed to introduce legislation for regulating the conditions under which foreign capital might participate in Indian industries. Each individual case of such participation was to be scrutinised and approved by the Central Government. As a rule it would provide that the major interest in ownership and effective control should always be in Indian hands. Power would, however, be taken to deal with exceptional cases in a manner calculated to serve the national interest. In all cases, however, the training of suitable Indian personnel to replace foreign experts would be insisted upon.

The attitude on foreign capital was subsequently explained by the Prime Minister in Parliament in greater detail. It was pointed out that foreign capital should conform to the general requirements of the industrial policy of the country and that so far as existing foreign interests were concerned, no restriction, not applicable to similar Indian enterprise, would be placed on them. So far as the profits of foreign interests were concerned, they would be subject to the same regulations as those of Indian enterprise. Facilities for remittance of profits would be given, the only restriction being the availability of foreign exchange. In case any foreign concern was compulsorily acquired, Government would provide reasonable facilities for the remittance of proceeds and compensation would be paid on a fair and equitable basis. Though the major interests in ownership

and control should be in Indian hands, Government would not object to foreign capital having control over a concern for a limited period, if it was in the national interests. It was also pointed out that there was considerable scope for British capital in India and there was no desire to injure British or other non-Indian interests. In fact, India would gladly welcome their contribution to a constructive and co-operative role in the development of India's economy.

Tariff Policy: It was laid down that the tariff policy would be designed to prevent unfair foreign competition and to promote the utilisation of India's resources without imposing unjustifiable burdens on the consumer. The system of taxation would be reviewed and readjusted where necessary, to encourage saving and productive investment and to prevent undue concentration of wealth in a small section of the population.

MEASURES TO IMPLEMENT THE POLICY

The Government introduced a bill in March 1949 to provide for the development and control of certain industries. This bill sought to give effect to certain parts of the Industrial Policy Resolution. The Government sought to take powers to register and license every new industrial undertaking, to make rules for the control and regulation of certain industries for the purpose of stimulating development, to regulate the production and use of raw materials, to train technicians and labour, to collect statistics and to inspect any industrial undertaking to ascertain the position of its working. The Central Government reserved to itself the right of taking up the management or control of any industrial undertaking and the making of rules regarding the control and regulation of controlled undertakings. Owing to the organised criticism that was levelled by the industrialists against the comprehensive control envisaged in this bill, the Select Committee dropped many of the disquieting features. In the field of labour-capital relations and profit regulation various other measures have also been attempted. These are:—

(i) The Employees' State Insurance Act of 1948.
(ii) The Factories Act, 1948.
(iii) The Industrial Disputes Bill.
(iv) Labour Relations Bill, 1950.
(v) Trade Unions Bill, 1950.
(vi) Revision of Payment of Wages Act of 1936.

While these efforts are in progress, along with certain executive actions in the same direction, it may not be inappropriate if we examine some of the features of the industrial policy that is being evolved in practice in the country in the light of existing circumstances.

V. A CRITIQUE OF INDUSTRIAL POLICY OF INDIA

THE APPROACH

The underlying approach both in the industrial policy statement and in the activities pursued by the Governments is both economic and social. On the one hand there is a desire to increase production rapidly and also to raise the standard of living of the people. At the same time there is a desire to control the capitalistic form of industrial organisation and to bring about a form of institutional framework which may be called "Mixed Economy". The Industrial Policy Resolution has demarcated industries with respect to State and private

ownership, into four categories. In the first category are industries which would be subject to state ownership. In the second category are mentioned industries where new concerns are to be started only by State authorities. The existing industries in this field would be allowed full scope for a period of ten years after which the question would be re-examined. In the third category are given industries which would be subject to varying degrees of control. In the fourth category the rest of the industries are included and are presumably allowed full scope for development. The Government attempted in this way to divide between themselves and the private sector spheres of future industrial activity.

THE CONCEPT OF "MIXED ECONOMY"

A close perusal of the resolution will reveal that there is difference between the type of control that was envisaged in 1945 and the type that was formulated in 1948. The following list which gives the names of industries which were suggested for nationalisation in the Industrial Policy Statement of 1945, the Advisory Planning Board Report of 1946 and the Industrial Policy Resolution of 1948 will be of interest:—

Industrial Policy Statement—1945	Aircraft, automobiles and tractors, chemicals and dyes, iron and steel, prime movers, transport vehicles, electrical machinery, machine tools, chemical and non-ferrous metal industries.
Advisory Planning Board Report—1946	Coal, mineral oils, iron and steel, motor, air and river transport.
Industrial Policy Resolution—1948	Coal, iron and steel, aircraft manufactures, ship building, manufacture of telephones, telegraph and wireless apparatus, mineral oils.

The special feature of the 1948 resolution is the attempt to pre-determine the course of industrial development by stating that such and such industries would henceforth be initiated only by the State. This type of demarcation is something that is new to the conception of a mixed economy. It may be pointed out that almost all economic systems can be characterised as mixed economies. What is important is the degree of "mixedness". In fact there was a large sector of industrial activity in India already under State aegis. The entire railway system, the postal, telegraphic and communications services, a large number of major electricity plants, the Reserve Bank of India and many other public utilities are being owned by the Central or Provincial Governments. In addition to these, some of the Provinces and States are running industrial concerns. If mixed economy means that both the Government and the private sectors participate, and have a direct stake in the operation of industrial ventures, the idea is not new to India.

DEMARCATION OF BOUNDARIES AND ITS EFFECTS

But the clear cut demarcation and boundary that is laid down in the Policy Resolution is based on the assumption that such an allocation of roles would lead to greater certainty and confidence in respect of investment in the private sector, and also that the Government sector has the necessary resources and ability to fulfil its part of the task. Though the need for creating a definite atmosphere in which private enterprise could plan without fear of any State inter-

ference in the form of nationalisation became necessary in India, the wisdom of excluding private enterprise from certain fields in the hope that the Government would be able to obtain the necessary investment in them is to be doubted. The Government appears to be too optimistic regarding their ability to discharge their self-imposed responsibilities. Setting a ten year time limit to the consideration of nationalisation in certain industries may certainly prove somewhat of a disincentive and may act against further expansion by existing undertakings in that category. Industries which require enormous investment in fixed capital and a long period of time in order to get the full results of the expenditure cannot be expected to plan for further development with the threat of nationalisation facing them. As regards the category in which industries were supposed to work under controlled direction, it was not clear whether the State would enter into competition with private enterprise in these fields. In fact, along with the questions of nationalisation, and of foreign capital, the industries in India were apprehensive about the future competition that they might have from the State itself. What the Policy Resolution stated was that private enterprise would be excluded from certain fields; it did not lay down that the State was excluded from other fields. It is well known that when the State enters into competition with private enterprise it operates under unusual advantages. There was also the need for ensuring that the spirit of the industrial policy resolution would be observed by the Provinces, particularly because industries formed a Provincial subject.

INHERENT DIFFICULTIES IN THE WORKING OF A "MIXED ECONOMY"

One of the most difficult tasks is to see that a mixed economy functions without frictions. In fact it is far more difficult to run mixed economy than to run a socialistic economy or a completely free private enterprise economy. The problems that confront a mixed economy are very intricate. The activities of the two sectors, the private and the Government have to be very carefully co-ordinated. The competition for the scarce resources by both the sectors will necessitate a cautious allocation of such resources. The mixed economy will have to function through a large number of controls, which themselves result in bottlenecks and friction. In a large country like India where there is a framework of a federal polity the difficulties are greater still. The activities of one unit of Government have to be co-ordinated with those of another, otherwise the objectives stated by the Central Government may be defeated by the actions of the Provincial Governments. It is a very arduous task to enforce a national point of view in all the actions of the different units. The working of mixed economy in India during the last three years very clearly shows that there is considerable scope for improvement in the way the policy should be carried out. In support of this observation, an attempt is made below to discuss some of the defects that have been revealed in the working of the new policy.

VI. INDUSTRIAL POLICY IN ACTION

LACK OF CO-ORDINATION

Nationalisation: There has been a lack of co-ordination between the activities of the Central and Provincial Governments and sometimes between those of different departments of the same Government. For example, though nationalisation of certain industries after a particular period is hinted in the industrial policy resolution and the Central Government spokesmen were repeatedly stating that the Government had no funds to undertake large scale nationalisation, some of the Provincial Governments took steps to nationalise

electricity supply companies. The Madras Government, for example, was venturing on the policy of nationalisation of electricity in Madras in spite of the remarks of the Deputy Prime Minister that if anybody talked of nationalisation, it was for purposes of power or for propaganda. During the same period the United Provinces Government nationalised the Cawnpore Electricity undertaking. The Bombay Municipality bought over the Bombay Electricity Supply and Tramways Ltd. Nationalisation of road transport was not envisaged by the Central Government. But as road transport formed a provincial subject most of the provinces were utilising their funds on capital account to nationalise road transport. The Industrial Policy Resolution excluded air transport from the list of industries to be run under State initiative. But within two years a Committee was set up to enquire into the working of the air transport industry, one of the terms of reference being the question of nationalisation of air transport companies. On some occasions some unusual reasons have been given for nationalisation. In Madras it was stated that the private electricity concerns were not in a position to supply power to the rural areas. With respect to air transport it was pointed out that they were not in a position to carry mails during the night.

New Industrial Ventures by Provincial Governments: Though the supply of funds at the command of the different Governments was scarce and it was found very difficult even for the Central Government to fulfil its borrowing programme, the different Provincial Governments were embarking on a large number of industrial enterprises. The Madras Government bought a paper mill; the U.P. Government planned the starting of cement, precision tools and rayon factories; the C.P. Governmment supported two paper mills and an aluminium concern and took over certain mines; the Bombay Government sponsored a cement concern; the Assam Government thought of starting a good number of factories. The experience of these Governments in running these industries has not been happy. The C.P. Government recently appointed a Committeee to go into the question of the supposed mismanagement in the Government sponsored industrial ventures of the province. The Assam Government had to give up all its plans.

Industrial Ventures by the Central Government: The Central Government itself formulated plans for the starting of several industries. It invited foreign technical co-operation for preparing project reports. For example, when the existing producers in the iron and steel industry asked for Government assistance for the expansion of their works, the Government hesitated. But it itself planned the starting of two iron and steel plants with a total capacity of a million tons. Though a loan was given to some of the steel companies (as late as April 1950) it may be asked whether it would not have been possible to have granted the loans earlier so that some expansion could have taken place in the meanwhile. The Government of India planned the starting of a machine tool industry. This was quite contrary to what the Minister for Transport had stated earlier.[1] The Minister in reply to the question as to why the State would not start a machine tool factory, had observed that such a factory would come into competition with the war-expanded private machine tool industry. Within a year, the Government of India had gone back on these remarks and were planning a large machine tool industry, at a time when the different machine tool concerns in India were passing through a serious crisis due to increased imports and to lack of demand for their products. The Government of India had also a plan to start a factory for producing synthetic petrol from

1. *Vide*, Indian Information, March 15, 1948, p. 305.

coal. Foreign experience in this field has not been promising enough for the Government to embark on a costly scheme like this.

Policy with respect to Multi-purpose Projects: The working of the Government's policy as regards the different multi-purpose projects has also been rather uncertain. On assuming office in 1947 the Government promised that the schemes would be proceeded with immediately. Later, the rising inflation made a halt necessary. Large cuts were ordered in the beginning of 1949 in some of the schemes. Suddenly the Government revived their enthusiasm for these projects and orders were given to go ahead in the beginning of 1949. On account of the devaluation crisis of September 1949 economy cuts were again imposed. In January 1950 it was, however, decided to proceed with the multi-purpose projects. Such fluctuating policy is uneconomical and not likely to inspire confidence in the capacity of the Government to handle industrial and development schemes.

Inter-unit and Inter-departmental lack of Co-ordination: Where the same problem was being handled by different units or departments of Government confusion was inevitable. For example, in the case of the sugar industry, the provinces controlled the sugarcane prices, whereas the Central Government controlled the price of sugar. In the bargain suffering was the lot of the consumer, as the provinces concerned were not able to take an all-India point of view. Similar lack of co-ordination between different departments of some Governments was also visible. In the Centre, for example, shipping was dealt with both by the Commerce and Industry Departments and coal was handled by the Ministers of Works, Mines and Power, Industry, Labour and Transport. Some of the defects and mutually conflicting legislation in this connection could be remedied by a co-ordinating agency, thus bringing about an understanding and co-operation between different departments in the execution of different schemes.

LACK OF PRIORITIES

Part of the criticism made above is due to the fact that no systematic attempt was made to lay down priorities so far as schemes of development were concerned. In spite of this, the Government was trying to attempt too many things at a time, perhaps in the hope of getting public appreciation. The Government of India often suggested that the Provinces should deal with first things first. But they did not lay down clearly which were the first things which should be attended to first. In a country like ours with limited resources on the one hand, and unlimited demand for getting things done quickly on the other, confusion is inevitable if those in charge do not have a clear idea regarding priorities. In consequence, whereas some Provincial Governments embarked on social reforms, others emphasized nationalisation of industries and some others ventured on new industries themselves.

LACK OF A RESOURCES BUDGET

In order that proper priorities may be evolved it is desirable to have a survey of our resources both in the immediate future and in the long-run. With reference to the availability of resources, we should decide on the production of certain requirements which may be in the general interests of the country. It is well known that in India the lack of adequate real resources like iron and steel, cement, transport, technical personnel, and foreign exchange have been responsible for limiting the pace of industrial expansion. The different plans and projects that are undertaken should be co-ordinated with the availability of resources. The rate of industrial expansion should be governed by the rate of expansion in the supplies of these basic resources. If the projects are so ambitious that they outrun the flow or resources, then there will be waste and

frustration. If a resources budget is framed from an all-India point of view, we would avoid the ugly competition for scarce resources which takes place between different governmental authorities and also between the private and the Government sector. The emphasis on the limitations of our resources would also bring home to those in authority that we have to pay due regard to such limitations and should not embark on big schemes of improvements irrespective of financial and other considerations. In India attempts have been made to plan grandiose projects.[1] The proposed Kosi Dam is likely to be the highest in the world. The Waiganga lake in the C.P. is planned to be the biggest man-made lake in the world. The Ramapadasagar project also appears to be outstanding in its engineering characteristics. The Bhakra and Nangal projects are supposed to produce nearly half a million kilowatts of power. The Kosi project is expected to produce nearly one million kilowatts of power. Economic surveys have not been conducted to see whether these projects will find a market capable of absorbing the electricity produced. While schemes are thus being pushed through without regard for markets, areas like Bombay are having acute shortage of power. Until the beginning of 1950 no attempts were made for increasing the power supply of Bombay City and surrounding areas, where the power produced would have a ready market. The U.P. Government spent considerable amount of money on the Nayar Project. Later they gave up the project as foreign experts did not favour it. These illustrations show a lack of sense of proportion as well as realism, which has been responsible for much misdirected enthusiasm and speeches mistaken for achievement. What we require is not propaganda on the wonderful things that we hope to achieve, but positive realisation of improvement, however limited, by means of increased production and improved standard of life.

ADMINISTRATORS AT THE HEAD OF INDUSTRIAL PROJECTS

The Industrial Policy Resolution made it clear that the State ventures would be managed by public corporations as is done in England. In England when the State takes over any industry the work of the industry continues to function as before. As a rule the technicians, managers and labourers remain in their respective positions doing their work as if nothing has happened. What does happen, however, is that the capitalists at the top who are in control of the industries have to go; they are replaced by public corporations. As directors of these public corporations, however, experienced persons in industry are employed as paid officers of the State. In this way the practical knowledge, business outlook and the peculiar technique of getting things done in the business way are all pressed into service. In India the number of persons trained in industrial work either on the managerial side or the technical side is small. Partly because of this reason and partly also because of the prevailing distrust of the capitalists in general, we have created somewhat of a paradox for ourselves. We find that persons trained in administration are put at the head of industrial concerns or public corporations as in the case of the Hindustan Aircraft Ltd., the Damodar Valley Corporation, the Central Electricity Authority and so on. However competent the administrator may be in his own field of work, he is certainly not trained to look after industrial ventures, which require enterprise and business outlook. The tradition of red tape and inevitable delays, which creep into administrative departments cannot be shaken off by persons trained in the civil service, who naturally import the atmosphere of Government departments wherever they go. We should strive to find talent from industry to look after such concerns. It is also possible as in other countries

1. See pp. 234-236.

to recruit talent from other fields for such work. The tendency to put the civil servant in charge of such work will on the one hand give undue premium to the civil servant, and on the other hand prove as a damper on other available talent in the country.

LACK OF TECHNICAL PERSONNEL

The other paradox is that at a time when we are complaining of lack of trained and technical personnel we have a good number of trained young men specially sent at state cost to U.K. and U.S.A. as part of the planning schemes from the year 1945; these have returned and are not able to find suitable employment. Possibly the reply to this situation is that the training was not co-ordinated with the requirements of the country. The relevant question is whether the training which is being planned on a large basis in numerous technical institutions and laboratories in the country has been coordinated with the requirements of the country. If there is any mistake in this connection which is not unlikely, it will only succeed in creating a band of unemployed technical persons who would merely swell the ranks of the discontented. Similarly the complaints of engineering firms that the different projects are not making sufficient use of the services of Indian engineering concerns, but are giving contracts to foreign concerns should also be investigated.

REVISION OF COST ESTIMATES

Want of experience as well as the absence of business outlook in those responsible for sanctioning schemes have resulted in a gradual writing up of financial estimates as often happens in Government departments. To give a few illustrations the following table indicates the changes that took place in the cost of estimates of the different projects.

Revision in Cost Estimates of State Ventures

(*Rs. in crores*)

Name of project	Earlier Estimate	Later Estimate (1950)
Damodar Valley Authority	55	65
Fertiliser Factory, Sindri..	11	22
Iron and Steel Plants (two)	100	180
Sulpha drugs factory	2	3.5

In the case of private enterprise such a tendency would bring the concern into liquidation. In the case of the State, the tax-payer will suffer perhaps in a dual capacity. The cost has to be somehow met which leads to a direct or indirect burden on the tax-payer. If the product ultimately turns out to be costly, the consumer will have to pay a higher price.

DEFECTIVE POLICY TOWARDS CONTROLS

A mixed economy, as was stated earlier has to work through controls. In India the large number of controls that were imposed in the beginning of the war have continued in the post-war period also. So long as raw materials and finished goods are scarce, controls become necessary. Controls may involve the fixing of prices of industrial raw materials, finished products or of food. Controls may also take the form of quotas and licenses for import and export. Controls may be required for the allocation and distribution of raw materials,

semi-manufactured goods and finished products. The transport of materials to industries has to be governed on a system of priorities. Owing to the existence of both the private and the public sectors, and the existence of a wide disparity in incomes, controls are necessary for the proper allocation of resources and for preventing an inflationary rise in prices. The abolition of controls will create unnecessary hardship for the fixed income consumer and the Small industries. But along with controls there has been a large amount of black marketing and corruption. The Government should have noted that so long as the productive system does not expand in response to increased demand, a system of direction of resources becomes inevitable. The Government on the other hand has followed a vascillating policy with respect to controls with consequent distress and suffering to the people. At the end of 1947 there was decontrol both in food and many other products. The prices went up and the force of circumstances made the Government resort again to controls. The Governments have been administering controls in an apologetic mood, which shows that they are not fully aware that so long as shortages persist controls are necessary and that instead of being apologetic about it, they should try to work them properly.

VII. ROLE OF PRIVATE ENTERPRISE

INCREASED LABOUR COSTS

Owing to the uncertainty in the formulation of Government policy and the contradictory programmes pursued by different departments, as well as by the Provincial and Central Governments, the attitude of capitalist producers in India towards expanding production has become somewhat confused. They have not been able to determine their exact role in the new scheme of things and find themselves targets of attack from many sides. Their first headache is due to the increasing consciousness among industrial workers regarding their rights and privileges. Partly because of the trade union movement and partly because of the special treatment which labour is receiving at the hands of the Government by means of legislation and other methods, the importance of labour has grown considerably in recent times. Employers complain of increased labour costs. During the war and in post-war years, the scales of preferences of labour for goods and services have changed considerably. The Indian working class has fought the inflationary spiral by putting more members of the family to work and by bargaining through the trade unions for higher money wages. In consequence, the ordinary worker to-day consumes superior staples like rice and wheat in place of cheaper millets like jowar, bajri, etc., buys larger quantities of fine cloth in place of coarse cloth, more often consumes cheap cigarettes in place of indigenous *bidis*, and liquor, wherever available, in place of toddy, uses buses and trams in urban areas and goes more frequently to places of entertainment. For all these changes in his demand schedule for goods, rationing and controls which have socialized demand are partly responsible. The workers successfully fight wage disputes through their trade unions, and the Tribunals appointed under the new Industrial Disputes Acts award them higher money wages bonuses etc. with due regard to the rise in prices and profits.

The sudden overall increase in money wages has not generally meant a permanent benefit to all the workers. As a result of the continuation of the inflationary spiral, wages try to catch up with prices, but as is well known, ultimately lag behind. About 80 per cent. of the total working class families, in which the number of earners are more than 1.5, are reported to have benefited by the

increased money wages. Money wage rates once increased have a tendency to stick, and unless the efficiency of labour improves, the labour costs of production will be pitched rigidly higher.[1] To some extent, they might even cut into profits and provide disincentives to business enterprise.

As is well known to students of economic theory, beyond a particular point even the offer of increased wages may not result in an increase in the supply of effort. On the other had, as the same amount of income can now be earned with a lesser amount of work, the labourer may prefer leisure to putting in a greater amount of work. In other words, the elasticity of demand for income in terms of effort becomes less than unity.[2] This tendency may operate when wage rates have risen very high. It is true, that during the period of the war, peak production was reached in many industries and the supply of effort from labourers was responsive to offers of increased wage rates. But to-day, the situation appears to be different. Absenteeism and go-slow tactics are increasingly evident in mills and factories. The labourers are able to get lump sum paymens like dearness allowances and bonuses by putting in a minimum quantity of work. Sometimes these fixed payments plus the value of non-monetary services like housing, medical facilities, etc., aggregate to an amount which is larger than the weekly or monthly wage. Under these circumstances, the incentive of high wages may not result in creating increased willingness in the worker to put in greater effort. One way to get rid of these tendencies is by grading the award of dearness allowances and bonuses in such a way that the labourer who works more should get increased amounts of these lump sum payments and also of facilities in kind.

STAGNATION IN INDUSTRY

Besides this cloud of unfavourable atmosphere in which they have to function, businessmen have realised that their principal incentive, *viz.* profits will now be considerably reduced. They do not see prospects of continuation of high profits to which they were accustomed particularly during the war. They find that the sphere of their work is now circumscribed by the industrial policy, and they also feel that the sword of Damocles is hanging on their head in the form of the threat of nationalisation of industries in the near future. The combined effect of this situation is that instead of spurring them to greater activity, the new policy has made the business community think furiously as to how best to preserve what they have instead of trying to do more. The same circumstances explain the absence of adventure and enterprise on behalf of the capitalists who now think twice before going in for any new scheme. As a rule the middle class investor follows the lead given by well

1. In the event of rigid wage-levels pitched higher in relation to productive efficiency and profit margins, either due to collective bargaining or State partiality, the employer will try to meet the situation by using the minimum of labour. The consequently danger of unemployment may prove harmful to the economic interests of the working class itself.

2. One wonders whether the same tendency is not operating in every branch of economic activity. In the face of increased prices of cereals, the farmer has not produced more of food crops ; in spite of increased profits, there has been very little investment ; and in spite of increase wage rates, absenteeism and indifference to work are on the increase. Of course there are other causes for the operation of these trends, besides the one mentioned in the text. Increased agricultural production is not possible so long as the socio-technical bottlenecks are not removed. Increased investment is not possible so long as there is no improvement in the supply of complementary goods and facilities and the uncertainty in Government's economic policy continues to cause misgivings and doubts; and the non-replacement of highly worn-out plant and machinery partly contributes to lesser efficiency.

known capitalists and industrialists in the investment market. As such lead is not available at present the middle classes are also affected by the same psychology of 'wait and see.' In fact, it is true to say that a majority of the middle classes are unable to invest under the present circumstances, as they are not able to make both ends meet due to the prevailing high prices for so many years. It is difficult to say whether capital has become dry or shy. It is true, however, that the subscriptions both to Government loans and industrial securities are relatively low. The inevitable consequence of this situation is that private enterprise does not contribute to larger investment and production as expected.

REGULATION OF INDUSTRIES

Attempts have been made by the Government of India to reassure private enterprise of the great scope that is left to them to function in the development of the country. Speeches have been made by the Prime Minister, the Deputy Prime Minister and others on different occasions giving such encouragement. Conferences have been held in which members of the business community have been given the necessary assurances. The effects of such assurances are, however, nullified by action of a different type in another sphere. For example, while the climate of opinion was gradually changing for the better, the Control and Regulation of Industries Bill was introduced in Parliament. The provisions of this bill were so far reaching that the industrial community discounted the assurances given to them. In view of their organised opposition this bill was later modified, though there are still clauses in it which the capitalist class considers as disincentives to productive activity. In this context we have to remember that whenever in a mixed economy, the Government wants to impose restrictions on the location of industrial activity, it may result in frightening away investment. The inherent tendency for business enterprise is to concentrate in areas which offer special advantages by way of external economies. Any attempt to formulate a comprehensive location policy and to see that private enterprise works in such a framework may lead to discouragement of private investment. The handling of the private sector in a mixed economy requires a great deal of tact, which unfortunately is lacking in the attitude of the Government towards industrialists in India. After all private enterprise has to play a significant role in bringing about industrialisation in a backward country like India. So long as the Government has not the necessary resources and personnel to bring about a comprehensive scheme of nationalisation of all activities it will have to work through private enterprise.

CONCENTRATION ON SPECULATIVE ACTIVITY

While the somewhat faulty way in which the Government has attempted to work its policy is certainly open to criticism, it does not mean that the behaviour of the capitalist class has been above board. To some extent the measures of the Government can be justified on account of the continued stagnation that was visible in private industrial and investment activity. Private enterprise has been hesitant to plough back profits into industry. In such a case it may be rightly asked, whether the Government is not right in trying to force the pace of industrialisation by itself embarking on certain ventures. If the business community refuses to be active and prefers to sit tight on the hoardings, which it accumulated during and after the war, then the responsibility for industrialisation falls upon the State. It appears that a large section of the business community has been mainly concentrating on specula-

tive activities during the last three years. This may have been partly due to various reasons like the non-availability of capital goods or the uncertainty as regards future Governmental policy. But the concentration on speculative activity may also be attributed to the refusal or inability of the business community to shoulder enterprise and face risk. In recent times the control of Indian industrial activity is slowly being transferred to the hands of a particular group, which barring some notable exceptions, has hitherto been noted not so much for productive enterprise as for speculative business on the stock and commodity exchanges. Unless a thorough investigation is carried on into the state of affairs that exist in industrial ownership in India today, it is quite possible that the evils associated with monopoly and combinations, as were rampant in U.S.A., may occur in India also.

LACK OF NATIONAL ATTITUDE

The effects of the recent trends coupled with the degeneration of business morality as a whole (thanks to corruption, administrative inefficiency and black-marketing) on skill, enterprise, and productive efficiency have not been salutary at all. It is a sad reflection on industrial efficiency in India that foreign countries repeatedly complain against the deterioration of quality in Indian goods and fraud on the part of Indian exporters. The responsibility of the Indian Sugar Syndicate in creating the sugar shortage scandals in August 1949 and the revelations of the Tariff board on its working should be an eye-opener to the Indian businessmen about the trend of popular feelings, against anti-national attitudes for the sake of profits. Such anti-national conduct is not however merely confined to the sugar syndicate. Before the decontrol of cloth, towards the end of the year 1947, Indian millowners had given a moral binding to Mahatma Gandhi that the free market prices of mill cloth would not be more than 12½ per cent. above controlled prices. Experience showed that the events shook Gandhiji's faith in the capitalist class as trustees of public welfare.

SLOWNESS IN ADOPTION OF MODERN TECHNIQUES

Indian industrialists have also been slow in employing technical skill and expert personnel in the industry. Compared with what the industrialists in other countries spend on research, the contribution of the Indian business community towards fostering scientific research is negligible. The capitalists in India are not anxious to utilise the latest technological advances and to employ up-to-date equipments and machines. Even with respect to business management, accounting and marketing, the developments in technique that have been evolved are not much in vogue in India.

NEED FOR ENTERPRISING SPIRIT

The industrial community in India has been largely accustomed to a sheltered market. Working under conditions of protected markets and under conditions of shortages they have been accustomed to a level of profits, which it is very difficult for the country to sustain in future. It may be pointed out that the large abnormal profits that the industries got during and after the war are like surpluses and rents and not functional rewards. In order that profits may be justified, the industrial community must be enterprising and must be prepared to undertake risks. Unfortunately very little of such pioneering is visible in India. Short-term gains and profits have been

the main consideration. The interests of the country and the desire to help in building up of basic industries, are rarely noticed. Under such circumstances the measures of the Government may be partly justified. The Indian industrial community has been accustomed to very little interference from the State. With the emergence of India as an independent country, the responsibility of the Government for fostering rapid industrialisation to bring about economic prosperity has increased. A larger degree of state control and greater interference by the State in the industrial have field become neccesary. In the transitional period the business community in India has not yet adjusted itself to these changes.

ADAPTATION TO CHANGED CONDITIONS

The capitalist class must realise that under a democratic form of Government, they have to go a long way in satisfying the popular will. They have to reconcile themselves to the new situation and adopt a national attitude in their plans and policies. They are bound to meet with an adequate response from the Government and the public in the task of greater production. Let not the common man feel that the industrialists are fighting a ceaseless war of nerves with the Government in the interests of their profits. Let an atmosphere be created so that the public may feel that the industrialists are willing to play their part and be satisfied with reasonable rewards.

GOVERNMENTAL ASSISTANCE

The Government can assist private enterprise in many ways by guaranteeing the demand for their products, by helping them in the importing of machinery, by providing them with proper allocations of transport and raw materials and also by providing them incentives by tax adjustments. Whatever policy is pursued it must be seen that the present production and rate of expansion are not hampered by misguiding and confusing statements which have 'large announcement effects' in an undeveloped mixed economy like ours. If there are black sheep in the capitalist class, they should be dealt with by law. The enlightened capitalists should, however, be persuaded to create an improved code of behaviour among themselves. What is necessary is to see that the capitalist producer reconciles himself to the new state of affairs in the country and to induce him to play his legitimate part by quiet tactful action, instead of by unending platform speeches by responsible persons, who succeed thereby in upseting the minds of these classes, without achieving anything substantial in return. In fact, before passing general legislation and deciding upon a reasonable rate of return for the industry as a whole, the Government will do well to make provision for special incentives particularly in industries in which risks and uncertainties appear to be greater.

INCENTIVES FOR LABOUR

Just as the atmosphere must be made suitable for the capitalist producer to function effectively we must also see that labour has its due. All encouragement must be given to bring about harmonious labour-capital relations. In this the Government of India and the provinces have been doing beneficent work. If a sense of discipline and national responsibility is instilled into labour just as it is being done in England, and labour is made to feel the need for identifying itself with industry, greater production will be achieved.

VIII. NATIONAL PLANNING COMMISSION

TERMS OF REFERENCE

Out of the somewhat unsettled situation in the economic life of the country, we have a ray of hope in the establishment of the National Planning Commission, which was announced on 15th March 1950. According to the terms of reference the Planning Commission will:—

1. make an assessment of the material, capital and human resources of the country, including technical personnel, and investigate the possibilities of augmenting such of these resources as are found to be deficient in relation to the nation's requirements;
2. formulate a plan for the most effective and balanced utilisation of the country's resources;
3. on a determination of priorities, define the stages in which the plan should be carried out and propose the allocation of resources for the due completion of each stage;
4. indicate the factors which are tending to retard economic development, and determine the conditions which, in view of the current social and political situation, should be established for the successful execution of the plan;
5. determine the nature of the machinery which will be necessary for securing the successful implementation of each stage of the Plan in all its aspects;
6. appraise from time to time the progress achieved in the execution of each stage of the Plan and recommend the adjustments of policy and measures that such appraisal may show to be necessary; and
7. make such interim or ancilliary recommendations as appear to it to be appropriate either for facilitating the discharge of the duties assigned to it; or on the consideration of the prevailing economic conditions, current policies, measures and development programmes; or on an examination of such specific problems as may be referred to it for advice by the Central or State Governments.

Unlike some of the earlier efforts at planning, the effort on this occasion is more systematic and shows greater promise of success. In a democratic Government, the responsibility for executive action has to be taken by the Executive which is responsible to the Legislature. In view of this, it was obviously not possible to give executive functions to the Planning Commission. In order, however, to see that the work of the Commission is co-ordinated with that of the Executive, adequate links have been provided. The Prime Minister is the Chairman of the Planning Commission. The Secretary of the Cabinet is also the Secretary of the Planning Commission. Among the members of the Planning Commission are well known persons experienced in different walks of life and together they make a strong team, if they are given adequate opportunities without constant interference. In recent years the reports of the Congress Economic Committee and the speeches of the Congress leaders on economic problems on the one hand, and the statement of Governmental policy made by the Government of India and actions based on them on the other, have been together responsible for creating misgivings regarding economic policy which are characteristic of our life in recent times. It is to be hoped that the existence of a Planning Committee appointed by the Congress Working Committee and its efforts to take into confidence Chief Ministers of Provinces and to influence Governmental policy will not lead to that confusion of ideas regarding the work

of the Planning Commission, leading to uncertainties in economic policy, from which we have suffered in the recent past.

Subject to this, the Planning Commission should be able to suggest steps by which some of the existing defects in the schemes of development can be effectively removed. For example, the Planning Commission has to make a Resources Budget and evolve a balanced plan by determining priorities. It has also to take due note of the current social and political situation in the country, and suggest the nature of the machinery required for carrying out the plans. In order that the Commission may be in a position to revise the plans from time to time, it has powers to watch the execution of the plan at each stage, and recommend adjustments of policy and measures from time to time. If the Central and Provincial Governments are willing to trust the wisdom of the Commission, and are willing to carry out their recommendations, we shall have a unified and co-ordinated approach for the economic development of the country which we have lacked hitherto. If, however, other conflicting forces and ideologies are brought into the picture, the work of the Planning Commission will suffer, and we shall add one more huge frustration to the many from which we are already suffering.

NEED FOR AN ECONOMIC SERVICE

It would be appropriate to emphasize that any plan for economic development prepared by the Planning Commission will have to be comprehensive in scope and based on an awareness of the trend in the economic situation both within the country and without. The Government will have to foresee the difficulties and hurdles that will arise during the course of the execution of the plan, and should be prepared boldly to face and solve the same. Unfortunately the Government has hitherto followed a policy of drift and has been more often than not overwhelmed by the obstacles. An understanding of the nature of trends will lead to measures which will modify and direct the trends themselves in such a way that the schemes of the Government are made to function smoothly. The Government should also realise that the economic system is one whole; and therefore no province or region should be permitted to take an isolationist attitude in affairs which involve national welfare and call for sacrifice from all. A rational appraisal of economic advantages and disadvantages, both in the short as well as in the long run, will result in concreteness and definiteness in economic policy, provided the influences of pressure groups and vested interests are ignored. The country today does not possess a sufficient number of well trained, honest and national minded administrative personnel. The increasing role played by the Government in the economic affairs of the country necessitates devolution of crucial powers to persons who are not sufficiently trained in problems of economic administration, which require a clear understanding of rapidly growing economic technique, theory and practice. The need for organising an Economic Service is therefore most urgent. It may be pointed that the value of such a Service has been well recognised in Western countries.

Though the need of technically trained personnel for national development has been recognised, the equally urgent need for persons trained in economic technique is not appreciated either by the politician or the administrator, who is used to opine on economic problems with an air of confidence, which may make any expert blush. The civil servant who cannot dabble in scientific technical problems has to part with control over technical matters; he likes to retain control over economic affairs, because he thinks he knows all that is worth knowing about them; he thinks so because he is not willing to part with

power in the sphere of economic affairs, not because he is really competent. It is this psychology which explains the recent reported move to side-track the proposal of the Fiscal Commission for the creation of a separate Economic Service, by the suggestion that recruits to the Indian Administrative Service should be given a course of lectures in the Administrative Training School at Delhi, as if such a course is a substitute for the expert training and experience which are implied in the creation of a separate Economic Service.

'EUTHANASIA' OF THE MIDDLE CLASSES

Another point to which attention may be drawn is the pressing need to arrest the rising price level in the country. While there is the utmost necessity for the most cautious allocation of our limited resources, the battle against inflation should be fought by concentrating upon measures which will bring about an increase in the production of essential products like food, clothing and housing. The provision of these basic needs is a social overhead. So long as the threat of famine hangs over any part of the country, the psychological atmosphere and the social background which are so necessary for the success of planning will not be created. The 'euthanasia' of the middle classes which is being gradually brought about, thanks to the continuance of a period of high prices and of low fixed incomes does not augur well for the economic development of the country. The miseries of the middle classes have been increased due to the mass migration which followed the Partition. It is widely believed that the redistribution of income that has taken place during the war and post-war period has not benefited the middle classes who formerly provided the sheet anchor for the borrowing programmes of Government and private enterprise. What is not equally widely realized is that the taxation policy of both Central as well as Provincial Governments has been excessively burdensome on these classes and the cost of the various social amelioration measures undertaken by the Governments has been largely borne by them, through sales taxes and higher prices. The spirit of frustration which has caught hold of these people and has resulted in the dampening of their energy and enthusiasm might result in introducing elements of instability in the political field, which will have its counterpart in the economic sphere. The increased costs of education have closed the doors of knowledge to large sections of middle class families, who were accustomed and attuned to making use of such opportunities. Higher technical education has become a luxury and the younger members of middle class families have been forced to take up work at an early age. A paradoxical situation has been created in the country to-day in which, while the labour class families (where every adult member is put to work), being provided with lump sum dearness allowances and bonuses and non-monetary facilities like housing etc., may follow go-slow tactics in spite of increased wages and prefer leisure to work, the middle class families being provided with low rigid incomes in the face of increasing costs of maintaining their standard of life, are being forced to deny themselves the basic necessities of life and are forced to put every adult member of the family to work. The social contribution of the latter is therefore rapidly diminishing with highly undesirable consequences to society.

NEED FOR READJUSTMENT IN CASE OF EMERGENCY

Finally, it should be noted that the international political situation being full of war clouds, the country will have to be prepared to readjust itself to any emergency situation. Even though India itself may not be directly involved in any impending world war, the preparation for war in other countries will

have its repercussions on our economic activity. For example, the structure of our foreign trade transactions will change. There will be a rise in the prices of many commodities for which we depend upon other countries. The import of capital goods will be reduced. Markets for our export industries will be affected. Internally, tendencies of hoarding and blackmarketing way increase. The National Planning Commission as well as the Government should make efforts to study the measures that will be necessary to prevent the working of anti-social forces, if such an emergency occurs. The inflationary potential unleashed during the last war has not yet abated and has come in the way of all economic development. Let us beware so that it may not get further impetus owing to the unpreparedness or complacency of the Government. The situation is so desparate that timely monetary and other measures should be considered to bring it under control.

CONCLUSION

The above brief survey of the course of industrial planning in India indicates the inherent difficulties that are natural in an economy which tries to attain in a short period a rate of development which normally requires a longer period of time. The Governments have attempted to achieve simultaneous reforms on all fronts. Measures of social reform, labour welfare schemes, nationalisation proposals and schemes for industrial development and planning have all competed for our limited resources. Competition rather than co-ordination has been the result. Meanwhile the larger part of the resources of the country has been necessarily devoted to providing basic necessities like food. The rate of investment that has been planned to be undertaken has perhaps created an undue pressure on the very limited supplies of finance, capital equipment, basic raw materials and technical skill. The rate of expansion in these real goods and services has not at all been commensurate with the planned rate of investment. Consequently prices have been pushed up. The Government spokesmen have repeatedly called forth the need for larger savings and larger investment from the private sector. But even investment efforts under the bottleneck conditions which we are unfortunately facing in the country to-day might result in inflationary pressures. The most important question before the country today is that of determining the optimum rate of investment under the present institutional framework and the existence of fundamental shortages. So long as the flow of real resources is inelastic, blind talk of increasing investment results only in increasing the monetary pressure on the economy. Under these circumstances, the expenditure policy of the Government as well as that of the private sector should be directed so as not to strain the economy too much. Prior attention should be given to replacing the heavily worn-out capital equipment as early as possible. Production has reached a high state of increasing costs on account of the over-exploitation of the fixed factor. Secondly, we must expend our resources in getting machinery for industries which produce essential goods, without whose complementary expansion no industrialisation scheme can proceed. Measures of the Government which result in no tangible immediate increase in the production of important articles should proceed slowly. Any measure which abandons existing sources of revenue may not be conducive to the anti-inflationary programme. Measures which result in bringing about a redistribution of income such that the pressure on consumption is increased should go slow. Expenses of governments which result only in the transfer of assets should also be checked. It is encouraging to note that the Central Government has been gradually realizing the need for co-ordinated action in these spheres.

IX. INDUSTRIAL POLICY—PAKISTAN

ECONOMIC DIFFICULTIES AND HANDICAPS

Before we give an account of the attempts of the Pakistan Government to initiate industrial development programmes in Pakistan, it would be appropriate to give a connected idea of the initial handicaps which the country has to face. In the previous two chapters we have made it amply clear that Pakistan emerged with an insignificant share of the total number of factories of Undivided India. Except in the case of cement and minor industries like fruit products, sports goods and surgical instruments, Pakistan does not have any other industries of importance. Her position in respect of the essential consumer goods industry is very weak. Though she has large areas under sugarcane, tea and tobacco, she has to depend upon imports of tea, sugar and tobacco products for her internal consumption. In respect of goods like soap, vegetable oils, matches etc., she is dependent upon the products of Indian industries. Though she produced 70 per cent. of Undivided India's output of raw jute and supplied large quantities of raw cotton, hides and skins and bamboos to the Indian industries, it is a paradox that she has no jute mill even to satisfy her internal requirements of jute goods, no paper mill, very few cotton textile mills and tanning and leather factories. In respect of metallurgical, mineral and engineering industries, Pakistan's position is far from enviable. The same is the case in respect of industries which produce accessories and raw materials like chemicals, machine tools etc., for other industries.

The partition has separated industries from raw materials and markets from industries. To fashion out an entirely new state of economic relationships in an atmosphere of foreign exchange scarcities and world shortage of capital goods is indeed a difficult task. Pakistan lacks not merely in industries; she has also not got enough technical personnel to operate the existing factories, let alone start new ones. Her labour force is mainly accustomed to manual work. The greater portion of the population is rural in character, especially so in the case of East Bengal. Most of the technical institutions are situated in India. Therefore facilities for training the existing labour in new fields are absent and will take time to be established. The mass migration which accompanied the partition and which has still persisted even after three years, has resulted in large gaps in the economy and its smooth functioning has been rendered difficult. The Hindu and Sikh communities who left Pakistan were relatively more educated, more urbanised and more attuned to industrial pursuits. The wealthy and enterprising capitalist class has also migrated from Pakistan. With few enterpreneurs who can risk in industrial ventures, with only a few capitalists to finance enterprise, with a few managers to conduct the factories, and a small number of technical personnel to operate the complicated modern machinery and equipment and a labour force unaccustomed to skilled industrial work, the process of industrialisation in Pakistan is indeed beset with formidable difficulties.

The process of industrialisation in a country which is highly backward takes time and calls for much effort, patience and sacrifice. It has taken more than fifty years for Undivided India to emerge as an industrial nation. A beginning had to be made for the raw materials to be utilised within the country. Gradually the industries developed with the aid of tariffs and subsidies and finished products, instead of raw materials, came to be exported. But Pakistan has yet to

make a beginning with industries. She must realise the existing limitations before formulating economic policies. Pakistan is deficient in fuel and power. Until she assures herself of a large supply of fuel and increases the generating capacity in electricity, she cannot think of large-scale industrialisation. Moreover, she is not well-provided with transport facilities.

Even in the problem of determining priorities, Pakistan faces a dilemma—whether she should first concentrate on industries producing essential consumer goods or on process industries which utilise the principal raw materials. Her economy is full of bottlenecks. There are pressing demands from all sides. There is plenty of raw jute but no export is possible so long as there are few baling presses and the port capacity continues to be limited. Concentration on development of ports and of baling presses means less of funds for other purposes.

There is also a virtual conflict in the economic interests of East and West Pakistan. To frame a common economic policy which balances the interests of both East and West Pakistan is difficult. A policy which is of greater advantage to West Pakistan might result in undue hardships to the people of East Pakistan, with the consequence that the latter may feel that their interests are ignored. The dearth of consumer goods and the fall in incomes that accompanied the devaluation deadlock in East Bengal resulted in some bitterness towards West Pakistan; and the intensity of economic suffering was reflected in the frictions with the minority community. East Pakistan's interests are relatively more bound up with India than those of West Pakistan. West Pakistan is a homogeneous unit and well provided with supplies of some consumer goods. East Pakistan has been entirely dependent upon India for most of its basic needs. The misery and suffering that were caused to the people of East Pakistan on account of the trade dealock that followed devaluation, ultimately resulted in creating bitterness among the population. East Pakistan is very densely populated and the people are extremely poor. West Pakistan, on the other hand, has been accustomed to a period of prosperity on account of the high prices of agricultural produce. The prosperity of West Pakistan to a large extent depended upon the economic unity of Undivided India. The farmers were able to sell their agricultural produce to the urban section and the industries spread over different parts of India. The prosperity of the highly industrialised urban sector depended upon the free flow of raw materials and products to and from different parts of India. The mass migration has crippled these industries and has caused huge occupational gaps. Non-food crops like cotton grown in West Pakistan have now to depend upon foreign markets. Formerly, raw cotton was being utilised by the Indian textile industry which catered for a large and expansive home market, thus providing an assured outlet for the Pakistan raw material. It is, therefore, doubtful whether the West Pakistan economy will be able to sustain the prosperity which it had enjoyed in Undivided India. For example, its inability to find a market for its wheat surplus in 1949-50 led to a fall in wheat prices with consequent discontent among the agrarian classes. Until recently the East Pakistan farmer was helpless against the bargaining capacity of the jute manufacturers. It is only in the last two or three years that the farmer has come to share in the increased profits of the jute industry. But an aura of uncertainty hangs over the future of jute. If India takes a determined stand and is able to be self-sufficient, then the myth of high raw jute prices will be exploded and the East Pakistan jute grower will also face distress.

The Pakistan economy is also very much dependent upon foreign countries for its prosperity. Most of her raw materials enjoy a derived demand. The ability of the country to increase the level of income by large-scale industrialisation is dependent upon the continuance of foreign exchange earnings, facilitating the import of capital goods. But as will be seen in Chapter XII a large portion of Pakistan's financial resources and foreign exchange are being spent on defence. The prospects of the entry of foreign capital are also not very bright so long as political circumstances and economic bottlenecks in the land itself continue to cause misgivings abroad.

PAKISTAN'S INDUSTRIAL POLICY STATEMENT

The Government of Pakistan, however, lost no time in convening a conference of Pakistan industrialists at Karachi in December 1947 to consider and formulate development plans. As in the case of India, the Industrial policy statement of the Government of Pakistan was published in April 1948. We give below a brief idea of the main features of the Policy Resolution:

Features of Pakistan Economy: The resolution recognised that Pakistan was essentially an agricultural country. She had to start from the scratch as regards development of technical and technological institutions, research and analytical laboratories and credit and service agencies. The resolution laid particular stress on the contrast that though Pakistan was producing 75 per cent. of world's jute, and over 15 lakhs bales of good quality cotton, there were no jute mill and very few cotton textile mills in Pakistan.

Aims and Objectives: The resolution stated that improvement in the standard of living of the people was the main objective. Free play would be given to private enterprise, subject to certain conditions. In view of the predominantly rural economy of Pakistan, initial emphasis was made on development of agriculture and of industries based upon or connected with it. The promotion of medium and cottage industries got the next priority. Development of large-scale industries would also receive proper attention. Pakistan would try to encourage (i) the production of raw materials, in particular jute, cotton, hides and skins for which there was an assured market at home or abroad, (ii) consumer goods industries for which Pakistan was dependent upon outside agencies, and (iii) heavy industries, which would come at a later stage.

Planning: The resolution recognised that a well-defined and integrated plan was necessary. It recognised that the Centre had a great role to play in planning. The defective nature of the then existing Act in putting the industries in the Provincial list, was recognised. As the Centre was in a better position to judge about regional development and strategic considerations and to formulate a fiscal policy, Central control was very necessary. It was, therefore, decided to transfer the development of industries from the provincial list to the concurrent list. The power to regulate mines and oil-fields was also taken over by the Centre.

The Centre would exercise supervision over industrial development to see that plans were properly carried out but the Provinces would also have their role. Location of units would be decided in consultation with the Provinces. The resolution stated that a Development Board to co-ordinate plans of the Centre and Provincial units had already been established. The Board would make recommendations as regards priorities among the development plans and keep a watch on the development schemes. A Planning Board had also been established consisting of representatives of Provincial Governments and

the States and of the Centre and of special interests like industry, labour, etc. Various panels for different industries were also established.

Relation of State to Industry: Monopolies and public utilities were ideally suitable for nationalisation. Communications and transport services, particularly railways were already state-owned and managed. Road transport had been nationalised by some provincial units. River services would be left in private hands for the time being. As regards other industries, it was decided that certain categories would be owned and operated by the State, namely, (1) Arms and munitions of war, (2) Generation of hydro-electric power, (3) Manufacture of railway wagons, telephones, and wireless apparatus.

The Government, however, reserved their right to take over any industry for reasons of security and economic well-being. They would also enter where private capital was not adequately forthcoming. They would determine the location of industry and allocation of materials in short supply. Proper conditions of work were also guaranteed to labour.

Assistance to industries: The Government declared that it would give all possible help for the establishment and development of private industry. Researches in and survey of Pakistan's resources would be conducted. The port facilities would be improved. Raw material supplies would be facilitated. Capital goods would be bought from other countries. The Government decided to establish an Industrial Finance Corporation. It also promised to buy the products of Pakistan industries in preference to goods from other countries. Assistance as regards purchases of land and facilities by way of cheap power would be given. Industrial trading estates would also be started.

Tariffs: The Government recognised that it was their duty to give favourable considerations to claims for a reasonable measure of protection to industry. The establishment of a Tariff Board was decided upon.

Taxation: The Government promised concessions to new industrial units. Allowances for depreciation were to be liberalised.

Foreign capital: The resolution welcomed the entry of foreign capital. But it laid stress on the participation of Pakistan nationals in administrative and technical services. Where trade facilities rather than establishment of industry were desired by foreign concerns, subsidiaries would have to be registered in Pakistan. Foreign capital would be welcome provided participation of indigenous capital was given proper opportunities and monopolies were avoided. The Government stated that in the national interests, Pakistan nationals should be given the option to subscribe to at least 51 per cent. of all classes of share capital and debentures in the industries detailed below:—

1. Cement
2. Coal
3. Cotton spinning and weaving mill
4. Fish canning and fish oils
5. Generation of electric power (other than hydro-electric)
6. Glass and ceramics
7. Heavy chemicals and dye-stuff
8. Minerals
9. Preserved and prepared foods
10. Power alcohol
11. Ship-building
12. Sugar
13. Tanning and leather.

With regard to other industries Pakistan nationals were given the option to subscribe up to 30 per cent. of share and debenture capital. If the Government was satisfied that the requisite amount of indigenous capital was not available the balance might with their approval be subscribed by foreign investors.

The need for co-operation: The Policy Resolution concluded in these words: "Government are fully conscious of the fact that State action alone, however beneficial or far-reaching it may be, will not usher in an era of intense industrialisation. Individual initative and private enterprise must play their part, if Pakistan is to succeed in building up a balanced economy. It is Government's firm belief that the policy they have now announced and the measures that will be taken in pursuance of that policy will help in the process. Government are confident that every section of the people will bend its energies and spare no effort to build up a progressive and prosperous Pakistan which will play a worthy part in the comity of Nations."

Industries subject to Central Planning: In the appendix was given a list of industries subject to Central Planning as under:—

1. Arms and munitions of war.
2. Cement
3. Coal
4. Electrical equipment—fans, lamps, motors, generators, transmitters and switchgears.
5. Generation of electric power—hydel and thermal.
6. Glass and ceramics
7. Heavy chemicals industry—sulphuric acid, caustic soda, soda ash, fertilisers
8. Heavy engineering industries for construction of aircraft, ships, locomotives, wagons, automobiles, agricultural machinery.
9. High temperature and high pressure reaction and carbonisation plants.
10. Iron and steel
11. Machine tools
12. Manufacture of telephones, telegraphs and wireless apparatus.
13. Marine fisheries
14. Mineral industries
15. Non-ferrous metals and alloys industry
16. Paper and pulp
17. Petroleum and mineral oils
18. Power and industrial alcohol
19. Pharmaceuticals and drugs
20. Preserved and prepared foods
21. Rubber manufacture
22. Scientific instruments, gauges and precision tools
23. Sugar
24. Salt
25. Tanning and leather
26. Textiles—cotton, woollen, jute, silk and rayon
27. Tobacco.

Clarifications regarding foreign capital: Further clarifications had to be made with regard to the statement on foreign capital contained in the Policy Resolution. The Government stated that they would be quick and liberal in giving concessions to foreign capital if indigenous capital was not forthcoming. Liberal treatment was also promised in the case of extension of existing companies. It was also made clear that no undue restrictions would be placed on transfer of profits to the country from which capital was drawn.

Measures passed by the Government: This resolution was the first step that the Government took in the process of industrialisation of Pakistan. As regards mines and minerals, an Act was passed on 10th January 1949 called the "Mines, Oilfields, and Mineral Development Act." The Government of Pakistan took powers to regulate and make rules for all mines in Pakistan. The industries Act was passed on 21st March 1949, by which the Government assumed powers for Central control over the industries which were listed in the appendix to the Industrial Policy Resolution.

X. PLANNING IN PAKISTAN

The nature of priorities: One of the distinct features of the resolution was the recognition that Pakistan was mainly an agricultural country and therefore the first priority should go to the development of agriculture and small-scale and cottage industries. Next came industries which would utilise raw materials produced in Pakistan. Development of consumer goods industries came next in order. Heavy industries were given the last priority, and the State took upon itself the task of developing some of these industries.

Backwardness of Pakistan: The backward nature of Pakistan's economy can be clearly seen from the following list of industries which asked for direct participation by the State in one way or another.

Jute Textiles	Pharmaceuticals
Woollen Textiles	Paper
Tanning	Non-ferrous metal smelting
Leather and footwear	Iron and steel smelting
Sugar	Fertilisers
Rubber goods (tyres and tubes)	Caustic Soda and Soda Ash
Sulphuric acid and derivatives.	Tobacco

There were only four industries which stated that no assistance from the Government was necessary. These were, rubber goods, sports goods, petroleum and products, vegetable oils and cement. The rest of the industries asked for assistance by way of land, concessions for the supply of raw material etc.

Development Board: The Government of Pakistan has been making earnest efforts to exploit internally the indigenous resources. A Development Board consisting of high officials of Government was appointed soon after the establishment of the Government of Pakistan. In order to advise the Development Board a Planning Advisory Board consisting of officials and non-officials was also set up. A separate Ministry of Economic Affairs was instituted in the Cabinet with the object of co-ordinating the different plans and the day-to-day activities of the other Ministries. The Development Board and the Planning Advisory Board work as part of the Ministry.

Preparation of new schemes: At its first meeting the Development Board, while taking stock of the Development Schemes which had been prepared in the past by the Provinces in Undivided India, considered the modifications that had to be made in view of the partition. Greater emphasis had to be laid on certain subjects than was done in the past. The Development Board asked the Provincial Governments and the Central Ministries to re-examine the old schemes and to prepare new schemes which should relate primarily to the following subjects:

(a) Production of hydro-electricity and other forms of power;
(b) Maintenance and expansion of communications, including ports;
(c) Exploitation of mineral wealth;
(d) Reclamation of land, especially for the refugees pouring in from India;
(e) Establishment of basic and key industries;
(f) Training of technical personnel required for industrial development;
(g) Prevention of disease and improvement of health;
(h) Large-scale development of fisheries and fish industry.

Methods of financing development: The Development Board approved 105 schemes. The total cost spread over a period of five years was first esti-

mated at Rs. 70 crores. The estimates were later revised and put at Rs. 112 crores. This amount does not include the expenditure on those schemes, which the Provinces could meet out of their own resources and also of those schemes which the Central Government regarded as part of the normal ministerial activity. For purposes of financing the following arrangement was made. In respect of schemes which were submitted by the Provincial Governments and were approved by the Development Board, the Central Government would advance loans for financing the schemes. The responsibility for actual execution rested with the Provincial Governments. In respect of schemes submitted by the Central Ministries, the financing would be done out of the Central Exchequer and the different Ministries would be responsible for actual execution. In both the cases the Development Board could recommend sanction of loans or grants.

The nature of the schemes: The total expenditure of Rs. 70 crores on the development schemes was split up as follows:

	Rs. in crores.
Electricity	20
Communications	10
Irrigation	16
Agriculture	10
Health	3
Industrial Development	2.5
Rest	8.5

The various Provincial Governments were given loans to the extent of Rs. 23 crores in 1948-49 and 1949-50. The Central Government also made an outright grant of Rs. 1 crore in 1949-50 to the Provincial Governments for agricultural development.

The Central Government also established an Industrial Finance Corporation with a capital of Rs. 3 crores for providing assistance in the establishment of certain large industries for which sufficient private capital was not forthcoming. Among the major development schemes are, the Karnafully Hydro-electric Project, the Mianwali Hydro-electric Scheme, the Warsak Multipurpose Project, the Rasul Hydro-electric Project and the Thal Multi-purpose project. In respect of the Thal scheme, an authority on the model of the TVA, called the Thal Development Authority has been set up, its area of operation extending over 3 districts.

Industrial planning: In respect of industrial development, only slight progress has taken place. Four new textile mills have started production. Work on a 50 thousand ton sugar factory which would be the largest in Asia, has been almost completed. The Government has decided to set up 5 jute mills, each with 1,000 looms, the first of which is expected to go into production in 1951, the second in 1952 and the third in 1953. It has also been decided to set up a paper mill in East Bengal at a total cost of Rs. 5 crores. Survey work on the establishment of fertiliser industry has been completed. The Government has given the highest priority to the development of Chittagong Port and a sum of Rs. 3.73 crores has been provided in the year 1950-51. The Government has also decided to form an Industrial Development Corporation in order to provide stimulus for industrial development.

Technical missions: The Government of Pakistan has also invited foreign technical missions for purposes of survey and preparation of project reports. Messrs. Powell Duffryn Technical limited, a well-known British firm were in-

vited for surveying the coal resources of Pakistan. A Mission of British experts was asked to prepare a project report for the establishment of the fertiliser industry. A Mission of Belgian Experts was also called for the same purpose. The Government of Pakistan also invited the United States Steel Export Company, the largest steel export company in U.S.A., to survey the Pakistan territories for the development of the steel industry. Messrs. Merz Rendell Vatten, a combine of three internationally reputed firms, one Swedish and two British, had been entrusted with the task of carrying out the major enginnering programmes of the Pakistan Government. A delegation of British industrialists headed by Lord Burghley was also invited by Pakistan.

Difficulties in way of industrial development: The continued strained relationship with India has been responsible for interruptions in industrial development in Pakistan. Proper industrial production requires coal. The trade deadlock with India resulted in the stoppage of coal supplies to Pakistan. Unless Pakistan imports coal from other countries and assures a regular flow of fuel to her industries, and expands the eletricity supply stations, the prospects of industrial development appear to be remote. The separation of the two parts of Pakistan creates difficulties by adding up large elements in the final costs of products. It also creates an element of uncertainty in the flow of materials. The non-devaluation decision of Pakistan might also contribute towards the slow rate of industrialisation. Products of the devalued countries would be very cheaply available in Pakistan, rendering the task of starting new industries in Pakistan difficult and relatively uneconomical. The continuing refugee problem by which the remaining enterprising industrialists and labour are moving out of Pakistan will in the long run lessen the rate of development. The determination to make Pakistan a theocratic State might also create difficulties for entry of foreign capital.

XI. CONCLUSION

NEED FOR MUTUAL UNDERSTANDING

To carve out two self-sufficient economic units out of one unified system evolved over a period of centuries as one integrated economy is a time consuming process. If attempts are made to undo and to reverse in a period of two or three years a pattern of relationship which has been systematised and normalized after hundreds of years, unnatural and heavy costs have to be borne. If reason instead of sentiment had been the guiding force in the economic policies of the two countries, it is certain we could have avoided most of the human misery and suffering which have resulted on account of these attempts. Much of the difficulty has arisen on account of the non-recognition and non-realisation by both the Governments, of the hard fact of the inevitability of certain trends. It is in the nature of things that Pakistan should make attempts to start industries within the country. It is equally natural that India should make efforts to be self-sufficient in the raw materials on which she is dependent upon Pakistan. In such an atmosphere, it is evident that the price structure of raw materials and products cannot be the same as was prevalent in Undivided India. The supply and demand relationships are no longer between articles grown within one country, where ultimately no transfer of resources outside the unit is involved. When we come to trade transactions between two independent countries, it is natural that each country should try to ask for more from the other. The raw jute growers of East Pakistan, for example, were completely unorganized before the partition. After the

partition, the Pakistan Government had to negotiate on behalf of these unorganized growers and had to make efforts to increase their incomes through concerted action in dealing with the Indian jute industry. All these things are of course natural. But what has been forgotten in the separate policies of the two countries is the fact that so long as the world suffers from uncertainty and shortages in the supply of jute goods, substitutes will gain and the very demand for jute goods and of raw jute will tend to suffer in the long run. If such an event materializes, it will result in impoverishing both India and Pakistan. Pakistan appears to have followed a policy of denial to India without having at the same time facilities to export the raw materials to other countries. A mutual agreement on these issues based on a proper understanding of the superiority and advantages of co-operative action might result in large absolute profits taking both the countries together, subject to the settlement of the shares that should accrue to each. If, on the other hand, there is a quarrel about the division of shares itself, then ultimately the size of the absolute profits will suffer.

The Indian industries have to reconcile to the fact that Pakistan cannot provide a sheltered market for them in future. Every independent country has to think of ways and means of affording protection to its own industries. It has also to increase the Government revenues by levying import and export duties. The shrinkage of demand for certain Indian products is in the nature of things and is a necessary consequence of the partition. On the other hand, unfortunately, Pakistan has unnecessarily put her own consumers to much suffering by preventing the free flow of Indian commodities to that country. Pakistan should realise that so long as her industries take time to develop, it would be to her benefit to see that the consumers get the cheapest goods. Both India and Pakistan were accustomed to an integrated transport arrangement. Attempts on the part of either Government to prevent a flow of materials and commodities on their most economical and cheapest routes will ultimately result in higher economic costs all round, as a consequence of which both the countries will have to pay increased prices for products.

Most of the frictions have arisen on account of the attempts of the Governments to discover short cuts. It must be remembered that there can be no short-cut for bringing about an increase in the incomes of the people. If short-cuts are resorted to on account of political reasons, ultimately there would be so many transitional difficulties that the very objective of development would be defeated. A proper understanding of the nature of issues involved and a correct appraisal of the economic advantages and disadvantages might result in the evolution of economic policy, which will lead to lesser suffering in the short run and ultimately higher incomes for both in the long run. The process of give and take is inevitably bound to result in increasing the size of the cake, so that each country can have a larger portion.

PROSPECTS FOR INDUSTRIAL CO-OPERATION

The plans for industrial development in both the countries can be undertaken on either of the following two assumptions. If each country assumes the expectation of harmonious co-operation and trade relations with the other, then the pattern and pace of development might itself change. On the other hand, if either country plans on the basis of self-sufficiency and of non-co-operation on the part of the other, the development may be different. We have seen that so far as India is concerned the economy is showing gradual signs of recovery and resilience after the shocks of the partition. But the problem still remains whether

the pangs which India has to undergo may not be less if she has harmonious co-operation with Pakistan. The same question may be put in the case of Pakistan also. Is the economic development of the two countries filled with mutual contradictions and conflicts? Cannot India and Pakistan progress well together on the basis of mutual co-operation? Can the industrial development of any one country take place only at the cost of the other? What would be the gains in the standard of life and in industrial development, if both the countries continue to retain their complementary nature even after the partition? Are the economic interests of the two countries fundamentally against each other? An answer to all these questions will have to take note of the large possibilities of industrial expansion in either country, that can take place on the basis of mutual interdependence and co-operation. A policy in either country which is based on the lack of response from the other will push the economic systems, which have been complementary by nature, towards self-sufficiency at high cost. The sacrifices and sufferings will have to be greater. Resources in area, capital, foreign exchange, raw materials and man-power will have to be diverted for purposes which will mean additional suffering for the people. If Pakistan does not supply raw materials to India, then less of food can be grown in India. Ultimately the natural cost of some of the resources that are produced in Pakistan and for which India depends on Pakistan, is less than the cost of the same resources if they were to be produced in India. If Pakistan refuses to buy Indian products, then she may have to pay higher prices for the products of other lands. If Indian industries have a larger market, then their cost will be low and the final prices will be low and both the countries may stand to gain. The diversion of transport arrangements will mean a loss to the transport system in either country. Both the Pakistan railways and steamer services and also Indian railways will reap the gains of mutual co-operation. There is a large scope for mutual assistance in exchanging technical personnel and trained labour. The various research organisations of India can assist development in Pakistan. The Pakistan Government by offering full scope for the flow of Indian capital may quicken the pace of industrial development in that country. The prospects of entry of foreign capital will appear brighter in either country if there is mutual co-operation. The large expenditure on defence which has become necessary on account of mutual fear and hatred can be employed for national reconstruction purposes. The atmosphere of fear that has engulfed the border areas of either country might vanish and quicker industrial development can take place. Thus the natural wealth of both the countries might increase and the vast sub-continent might soon emerge as the leader of Asia.

In view of recent efforts at co-operation in the forms of the Minority Pact and the Provisional Trade Agreement of April 1950, it is to be hoped that the atmosphere will change for the better, leading to that mutual co-operation between the two countries which is so essential. After all it is very necessary that we should take a long term view, which will ultimately mean reduced economic cost and suffering. If India and Pakistan drift apart the mutual recriminations will hamper the progress of both the countries. The deadening of the spirit of the minorities, the burden of the ever present refugee problem, the higher cost of living, the mutual jealousies that arise on account of the short term gains and advantages secured at the cost of the other, the increased deadlocks that follow, the larger expenditure on defence, and the psychology of fear, uncertainty and instability that will be created, are all having far-reaching consequences not only on the economic life of India and Pakistan, but also on the opinion of the world. Ultimately the co-operation between India and Pakistan will form part and

parcel of the economic prosperity of the world. If the two countries drift away from each other, we cannot imagine what might happen. The economic consequence of a war between the two countries can only mean the shattering of the economies of both the countries, stultifying all hope of development and releasing hatred and animosity which may last for many centuries. It is in this context that politicans in both the countries have to visualise the large-scale possibilities of mutual co-operation and the economic prosperity that it might bring to both the lands in the long run.

APPENDIX

INDUSTRIAL ACTIVITY IN INDIA, 1946-49.

TABLE 1. Expansion in Industrial Capacity in India

(figures in thousands)

Industry	Unit	1946	1947	1948	1949
Steel	Tons	1,644	1,644	1,644	1,644
Antimony	,,	.5	N.A.	.7	.7
Semi-manufactures	,,	22	,,	50	N.A.
Enamelware	Pieces	24	24	25	25.2
Cement	Tons	1,800	2,075	2,500	2,815
Refractories	,,	210	214	225	269
Paper	,,	90	110	110	135
Plywood	Sq. Ft.	N.A.	30,000	63,000	100,000
Caustic Soda	Tons	10.5	10.5	13.5	17.6
Soda ash	,,	29	N.A.	35	54
Super-phosphates	,,	60	60	75	113
Sulphuric acid	,,	80	100	100	150
Power alcohol	Gallons	..	5,000	5,000	9,144
Ammonium Sulphate	Tons	17	N.A.	35	78
Abrasives	Reams	N.A.	122	122	145
Electric lamps	Numbers	13,000	13,350	14,350	18,000
Dry cells	,,	130,000	132,000	142,000	187,200
Power transformers	KVA	100	102	175	225
Electric motors	H.P.	100	100	150	200
Electric fans	Numbers	200	250	250	300
Diesel engines	,,	.8	.8	1.2	5.2
Storage batteries	,,	172	172	268	268
Cycle tyres	,,	N.A.	N.A.	4,500	6,000
Cycle tubes	,,	N.A.	N.A.	4,500	6,000
Bicycles	,,	50	52	60	94
Cotton textiles	Million spindles	10,000	N.A.	10,500	10,366
Hydrogenated Oil	Tons	150	N.A.	220	N.A.
Glass	,,	..	120	..	150
Soap	,,	..	200	..	244
Paints and enamels	,,	..	50	..	60
Varnishes	Million gals.	..	265	..	300
Pigments	Tons	..	10	..	12
Woollen textiles	Million lbs.	..	20	..	23
Prime movers	H.P.	..	30	..	50
Automobiles	Vehicles	..	20	..	30
Shipbuilding	Gross tons	..	100	..	100
Machine tools	Units	..	8	..	10
Plastics	Tons	..	2	..	4
Sugar	,,	..	1,080	..	1,400

TABLE 2. Employment in Perennial Factories (Private) in India

Type of Factories.	Number of workers employed		
	1946[1]	1947	1948
TOTAL	1,757	1,779	1,836
Textiles	982	1,007	1,031
Engineering	215	211	220
Minerals and Metals	84	89	101
Food, Drink & Tobacco	151	139	149
Chemicals, Drugs etc.	96	100	110
Paper and Printing	55	62	63
Wood, Stone and Glass	91	91	96
Gins and Presses	17	17	14
Skins and Hides	30	29	27
Rest	36	34	35

1. Figures for 1946 relate to Undivided India.

TABLE 3. Expansion in Joint Stock Companies in India

(*lakhs of rupees*)

Class of Company	Paid up capital.			
	1944-45[1]	1945-46[1]	1946-47[1]	1947-48
TOTAL	388,97	423,24	445,45	569,53
1. Banking, Loan and Insurance ..	50,45	58,52	59,32	70,47
2. Transit and Transport	52,22	31,25	34,82	39,93
3. Trading and Manufacturing ..	147,74	155,83	168.34	233,32
4. Mills and Presses	87,55	93,14	96,21	118,01
5. Tea and Planting Companies ..	20,43	22,09	23,23	25,97
6. Mining and Quarrying	21,73	23,95	23,51	30,71
7. Estate, Land and Building	15,55	16,12	17,26	20,17
8. Breweries and Distilleries	97	1,47	1,78	1,62
9. Sugar (Jaggery also)	14,35	14,87	14,59	19,25
10. Hotel, Theatre & other companies	4,51	5,94	6,35	10,03

1. Figures for 1944-45, 1945-46 and 1946-47 refer to Undivided India.

TABLE 4. Industrial Profits in India

(Base year 1928=100)

	1946	1947	1948
ALL INDUSTRIES ..	160.2	137.5	186.7
Jute	56.4	50.1	49.8
Cotton	631.9	490.9	912.5
Sugar	219.2	303.4	731.1
Tea	191.5	208.4	121.3
Paper	405.3	261.6	377.6
Iron and Steel ..	293.5	246.1	275.4
Coal	276.5	236.6	296.4

TABLE 5. Production of Agricultural Raw Materials in India[1]

Commodities.	Unit	Production 1946[2]	1947	1948	1949	1950
Sugarcane (Yield in terms of raw sugar)	('000 tons)	5,416	4,913	5,803	4,993	4,904
Tea	(Million lbs.)	542	562	561	595	..
Cotton	('000 bales)	3,530	2,168	2,188	1,678	2,055[3]
Jute	('000 bales of 400 lbs.)	1,320[4]	1,658	1,982	2,055	3,117
Tobacco	('000 tons)	424	270	242	..	..
Rubber	(Million lbs.)	35	37	35	35	..
Groundnut	('000 tons)	3,466	3,568	3,411	2,896	3,399
Other Oil Seeds	('000 tons)	1,793	1,560	1,706	1,569	..

1. Figures are for reporting areas and refer to the agricultural year ending June.
2. Figures for 1946 refer to Undivided India.
3. Commercial circles have estimated production at nearly 3 million bales.
4. Figures for 1946 refer to India only.

TABLE 6. Power, Fuel and Transport in India

	Unit	1946[1]	1947	1948	1949
Electricity					
Installed Plant capacity	'000 KWS	1,376	1,363	1,411	1,540
Electricity generated	Million KWHS	4,032	4,140	4,752	4,920
Electricity Sold	,,	3,348	3,452	3,721	3,984
Industrial consumption	,,	2,161	2,187	2,288	2,498
Coal[2]					
Raisings	'000 tons	29,280	31,176	29,820	31,500
Despatches	,,	25,608	25,872	25,850	28,068
Inland Transport					
Total wagons loaded	'000s	5,184	5,784	5,532	6,012
Freight carried	Million tons	121	94	104	112
,,	Million ton miles	25,568	19,488	22,318	23,640
Merchant Shipping[2]					41
Tonnage entered	'000 tons	4,884	6,840	7,752	8,892
Tonnage cleared	,,	4,440	4,150	4,368	6,708

1. Figures for 1946 refer to Undivided India.
2. Figures for 1946 and upto August 1947 refer to Undivided India.

TABLE 7. Industrial Production

(*in thousands*)

Industry	Unit	Production 1946	1947	1948	1949
Gold	Ozs.	132	172	180	161
Petroleum	Gallons	77[1]	65	66	..
Iron ore	Tons	2,408	2,498	2,285	..
Manganese ore	,,	253	451	467	..
Mica	Cwts.	121,363	130,968	151,602	..
Salt	Tons	1,938	1,540	2,265	..
Ilmenite	,,	185	261	229	..
Building materials	Value in Rs.	224,21	358,03	296,84	..

Industry	Unit	Production			
		1946	1947	1948	1949
Steel (Ingots and Castings) ..	Tons	1,203	1,256	1,256	1,353
Aluminium	,,	3.2	3.2	3.4	3.5
Antimony	,,	.1	.2	.3	.1
Copper	,,	6.3	6.0	5.8	6.4
Enamelware	Pieces	N.A.	8,532	6,763	6,590
Cement	Tons	1,542	1,448	1,553	2,103
Asbestos sheets	,,	25	N.A.	77	87
Refractories	,,	157	175	189	208
Sheet glass	Sq. Ft.	N.A.	5,719	6,256	3,452
Paper	Tons	106	93	98	103
Plywood-Tea chests	Sq. Ft.	N.A.	28,556	45,112	38,396
Sugar	Tons	901	925	1,000	1,045
Cigarettes	Million Nos.	N.A.	18,879	21,825	21,891
Matches	Cases	412	466	533	525
Caustic soda	Tons	2.9	3.3	4.4	6.3
Soda ash	,,	12.0	13.6	29.2	17.9
Super Phosphates	,,	4.5	5.0	21.4	46.7
Sulphuric acid	,,	60	60	80	99
Power alcohol	Gallons	N.A.	2,260	3,676	4,230
Industrial alcohol	,,	N.A.	4,820	2,940	2,988
Abrasives	Reams	61	40.6	46.1	24.8
Electric lamps	Nos.	6,131	7,620	9,246	13,641
Dry cells	Nos.	87,965	87,917	123,830	152,219
Power transformers	K.V.A.	39	32	82	109
Electric motors	H.P.	46	38	60	68
Electric fans	Nos.	110	160	180	179
Diesel engines	,,	.5	.7	1.6	2.1
Storage batteries	,,	27	70	110	106
Cycle tyres and tubes ..	,,	6,742	7,550	7,160	7,740
Other tyres and tubes ..	,,	1,450	1,630	1,520	1,388
Rubber insulated cables ..	Yds.	22,610	N.A.	22,000	19,356
Machine tools	Value in Rs.	91,25	45,87	54,73	4,729
Sewing machines	Nos.	6.1	5.9	20.0	25.0
Bicycles	Nos.	51	49	65	88
Woollen manufactures ..	Lbs.	27,000	24,000	20,000	21,000
Cotton yarn	Million lbs.	1,367	1,296	1,448	1,359
,, cloth	,,	3,909	3,762	4,319	3,504

1. Figure refers to Undivided India.

CHAPTER X

TRANSPORT

I. RAILWAYS

ROUTE MILEAGE OF RAILWAYS

As a result of the division of the country, seven out of nine major railway systems of Undivided India went intact to India, while the remaining two, *viz.* the Bengal Assam Railway and the North Western Railway were divided according to their location within the physical boundaries of each country. Besides, the Government of Pakistan also took over from the Jodhpur State a part of the Jodhpur-Hyderabad Railway lying within its borders. Table 1 shows the distribution of the route mileage of railways of various classes in each country on the eve of partition according to gauges.

TABLE 1. Route Mileage of Railways in India and Pakistan, March 1947

	Broad gauge	Metre Gauge	Narrow gauge	Total
UNDIVIDED INDIA	20,737.66	16,350.92	4,052.72	41,141.20
INDIA	15,639.48	14,956.63	3,563.28	34,157.39
Class I	15,639.48	12,825.17	1,552.50	30,017.15
Class II	..	1,964.21	985.20	2,947.41
Class III	..	167.25	1,025.58	1,192.83
PAKISTAN	5,098.18	1,394.29	489.29	6,981.81
Class I	5,098.18	1,370.26	489.44	6,957.88
Class II & III	..	23.93	..	23.93

Pakistan railways account for 16.9 per cent. of the total route mileage of railways in Undivided India, 24.5 per cent. broad gauge, 9.3 per cent. metre gauge and 12.1 per cent. narrow gauge. Her share in metre gauge railways looks small; a major portion of it is in a single railway system, namely, the Bengal Assam Railway. The following table gives the distribution of route mileage according to gauges of the partitioned railways in each country:—

TABLE 2. Distribution of Route Mileage of Partitioned Railways, March 1947

Railways	Broad Gauge	Metre Gauge	Narrow Gauge	Total
1. Bengal Assam Railway	893.76	2,624.16	37.15	3,555.07
India	351.88	1,572.64	17.40	1,941.92
Pakistan	541.88	1,051.52	19.75	1,613.15
2. North Western Railway	6,305.96	...	597.61	6,903.57
India	1,749.66	...	127.92	1,876.58
Pakistan	4,556.30	...	469.69	5,025.99
3. Jodphur Ralway		1,127.69	...	1,127.69
India		806.95	...	806.95
Pakistan		318.74	...	318.74

A major portion of the Bengal Assam Railway in Eastern Pakistan is metre-gauge. With the partition, the expansion and development of the port of Chittagong has become the prime concern of the Government of Pakistan. It should be remembered, however, that even if the port capacity at Chittagong were expanded, trade would not be successfully diverted unless railway development goes *pari passu* with it. For example, at present the railway line joining Chittagong with the hinterland is single-tracked, and this comes in the way of sending increased quantities of raw jute towards the port. Even in the hinterland itself, since an ordinary metre gauge wagon carries less tonnage, movements of goods by rail are limited to that extent. It is true that much the larger part of transport in East Bengal proceeds along river routes. At the same time it should be remembered that communications by river routes between the marketing centres and Chittagong is difficult during the monsoon months. Better rail facilities in East Bengal would thus go a long way in the development of economic life in the province.

When compared with India railway transport in Pakistan indicates lesser development. The following table compares the route mileage in either country with the area and size of its population:—

TABLE 3. Distribution of Route Mileage, Population and Area, March 1947

	Total route mileage	Population (thousands)	Area (sq. miles)
UNDIVIDED INDIA	41,041.20	414,211	1,581,410
India	34,083.32	337,211	1,220,011
Pakistan	6,957.88	77,000	361,399
Share of Pakistan ...	16.9%	18.9%	22.8%

With more than 22 per cent. of the area and nearly 19 per cent. of the population, Pakistan has less than 17 per cent. of the route mileage of railways of Undivided India. Further 1,817 rail miles of the North Western Railway in Pakistan were constructed for strategic purposes and involve the Government in considerable financial losses from year to year.

CAPITAL AT CHARGE

After the partition, the rolling stock and the financial liabilities in respect of the capital at charge were divided according to the terms of the Inter-Dominion Financial Agreement. So far as the financial liabilities are concerned, it has been laid down that the book values of the railways in each country would become the liability of that country except that in the case of strategic railways the book values would be reduced by 50 per cent. The total capital at charge on 1st March 1947 for all railways was Rs. 803 crores. According to the book values of the railways located in Pakistan, the liability of Pakistan would be Rs. 152 crores, of which strategic railways account for Rs. 32 crores. As half the liability of the strategic railways was debited to the Government of India, according to the above formula, the capital at charge of railways in Pakistan would be Rs. 136 crores.

Table 4. Capital at Charge (Railways)

(in lakhs of rupees)

UNDIVIDED INDIA	803,43
India	667,46
Pakistan	136,00

ROLLING STOCK

So far as the rolling stock is concerned, it was divided on a mileage-cum-traffic basis.. Table 5 (P. 405) gives the distribution of the rolling stock of the railway systems in each country. So far as the partitioned railways are concerned, distribution of the rolling stock is more or less based on the traffic requirements of each country. It should be remembered, however, that the table gives figures which are only provisional since full details are not yet available. From available information it seems that all the wagons belonging to Bengal Assam railway and the North Western Railway were not delivered for a considerable time. The East Indian Railway had to give on loan over 1,600 wagons to the East Bengal Railway to expedite the transport of East Bengal raw jute, tea and other goods from Assam through East Bengal to Calcutta. In both the countries, a considerable portion of the rolling stock has become over-aged. Referring to locomotives, Dr. John Matthai, the then Minister for Railways, mentioned in his Budget Speech for 1947-48 that of the total number of locomotives which India possessed, about a third were over-aged. They had done their normal period of service and would have been replaced immediately, if locomotives were available in the world market. It is true that a similar situation holds good for many countries in the world not excluding the U.K. But the United Kingdom is able to carry on because she has got efficient workshops where spare parts are available. This is not the case in India. On 31st March 1949, the number of over-aged locomotives in India was 1,129 on the broad gauge and metre gauge tracks. The normal life of a locomotive is 40 years. The average age of locomotives on the line should be half that figure, namely 20. At present the average age of locomotives in India is about 28 years. The same thing may be said about Pakistan.

DISTRIBUTION OF RAILWAY WORKSHOPS

As the workshops were divided on the basis of location, portions of the Bengal Assam Railway and North Western Railway going to India were left without effective workshops. According to the terms of the partition it was agreed that locomotives, carriages and wagons of the East Punjab Railway would be given periodical and intermediate overhaul and repairs at the Moghalpura workshop of the North Western Railway for a period of two years. The North Western Railway however was not able to fulfil the terms of the agreement to the required extent. The quality of work was much below normal standards. Repair work had therefore to be distributed to other workshops in India. The result has been that the coaching stock of the Eastern Punjab Railway has not been well maintained. The partition also left the Assam Railway without a workshop. Arrangements had to be made for repair work to be done at the Saidpur workshop in Pakistan. Even then excessive delays have occurred. Assam had no direct rail connection with India till recently; in consequence when wagons and locomotives were sent for repairs to Kanchrapara in India, they had to pass through East Bengal. Due to lack of co-operation from the East Bengal Railway authorities, there was excessive delay in their despatch to and from Kanchrapara. The existing workshop at Dibrugarh in Assam is very small and is not capable of expansion. Plans for a new workshop for the Assam Railway are under way. During the budget year 1949-50, a sum of Rs. 10 lakhs was provided for acquiring the land required for the project. Similarly on the East Punjab Railway a provision of Rs. 10 lakhs was made for acquiring land for a new workshop.

TABLE 5. Distribution of Rolling Stock, India and Pakistan

Railways	INDIA				PAKISTAN			
	Route Mileage	Loco-motives	Coach vehicles	Goods wagons	Route Mileage	Loco-motives	Coach vehicles	Goods wagons
GRAND TOTAL	30,017.15	7,248	20,166	2,10,799	6,957.88	1,339	4,280	40,221
BENGAL ASSAM	1,941.66	359	1,801	11,472	1,613.15	428	1,493	13,854
Broad	351.88	164	631	6,438	541.88	154	496	5,343
Metre	1,572.64	185	1,120	5,034	1,051.52	274	997	8,511
Narrow	17.14	10	50	..	19.75	..	..	..
NORTH WESTERN	1,877.58	512	1,515	19,645	5,025.99	817	2,401	23,843
Broad	1,749.66	467	1,362	19,339	4,556.30	764	2,193	23,256
Metre	..	..	..	..	..	..	..	..
Narrow	127.92	45	153	306	469.69	53	208	587
JODHPUR	806.95	..	83	...	318.74	94	386	2,524
Broad	..	..	..	..	..	..	..	..
Metre	806.95	..	83	..	318.74	94	386	2,524
Narrow	..	..	..	..	..	..	..	..
OTHERS	25,390.96	6,377	16,767	1,79,682	..	..	..	..
Broad	13,537.94	4,293	9,832	1,35,396	..	..	..	..
Metre	10,445.58	1,919	6,403	41,722	..	..	..	..
Narrow	1,407.44	165	532	2,564	..	..	..	..

Neither country has any factory which manufactures locomotives. Plans for the manufacture of locomotives in India have made considerable progress. The Railway Board has planned the construction of a locomotive building workshop at Mihijam, near Asansol on the East Indian Railway. The workshop is designed for the manufacture of 120 steam locomotives (complete with boilers) and 50 additional boilers per year. The cost of the workshop along, with a provision of a colony for housing the staff, has been estimated at Rs. 14 crores, of which about Rs. 7.5 crores were proposed to be spent by the end of the budget year 1949-50. The smaller shop in the factory for the manufacture of components and spare parts will be ready in 1950 and the main assembly shop for the production of complete locomotives is expected to start early in 1951. In due course it is expected that the production of locomotives by the factory at Mihijam along with that of the locomotive factory of the Tatas would make India self-sufficient. For the present, however, India has to import about 400 to 500 locomotives. It is reported that the Railway Board has made an arrangement with the Manufacturers' Association in the U.K. whereby a manufacturing capacity of 300 B.G. locomotives was reserved for India in 1946-47. The delivery of these locomotives started in August 1949. Similar arrangements have been made with firms in the U.S.A., Canada and France. As regards wagons India requires about 10,000 per annum. For the year 1949-50 it was expected that 4,400 wagons would be received.

So far as Pakistan is concerned, the budgets since the partition do not disclose any programme for the manufacture of locomotives. The Saidpur workshop is being remodelled to meet the additional broad-gauge repair requirements while the Pahartali workshop, also on the East Bengal Railway, is being rehabilitated to carry out metre-gauge repair which cannot be handled at Saidpur owing to the increase in load. It should be noted that the financial position of railways in Pakistan would not permit extensive projects as in India.

EFFECTS OF THE PARTITION

(1) **Railway Staff:** Immediately after the partition difficulties of railway staff were felt in either country. About 73,000 non-Muslims from Pakistan opted for India, while about 83,000 Muslims from India opted for Pakistan. As the transfer obviously could not be of homogeneous categories, it impaired the efficiency of railway operations by causing dislocation in labour supply. Particularly on the E.I., G.I.P., B.B. & C.I., and B.N. Railways in India, drivers and firemen became very scarce as a large number of Muslims doing these types of work opted for Pakistan. Many of the Muslims who left were skilled workers. As a result of this there was a shortage of blacksmiths, coppersmiths and tinsmiths on the B.N. and G.I.P. Railways. On the E.I. Railway the shortage of drivers and firemen amounted to about 45 per cent. of total requirements. Goods train services had to be curtailed for some time by about one-third. Coal loadings were therefore reduced to half. The majority of the personnel that came to India consisted of clerical staff and they could not easily replace skilled workers who had left. The effects of the partition and the disturbances that followed on coal loadings was not felt until September 1947. During the first half of 1947 the total quantity of coal despatched from the coal fields by railways was approximately 24 lakh tons a month on an average. By the second half of 1947, particularly in the months of September and October, the despatches sank to 19 lakh tons per month, thus indicating a fall of over 20 per cent. These delays in coal loadings were more particularly reflected on the East Indian Railway and the Bengal Nagpur Railway. During September 1947, these railways, between

them despatched per day 2,487 wagons loaded with coal. During October the number dropped to 1,400 per day on an average. Because of the slow movement of coal despatches by rail there was an accumulation of stocks at the collieries. Whereas the normal working balance of stocks at collieries is about 9 lakh tons, in December 1947 coal stocks had increased to about 18 lakh tons. Industrial production was adversely affected because of such slow movements of coal.

So far as Pakistan was concerned, there was a surfeit of staff which could not be adequately absorbed and measures for retrenchment had to be considered. The difficulties of Pakistan were not so much of personnel as of getting coal. As has been already explained earlier, Pakistan produces very little coal She has to obtain coal from India. The coal shortage was particularly marked on the North-Western Railway soon after the partition. It has already been explained how labour shortage on E.I. and B.N. Railways slowed down the movement of coal. Due to despatches of lesser quantities of coal to the North-Western Railway, only skeleton services could be run for at least three months after the partition. The cost of coal increased and this affected the earnings of railways. Operational costs on fuel amount to about 25 per cent. of the working expenditure in Pakistan as against 15 per cent. in India. Regarding supplies from India since a considerable portion of coal is carried to Pakistan by sea it costs a great deal more than when carried by rail, as the distance by sea is much longer.

The difficulties of staff were overcome by 1948 in India. Even the despatches of coal were brought to normal. So far as Pakistan is concerned, she has not been able to absorb all the railway surplus staff. Her coal difficulties will be a persistent problem with her, for a considerable time to come, until rail travel is electrified to some extent or locomotives are adapted for utilising oil instead of coal.

(2) **Movement of Refugees:**—A few months both before and after the partition, traffic movement all along the North-Western Railway in Pakistan and along the E.I. Railway in India had to be confined to the transport of refugees only. So far as India is concerned, during the first 2½ months after the partition, the railways transported about 3 million refugees, representing the capacity of one thousand passenger trains. Apart from this movement, the Indian railways had to face the difficult problem of the dispersal of refugees from camps to their final destinations in provinces and states of India. It was only by about December 1947 that passenger train services on the East Punjab Railway could be restored more or less to the normal level. Thus, heavy load on the East Punjab railway adversely affected its rolling stock.

(3) **Increase of goods traffic towards Bombay:** A characteristic change of permanent importance which came about directly as a result of the partition was the increase in the goods traffic towards Bombay. Before the partition Karachi used to be the main supply port for areas now lying in East Punjab, Rajasthan, Delhi, and western parts of United Provinces. After the partition, Bombay had to take over the place of Karachi, and traffic on the Bombay-Delhi route increased. As a result there was a serious congestion along certain routes. To reduce this, the Government of India had to undertake partial doubling of the railway track between Delhi and Muttra, and additional lines had to be installed between Budni and Barkhera on the Bhopal-Itarsi section of the G.I.P. Railway. A track of 52 miles had to be quadrupled between Saktigarh and Sitarampur along E.I. Railway. Several large yards are being remodelled.

ASSAM RAIL LINK

In Undivided India, Assam and North Bengal were connected with the rest of India by the Bengal Assam Railway, a major portion of which has now been transferred to Pakistan since the partition. On account of this, after the partition there was no direct rail link between Indian territory in North Bengal and Assam with the rest of India. So far as the transport between North Bengal and the rest of India was concerned, there used to be in operation a 2 feet gauge tramway line owned by the Darjeeling Himalayan Railway Co. The capacity of this small tramway both for trade and passengers is very limited. Some districts of North Bengal and Assam supply mills in Calcutta with the much needed jute; they are also responsible for the greater part of the production of tea in India. Commercial, strategic and political considerations rendered inevitable the establishment of a rail link between Assam and the North Bengal districts on the one hand and the rest of India on the other immediately after the partition.

Soon after the partition the Government of India took up the question of the rail link and appointed an officer in November 1947 to make a preliminary aerial survey of the 12 mile wide Indian territory between Eastern Pakistan and Nepal. This was followed by a ground survey and concrete proposals for a rail link were made by January 1948. The project was started on 27th January 1948 and it was felt that it would take at least 2½ years to be completed. The project involved railway construction along four sections: (i) Kishengunj to Siliguri (66 miles), (ii) Siliguri to Bhagrakot (22 miles), (iii) Madaripat to Hasimara (8½ miles), and (iv) Alipur Duar to Fakirgram (45 miles), a total route mileage of 142.5 miles, metre gauge. The project has cost in all Rs. 8,90 lakhs.

A number of difficulties were met with in the process of construction. A major portion of the area is located in regions liable to very heavy monsoons, which last for more than six months in a year. Consequently, during the two years of the period of construction, the actual working time available was only 11 months. The construction of bridges along the three turbulent rivers, Tista, Torsa and Sankosh, is a tribute to the Indian engineering zeal and capacity. At the peak period of construction, the personnel working on the project consisted of 35 officers, 707 subordinates and 6,777 workers. Co-operation from the Assam tribesmen was also enlisted.

The absence of a rail link between Assam and the rest of India up to January 1950 had considerably handicapped the bargaining capacity of the Government of India in its trade relations with Pakistan. A good deal of the industrial and commercial prosperity of Calcutta is dependent on the supply of tea and raw jute from North Bengal and Assam. Further, these undeveloped regions had to be supplied with essential consumer goods, fertilisers and coal. Without the co-operation of Pakistan even the very governance of these regions would have been a matter of considerable difficulty. It was in order to ensure transit facilities for goods and passengers between North Bengal and Assam and the rest of India that the Government of India had agreed to allow Pakistan to export raw jute from the port of Calcutta. After the devaluation controversy in September 1949, for some time, the Government of India had to face difficulties as about 60,000 bales of raw jute in transit were held up in Pakistan. It is heartening to note that due to the commendable rapidity with which the project was completed by January 1950, the Government of India will in due course become completely independent of the East Bengal Railway.

TABLE 6.—Railway Finance in India and Pakistan

(*in lakhs of rupees*)

	INDIA				PAKISTAN			
	15-8-1947 to 31-3-1948	1948-49 Actuals	1949-50 Revised	1950-51 Budget	15-8-1947 to 31-3-1948	1948-49 Revised	1949-50 Revised	1950-51 Budget
Gross Traffic Receipts	101,00	213,10	225,10	232,50	18,20	33,38	36,36	37,33
Net Miscellaneous Revenue	1,77	256,00	—438,00	—472,00	..	..	..	..
Total Working Expenses	92,24	173,32	186,60	181,92	15,29	28,75	29,46	29,28
Net Revenue	10,53	42,34	34,70	45,86	1,91	4,63	6,90	8,05
Interest charges	13,27	22,36	23,15	38,85[1]	2,35	3,83	3,90	4,05
Surplus (+) or Deficit (—)	—2,74	+19,98	+11,02	+14,01	—1,50	—7,95	+3,00	+4,00

1. Dividend to general revenues.

FINANCIAL WORKING OF RAILWAYS

So far as Pakistan is concerned, it is difficult to get exhaustive data. The Pakistan Government has abolished the procedure of having a separate Railway Budget. In the words of the Finance Minister of Pakistan, "It has been decided that in the circumstances prevailing in Pakistan at present, it will be unnecessary refinement to have either a separate railway reserve fund or to maintain the distinction hitherto made between the strategic and commercial lines. In consequence of these decisions the railway budget like that of Posts and Telegraphs has been made a part of the Central Budget."

Table 6 (P. 409) shows that immediately after the partition both the countries were adversely affected and showed deficit budgets as against the surplus post-war railway budgets in Undivided India. After 1948-49 the railways in India have recovered and are showing profits once again. The recovery in the case of Pakistan is slower and only in the budget 1950-51 are the railways able to contribute to the general revenues. This is because of the higher operating expenses in Pakistan due to the necessity of importing coal from India and other countries. Further, traditionally the Bengal Assam Railway is not a sound financial proposition. Pakistan has also to bear the burden of the financial losses on the strategic tracts along the North Western Railways which give less traffic returns, though they are indispensable for purposes of defence. Until about 1949-50 the financial condition of railways in Pakistan was so difficult that very little provision was made for the railway reserve fund. As contrasted with this Indian Railways had the following three funds on 1st April 1950:—

TABLE 7. Balances in Railway Funds in India

(in lakhs of rupees)

	Opening balance as on 1-4-1950	Estimated closing balance as on 31-3-1951
TOTAL	118,30	124,20
1. Depreciation Reserve Fund ...	97,42	104,77
2. Railway Revenue Reserve Fund	6,82	10,41
3. Development or Betterment Fund	14,06	19,03

These funds were created in wartime by transfers from revenue surpluses. Of these three funds, the Depreciation Reserve Fund is meant for replenishing the railways with the expenditure necessary to replace worn-out material. The Development Fund is meant for expansion activities. It has been decided that in future the fund can be utilised to finance expansion with reference to commercial considerations and annual financial results. "The institution of Railway Development Fund is due to the recognition that future railway development could no longer be conditioned by commercial considerations alone and that a system of nationalised railways must perforce feel a positive and complementary role in the general economic development of the country....It would be imprudent to finance such unremunerative expansion from loan capital ....the Committee, therefore, came to the conclusion that a Railway Development Fund created out of the revenue surpluses would be a suitable way...."[1] The betterment fund would be utilised in giving amenities to passengers.

1. Railway Budget Speech of Sri N. Gopalaswami Ayyengar, Minister of Transport, Government of India, February 1950.

The improved financial position of Indian railways has enabled the Government of India to change the Convention relating to the relation of the railway finance to general finance. As a result of the recommendations of a Committee which examined the question, it has been decided that for a period of five years commencing from 1950-51, the separation of railway from general finance would continue. But the present relationship between them would be so altered as to give the general tax payer the status of the sole shareholder in the railway undertaking. As a corollary to this, it follows that the tax-payer should be granted a minimum dividend from the national undertaking. It has been agreed that the dividend of four per cent, on the loan capital invested in the railways would be transferred to the general revenues. As against this the general budget would have to provide for interest charges. As the interest charges on the loan capital with which the railways were constructed are less than the amount of the dividend, a net contribution from the railways to general revenues would accrue. It has been estimated that during the year 1950-51 the net contribution to general revenues calculated in this manner would amount to Rs. 6.37 crores. In the year 1948-49 the net contribution amounted to Rs. 7.34 crores and in 1949-50 Rs. 7.0 crores. The revised Convention which modifies that of 1924 would be effective from the year 1950-51. The following are the main provisions of the Convention:

(a) The separation of railway from general finance should continue but the present relationship between them should be so altered as to give the general taxpayer the status of the sole share-holder in the Railway undertaking entitled to a guaranteed dividend of 4 per cent. on the loan capital invested in the undertaking as computed annually.

(b) The contribution to the Depreciation Reserve Fund should be a minimum of Rs. 15 crores a year.

(c) The rules of allocation of expenditure between capital and revenue should be modified in the following manner:—

(i) the full cost of replacement including the improvement and the inflationary elements in it should be charged to the Depreciation Reserve Fund;

(ii) the financial limit for charging to revenue the cost of minor additions and improvements should be raised from Rs. 10,000 to Rs. 25,000 on each individual item;

(iii) the expenditure on unremunerative projects for improving operational efficiency costing not more than Rs. 3 lakhs should continue to be charged to revenue, the excess over Rs. 3 lakhs on such projects being charged to a Railway Development Fund to be constituted;

(iv) expenditure on the construction of new lines which are necessary but unremunerative may be financed to the extent possible from the new Railway Development Fund;

(v) expenditure on unremunerative strategic lines should be charged to capital, but no dividend on the capital funds so expended should be payable to General Revenues.

(d) The scope of the Revenue Reserve Fund should in future be limited to:—

(i) ensuring payment of the prescribed dividend, and

(ii) bridging the budgetary gap, if any.

(e) A Railway Development Fund should be constituted for the following purposes:—

(i) passenger amenities;

(ii) labour welfare; and

(iii) financing projects which are necessary but which are unremunerative at the time of construction; and the existing Betterment Fund should be merged in this new fund with the reservation that for the next 5 years a sum of Rs. 3 crores per year should be made available from the new fund for expenditure on passenger amenities.

(f) The loan account should be separated from the block account, the former representing in future the capital-at-charge of the undertaking and the latter the assets of the undertaking whether financed from revenue or from loans.

It is necessary to emphasise, however, that the various modifications in the Convention Resolution of 1924 do not bring about a complete separation of railway from general finance. Separation has reference only to railway revenue and expenditure chargeable thereto *vis a vis* the non-railway revenue. Separation does not affect the existing arrangements regarding the ways and means position of the two parts of the budget. "The railways have no working balance of their own whether opening or closing. The General Finance acts as banker for the railways and the reserve funds of the railways are deposited with their banker (the Finance Ministry of the Government of India) who is free to utilise them for his ways and means financing." General finance of course pays to the railways interest on the balances accumulated. The arrangement involves limitations on the freedom of the railways to utilise this balance as they like.

IMPROVEMENT IN THE WORKING OF RAILWAYS

From 1950-51 railways in India have become a completely nationalised concern. With the integration of all railways managed by Indian States, the total route mileage of Indian railways has increased by 7,560 miles to a total of 33,084 miles. By 1950 the railways completely had recovered from the effects of the partition. Transport bottleneck is now more or less a thing of the past. The passenger services are more regular. The wagon turn-round shows definite improvements. Goods are not held up unnecessarily or unduly at junctions or wayside stations. With the increased movement of coal in relation to the requirements of various industries in different parts of the country, production trends show definite signs of improvement. Even though the index of the volume of exports has increased the railways have been able to carry the load.

Table 8 shows the improvement in the working of railways. The comparative figures indicate that the volume of goods as well as passenger traffic have improved. The rain mileage on goods services has exceeded the pre-war level, by 3.73 per cent. The power position improved considerably. In the year 1949-50 about 447 broad gauge and 51 metre gauge locomotives were imported and put into operation. As compared with the pre-war year 1938-39, the passenger miles per route mile have increased from 590 thousand in 1948-49 to 1,613 thousand on the broad gauge and from 410 thousand to 420 thousand on the metre gauge; so also the net ton-miles per route mile have risen from 880 thousand to 1,350 thousand. The turnround of wagons has improved from 12.97 days in November 1948 to 10.87 days in November 1949. The tonnage move-

ment in the first 9 months of 1949-50 was 15.5 per cent. more than in the corresponding period of 1948-49.[1]

TABLE 8. Working of Indian Railways

Items	1948-49	Excluding E.P. and Assam and E.I. (N.G.) 1947-48	1948-49	Percentage variations
Number of passengers carried (in millions)	1,180.06	1,017.10[1]	1,094.2	+ 7.6
Passenger miles (in millions)	38,765.00	32,575.20[1]	35,477.2	+ 8.9
Earnings from passengers (in crores of rupees)	92.91	70.40[2]	84.32	+ 19.8
Average amount earned per passenger per mile (pies) ...	4.60	4.15	4.56	+ 9.9
Average miles a passenger was carried	32.80	32.00	32.40	+ 1.3
Freight tons carried (millions)	82.60	71.70	77.90	+ 8.6
Net tons-miles (millions) ...	22,748.00	20,111.00[2]	21,823.00	+ 8.5
Earnings from goods carried (in crores of rupees) ...	1,12.26	82.49[2]	1,05.99	+ 28.5
Average amount earned per ton-mile (pies)	9.47	7.87	9.33	+ 18.6
Average mile a ton of goods was carried	276.00	281.00	280.00	— 0.4

1. Revised figures.
2. Budget speech, *op. cit.* p. 6.

WORLD BANK LOAN

The World Bank gave the first loan of $34 million to India in August 1949. The loan is for a period of fifteen years and involves an interest liability of 3 per cent. plus 1 per cent. commission. It is intended to help India to finance the purchase of 650 locomotives. While $26.7 million will be spent on the purchase of locomotives, $7.3 million will be spent on spare parts and boilers. India's own contribution to the cost of locomotives would amount to $50 million. While the bank has given loans for purchasing locomotives, it has not as yet sanctioned the loan for the construction of a plant in India itself for building locomotives. Some of these locomotives have already arrived and have started operating. When all the locomotives to be imported arrive and are placed in active service it is expected that the Indian railways will be able to carry 15 to 20 per cent. more goods and passenger traffic than they do at present. Freer and speedier movement of traffic will remove transport bottlenecks which hampered production towards the later half of 1947 and 1948.

II. ROADS

PRESENT POSITION

Considering the fact that India is a country of vast dimensions its present road position reveals an unsatisfactory state of affairs. While every modern country has taken an active interest in the development of roads, in India it has been subordinated to that of railways. Table 9 gives a comparative picture of road development in India and Pakistan and in some of the advanced countries of the world.

1. Speech of the Honourable Shri N. Gopalaswami Ayyengar, introducing the Railway Budget (India) for 1950-51, p. 21.

TABLE 9. Road Mileage in Some Countries

Countries	Year	Population in millions	Area in sq. miles ('000s)	Mileage of Motorable Roads	Mileage of Unmotorable Roads	Total Mileage
U.S.A.	(1940) ...	132	3,027	1,000,000	2,009,000	3,009,000
U.K.	(1939) ...	46	89	160,120	19,170	179,290
France	(1939) ...	42	213	N.A.	N.A.	405,028
India	(1949) ...	319	1,217	181,406	57,575	239,081
Pakistan	(1949) ...	71	365	5,569	48,119	55,918

Although the figures for different countries relate to different years, certain broad conclusions emerge from the comparison. The table reveals that India and Pakistan have only 0.19 and 0.15 miles of roads per square mile respectively as against 1 mile in the U.S.A., 2.02 miles in Britain and 1.90 miles in France. The road mileage per 1,000 persons comes to only 0.75 and 0.79 in India and Pakistan respectively as against 22.7, 3.9 and 9.0 in the U.S.A., the UK. and France respectively.

After the partition the total mileage of roads of various categories in India and Pakistan was as follows:—

TABLE 10. Road Mileage in India and Pakistan

Country	Metalled	Unmetalled	Total
INDIA	85,788	153,293	239,081
Provinces	62,174	124,410	186,584
Madras	23,834	14,706	38,540
Bombay	13,230	14,535	27,765
West Bengal	1,534	10,436	11,970
United Provinces	8,035	23,951	31,986
East Punjab	2,282	8,354	10,636
Bihar	3,986	27,510	31,496
C.P. & Berar	6,106	6,321	12,427
Assam	705	10,270	10,975
Orissa	2,462	8,327	10,789
Centrally administered areas	1,720	4,184	5,904
States and State Unions	21,894	24,699	46,593
PAKISTAN	9,098[1]	43,967	55,918
Baluchistan	645	3,274	3,919
N-W.F.P.	2,033	3,632	5,665
Sind	494	9,881	10,375
West Punjab	3,191	11,152	14,343
East Bengal	2,371	15,270	17,641
N.W.F. Tribal Areas	364	758	1,122
Pakistan States	..[2]	..[2]	2,848

1. Including 2,225 miles of water-bound macadam.
2. Figures not known.

The table reveals that the total road mileage in Pakistan compares favourably in as much as it amounts to nearly one-fifth of that in India. So far as metalled roads are concerned, Pakistan's position is discouraging in as much as only 9,098 or about 15 per cent. of the total mileage is metalled, whereas in India more than one-third of the roads are surfaced.

TYPES OF ROADS

Roads are classified in India into (i) National Highways, (ii) Provincial Highways, (iii) District Roads, and (iv) Village Roads. The National Highways constitute the framework which will eventually become a network of modern roads for internal communications as well as for the defence of the country. These highways connect all capitals of States and Provinces, large towns, industrial areas and ports, and also extend to foreign countries such as Burma, Nepal and Tibet. On the eve of partition, the National Highways System comprised 18,000 miles of roads of which 2,800 were in the States. The Provincial Highways are the main arteries of commerce within a Province or State and are connected with the National Highways. District Roads serve areas of production and markets, connecting them with one another or with highways and railways. They take traffic into the interior of each district. The village roads, most of which are no better than mere tracks, connect villages and groups of villages.

Out of the 18,000 miles of roads which were classified as National Highways in Undivided India about 4,000 miles are in Pakistan. But the main drawback even in respect of this meagre mileage of surfaced roads in Pakistan is that they were constructed for strategic reasons. But from the economic point of view these roads do not have much utility at the present juncture. It has, therefore, been found necessary to devise an entirely new scheme of roads in Pakistan.

NAGPUR PLAN

Any study of future road development must inevitably start from the Nagpur Plan, which was evolved at a conference of Chief Engineers held at Nagpur in 1943. The plan is based on the estimated requirements of the country for the first 20 years of the post-war period. The main purpose of the plan is to bring about a balanced development of roads in this country so that every village in a well-developed agricultural area is brought within easy reach of a main road. The plan involves the improvement of existing roads as well as new construction. The total mileage envisaged and the cost are as under:—

TABLE 11. Nagpur Plan for Road Development in Undivided India

	Length (thousand miles)	Cost (Rs. crores)
TOTAL	400	448
National Highways	22	47
National Trails	3	3
Provincial Highways	65	121
District Roads—Major	60	62
District Roads—Others	100	80
Village Roads	150	30
Arrears of war years	...	10
Bridging	...	45
Land Acquisition	...	50

Of the 400,000 miles of roads proposed in the Nagpur Plan 311,000 miles were to be in India and 89,000 miles in Pakistan. Out of the total cost of Rs. 448 crores that was to be incurred in the implementation of this plan, the cost of roads planned for Pakistan was to be about Rs. 75 crores. The Nagpur Plan recommended that the Central Government should assume complete financial

liability for the construction as well as actual maintenance of National Highways, while as regards the other categories of roads, the Centre should actively assist in co-ordinating road development planning in all parts of the country, by providing a Central Road Research Institute, and Central Standards Specifications and technical advice concerning road construction and maintenance and also by providing legal machinery to deal with problems arising out of land acquisition etc.

ROAD DEVELOPMENT POLICY

Eight months prior to the establishment of the National Government in August 1947, the Central Board of Transport, consisting of all top officials connected with transport, was created. Though this was a purely co-ordinating and advisory body, it did valuable work. Within four months of the assumption of power by the National Government, the Board was reconstituted with the Minister of Transport as Chairman, the Ministers of Communications and Commerce as Vice-Chairmen and the Chief Commissioner for Railways, the Secretaries of the Ministries of Transport, Communications, Commerce, Industry and Supply, States and Finance as members. This has facilitated greater co-ordination between various Ministries dealing with different forms of transport. The two main objectives in the setting up of this Board are:— (i) bringing about better co-ordination between various forms of transport with a view to maximum benefit to the public, and (ii) the matching of transport planning with the agricultural and industrial development plans of the country.

Pending the decision on the constitutional set-up, the Government of India provisionally accepted the entire financial liability for the development and maintenance of roads classed as National Highways. As a result of this, the National Highways remained Provincial roads except for the financial part of their construction and maintenance. In the new Constitution of India, however, National Highways have been included in the federal list of subjects. At present the length of roads coming within this category is about 13,300 miles, of which about 2,400 miles lie in the States, some of which have merged with the Provinces. As a first step in the implementation of the Nagpur Plan, the Central and the Provincial Governments have devised a five-year Plan according to which they have agreed to an expenditure of about Rs. 30 crores comprising Rs. 23.5 crores for development and Rs. 6.5 crores for maintenance and repair of National Highways, during the five-year period ending March 31, 1952. The actual and anticipated expenditure on all National Highways upto the end of 1949-50 is as follows:—

TABLE 12. Expenditure on National Highways in India

(in lakhs of rupees)

	1947-48	1948-49 (estimated)	1949-50 (budget)	Total
Original Works	45.27	142.69	200.00	387.96
Maintenance and Repairs ...	130.98	235.02	223.25	589.25

So far as the actual working of the five-year plan is concerned, the results are not as encouraging as they were originally expected to be. As part of the anti-inflationary policy and economy drive, the Government has been forced to restrict expenditure only to productive and unavoidable works. The plan, therefore, is not likely to materialise within the expected period. Nevertheless about 105 different works such as improvement to road links, construction of

bridges and widening of congested sections of roads, have been sanctioned and most of them have made considerable progress. In order to make good the effects of the partition in the East, namely the separation of Assam and the State of Tripura, the Government of India is now concentrating on the construction of the 115 mile road connecting Tripura with rest of India. The project, which is estimated to cost Rs. 1.53 crores, would enable the State authorities to avoid the use of Eastern Pakistan territory in transporting jute and other agricultural produce to Assam, Calcutta and other parts of India.

When the network of roads is completed according to the five-year plan, Delhi will be connected with Amritsar and with the Pakistan border on the North and with Agra, Kanpur and Calcutta towards the East. Madras will be linked up with Bombay on one side and with Calcutta on the other. Besides, there will be a long artery running across the entire length of the country from Benares to Cape Comorin.

So far as Pakistan is concerned, a conference was held at Karachi in May 1949 with a view to working out a plan for road development. It appears from the resolutions adopted at this Conference and the general lines of policy, that road development in Pakistan would proceed on the same lines as in India. With a view to co-ordinating road development in general, it was decided to set up a Central Road Organisation to ensure that the interests of the railways were safeguarded and to foster the development of inter-provincial roads in Western Pakistan. The Karachi Conference accepted the need for the formation of a Pakistan Roads Congress, on lines similar to that of the Indian Roads Congress. It was also decided to create a Road Fund from the proceeds of an extra duty of 2½ annas on petrol. It was agreed that a Central reserve of 15 per cent. of the proceeds of this duty should be kept by the Central Government for defraying the charges of administration of the Road Fund, for expenditure on research and for special grants. The balance was to be distributed to the Provinces in accordance with a prescribed formula. A Transport Advisory Council is to be constituted at the Centre, its main function being the overall co-ordination of the entire transport system. Though this body is to be representative of all interests, it would be purely advisory in nature and none of its recommendations would be binding on any of the Provinces or acceding States.

NATIONALISATION OF MOTOR TRANSPORT

One feature in respect of which the road policy of Pakistan is similar to that of India is the nationalisation of road transport. By enacting legislation amending the Motor Vehicles Act of 1939, a number of Provinces and States in India have put into operation schemes for the nationalisation of road transport by gradual stages. Early in 1948 the Central Government passed the Road Transport Corporation Act by which Provincial Governments are empowered to incorporate, regulate, and if necessary wind up Transport Corporations. Work in this direction has already started, though the pace of operation is not uniform. The first step in this direction was taken when the G.N.I.T. Company in Delhi was taken over by the Government and a new Company known as the Delhi Transport System was formed. This system is operated directly by the Ministry of Transport. The Bombay Government has evolved a scheme known as the State Road Transport Corporation, the object being to take all road services in the Province in course of time. This body, which came into existence in December 1949, is a statutory corporation with capital subscribed by the Provincial and the Central Governments in the proportion of 3:1. It will function in 27 districts where the State Transport now operates. The Cor-

poration is empowered to prepare and execute schemes with a view to rationalising and co-ordinating any road transport service or ancillary service in any part of the Province. The U.P. Government decided upon the nationalisation of the passenger bus transport, as early as in 1947. As in Bombay, there is a provision for the railways to subscribe 25 per cent. of the share capital. In Madras more districts are being gradually brought under nationalised transport system. Bihar and Orissa have also prepared schemes for the formation of transport corporations. In Central Provinces and Berar, the Provincial Government has taken over one of the two large transport companies, namely the Central Provinces Transport Services Ltd. The Government has plans for the complete nationalisation of road transport by stages. Among the State Governments, the Government of Mysore has worked out a scheme for gradual nationalisation of road transport. Already many of the important routes which were hitherto being operated by private companies are being taken over.

It has been stated that nationalisation of road transport has not been a panacea to all the shortcomings in this sector. This may be said particularly regarding the fares charged by nationalised services. It has been pointed out that the U.P. Government charges an anna per mile between Delhi and Meerut as against 4 pies charged by the private operator. The Bombay Government charges 9 pies to 1½ anna a mile as against 6 to 9 pies charged by private operators. The C.P. Government have put up the rates by 50 per cent. But it must be said that apart from the comfort to the passengers which nationalised transport ensures, the profits that accrue to the industry are again ploughed back with a view to increasing the efficiency of the service.

As in the case of India, in Pakistan too, all Provincial Governments have schemes for the nationalisation of transport by stages. Railways are also to be encouraged to invest in the proposed services. The extent of railway participation is to be decided by negotiations between Central and Provincial Governments.

III. SHIPPING

PRESENT POSITION

Most maritime countries have fostered the development of shipping because an efficient mercantile marine not only fosters increased commercial intercourse but also serves as a second line of defence. From this point of view the importance of the development of shipping in India and Pakistan is obvious. India and Pakistan have an extensive coastline of nearly 4,000 miles. Geographically, India commands the Indian Ocean and occupies a strategic position in South and South-East Asia. But because of the antipathy shown by the British rulers, Indian shipping has been in an undeveloped stage. Thus at the outbreak of the second world war Undivided India had only 30 ships with a gross tonnage of 150,000. The vulnerability of her position became manifest during the war when she could not find adequate shipping within the country to transport supplies which were so badly needed. As a result of the efforts made by the Government during the war, and in the post-war period the number of ships and their tonnage now stand at 86 and 337,000 respectively.

The following table which gives the gross tonnage owned by some countries in 1948 reveals the very weak position of India and Pakistan:—

TABLE 13. Gross Tonnage of Shipping, Country-wise, 1948

Country	Gross tonnage of ships (000' tons)
U.S.A.	29,165
United Kingdom	18,025
Norway	4.261
France	2,786
Holland	2,737
Italy	2,100
Sweden	1,937
Greece	1,286
Spain	1,147
Denmark	1,123
Japan	1,024
Germany	428
India	327
Pakistan	83

In a total world tonnage of over 80 millions, India's share is just 0.04 per cent. while that of Pakistan is only 0.004 per cent. At the time of the partition there was not a single shipping company registered in Pakistan. Subsequently the Mogul Line and an other shipping company have been registered in Pakistan. Though India retains the bulk of Undivided India's tonnage, its position is far from encouraging. The state of affairs is really unfortunate in as much as the overseas trade of India amounts to about 4 per cent. of the total world trade. Consequently, the goods carried by Indian ships account for an insignificant share of her trade.

SHIPPING POLICY

The serious shipping difficulties which the country had to face during the war made the Government of India realise the importance of a sound shipping policy. The Reconstruction Policy Sub-Committee on Shipping was therefore appointed by the Government in 1945. The Committee, which submitted its report in January 1947, strongly emphasised the need for adopting a national shipping policy similar to that adopted by the leading maritime nations of the world. To this end, it recommended that within the next five to seven years the Government should secure for Indian shipping the entire share of the purely coastal trade of India, 75 per cent. of India's trade with Burma and Ceylon and with the geographically adjacent areas, 50 per cent. of India's distant trade and 30 per cent. of the trade formerly carried in 'axis' vessels in the Orient. In terms of the volume of traffic, this would amount to ten million tons of cargo and three million passengers every year, for which a shipping tonnage of about two million tons would be necessary. It also recommended the formation of an Indian Shipping Board.

With a view to implementing these recommendations, the Government of India tried to acquire shipping tonnage to enable Indian steamers to ply in distant waters. The acquisition of ships by India meant valuable foreign exchange. The private shipping interests in India urged the Government to release a reasonable sum out of the sterling balances for placing orders with British shipbuilders who in 1949 had set aside 40 per cent. of the estimated output of 1.5 million tons for foreign buyers.

At the Shipping Conference held in January 1950 a further attempt was made to put into practice the recommendations regarding the transfer of a greater share of Indian coastal trade from British to Indian companies. It was

decided not to issue new licenses to British ships to operate on the Indian coast and in fact to cancel the existing licenses of some of the ships. As a result of this policy it was expected that the share of the British shipping companies which at present control 60 per cent. of the coastal trade would be reduced in course of time to about 15 per cent. The Government of India also assured Indian companies that they would give them Government cargo as far as possible. As regards overseas trade it was decided at this conference that India's fresh trade with other countries should include a shipping clause by which 50 per cent. of the shipping cargo under Government agreements should be carried in the Indian ships. The Government of India decided in August 1950 to implement fully a policy of reserving coastal trade to Indian vessels only.

To assist in the acquisition of tonnage at a more rapid rate and also bring about an all round development of shipping, the Government of India announced towards the end of 1947, their intention to set up three new shipping corporations, each with a capital or Rs. 10 crores, the Government subscribing 51 per cent. of the total capital. Each corporation was to have an allotted route and an authorised tonnage of one lakh. The first of these corporations under the Managing Agency of the Scindia Steam Navigation Limited was entrusted with the task of looking after the trade with Australia, the Far East and the Near Eastern countries. Of the 24 ships which each corporation was to have, the Government has so far bought two 'Victory' ships from Canada for the first corporation. In view of the difficulty of finding Managing Agents with the necessary capital and experience for the other two corporations as also the unsatisfactory financial and foreign exchange position, it seems likely that the establishment of the second and the third corporation may be shelved for some time. The India Steamship Company, which was offered management of the second Shipping Corporation to carry on trade along the Indo-Continental route, declined the offer. The Bharat Line which was offered the management of the third Shipping Corporation for looking after the Indo-U.S. route has not yet come to any decision.

SHIP-BUILDING

As regards the development of ship-building, the partition has been favourable to India, which possesses the only ship-building yard in Undivided India. This yard, which belongs to the Scindia Steam Navigation Co., is located at Vizagapatam. Despite the fact that the yard has been in existence for the last eight years, it was unable to achieve any substantial results till the end of 1946 because of the unhelpful attitude of the Government. So far the yard has built only three ships. The yard has two ship-ways at present and others are under construction. The yard is ultimately expected to have 6 to 8 ship-ways and is expected to build ships upto 14,000 tons deadweight.

While this is the only yard at present engaged in the construction of ships, proposals for the construction of two more ship-building yards have also been submitted by the Chief Engineers of the Port Trusts of Bombay and Calcutta. According to the scheme submitted by the Bombay Port Trust a ship-building yard is proposed to be located at Trombay, about fifteen miles from the city. The scheme envisages provision for ten ship-ways so that construction of 10 vessels of upto 15,000 tons capacity can proceed at the same time. Room for further expansion and fitting of two more berths would also be made.

But the entire question of the development of the ship-building industry needs to be reviewed in the light of recent development. The Scindia yard which launched its first ship in March 1948 showed great promise for the future. But

hardly a year had elapsed when, in March 1949, the Scindias decided to suspend indefinitely the construction of new ships at their Vizagapatam Yard, the reason being the very high cost of construction of ships in India as compared to that in the other ship-building countries. Thus while the cost of constructing an 8,000 ton ship in the U.K. now ranges from Rs. 35 lakhs to Rs. 40 lakhs, a similar venture in India would cost about Rs. 65 lakhs. Though the industry is equipped with machinery which is comparable with that of any country, its productivity is lower and the overhead costs are high. After repeated negotiations between the Scindias and the Government of India, the Government announced its decision to take over the ship-building yard at Vizagapatam. A hitch, however, arose between the Company and the Government over the 'book-value' of the assets. The Government whose valuation was based on the advice of two French experts specially appointed for the purpose, have fixed Rs. 3.5 crores as the sale price while the Scindias felt that Rs. 4 crores would be the fair price. The mode of payment was to be in terms of the shares of the new Shipping Corporation of which the Scindias themselves are the Managing Agents. As part of the economy drive, the Government anounced its decision towards the end of December 1949 to give up the idea of acquiring the Vizagapatam ship-building yard and deferred the question to 1952. In view of the representation made by the company as well as the prospect of mass disbandment of skilled workers, the Government has placed an order with the Company for the construction of three ships of 8,000 tons at a cost of Rs. 64 lakhs each. This is expected not only to keep the yard going for the present but will also give time to the Government to make the necessary financial arrangements for taking over the yard. An official of the Government of India has been nominated to reorganise the management of the Scindia Steam Navigation Co. and to effect economies in its expenditure.

The advantages of establishing a ship-building industry in Pakistan are meagre. Her supply of skilled labour is negligible, while semi-skilled labour is limited. Besides, Pakistan would have to import most of the ship-building materials. These advantages hardly render ship-building in Pakistan an economic proposition. The suggestion to establish an industry for the construction of ships upto 1,000 tons needs to be reviewed in view of the fact that the constructional and labour costs incurred would not vary much with the size of the ships built. Moreover, Pakistan's merchant fleet would not merely consist of small vessels, but of vessels from 8,000 to 10,000 tons, because they would have to participate not only in coastal trade but in international trade as well.

With a view to formulating a scheme for the development of ship-building and ship-repairing industry a Conference of the Industrial Advisory Committee was convened in Karachi in June 1949. The Conference emphasized the urgency and the need for the installation of a modern dry-dock in Karachi. Pending the construction of a dry-dock, the immediate provision of a floating dock is under consideration.

PORTS

Prior to the partition, coastal as well as foreign trade was based on the major ports of Bombay, Cochin, and Karachi in the West and Calcutta, Madras, Vizagapatam and Chittagong in the East. There was a natural distribution of foreign and coastal trade between these ports, which guaranteed speedy delivery at low transport costs. But the partition has necessitated fundamental shifts in the direction of movement of goods. Before the partition, Bombay was the first port, while Karachi was a very important second on the West Coast. Both acted as clearing centres for the vast hinterland and Karachi acted as

a port of clearance even for Afghanistan. The bulk of the cotton trade of Undivided India passed through the port of Bombay which had excellent facilities for grading, baling and warehousing of raw cotton. Karachi with its excellent harbour was a natural centre for supply to the North West as well as North India. After the partition, however, the imports into Northern India were diverted from Karachi to Bombay, resulting in a serious congestion at the latter port. In the East, Calcutta was the principal port and handled the bulk of the trade, mainly in jute and tea. After the partition, however, the export of jute has come to figure largely in the foreign trade of Pakistan. However, Pakistan's ability to take over the export of jute in large quantities is limited by the meagre capacity of the port of Chittagong. Chittagong, which occupied a comparatively insignificant position prior to the partition, is now called upon to handle increased quantities of varied types of goods. The capacity of Chittagong to serve as a port for handling international trade of any vast dimension is limited and thus Pakistan is experiencing considerable difficulty in handling her export trade, which is so vital to her.

India: The problem of developing the ports of India has two important aspects: (i) the extension and modernisation of the existing ports; and (ii) the development of new ports to serve ocean-going liners. Among the immediate measures, the Government has given top priority to the Rs. 25 crore project for expansion and modernisation of the three major ports. Construction work has already started and is expected to be over within a period of five to ten years. The present annual capacity of the Indian ports is about 20 million tons and the improvements now being affected will raise the capacity to 26 million tons. The Government is also planning the conversion of some of the numerous trade centres spread all along the 4,000 mile coastline of the country into modern ports. Development works at Vizagapatam include the construction of a dry dock at an estimated cost of Rs. 1 crore, the provision of a siding to develop the Western area and to serve the Scindia shipyard, and a coal berth. As regards the extension of the port of Madras towards the south, a scheme for constructing a projected wet dock at a cost of about Rs. 5 crores is also under consideration. In regard to the Calcutta port, the Government of India has before it a proposal to construct a ship canal from Diamond Harbour to Kidderpore Docks so as to short-circuit the 42 miles of dangerous and difficult river navigation on this stretch of the Hooghly and to provide a deep water approach to the dock system at Calcutta. This project was considered in all its aspects by the Central Board of Transport. The Bombay Port authorities have a scheme for modernising the Princess and Victoria docks and electrifying them. The projects are expected to cost about Rs. 20 crores spread over 10 years.

So far as the development of new ports is concerned, Kandla in Cutch has been selected as one of the future ports. After the partition, the pressure on the port of Bombay increased manifold due to the loss of Karachi. Thus there was great need for an alternative port. A team of technical experts served the West Coast Major Port Development Committee which was appointed by the Government of India to report on sites suitable for the establishment of two major ports. On their recommendation, the Government of India has decided to establish a major port at Kandla, at an estimated cost of Rs. 16 crores. The Kandla creek situated at the East end of the Gulf of Cutch has a sheltered natural harbour and is easily navigable. The new port when completed will have a capacity to handle 3 million tons of cargo annually. The first stage is expected to be completed by 1954. Regarding the site for the other port, no

decision has been arrived at so far. The possible sites are Malpe, Bhatkal, Karwar or Mangalore. The Government of India is thinking of constituting a National Harbour Board in order to facilitate central control over all the ports.

Pakistan: We may now examine the position of the ports of Pakistan in the light of the new situation they have to face. The port of Karachi in West Pakistan which has adequate modern facilities is one of the most favourable legacies of the partition to Pakistan. Karachi was the third largest sea-port in Undivided India. It is equipped with 21 berths, varying in length from 430 feet to 600 feet, giving a continuous frontage of 19,925 feet. The annual handling capacity of the port is over 3 million tons. So far as storage and warehousing accommodation are concerned, the port has a covered space for 70,000 shipping tons of goods in transit as also 228,000 shipping tons of goods under longer storage in addition to an open space of 70,000 ons of transit goods and 617,000 tons of storage goods. Besides, 900,000 square feet of additional space is provided by the private warehouses. A special feature of the port of Karachi is that all these storage areas are conveniently connected by rail. This was the reason why in spite of the storage capacity of the port being severely taxed after the partition, there was no congestion as was witnessed in Bombay. Thus this port by itself is expected to meet the needs of Western Pakistan in the immediate future.

But very recently the Pakistan Government have taken in hand a scheme for the development of an alternative port on the West Coast at Pasni on the Mekran coast in the Persian gulf. Pasni is a natural port and is about 300 miles west of Karachi. It is connected by road and rail with Baluchistan. The main objective in developing this port is to afford relief to Karachi, the pressure on which is expected to increase many times in the near future. It is also believed that the opening of this port will favourably affect the export of wool, hides, bones, dates, fish and mineral products of Baluchistan States.

The major problem that confronted Pakistan was not in the West but in the East. The economy of the Provinces of Assam and Bengal was excessively dependent on the port of Calcutta. But the partition left East Pakistan with only one port, Chittagong, which was ill-equipped to take over its new responsibilities. At the time of the partition the annual capacity of the port was only 0.75 million tons. But after the partition, Chittagong became the only outlet for the entire traffic of East Pakistan, most of which passed through Calcutta in the pre-partition days. Apart from its importance as the principal gateway to East Pakistan, it was charged with the new role of strengthening the vital trade and communications route between East and West Pakistan. From its very inception the Government of Pakistan realised that the development of this port was a matter of vital urgency for the economic life of East Pakistan. To meet the situation the Ministry of Communications immediately drew up a short-term plan and started to implement it. This plan consisted of the extension of two of the four existing jetties, the extension and reconstruction of two existing sheds, the addition of a separate jetty for salt, rebuilding of the marshalling yard dismantled during the war and the provision of moorings for mid-stream loading and unloading together with lighterage jetties. The work so far completed includes the construction of the salt jetty, the extension of a berth and a transit shed, the re-erection of a storage shed and the rebuilding of the railway marshalling yard. The entire short-term plan was mostly completed early in 1950 and the capacity of the port was stated to have increased

to 1½ million tons per annum, almost treble the capacity at the time of the partition.

But it must be remembered that Chittagong is now handling a large part of Pakistan's jute export trade. The export of jute, tea and some types of forest produce in which this region abounds require the bulk of the port's capacity. Consideration must also be given to the huge import trade which this port must inevitably handle. Prior to the partition, Calcutta supplied all categories of manufactured articles to East Bengal. If Pakistan decides to meet its future needs of these by imports from other areas, the Chittagong port will have an additional burden. In order that the port might be able to cope with the difficulty, the Government of Pakistan, simultaneously with the drawing up of the short-term plan, engaged the services of Messrs. Merz, Rendel and Vatten (Pakistan), a firm of consulting engineers to draw up long-term plans for the development of the Chittagong Port. Some features of the long-term plan are: (i) increase in the number of berths from 4 to 11, equipped with up-to-date facilities and terminal yards and warehouses; (ii) the construction of new offices for the Port and Customs authorities and a housing estate for the port and customs staff; (iii) the construction of transit sheds, sidings and marshalling yards, lighterage jetties with sheds and railway sidings; (iv) the provision of equipment such as heavy lift cranes, mobile trucks, shunting locomotives, etc; and (v) the provision of roads, lighting, power and water and other services, and river training works. When all these plans are put through, Chittagong will be fit to take up its new role and its annual capacity will have increased to 3 million tons. The Government of Pakistan has ambitious schemes for developing the Chittagong valley on the lines of the Tennessee Valley Authority and to transform Chittagong into one of the biggest ports in the East.

INLAND TRANSPORT

Inland waterways connecting different centres in West Bengal and Assam pass through East Pakistan. Because of unsatisfactory relations between the two countries the movements of goods along these inland waterways has been jeopardised. Thus the pre-partition transport of Assam and North Bengal tea to the port of Calcutta through East Pakistan has been disturbed. In the case of Assam jute also similar difficulty was experienced. Barges laid with Assam jute on their way to Calcutta were held up in Pakistan territory in December 1949. For these reasons it has become necessary to reorient the inland transport system in West Bengal and Assam with a view to providing a direct link between centres in India and minimising the need for the movement of vessels through Pakistan. The Commerce Minitry of the Government of India has been confronted with the task of co-ordinating the inland water transport in this region with the railway system and roads. The waterway which links Calcutta with the Ganges as well as the Brahmaputra is running through Pakistan territory. The Central Board of Transport has therefore recommended the investigation of the Ganges Barrage multi-purpose project which envisages the provision of a direct navigation route.

We have mentioned above that East Pakistan is endowed with a net-work of river systems. It is estimated that there are 2,800 miles of navigable rivers in East Pakistan. Steamers of 400 to 600 tons ply in the large rivers while country crafts provide communication between villages. These waterways which provide a cheap means of transport, play a very important part. The most important commercial crop of East Bengal, viz. raw jute, moves from the mofussil areas to the marketing centres and from these centres towards Calcutta not so much

by rail as by river. During the war, when there was the threat of Japanese invasion many of the country-craft were deliberately destroyed, but they are again coming into their own. So far as the future industrial development of East Pakistan is concerned, rationalisation of the country-craft as a means of transport would enable them to serve as an excellent feeder to the railways. The country-craft can bring new material to the industrial areas from the remotest region at minimum costs and this will help the location of industry in or around Chittagong. The only discomforting feature from the point of view of Pakistan's economy is that all the large steamers plying in inland waters are foreign-owned and hence there is no co-ordination between this means of transport and the railways.

IV. CIVIL AVIATION

PRE-PARTITION POSITION

The partition of the country adversely affected Pakistan so far as civil aviation was concerned. At the time of the partition there was not a single company which had its headquarters in Pakistan while in India there were ten companies. Because of the absence of even a single operating company in its territory, facilities for repair and maintenance too were totally absent in Pakistan. Though four international services passed through Pakistan and some of the Indian companies extended their services upto Karachi, the existing companies could hardly fulfil the requirements of Pakistan. The problems of civil aviation in India and Pakistan are hardly comparable in as much as, while in the former the problem was more of rationalising the existing services, in the latter a start had to be made literally from the scratch. Besides, in view of the vast distance which separates West Pakistan from East Pakistan an air link between the two is absolutely essential for quick transport.

EVACUATION

Immediately after the partition the air force as well as the civil airlines in both the countries were called upon to undertake large-scale evacuation of stranded refugees. Ten aircraft belonging to various Indian companies were chartered by private parties for the purpose of evacuation. Between August 29 and September 14, 1947 about 8,000 to 10,000 persons were evacuated by air from Western Pakistan. From September 15, however, Government themselves chartered the aircraft in order to evacuate Government personnel and their families, without cost from Sargodha, Lyallpur, Multan, Rawalpindi, Dera Ismail Khan, Risalpur, Mianwali, Chakwal and Kohat. The number of aircraft was, however, found to be inadequate and from October 20, about 25 aircraft belonging to the B.O.A.C. were chartered. Between September 15 and November 30, 1947 the aircraft belonging to Indian companies covered more than 300,000 miles and carried about 100,000 evacuees between Pakistan and India. The B.O.A.C. aircraft chartered by the Government of India flew 35,000 persons during the same period. In addition, they carried 1.5 million pounds of freight and flew over 800,000 miles between India and Pakistan. These operations practically ceased by the end of November 1947 but one or two aircraft were placed at the disposal of the Controlling Authority, Air Transport for Refugees, till January 7, 1948 when the evacuation of the refugees by air was finally terminated. The part played by civil aircraft in the evacuation of refugees and in the Kashmir struggle showed the potentiality of this form of transport and considerably influenced the Government in determining their aviation policy.

PRESENT POSITION OF AVIATION IN INDIA AND PAKISTAN

India: A review of the progress of civil aviation in India shows that on June 30, 1949 ten Indian air transport companies were operating scheduled air services, internal and international, covering an unduplicated route mileage of 20,661. The number of aircraft operating on all these services was 170, while 248 pilots and 173 other air-crew were employed. 39 Cities in various parts of India are now connected by air, the more important among them having more than one service a day. The following table shows the progress of air transport in India during the last five years:-

TABLE 14. Air Transport in India, 1945-1949

Year	Hours Flown	Miles Flown	Passengers carried	Freight carried	Mails carried	Capacity ton-miles	Revenue load ton-miles
1945 ...	21,781	3,320,277	24,090	8,52,068	480,616	2,708,575	1,952,975
1946 ...	29,539	4,520,046	105,251	1,318,153	1,026,403	8,536,457	6,391,210
1947 ...	59,301	9,361,673	254,960	3,868,546	1,405,073	18,596,777	14,355,164
1948 ...	78,961	12,648,765	341,186	8,156,471	1,582,645	26,320,058	19,295,532
1949 ...	93,000	14,900,000	358,000	13,300,000	4,900,000	35,300,000	22,900,000

Pakistan: There are two Pakistan Airlines operating scheduled air services in and outside Pakistan. They are the Orient Airways Ltd., and the Pak Air Ltd. While recognising the need for a network of air services, the Pakistan Government have decided not to license more than two domestic air transport companies. The main objective underlying this policy is the avoidance of wasteful competition arising from unprofitable duplication as is evident in the case of Indian companies. Since Pakistan did not have a single airline of its own at the time of the partition the Pakistan Government requested the Orient Airways Ltd., Calcutta, to transfer its headquarters to Pakistan and start the urgently needed services on a temporary basis pending the evolution of a long term air transport policy. On June 19, 1948 the Government decided to grant air transport licenses to two companies which had Pakistan capital and were directed and controlled by Pakistan nationals. The Orient Airways owns a fleet of 23 aircraft, mostly of the Douglas D.C. type and the Pak Air Ltd. has 8 aircraft. These companies together operate 9 scheduled services and on March 31, 1949, the route mileage covered by them was 14,876 miles.

Airports: The progress of civil aviation depends to a large extent upon the number of airports in the country. In India at present there are 64 airports under the Directorate General of Civil Aviation. But not all these can be used by larger aircraft. Among the important airports are the three 'international' airports at Delhi, Calcutta and Bombay, 7 'major' ports and 13 'intermediate' ports. 14 more airports have been equipped for receiving regular air services. New aerodromes are propose to be constructed at Ajmer, Aligarh, Berhampur (Orissa), Calicut, Cuddalore, Nellore, Ootacamund, Salem, Ratnagiri, Saugar and Surat. So far as the international airports are concerned, though there are now three of them in India, they are not adequately equipped. Plans have been finalised for converting the Santa Cruz Airport at Bombay and the Dum Dum Airport at Calcutta into standard international ports. The development of Bombay comprises the construction of terminal buildings, a regional meteorological office, hangars, workshops, expansion of residential accommodation, extention of runaways, provision of lighting facilities for night flying, radio transmitting and receiving stations, etc. Santa Cruz and Dum Dum, being the first

points of entry from the West and East, will, in addition, be equipped with permanent isolation hospitals. The project of developing the Santa Cruz Airport into a leading international airport has been estimated to cost Rs. 4 crores and will taken ten years to complete. Similar work is to be taken up at the Dum Dum Airport. Work is already in progress on the construction of a second runaway at this airport to meet international air traffic requirements. The total expenditure to be incurred on the Dum Dum Airport will be about Rs. 3,07 lakhs. The Palam Airport at Delhi is also to be modernised at a cost of Rs. 2,75 lakhs.

Considering the vastness of the country, the number of airports in Pakistan are few. At present Pakistan has aerodromes at Karachi, Lahore, Rawalpindi, Peshawar, Chittagong, Dacca, Sylhet, Hyderabad (Sind), Jacobabad, Multan and Quetta. Landing fields also exist at Comilla and Feni in East Pakistan. Besides these there are a few other emergency fields constructed during the war. So far as international airports are concerned, Pakistan has only one, viz. Karachi. The Karachi Airport is provided with the latest type of equipment which has rendered it one of the safest airports in the world which can operate in all types of weather.

Workshops: At the time of the partition, facilities for major overhaul and repairs of civil and service aircraft existed only at the Hindustan Aircraft Factory in Bengalore. The lack of such facilities in Pakistan was a major handicap both to civil aviation and to the Royal Pakistan Air Force. To meet the situation the Government of Pakistan itself took the initiative, in setting up the Pakistan Aviation Ltd., in which Government of Pakistan will hold a majority of shares and will have a controlling voice. The preliminaries for setting up this organisation have been concluded and a beginning has already been made to carry out repairs and major overhauls of engines and airframes.

Financial Position of Indian Airlines: The financial position of our aviation companies is unsatisfactory. The main reasons advanced are that (i) operation costs in India are high and (ii) some of the routes traversed are unremunerative. The policy of Air Transport Licensing Board, which was issuing only short-term licenses to the operating companies, was a factor which unduly increased the operational costs, because companies maintained uneconomically large fleet of aircraft with a view to obtaining licenses for operating remunerative routes. But from June 1949 this system has been revised and licenses are being issued normally for a period of ten years. So far as the high operational costs are concerned, the Government is extending every possible help to the companies to reduce high operation costs. The Government has granted a subsidy of 9 annas a gallon in connection with the Customs Duty on aviation gasoline. Taking the monthly consumption of petrol by Indian aircraft at 700 000 gallons this amounts to Rs. 45 lakhs in the current financial year. The introduction of the night Air Mail Scheme is another factor which was expected to contribute to the earnings of the air companies.

Night Air-mail Scheme: The night air-mail scheme was originally introduced in February 1949 to quicken the delivery of mails within the country. But, instead of offering the benefit of running this service to all the operating companies, the Government offered it to the company which quoted the minimum terms and soon it was found that the company concerned was involved in losses. From April onwards another scheme known as the "all-up mail scheme" was introduced after enhancing the rates of postage. But the rate of payment was altered and even this scheme failed to benefit the operating company.

The night mail scheme which was suspended in June 1949 because of the monsoon was resumed in October 1949, and the license to operate this service given to a new entrant to the field, which was allowed to take passengers at the rate of 2¼ annas per mile, which amounts to the 1st Class railway fare plus a surcharge of 12½ per cent. The other companies asked for a surcharge of 25 per cent. above the 1st class fare. The licensing of this new company calls forth some questions of economic importance and relate vitally to the future of civil aviation in the country. The first question is whether it was really necessary to license a new company. It cannot but be admitted that this move has indirectly introduced an element of competition at a time when there was already more than enough of it. It has been accepted by all concerned that the effective route mileage in the country does not warrant the existence of more than three or four companies, while we have double this number. The second question is about the rates. Even at an average rate of 4 annas a mile only a load of 85 per cent. of the total capacity would just meet the costs of operation of the Dakota. When this is the case, the move in allowing a particular company to charge nearly 50 per cent lower rates would certainly have a depressing effect on the other companies. Indirectly therefore the Government are encouraging a rate war which the Indian companies can ill afford.

Personnel: One significant factor which contributes to the high operational cost is the high salaries paid to employees. Of the 249 commercial pilots in India, 172 or about 69 per cent. are Indians. Foreign pilots are usually paid much more than the Indian pilots and there is, therefore, an urgent need to replace them by Indians. To remedy the shortage of commercial pilots, the Government has initiated a scheme for the training of civil aviation personnel in subsidised flying clubs. At present there are seven subsidised flying clubs, one each at New Delhi, Bombay, Madras, Patna, Calcutta, Bhubaneshwar, Lucknow and Cawnpore. Provision has been made for giving subsidies to three new clubs in Jullundur, Nagpur and Gauhati. Besides, the Government is conducting a Civil Aviation Training Centre at Allahabad. The execution of this scheme will ensure a steady flow of pilots and will pave the way for progressive Indianisation. Similarly, Government have been training a number of radio technicians at the Saharanpur Civil Aviation Training Centre and by the end of 1949 about 400 radio operators and 252 radio technicians had passed out from these centres.

Much of the progress of Pakistan's civil aviation will depend upon a steady and ensured supply of pilots and other technicians. To meet the increased demand for pilots, training facilities have been provided both by the national airlines and flying clubs. There are three Government subsidised flying clubs in Pakistan, at Karachi, Lahore and Dacca, for providing initial training and practical experience. The question of establishing a club at Rawalpindi is also under consideration.

INDO-PAKISTAN AIR AGREEMENT

After partition, flights between destinations in the two countries which had hitherto been internal became international. It, therefore, became necessary for India and Pakistan to enter into a Standstill Agreement. On the expiry of this agreement on September 20, 1947, an Interim Agreement on reciprocal rights was reached. In April 1948 the terms of a bilateral agreement for the operation of scheduled air services between the two countries were discussed. Throughout the preliminary talks, India's case was mainly based on commercial considerations while Pakistan was mostly interested in the maintenance of

close communications between its widely separated zones. A permanent Bilateral Agreement was concluded on June 23, 1948, according to which airlines designated by the Governments of India and Pakistan are entitled to operate air services on each of the specified routes and to land for traffic purposes at specified points in the other country.

EXTERNAL SERVICES

Indian companies have been successful in making their appearance in the field of international civil aviation. In June 1948 an external service to the West, known as the 'Air India International', was inaugurated. In April 1949 a service was started in the East by the Bharat Airways linking India with China and Japan. Arrangements are now complete for commencing a service to Australia and Far East by the same Company. Recently the Air-India has also started a service to Nairobi, East Africa. This service which will operate once in a fortnight will cover the distance in fourteen hours and is claimed to be the fastest between India and East Africa. India has entered into agreement with France, the Netherlands, U.K., U.S.A., Ceylon and Australia for the operation of air services. Provisional agreements are in force with China, Ethiopia, Siam, Iran, Egypt, and Switzerland. While granting routes to foreign countries, care is taken to ensure that there is no duplication which is likely to hamper the progress of India's external services. Thus, when the air agreement with Sweden was signed, the Government of India emphasised that Geneva and Cairo should not be halting places on the route of the Scandinavian Airlines System, as it was likely to affect the traffic of the Air-India International which also halted at the same places. Regular services have not yet been started on external services as well as on all the routes agreed to in the Indo-Pakistan Air Agreement. But steady progress is being achieved in this direction. The main impediment to the progress of Indian Aviation is the high operational cost and the consequent high traffic fares. The cost of petrol in India amounts to as much as 4 to 5 times the cost in the U.S.A. and it may not be possible to remedy the situation in the near future. Airlines in India, which operate thousands of miles away from the factories which produce the machines and spare parts could not possibly run their companies as economically as the larger companies with terminals in countries where these are manufactured.

As regards Pakistan, according to the Indian Independence (International Agreements) Order 1947, agreements for the operation of air services concluded between the Government of India and the Governments of U.S.A., France and the Netherlands were also binding on Pakistan. The contracting parties were accordingly informed and they confirmed the same. Later, Pakistan concluded bilateral air agreements with India, Sweden and Ceylon. Negotiations for bilateral agreements with Egypt, Turkey, Norway, Iraq, Syria, Ethiopia, Burma and Czechoslovakia and the U.K. are also envisaged and will be concluded as early as possible.

FUTURE OF AVIATION

As a result of a heated debate in the Indian Parliament in November 1949, the Communications Ministry appointed a Committee to enquire into the working of the Civil Aviation in the country. The Committee consisted of five representative members and its terms of reference specially covered the operation of the night air mail scheme. Fully acquainted with the economics of the air transport industry, this Committee enquired in a comprehensive manner, into issues such as aggregate costs of carriage by air of goods, passengers and mail.

The Committee's report is eagerly awaited by all those who are interested in the future of this vital industry.

Regarding nationalisation, the policy of the Government is not very clear. Till June 1949, the Government was not granting long-term licenses to aviation companies. This was because the Government had still not made up their mind about nationalisation. Since then all the companies are being given a ten-year license. The Government of India very nearly came to taking over the Indian Overseas Airlines Ltd., in 1949, when the company was involved in serious financial losses. This, however, was not done because of its far-reaching implications. Recently Mr. Kidwai, the Communications Minister, has stated that the Government have not fully given up the idea of nationalising civil aviation in this country. It is stated that the all-up air scheme is costing Rs. 15,000 a day to Government, and in view of this it is felt that the Government would do well to take over the air services.

As regards Pakistan, both the Orient Airways and the Pak Air Limited are operating under private management. The Government of Pakistan is considering nationalisation of these airlines. Under a scheme now before the Government the two companies will be merged into one nationalised corporation similar to the British National Airways. In the new corporation, which will be known as Pakistan Airlines, the Government will hold 51 per cent. of the share capital and the rest will be held by the present companies.

CHAPTER XI

FOREIGN TRADE

I. INDO-PAKISTAN TRADE

For convenience of analysis, the post-partition foreign trade of India and Pakistan may be split up into (A) Indo-Pakistan trade and (B) Trade with other countries. Indo-Pakistan trade is the direct outcome of the partition and to some extent reflects what was at one time internal trade between regions that now constitute Pakistan on the one hand and those that comprise the Republic of India on the other. As a result of this transformation of internal trade into international trade the total foreign trade of India has increased both in quantum and value. But Indo-Pakistan trade has added more to import liabilities than to export earnings and this has increased India's deficit in balance of payments.

The following table indicates the overall trade position of India and Pakistan for the years 1948-49 and 1949-50:—

TABLE 1. Foreign Trade of India and Pakistan, 1948-49 and 1949-50

(in crores of rupees)

	Indo-Pakistan Trade		Trade with other countries		Total	
	1948-49	1949-50	1948-49	1949-50	1948-49	1949-50
INDIA						
Exports	77	40	376	468	453	508
Imports[1]	109	44	560	558	669	602
Balance of Trade ...	— 32	— 4	—184	— 90	—216	— 94
PAKISTAN						
Exports	109	44	62	72	171	116
Imports	77	40	64	95	141	135
Balance of Trade ...	32	4	— 2	— 25	30	— 19

IMPORTANCE OF INDO-PAKISTAN TRADE

The figures for the year 1949-50 do not give us a correct appraisal of the significance of Indo-Pakistan trade in the foreign trade of either India or Pakistan because of the trade deadlock over the devaluation controversy. We shall therefore take into account the figures of 1948-49. Table 1 shows that in terms of value Indo-Pakistan trade forms the bulk of Pakistan's trade but not of India. Exports to India account for nearly 62 per cent. of Pakistan's exports to the outside world. Imports from India account for nearly 54 per cent. of the total imports of Pakistan on private account. It is reported that Pakistan imported goods worth Rs. 50 on Government account. Considering the imports both on private and Government accounts, it appears that imports from

1. Accounts relating to the sea-borne trade and navigation of India do not give a complete picture of India's food imports. The figures of India's food imports have been adjusted by reference to the data disclosed by the Ministry of Food and published in the Government of India's monthly publication "The Agricultural Situation in India."

2. The figures relating to India's foreign trade for the year 1949-50 do, but Pakistan's do not, include trade on Government account.

India constitute nearly 40 per cent. of Pakistan's total imports. In the year 1949-50, India's share in Pakistan's imports was 31 per cent. and her share in exports 35 per cent. Even then India still remains the most important country trading with Pakistan both from the point of view of exports and of imports. This has been recognised only lately by the Government of Pakistan. It should be emphasized that the whole agricultural and commercial economy of Pakistan largely depends on the smooth functioning of Indo-Pakistan trade.

Though Indo-Pakistan trade accounts for only 17 per cent. of exports and about 16 per cent. of imports in the foreign trade of India, it does not follow that Indo-Pakistan trade is less important for India. The jute industry which is responsible for more than 35 per cent. of the foreign exchange earned by India is heavily dependent on raw jute supplies from Pakistan. The cotton textile industry not only depends on Pakistan for raw cotton but also finds a profitable market for cotton piece-goods in that country. It is ordinarily believed that the demand for the small number of commodities like cotton and raw jute as well as hides and skins which India imports from Pakistan is inelastic, and that Pakistan can obtain from other countries the large number of goods hitherto supplied by India. While this is broadly true, it is necessary to emphasize a few important qualifications to this general observation. Among the commodities exported by India to Pakistan, there are quite a few, like coal, mustard oil, *lungi* cloth and iron and steel goods for which, though the imports are small in value, the demand in Pakistan is inelastic. Besides, in the case of the most important commodity exported by Pakistan to India, viz. raw jute, the problem is not simply one of an absolute monopoly enjoyed by Pakistan, as that of a bilateral monopoly, with Pakistan as the main supplier and India as the main buyer of raw jute. In course of time, as the production of raw jute in India increases, the monopoly of Pakistan in the raw material will be adversely affected, while the monopoly enjoyed by India on account of her having 57 per cent. of the jute looms of the world is not likely to suffer much.

VALUE OF INDO-PAKISTAN TRADE

A large part of the trade between India and Pakistan is carried on by land. The following table shows the relative importance of land and sea trade:—

TABLE 2. India's Trade with Pakistan, 1948-1950

(in crores of rupees)

	By sea		By land		Total	
	1948-49	1949-50	1948-49	1949-50	1948-49	1949-50
Exports	46.61	13.87	30.39	25.82	77.00	39.69
Imports	24.29	12.46	85.00	31.47	109.29	43.93

It will be seen that the overland trade accounts for nearly 80 per cent. of the imports from and 40 per cent. of the exports to Pakistan in 1948-49. Land trade stretches over hundreds of miles of the Eastern and Western frontier between the two countries. The administration of Land Customs in both the countries is defective, partly because of inexperience and partly because of the extent of the area to be covered. This leaves considrable scope for smuggling. It is reported that within six months prior to October 1949 over 30,000 bags of sugar were smuggled into Western Pakistan. Similarly, though between September 1949 and April 1950 Indo-Pakistan trade was at a stand-still, it was reported that more than three lakh bales of raw jute were smuggled into India from East

Bengal. Apart from the imperfections in Land Customs Administration, reliable figures of Indo-Pakistan Trade were not available till recently. To some extent the defects in Customs returns are due to the lack of interest in collecting data for commodities imported free of customs duties. For example, though during the period 1948-49 over 41 lakh bales of raw jute came to India from Pakistan, the Land Customs returns showed an import of only 7.7 lakh bales. The data had subsequently to be verified and changed after reference to the Bengal Chamber of Commerce. So far as India is concerned, Customs Reports are being compiled by about twelve separate authorities. This leaves considerable scope for non-reporting. Efforts are now being made in India to improve the machinery for the compilation of Land Customs Returns.

A major portion of the Indo-Pakistan trade by sea with West Pakistan, whilst a major portion of the trade by land is with East Pakistan. The following table gives the figures of Indian trade by sea and by land separately with Eastern and Western Pakistan:—

TABLE 3. India's Trade with Eastern and Western Pakistan, 1948-1949

(*in crores of rupees*)

	West Pakistan	East Pakistan
Exports	52.19	24.81
Imports	32.09	77.20
Balance of Trade in Merchandise ...	20.10	—52.39

It is clear that 65 per cent. of Indian exports went to Western Pakistan, while only 28 per cent. of imports came from that region. Whereas only 35 per cent. of the exports went to Eastern Pakistan, nearly 72 per cent. of the imports came from that region. In short, while there was a trade surplus with Western Pakistan to the extent of Rs. 20.10 crores, there was a deficit with Eastern Pakistan to the tune of Rs. 52.39 crores. This is largely due to our overwhelming dependence on Eastern Pakistan for raw jute. It is estimated that out of the total imports from East Bengal, 41.85 lakh bales of raw jute were imported at a total cost of Rs. 71.14 crores during the year 1948-49. The following table gives the principal items of imports from and exports to Pakistan:—

TABLE 4. Principal Items of India's Imports from and Exports to Pakistan, 1948-49

(*in crores of rupees*)

	Value		Value
TOTAL IMPORTS	107.09	TOTAL EXPORTS	72.41
Building and Engg. items (mainly cement)	1.23	Coal and Coke	1.78
Foodgrains	1.79	Leather	1.37
Hides and Skins	1.78	Metals (iron and steel) ...	0.95
Agricultural Seeds	4.37	Vegetable and other non-essential oils (mainly mustard oil)	4.62
Raw Jute	71.23	Rubber Manufactures ...	0.75
Raw Cotton	16.68	Sugar	0 86
Others	10.01	Molasses	1.48
		Tea	1.48
		Tea Chests	3.04
		Cotton manufactures including yarn	21.10
		Jute manufactures	5.51
		Artificial silk goods	5.16
		Manufactured tobacco ...	5.29
		Spices	2.43
		Boots and shoes	0 86
		Others	15.73

Of the total value of imports from Pakistan, raw jute accounts for nearly 72 per cent., raw cotton for nearly 17 per cent., agricultural seeds 5 per cent., hides and skins 2 per cent. and cement 1 per cent. The table also shows that the number of commodities exported to Pakistan is larger than the number of those imported from Pakistan. Of the main articles of exports to Pakistan the more important are cotton piece-goods, mustard oil, coal and coke, jute manufactures, artificial silk goods, manufactured tobacco and tea chests. * So far as cotton piece-goods are concerned, Pakistan is heavily dependent on India, particularly for *lungi* handloom cloth which is not available in other countries. Lack of supplies of tea chests or jute manufactures would also reduce the export capacity of Pakistan. Mustard oil is consumed by people of East Bengal as a frying medium. The Pakistan railways and industries are dependent on supplies of coal from India. These are some of the commodities from India the demand for which is likely to be inelastic in Pakistan for a considerable time to come.

From the foregoing figures of Indo-Pakistan trade, it appears that for some time to come Pakistan will have a favourable balance of trade with India. Unfortunately the full implications of this possibility do not seem to have been anticipated by the Government of India when they considered the concessions to Pakistan under the Inter-Dominion Financial Agreement which was concluded soon after the partition. In that Agreement it was assumed that Pakistan would not be able to pay for some time to come her share of amount of public debt of Undivided India. She was, therefore, granted a moratorium for four years. Had it been realised that the Pakistan would enjoy a favourable balance of trade with India, the granting of a moratorium would not have been considered necessary. Pakistan could have utilised her export surplus in paying off interest on her debt as well as capital in a few years. As is well known, the repayment has been spread over a period of fifty years with easy instalments. This mistake has cost the Government of India considerable amount of sterling balances, in terms of which adjustments have to be made in order to finance trade deficits in excess of stipulated amounts according to the Payments Agreement.

INTER-DOMINION PAYMENTS AGREEMENTS

First Inter-dominion Payments Agreement: India and Pakistan signed an Inter-Dominion Agreement on June 30, 1948. According to the terms of the agreement, which was to be in force for a period of one year from that date, it was agreed that there would be no exchange control as between the two countries and no restrictions on the transfer of funds on current and capital account, gold, however, being, excluded from its scope. It provided that the rate of exchange between the Indian and the Pakistan rupees would be at par. For the settlement of payments it was decided that the Central Bank of each country would sell to the other its own currency to the extent of Rs. 15 crores against the currency of the other. In effect this meant that until the difference between the export receipts and the import payments exceeded Rs. 15 crores, the deficit country would not have to remit the payments in terms of gold or any other accepted mode of payment, such as sterling or dollars. If the difference exceeded Rs. 15 crores it was agreed that up to a maximum of £7.5 million, payments would be made in terms of sterling which would be credited at the Bank of England in favour of the surplus country in Account No. I.[1] If the adverse balance of payments exceeded both these amounts, *viz.*

1. **Known as Current Account.**

Rs. 15 crores to be held in each other's currency plus £7.5 million to be paid in current sterling, the excess was to be paid in the form of sterling in account No. II.[1]

Indo-Pakistan Balance of Payments: The Reserve Bank of India has published figures relating to India's balance of payments with Pakistan during the period July 1948 to June 1949. Appendices I and II give the known transactions between India and Pakistan both on current and capital account. From a reference to Appendix I, it appears that during the period July 1948 and June 1949 Pakistan had a favourable balance of trade with India to the extent of more than Rs. 34 crores. As per the terms of the Indo-Pakistan Payments Agreement, Rs. 15 crores out of this deficit had to be accepted by Pakistan in the form of rupees. Of the remaining amount of Rs. 19 crores, the State Bank of Pakistan received Rs. 2.3 crores in free sterling and Rs. 9.65 crores in the form of sterling in Account No. II. The balance of nearly Rs. 8 crores appears to have been settled through a net influx of 'India' rupee notes into Pakistan. It should be remembered that there was no exchange control between the two countries throughout the whole period, and up to March 1949, there were no restrictions on the transfer of notes from one country to another. It was only in March 1949 that the freedom to transfer India rupee notes to Pakistan ceased to exist and only a maximum of Rs. 50 per head was allowed to every *bona fide* traveller. The India rupee notes must have been returned by the State Bank of Pakistan to the Reserve Bank of India. In return, their share in the assets of the Reserve Bank must have been correspondingly increased. A part of this share must have been in the form of sterling. A reference to the figures, however, shows that in return for a favourable balance of trade of more than Rs. 34 crores the Government of Pakistan received only Rs. 2 to 3 crores as free sterling. Obviously, the Government of Pakistan was not satisfied with the results of the first Inter-Dominion Payments Agreement. They did not want that in return for a favourable trade balance on current account, they should be credited in blocked sterling, or in Indian rupees. For all practical purposes, therefore, India became a soft currency area for Pakistan. The actual working of the first Inter-Dominion Payments Agreement thus gives one important reason why Pakistan must have thought of diverting her trade away from India.

This agreement ended in June 1949. Thereafter a revised agreement was reached between the two countries. In this agreement, the Government of Pakistan demanded a larger amount of payment in the form of current sterling. Accordingly it was arranged that when the deficit in balance of payments exceeded Rs. 15 crores, the transferable amount of current sterling should cover the remaining deficit upto a maximum of Rs. 20 crores.

Trade Agreements: Apart from these payments agreements, India and Pakistan have also entered into trade agreements for the exchange of essential commodities required by one country from the other. The first Inter-Dominion Trade agreement on the exchange of essential commodities was reached in May 1948 and was effective for a period of one year, June 1948 to June 1949. It laid down specified quantities of commodities which each country agreed to supply to the other within the prescribed period. When the first Payments Agreement was terminated in June 1949, a revised trade agreement was also concluded. As a result of the experience gained, and in view of the fact that the terms of the revised Payments Agreement were modified, the quantities agreed by Pakistan to be supplied to India were reduced in volume. Appendix III gives the

1. **Known as Blocked Account.**

mutual requirements of India and Pakistan as indicated in the trade agreement. Both these trade agreements in practice failed to direct the course of trade as desied, as they did not specify the maximum and minimum prices to be paid for various commodities. During the period of the first Inter-Dominion Payments Agreement cloth produced in India became dearer in Pakistan as compared to cloth from other countries. Similar was the case with Indian sugar. In India the raw cotton prices of Pakistan varieties were considered high and less raw cotton was imported. Apart from the problem of prices, the two countries did not come to any agreement with reference to tariff rates. The Government of Pakistan levied export duties on raw jute, raw cotton, hides and skins and import duties on Indian cotton piecegoods. The Government of India levied export duties on oilseeds, cloth and cotton yarn, while it refused to remit excise duties leviable on goods exported to Pakistan up to May 1949. These duties adversely affected the free flow of trade and reduced its quantum. Appendix IV shows the changes in import, export and other duties levied by Pakistan and India on the commodities traded between them.

DEVALUATION AND AFTER

In September 1949, the United Kingdom and many other countries of the sterling area devalued their currencies in terms of the dollar. India followed suit. The Government of Pakistan however, preferred to maintain its old parity and did not devalue, and fixed the rate of exchange in terms of the devalued Indian rupee at 100 Pakistan rupees per 144 Indian rupees. According to the Finance Minister of Pakistan the non-devaluation of the Pakistan rupee was decided upon on purely economic considerations. These were (i) to increase exports, (ii) to reduce the internal price levels and (iii) to get cheaper imports.[1] The main exports of Pakistan are raw materials like raw jute, hides and skins and raw cotton, the supplies of which cannot be increased in the short period. Devaluation would be of a doubtful advantage in the case of such export articles, and might on the contrary reduce the total earnings of foreign exchange to the extent that prices did not rise. Pakistan was in need of machinery and other capital goods for her plans for development. By devaluation imports would become costlier and there would be a danger of overcapitalisation. On the other hand, by non-devaluation, cheap imports could be arranged and with larger imports of consumer goods not produced in Pakistan, price levels could be brought down. With the hope of deriving these advantages through non-devaluation, the Government of Pakistan had assumed that the Government of India would acquiesce in their policy. Experience has belied their hopes. The Government of India and the commercial and industrial community interested in the Indian cotton textile and jute manufacturing industries felt that Pakistan was trying to derive economic advantages at the cost of Indian interests. By non-devaluation the prices of Pakistan commodities went up by more than 40 per cent. in terms of Indian currency. If such high prices were paid by Indian industries all the prospective advantages of devaluation by India would be neutralised. The Government of India in consultation with trade and industry refused to oblige Pakistan in their move and a trade deadlock ensued from September 1949.

1. The Karachi Correspondent of the "Economist" has described Pakistan's decision as a result of "a sense of injured pride" in as much as she was not consulted either by the United Kingdom or India at the time of the decision for devaluation. The correspondent has also described the decision as an attempt on the part of the Government of Pakistan to show its superiority over India in the international financial world. Besides these objectives, it is also believed that Pakistan did not devalue in September 1949, because it had some heavy dollar payments to make in lieu of her imports of military stores on Government account from Canada and the U.S.A.

This continued for eight months upto the end of April 1950, when an Interim Agreement covering a few commodities was arrived at, more or less on a barter basis.

CHANGING PATTERN OF TRADE BETWEEN INDIA AND PAKISTAN

It has already been indicated that Indo-Pakistan trade replaces to a great extent what was at one time free internal trade between regions that now constitute Pakistan on the one hand and those that comprise India on the other. Nationalism, sentiments of Pan-Islamism, political differences and the devaluation controversy have resulted in a restriction of the quantum of trade between the two countries from time to time. It is estimated that in the pre-partition year 1946-47, mills located in India consumed more than 9 lakh bales of various types of raw cotton of Pakistan varieties; in 1947-48 exports from Pakistan fell to 6 lakh bales, in 1948-49 to 3.7 lakh bales and in 1949-50 to a little less than 2 lakh bales. Though to some extent the fall in exports was due to reduced cotton production in Pakistan, there is evidence that cotton is being sold to other countries. In 1948-49 the exports of raw cotton from Pakistan amounted to 9 lakh bales and it appears that Soviet Russia, the United Kingdom, Italy and Spain have become important competitors of India in the Pakistan cotton market. Similarly, in the case of raw jute, exports from East Bengal to India amounted to 50 lakh bales in 1947-48; in 1948-49 they amounted to 41 lakh bales and in 1949-50 only 17 lakh bales. On the other hand, the exports of raw jute from Chittagong have been increasing. In 1947-48 they amounted to 7 lakh bales; in 1948-49 they increased to 10 lakh bales and in 1949-50 they are estimated at more than 15 lakh bales. The total exports of raw jute to countries other than India by Pakistan, including exports *via* Calcutta in bond, were more than 17 lakh bales in 1948-49. Exports of raw jute through the port of Chittagong have been given the first priority by the Government of Pakistan, exports in transit through the port of Calcutta the second priority, while exports to mills in India are assigned the last priority. Belgium, Italy, Germany, the United Kingdom and the United States are gradually emerging as important consumers of Pakistan's raw jute. Exports from India to Pakistan are also falling. Whereas before the partition, Pakistan areas used to consume more than 500 million yards of Indian cloth and even in the first Inter-Dominion Agreement, Pakistan asked India to supply 450 million yards of cloth, the actual exports during 1948-49 amounted to 174 million yards. Pakistan has been buying more and more cloth from the United Kingdom, Japan, Italy, the Netherlands, China and the U.S.A.

To some extent the fall in exports from India to Pakistan may be due to the high prices of Indian manufactured goods, particularly after the period of temporary decontrol in India, August 1947 to September 1948. Similarly, some fall in the exports of Pakistan is also due to the reduced production of both raw jute and raw cotton in that country. It cannot however be denied that the two countries are drifting away from each other in their trade relations. The drift cannot be explained merely with reference to political hatred. Perhaps the unfavourable working of the Inter-Dominion Payments Agreement from the point of view of Pakistan may be an important reason. There are a few commodities, however, for which both Pakistan and India will have to depend on each other. Until such time as India grows her own raw jute to the required extent and of the requisite quality the Indian jute mills will depend on Pakistan supplies. Until such time as Pakistan has her own baling presses for the entire crop or has her own jute mills to consume her own jute or in the alternative until such

time as the port of Chittagong is able to export the entire production, the Pakistan farmers will be dependent on Indian demand for their raw jute. In the short period, therefore, so far as the trade in raw jute is concerned, the interests of both the countries are complementary, not competitive. To some extent the same may be said about cotton and cloth. Indian cloth today is one of the cheapest in the world and instead of buying such cloth from third countries, it would be better if Pakistan sells cotton and buys cloth. East Bengal also depends on India for her mustard oil and the whole of Pakistan railway system on Indian coal. From August 1952 onwards the Government of Pakistan will have to pay its share of the public debt of Undivided India to the Government of India. Such a payment can only be made by means of an export surplus. Pakistan will in her own interest have to maintain a favourable balance of trade with India to the tune of at least Rs. 15 crores per annum.

HAS NON-DEVALUATION HELPED PAKISTAN?

Would Pakistan be able to maintain its rate of exchange? Already rumours are afloat that in the blackmarket the Pakistan rupee is selling much below the official rate of exchange. It is reported that about 3 to 5 lakh bales of raw jute were smuggled into India during the period of the deadlock without paying the export duty; the payments were settled at depreciated rates of exchange. The success or failure of Pakistan's decision is bound to be affected by this lack of confidence in the official rate. Sir Stafford Cripps in his speech in the House of Commons on the eve of devaluation of the pound sterling mentioned the non-official undervaluation of sterling in terms of dollars as one of the main causes for official devaluation. If the confidence in the official rate of exchange fixed by the Government of Pakistan is shaken, similar tendencies will be in operation regarding the Pakistan rupee also. The payments for exports, or the exports themselves, may be held over in the expectation of devaluation at a later date. This will adversely affect the export trade of Pakistan with the countries.

Should Pakistan have devalued? And in doing so, has it succeeded in attaining the objectives aimed at? It would be instructive to examine the foreign exchange position of Pakistan on the eve of devaluation and after, and compare it with that of India during the same period and to attempt an answer to this highly controversial question. The Government of Pakistan were credited with sterling assets worth Rs. 187 crores as their share in the assets of the Reserve Bank of India. Between July 1948 and June 1949 Pakistan received about Rs. 11 crores in sterling as a result of her favourable trade balance with India, as per terms of the Inter-Dominion Agreement. From August 1947 to September 1949, while Pakistan had a favourable trade balance with India, she had an unfavourable trade and balance of payments position with reference to other countries. According to the statistics of trade published by the Pakistan Government, during the twelve months ending June 1949, Pakistan had a deficit with soft-currency areas to the tune of Rs. 33 crores and a surplus with dollar areas to the extent of Rs. 5 crores. But these are figures of trade on private account. If imports on Government account to the extent of Rs. 50 crores, and the receipts from exports in transit through Calcutta to the tune of Rs. 16 crores were included, the total trade deficit of Pakistan with countries other than India would be of the order of Rs. 63 crores. So far as the dollar areas are concerned, it appears that taking trade on private and Government account together, Pakistan had a deficit of nearly $50 million during the period July 1948 to June 1949. Some indication of Pakistan's deficit in balance of payments with other countries may be had by a reference to the figures of sterling securities in the

Issue and Banking Departments of the State Bank of Pakistan as shown in their weekly statements summarised below:—

TABLE 5. Sterling Assets of the State Bank of Pakistan
(Rupees in crores)

Period	Issue Dept.	Banking Dept.	With Reserve Bank of India	Total
Transfers from the Reserve Bank of India between August 1947 and June 1949	100	87	8	190
2nd September 1949	79	70	3	152
28th April 1950	67	32	3	102
8th September 1950	62	32	3	97

From the aggregate foreign exchange holding of Rs. 190 crores including the transfers by India to meet her deficits in balance of trade, the Government of Pakistan spent Rs. 50 crores during the period August 1947 to September 1949. The depletion from September 1949 to February 1950 was at a much faster rate. From the table it is clear that this is equal to the aggregate reduction in the previous two years. If the use of sterling balances by India and Pakistan since the partition were separately considered, it would appear that each country has spent nearly half the amount of the sterling balances from August 1947 to March 1950. The sterling balances of the Reserve Bank of India fell from Rs. 1733 crores to Rs. 854 crores, while those of the State Bank of Pakistan fell from Rs. 200 crores to Rs. 104 crores. Whereas the depletion of the sterling balances of the Reserve Bank of India is due to several causes, such as the transfer to the State Bank of Pakistan, the transfer to the United Kingdom as capital payment in lieu of stores and pensions and to meet balance of payments deficits, the depletion in the sterling balances of the State Bank of Pakistan is due to trade deficit and the lower value of sterling in terms of the Pakistan rupee because of non-devaluation.

Whereas in 1948-49 the trade balance on private account had shown a surplus, in 1949-50 because of non-devaluation, even the trade on private account showed a deficit of about Rs. 20 crores. As a result, during the period July 1949 to June 1950, Pakistan overdrew sterling to the extent of £14 million. In the recent sterling balances agreement with the United Kingdom, the Government of Pakistan have been given a fresh release of £15 million during the period July 1950 to June 1951. It was further agreed that an additional release of £2.5 million would be allowed to Pakistan should it not be able to adjust her trade relations with India by September 1950. Even in the assets of the State Bank of Pakistan, the Government of Pakistan has been forced to substitute rupee securities in place of the reduced value of sterling securities. Though this reduction of sterling balances by the lowering of the value of sterling in terms of the Pakistan rupee may not be felt acutely at present, there is no doubt that Pakistan is eating into her sterling assets at a rate much faster than India.

The second objective of the Government of Pakistan was to get cheaper imports. In this they have succeeded. But the imports have not been paid for by exports, but by the depletion of sterling balances. Further, the larger part of the import on Government Account does not relate to imports of capital goods but to military stores and consumer goods. Larger imports have not therefore helped industrialisation in Pakistan.

The third objective of the Government of Pakistan in its non-devaluation policy was to bring down price levels. The Finance Minister has compared the price levels in November 1949 with those prevailing in December 1949. This does not tell the whole story. To measure the reduction in price levels, we should compare the price levels prior to devaluation and after. The following table shows the general index of price levels between November 1948 and December 1949:—

TABLE 6. General Index of Price Levels in Pakistan

(*Base year 1939=100*)

November 1948	...	374
June 1949 ...	...	324
December 1949	...	314

From the above statement it is clear that the fall in price levels was not entirely due to non-devaluation. The process had already started in November 1948, and by June 1949 price levels had fallen by 32 points. However, the price levels in East Bengal showed a sudden spurt in February. Even though the price of rice per maund in Dacca had fallen from s. 26 in August 1949 to Rs. 18 in December 1949, on 4th February 1950, the price had increased to Rs. 21-14-0. Similarly the price of gram per maund increased from Rs. 16 in December 1949 to Rs. 17-8-0 at the end of January 1950. The price of mustard oil has been increasing since September 1949 largely because of the export duty of 8 annas per pound, levied by the Government of India as also the reduced level of exports from India.

Can Pakistan maintain her existing rate of exchange? The answer to this question depends on the fortunes of her raw jute trade. During the jute season 1949-50 out of a total crop of 33 lakh bales Pakistan sent 17 lakh bales to India and nearly 15 lakh bales to outside countries. It is reported, however, that the jute crop in the season 1950-51 is likely to be larger than what was expected. If this happens, unless trade relations with India improve, stocks will be piled up. West Pakistan has unsold stocks of 5 lakh tons of wheat. With the improvement in the production of raw cotton, the problem of finding a market outside India for the entire crop will also have to be faced. As in the case of the Interim Agreement,[1] if Pakistan makes some further barter agreement with India, it may be able to maintain the rate of exchange. But then such barter agreement will mean that for all practical purposes the rate of exchange between India and Pakistan will be at par. In the meanwhile, India's jute industry would face uncertainty without satisfactory agreement with Pakistan. Already as a result of reduced production and increased exports the stocks of hessian are on the decline as is shown in the following table:—

TABLE 7. Production, Exports and Stocks of Gunnies in India

(*thousand tons*)

Period	Production		Exports		Stocks	
	Hessian	Sacking	Hessian	Sacking	Hessian	Sacking
1947-48 ...	481	519	476	468	53	63
1948-49 ...	433	576	441	478	54	50
1949-50 ...	286	505	279[2]	387	21	47

1. S e page 441.
2. Figures of export relate to period between July 1949 and May 1950.

The table shows the gradual depletion of hessian stocks and the reduction in the production of mills in India. As a result of the war situation in Korea there is likely to be an increased demand for jute goods. With the co-operation of Pakistan, an increase in the exports of jute manufactures, particularly hessian, would be of immense benefit not merely to the jute industry in India but also to the farmers in Pakistan. It may be hoped that when the Interim Trade Agreement which ends in September 1950 is revised, foresight will be used in either country to attain the economic advantage to either country of increased exports of jute manufactures and a satisfactory price settlement for East Bengal raw jute will be made.

INTERIM INDO-PAKISTAN TRADE AGREEMENT

The Indo-Pakistan Trade deadlock lasted for eight months from September 1949 to April 1950. On 21st April 1950 the Governments of India and Pakistan reached an agreement which was to remain operative upto the end of July 1950; as the quantities of goods agreed to be exchanged could not be delivered in time, the period was extended upto September 1950.

The agreement has been based on a 'balanced exchange of commodities expressed in monetary terms'. India has been promised 40 lakhs maunds of jute—19 lakh maunds of cuttings at Rs. 28 per maund, 1 lakh maunds of *hubbi-jubbi* and ropes at Rs. 30 per maund and 20 lakh maunds of rejections at Rs. 34 per maund. These prices are for delivery c.i.f. Calcutta and in terms of Indian currency; the amount will be credited to the account of the Pakistan Jute Board at the Reserve Bank of India. It is estimated that by the end of July 1950 half the quantity was sent by Pakistan. Looking to the prices agreed upon, it appears that for all practical purposes India and Pakistan rupees are at par as regards the jute prices. In return for raw jute, India was to give jute manufactures (20,000 tons), cotton textiles (45,000 bales), cotton yarn (5,000 bales, mustard oil (7,000 tons) tobacco (500,000 lbs.), steel sheets (5,000 tons), cement for East Bengal (50,000 tons), soap, matches, etc. Pakistan will allow free exports of vegetables, fruits, fish, milk and milk products. During the period of the Interim Agreement, Pakistan will not export raw cotton and India will not send out coal.

It is clear that the above agreement is only a stepping stone to further long-term and more comprehensive agreements. It indicates the growing realisation, though late, in both the countries of the interdependence of their economies.

II. FOREIGN TRADE WITH OTHER COUNTRIES

FOREIGN TRADE OF INDIA—ITS COMPOSITION

So far as India is concerned, the partition has accelerated the pace of those long-term changes in the structure of foreign trade which were visible for the first time during the war. Table 9 shows the composition of trade of India with foreign countries in 1938-39, 1948-49 and 1949-50:—

TABLE 8. Composition of Trade of India with other Countries

(Percentages)

		Exports			Imports		
		1938-39	1948-49	1949-50	1938-39	1948-49	1949-50
TOTAL	...	100.0	100.0	100.0	100.0	100.0	100.0
I. Food, Drink & Tobacco	...	24.0	21.0	24.5	15.8	24.3	20.7
II. Raw Materials ...	...	45.0	23.5	22.0	21.8	30.7	29.7
III. Manufactured Articles	...	29.3	55.1	53.0	60.9	44.3	48.8
Rest	...	1.7	0.4	0.5	1.5	0.7	0.8

We notice a considerable change in the pattern of trade during the last decade. In pre-war years Undivided India had normally a favourable balance on trade account. But now this annual surplus representing about 100 per cent of the total pre-war imports has been replaced by an adverse balance to the extent of about a third of the total value of imports or a little less than half of India's total exports in 1948-49. Formerly she used to utilise the surplus on trade account to finance sterling payments, which were known as 'home charges'. During wartime the sterling debt was repatriated and India became a creditor country with a sizeable amount of sterling balances in her favour. In post-war years parts of these sterling balances are being released from time to time and have enabled us to have more imports and to finance trade deficits. But the difficulties of food shortage which were increased as a result of the partition, have widened the trade deficit to a considerable extent, and it now appears as if for some time to come India may be faced with problems of continuous trade deficits.

Looking to the structure of imports we find that the imports of raw materials which accounted for less than 22 per cent. of the total imports in the pre-war years have increased to 30 per cent. in post-partition India. This change is largely due to the conversion of a part of the internal trade into international trade whereby raw jute and raw cotton, which were at one time India's profitable export commodities have now become large items of import. As a result of the reduction in the production of short-staple cotton the exports of raw cotton are on the decline. Further, the imports of food, drink and tobacco have increased. This is largely due to the food shortage in the country. Undivided India used to import on an average about a million tons of foodstuffs valued at Rs. 13 crores; after the partition in the year 1948-49 over 3 million tons of foodgrains had to be imported at a total cost of Rs. 130 crores. Even in the year 1949-50 the imports of foodstuffs have cost Rs. 108 crores. The need for food imports is the most important single cause which has tilted the trade balance against India. In 1948-49, food imports accounted for 60 per cent. of the total deficit of nearly Rs. 215 crores in the balance of trade. In the year 1949-50 but for food imports India would have enjoyed a trade surplus.

The proportion of imports of manufactured articles has gone down from over 60 per cent. to less than 49 per cent. This has been brought about by a reduction in the imports of non-essential consumers goods. The imports of machinery and capital goods have been increasing from year to year in the post-war period. Table 9 (p. 443) shows the imports of machinery into India in the last four years.

The value of imports and machinery and of capital goods has increased from Rs. 38 crores to more than Rs. 103 crores. This is a change in the right direction. During the war years because of the stringent restrictions on imports and overtime working, the existing machinery of various industries in the country has suffered tremendous wear and tear and the increased imports of machinery will help to increase efficiency as well as to expand output. Whereas the imports of capital goods like machinery and spare parts as well as of various metals accounted for only 22 per cent. of the total value of imports in 1938-39 and less than 17 per cent. in 1946-47, in 1949-50 the share was above 25 per cent. The imports of consumer goods decreased from 37 per cent. of the total value of imports in 1938-39 to less than 29 per cent. in 1949-50; at the same time the imports of luxury items were reduced from about 11 per cent. in 1938-39 to only

TABLE 9. Imports of Machinery into India
(in lakhs of rupees)

	1946-47	1947-48	1948-49	1949-50
TOTAL MACHINERY AND MILLWORK ...	38,65	59,37	76,66	105,07
Prime Movers	2,55	5,46	8,77	17,29
Electrical Machinery	5,17	7,78	12,78	14,73
Agricultural Machinery	1,47	1,39	2,55	6,35
Boilers	1,96	3,23	3,66	6,24
Metal Working	1,83	3,68	4,04	4,20
Mining Machinery	67	58	1,04	1,33
Paper Mills	80	50	98	1,16
Oil Crushing and Refining Machinery ...	50	71	54	42
Pumping Machinery	77	1,40	1,77	1,52
Rice and flour mill machinery	21	26	31	38
Saw mill and wood working machinery ...	19	28	42	49
Refrigerating machinery	50	1,50	1,32	1,39
Sewing and Knitting machinery	1,20	1,33	1,95	1,72
Cotton Textile Machinery	3,90	5,50	9,14	14,12
Textile machinery other than cotton machinery	1,98	3,98	5,92	5,74
Govt. stores machinery and millwork ...	7,58	4,69	...	...

3 per cent. in 1949-50. It must, however, be mentioned that the decrease in the imports of consumer goods because of foreign exchange difficulties has tended to aggravate the inflationary situation in the post-war India. Because of the partition India has had to increase its imports of raw materials (raw cotton, raw jute, etc) the share of which in the total value of imports has moved up from 20 per cent. to nearly 35 per cent. in 1948-49. The increasing food deficit and the import of raw materials as well as the growing demand for imports of capital items leaves less foreign exchange for the import of essential consumer goods in short supply.

Changes in the Quantum of Export Trade: The partition has adversely affected the export capacity of India by reducing the available raw material supplies. The effects of partition were particularly noticeable in the year 1948-49. In the year 1949-50, however, because of the devaluation of the rupee, the exports have risen. Apart from the partition, as a result of decontrol of essential commodities from August 1947 to July 1948 and reduced production due to transport bottlenecks, the prices of Indian exports went out of parity with world prices and the quantum of export trade was reduced in consequence. Table 10 (p. 444) indicates the reduction in the quantum of India's export trade in 1948-49 and the recovery in 1949-50. It can be seen from the table that both raw cotton and raw jute are becoming less important as export commodities because of internal demand. The exports of jute manufactures have gone down in the years 1948-49 and 1949-50 because of reduced supplies of requisite raw materials. Pakistan areas were important consumers of Indian cloth; as a matter of fact, even in the controlled distribution of cloth during the war period the *per capita* allocation to Sind, Punjab and N.W.F.P., was higher than the average allocation to Indian Provinces. Pakistan is, however, consuming less and less of Indian cloth, and Indian exports are being diverted to foreign countries. In 1948-49 there were difficulties in this readjustment because of the higher prices of Indian cotton piecegoods. Since devaluation, however, Indian cloth prices became relatively cheaper, and their exports have been pushed up. Table 10 also shows a reduction in the quantum of exports of both oils and oilseeds. This is largely due to increased internal demand by the *Vanaspati* Industry which came into increasing prominence during the war. The exports of raw materials like mica have kept up their levels because they were not affected

TABLE 10. Reduction in the Quantum of India's Export Trade

(Based on exports from 1934-35 to-date)

	Unit	Quantum of exports	Best Year of export	Exports in 1948-49	Exports in 1949-50
FOOD, DRINK & TOBACCO					
Tea	million lbs.	405.7	1944-45	405.9	439.6
Tobacco	„	75.3	1946-47	55.8	75.6
Spices	'000 cwts.	657.8	1947-48	458.0	674.0
RAW MATERIALS					
Coal	'000 tons	2008.9	1939-40	1137.0	1157.0
Mica	'000 cwts.	293.9	1937-38	340.0	285.0
Lac	'000 cwts.	833.9	1936-37	491.0	455.0
Raw Hides & Skins	'000 tons	43.8	1935-36	15.9	17.5
Manganese Ore	„	1001.0	1937-38	308.8	678.9
Raw Cotton	„	762.1	1939-40	76.0	55.5
Raw Jute	„	820.5	1936-37	213.6	138.6
SEEDS					
Groundnut	'000 tons	835.1	1938-39	38.2	125.7
Linseed	„	318.3	1938-39	25.0	71.5
OILS					
Groundnut	'000 gallons	8702.6	1940-41	8950.7	6176.1
Linseed	„	3317.5	1947-48	2280.6	1773.8
Castor	„	5638.2	1947-48	3009.1	1125.9
MANUFACTURED ARTICLES					
Tanned Hides & Skins,	'000 tons	31.9	1939-40	14.6	21.1
Iron & Steel manufactures	„	96.3	1939-40	12.3	11.3
Jute manufactures	„	1083.3	1939-40	928.7	786.6
Cotton piecegoods	million yds.	819.1	1942-43	340.9	690.6

by the partition. The exports of hides and skins, however, have gone down because of the partition. In tea and spices Indian exports came into their own in 1949-50. There is no doubt that devaluation has helped to increase the quantum of exports. One of the important hurdles in the way of increased exports of Indian goods in foreign markets, particularly in dollar areas, is the lack of standardisation of many of India's export goods. Time and again complaints have been received regarding the deterioration of quality of Indian goods. The Commerce Minister in his Annual Review of Indian trade for the year 1948-49 admitted that there has been great degeneration in business morality in India. The Export Promotion Committee have also complained against certain business practices in India. Referring to oilseeds, the Committee recommended rigorous price control and a check on speculation. They observed that "the rise in the prices of groundnut as well as other oilseeds has not been due to an increase in the cost of cultivation. Speculation has had a great deal to do with the high level of prices. We have been told that speculation in foodgrains being no longer possible, all the money which previously used to be spread over a number of commodities is now being invested in oilseeds."[1] As for hides and skins, the Committee have taken objection to the sentimental attitude of the Constitutent Assembly against the slaughter of cattle and the manner in which the Provinces and States in the country have banned the slaughter of cattle. The Committee complains, "In the absence of slaughter the best type of hide which helps to make chrome leather and fetches a good price in the export market is no longer available.....In all the circumstances the indiscriminate

1. Report of The Export Promotion Committee, 1949, p. 43.

stoppage of cattle slaughter is a wasteful policy."[1] In the case of mica, exports are handicapped by the sales taxes of Provincial Governments and shipping costs. Now that as a result of the new Constitution the Government of India has taken over the right of taxing essential commodities from the Provincial Governments, it would be highly desirable if export commodities like mica were not subjected to sales tax. Since the beginning of the Korean War the price levels in India are again rising and unless adequate steps are taken to stop this tendency the advantages of devaluation would be lost.

TERMS OF TRADE

It would be interesting to compare the index of export prices for some important commodities with that of import prices. The following table gives an idea of the price trends:

TABLE 11. Export and Import Price Indices

(*Base* : *1938-39=100*)

Class and Item	1947-48	1948-49	1949-50	Oct.—Dec. 1949-50
EXPORTS				
General index	360.7	394.8	389.1	407.2
I. Food, Drink and Tobacco	233.8	253.9	299.3	325.0
Tea	213.4	234.1	244.6	255.4
Spices	413.6	527.8	1408.2	1993.8
Tobacco	312.4	340.9	361.0	234.6
II. Raw Materials	367.0	414.2	407.9	488.5
Hides and Skins	315.8	353.5	315.3	398.3
Oils	476.6	493.6	495.6	508.4
Metals and Ores	212.1	264.2	296.5	350.3
III. Manufactured Articles	480.4	507.2	451.9	436.3
Cotton yarns and manufactures	352.6	390.2	335.5	322.3
Jute yarns and manufactures	528.4	571.7	599.0	642.9
IMPORTS				
General index	305.2	345.7	329.8	336.7
I. Food, Drink and Tobacco	431.8	465.5	430.7	485.4
Grain, pulses and flour	531.9	574.0	519.3	594.5
II. Raw materials	223.2	294.1	304.8	321.3
Cotton	312.7	449.9	451.5	514.5
III. Manufactured Articles	288.1	312.5	293.8	258.4
Electrical Goods	217.1	242.2	284.5	334.7
Machinery	193.7	177.5	156.7	153.7
Iron and Steel	284.1	307.6	266.0	238.2
Paper	376.0	340.3	353.2	385.6
Chemicals and Drugs	248.1	313.8	210.2	247.1
Vehicles	253.4	262.9	293.1	347.6

While the general index of export prices has moved up by 47 points, the import prices have moved up only by 31 points, thus showing that the terms of trade have become favourable to India. Among the exports, the largest increase is in the case of spices, the prices of which have moved up by more than five times since 1947-48. As a result of the lower level of export prices of cotton piecegoods

1. *Ibid*, pp. 6-7.

in 1949-50 as compared to 1948-49, their exports have moved up. Among the imported goods, the prices of food articles are nearly six times those in 1938-39, and the Central and Provincial Governments have to subsidise the sale of imported food so that the rationed population can have their food at concessional rates. It is encouraging to note that the prices of machinery have decreased since 1947-48.

QUANTUM OF TRADE COMPARED WITH PRE-WAR POSITION

Having compared the indices of export and import prices, it will be useful to note the quantum of exports and imports in relation to pre-war foreign trade, as given below:—

TABLE 12. Index of the Quantum of Exports and Imports of India

(*Base : 1938-39=100*)

	1938-39	1947-48	1948-49	1949-50	Oct.-Dec. 1949-50
EXPORTS	100.0	69.9	67.1	76.2	86.0
I. Food, Drink and Tobacco ...	100.0	92.3	95.7	105.4	89.9
II. Raw Materials	100.0	46.9	30.6	32.6	39.1
III. Manufactured articles	100.0	90.4	106.4	127.8	168.4
IMPORTS	100.0	111.1	124.5	121.3	82.9
I. Food, Drink and Tobacco ...	100.0	135.1	145.9	130.2	87.1
II. Raw Materials	100 0	128.8	142.8	165.1	124.6
III. Manufactured Articles ...	100.0	91.0	105.0	93.5	57.9

It appears that both during 1947-48 and 1948-49 the foreign trade of India faced structural disequilibrium. While the physical volume of exports was reduced by 33 per cent., that of imports increased by 25 per cent. In the year 1949-50, while the physical volume of exports improved by 9 per cent., that of imports was reduced by 3 per cent. But largely owing to the fact that the terms of trade were favourable and export prices were more remunerative the deficit in the balance of trade was less. During the fourth quarter of 1949-50 exports improved by 19 per cent, over the corresponding period in 1948-49 and imports went down by 40 per cent. In the last two quarters of 1949-50, therefore, India enjoyed a favourable balance of trade, partly because the exports increased but largely because of the reduction in import, particularly from dollar areas. by 25 per cent. Among the various classes of exports, the index of manufactured articles shows the greatest increase, while the other two groups have actually declined compared to levels in 1938-39, partly due to the partition and partly to the increased internal demand. In the raw materials group there is a reduction of more than 60 per cent., largely attributable to the partition. Among the imports, it is the raw materials which show the largest increase for the same reason. The reduction in imports of manufactured articles is due to the restrictions on the imports of consumer goods and luxuries. The imports of food have increased by 30 per cent.

India's total foreign trade both in 1948-49 and 1949-50 reached a record level of more than Rs. 1,000 crores. In 1949-50 the value of imports decreased by more than the increase in the value of exports and the total value of foreign trade showed a slight decline. One of the significant features in India's foreign

trade has been that she has found markets in the Middle East and in South East Asia for her goods, particularly cloth, and it would be in her interest to expand her foreign trade with Asian countries, specially with those which can give her foodstuffs and petroleum in return.

DIRECTION OF INDIA'S FOREIGN TRADE

Imports:—We have so far reviewed the changes in the composition of trade. As regards the direction of trade the war and the partition have brought about a change in the share of various countries in the foreign trade of India. Table 13 shows the changes in the sources of imports into India.

TABLE 13. Sources of Imports into India

(In lakhs of rupees)

(Figures in brackets give percentage shares)

	1937-38/1938-39 Average		1948-49		1949-50	
TOTAL	163,06	(100.0)	665,59	(100.0)	599,00	(100.0)
United Kingdom ...	49,22	(30.2)	152,13	(22.9)	149,32	(24.9)
U.S.A.	11,33	(7.9)	113,94	(17.1)	87,92	(14.7)
Pakistan	...	(...)	105,17	(15.8)	43,00	(7.2)
Egypt	2,58	(1.6)	36,22	(5.4)	39,45	(6.6)
Burma	25,15	(15.4)	35,00	(5.3)	12,86	(2.1)
Australia	2,03	(1.3)	33,98	(5.1)	33,97	(5.7)
Iran	3,11	(1.9)	20,09	(3.0)	32,97	(5.4)
Italy	2,58	(1.6)	18,24	(2.7)	13,95	(2.3)
Argentine	2	(...)	15,85	(2.4)	8,78	(1.5)
Kenya	4,80	(2.9)	19,80	(1.6)	15,04	(2.5)
Canada	95	(0.6)	19,12	(1.5)	12,05	(2.0)
Switzerland	1,65	(1.6)	8,66	(1.3)	7,54	(1.2)
Others	59,64	(33.6)	125,39	(15.9)	142,16	(23.9)

In the pre-war days U.K. and Burma were the principal sources of imports, the United Kingdom for machinery and consumer goods and Burma for rice. During the war years there has taken place a significant change. Because of continued disturbances Burma is not able to sell rice to India. The U.S.A. has come into prominence as a supplier of machinery and the share of the United Kingdom has gone down. In the year 1949-50 however, the United Kingdom has again become an important supplier of imports because of India's dollar difficulties and her decision to reduce imports from the U.S.A. In 1948-49, next to the United Kingdom and the U.S.A., Pakistan was an important source of imports. Pakistan's share in 1949-50 has gone down because of the Indo-Pakistan trade deadlock. The imports from Egypt have increased in 1949-50 because of larger cotton imports from that country for the same reason. Whereas Argentine had a negligible share in India's foreign trade in pre-war days, she has now become an important supplier of foodstuffs.

Exports.—Table 14 (p. 448) shows the destination of exports. Whereas in 1948-49 the balance of trade with U.S.A. indicated a deficit of Rs. 41 crores, in 1949-50 largely due to lesser imports as a matter a policy and a slight increase in exports after devaluation, the adverse balance of trade has been brought down to less than Rs. 9 crores. Pakistan had become the second largest market for India's exports in 1948-49. In 1949-50 because of the trade deadlock her share is less than that of the U.S.A.

TABLE 14. Destination of Exports (Including Re-exports) from India

(In lakhs of rupees)

(Figures in brackets give percentage shares)

	1937-38/1938-39 Average		1948-49		1949-50	
TOTAL	179,21	(100.0)	450,61	(100.0)	499,00	(100.0)
United Kingdom ...	61,35	(34.1)	98,26	(21.7)	113,88	(22.8)
Pakistan	...	(...)	74,01	(16.4)	41,00	(8.3)
U. S. A.	16,51	(9.1)	70,64	(15.7)	79,35	(16.0)
Australia	3,06	(1.7)	20,73	(4.7)	25,98	(5.3)
Argentine	2,79	(1.6)	16,76	(3.8)	7,76	(1.6)
Burma	11,19	(6.3)	10,56	(2.4)	14,20	(2.9)
Canada	2,23	(1.2)	8,39	(1.8)	10,86	(2.2)
Egypt	1,37	(0.8)	6,72	(1.7)	7,92	(1.6)
France	5,76	(3.2)	7,31	(1.5)	5,25	(1.0)
Netherlands	4,17	(2.1)	7,26	(1.5)	7,05	(1.4)
Others	70,78	(39.9)	30,07	(28.7)	175,60	(35.0)

III. PROBLEMS OF FOREIGN EXCHANGE—INDIA

STERLING BALANCES

War-time Accumulation of Sterling Balances:—Before the war, Undivided India had a sterling debt to the tune of Rs. 423 crores in 1938-39. During the war, Undivided India not merely repatriated this debt, but also accumulated sterling balances to the extent of Rs. 1,733 crores by March 1946. These sterling assets were acquired during the war by two different processes. From 1939 to 1946 India had an export surplus amounting to Rs. 426 crores which was met by a sterling credit into her account in the Bank of England. In addition, the Government of Undivided India financed in rupees the defence expenditure of the Allies known as Recoverable War Expenditure to the extent of Rs. 1,730 from 1939-40 to 1045-46. Over and above these sterling balances, India had also a considerable balance of dollars to her credit in the Empire Dollar Pool. From September 1939 to March 1946 Undivided India earned dollars worth Rs. 406 crores and spent an amount worth Rs. 291 crores, leaving a surplus of dollars worth Rs. 115 crores. By the end of the war, Undivided India had thus a sound international financial position.

Since March 1946 however, things took a different turn. In the first place, the pent-up demand for imports which was supressed during war time by rigorous import controls exerted its influence. Secondly, the Government of India and the industrialists were anxious to push through schemes of development. Large-scale orders for capital equipment both on private and Government account were being placed. Thirdly, for the first time, internal food deficits and large-scale imports of food from abroad also began to tell on foreign exchange. The era of favourable trade balances was over, and there followed a series of years of continuous trade deficits financed by releases of sterling by the United Kingdom. The foreign exchange difficulties of the U.K. prevented India from utilising her sterling balance according to her wishes. During the war the United Kingdom was financing its deficits in balance of payments through lend-lease arrangements and accumulation of sterling balances, as also by the cashing of her foreign investments. After the war, the United States gave a loan of $3.750 million to the United Kingdom in July 1946. By the end of September 1947 the U.K. used up the loan and still faced an acute dollar shortage. Because of these and other factors the United Kingdom entered into a series of agreements from

time to time to regulate the use of sterling balances held by countries like India and Egypt.

Indo-U.K. Agreements on Sterling Balances:—The first interim agreement on sterling balances was concluded between the Government of the United Kingdom on the one hand and India and Pakistan on the other, This was operative from July 1947 to December 1947. By this agreement two accounts were opened. In one account, known as the Current Account, India and Pakistan were credited with a working balance of £35 million and a release of £30 million for expenditure during the period. In this agreement there were no limits to the convertibility of released sterling into dollars. This was so because Undivided India still had a dollar surplus of more than Rs. 100 crores in the Empire Dollar Pool. From March 1946 to December 1947 India had deficits in the balance of payments with hard currency areas to the extent of dollars worth more than Rs. 80 crores. By the end of 1947 therefore India had less than Rs. 20 crores worth of dollars to her credit. The Government of the United Kingdom felt that India might become a net drain on the dollar resources of the sterling area.

It is because of the factors explained above, that Britain placed a limitation to the free convertibility of sterling in the second interim agreement for the period January to June 1948. There was a fresh release of £80 million. Of this amount Rs. 13 crores or £10 million could be converted into dollars. While releasing sterling for convertibility into dollars, the United Kingdom appealed to India to conserve her dollar resources. The then Finance Minister of India, Sir R. K. Shanmukham Chetty, went to the utmost limits in accommodating Britain in solving the problem of dollar shortage. Soon after August 1947 when Britain suspended the convertibility of the pound sterling India imposed stringent import restrictions, particularly against dollar areas. The imports of certain goods were completely banned and even in the case of imports of capital goods, licenses were not given if such goods were available in the United Kingdom. In the meanwhile, orders to the United Kingdom were not followed by immediate delivery of goods. The country was thus starved of imports. By June 1948, the Indian Finance Minister, who was in London to initiate a long-term agreement on the release of sterling balances for a period of three years, was faced with the paradox that whatever stering was released on previous occasions was not fully utilised. It was found that by June 1948 India had an unspent balance of £80 million even in her current account No. 1. The existence of such an unspent balance considerably weakened India's case for larger releases. Besides, this policy of severe import restrictions had an adverse effect on internal economy and price levels. It should be remembered that these restrictions were introduced between August 1947 and June 1948, the period immediately following the partition when the transport bottleneck was hampering production considerably, and when the policy of decontrol of essential commodities was being implemented. If at any time liberalisation of the import control policy was necessary, it was in this period. Unfortunately the consequences of decontrol on the one hand, and the anxiety of India's Finance Minister to accommodate the United Kingdom on the other, resulted in stimulating inflationary forces. The index of wholesale prices which stood at 302 in November 1947 rose to 389.6 by July 1949.

1948-49:—It has already been mentioned that the existence of an unspent balance in current account weakened India's case for larger releases of sterling. The new agreement was to operate from June 1948 to June 1951. It was agreed that for the period July 1948 to June 1949, India should

use up the unspent balance of £80 million. Further, for each of the years 1949-50 and 1950-51, a fresh release of £40 million per annum was agreed upon. It was also agreed that £15 million would be available for convertibility into dollars during 1948-49. In this agreement, the United Kingdom asked for capital payments for her stores in India and for payments in lieu of pensions due to her subjects who had served in India either under the Centre or under the Provincial Governments prior to the partition. It was agreed that India should make a capital of payment of £100 million or Rs. 133 crores in settlement of these stores. As for pensions it was agreed that Britain should accept a capital payment of Rs. 197 crores for Central pensions and Rs. 27 crores for Provincial pensions. All these capital payments for stores as well for pensions were deducted from India's balance in account No. 2, known as the Blocked Account.

1949-50:—From August 1948 onwards there followed a re-orientation of the import policy. As a dis-inflationary measure, import controls were liberalised and Open General Licenses No. XI, XII and XIII were issued. This was followed by a considerable increase in imports. By February 1949 it was found that the Government of India had not merely used the unspent balance but was overdrawing on both sterling and dollars. For the year July 1948 to June 1949 it was found that India had overdrawn £81 million from her balances. Further, though only $60 million was to be spent by India during 1948-49 or £15 million out of the release of sterling, India's deficit with hard currency areas amounted to $217 million. Of this amount she could finance $56 million by borrowing from the International Monetary Fund. By the revised agreement in July 1949, the United Kingdom agreed to finance the remaining dollar defit of $161 million. In return for this, India agreed to become a full-fledged member of the Empire Dollar Pool. She agreed that for the period 1949-50 her imports from dollar areas would be reduced to 75 per cent. of the total imports during the calendar year 1948. This was different from the agreement with Pakistan whose dollar imports were limited to 75 per cent. of the total dollar imports during the year July 1948 to June 1949. If the same basis had been adopted in the case of India, India would have got for the year 1949-50 larger foreign exchange in the form of dollars, because during the first half of 1949 her dollar imports were much larger than during the first half of 1948 when import restrictions were in operation. By the third agreement all the export receipts in terms of dollars in favour of India were to be credited to the Empire Dollar Pool and India's withdrawal of dollars from the Pool during the year 1949-50 would be irrespective of her export receipts. It was estimated that the amount of dollars thus made available to India would suffice to finance the deficit in the balance of payments with hard-currency areas to the extent of $140 to 150 million.[1] For each of the years 1949-50 and 1950-51 an amount of £50 million in place of £40 million was to be released by the United Kingdom.

BALANCE OF PAYMENTS

Appendix V shows the position of India's balance of payments for each of the years 1946, 1947 and 1948. Whereas figures for 1946 and 1947 are for Undivided India, those for 1948 are for India only, excluding Pakistan. These figures are, therefore, not strictly comparable from year to year. Further, the figures are for calendar years according to the general practice of the International Monetary Fund, which has standardised statistical statements relating to balance of payments. On the other hand, figures relating to foreign trade are

1. "The effect of this agreement is that India will have the right to draw from Central Reserves to the extent of about $140 to 150 million"—Press Communique issued by the Government of India on the Indo-U.K. Financial Agreement of 1949—August 5, 1949.

available usually for financial years. Besides, the Sterling Balances Agreement with the U.K. usually refers to the period July to June. The figures given above, therefore, cannot give a full idea of balance of payments from year to year and its relation to the various sterling balance agreements, as also the vicissitudes in foreign trade from one financial year to another. So far as India is concerned, separate figures are now available for the period January 1948 to June 1949. The entire period is broken up into three half-yearly sections.

Appendix VI shows India's balance of payments position from January 1948 to June 1949 on current account. It appears that during the year 1946 the net 'dis-investment' necessitated by the deficit on current account was about Rs. 29 crores. In 1947 it amounted to Rs. 100 crores. So far as the subsequent period is concerned, there are two phases, one lasting from August 1947 up to June 1948 and the other from July 1948 to September 1949. From the appendix it is clear that during the first half of 1948 India had a favourable balance on current account with the sterling area to the extent of Rs. 14 crores, with other soft-currency areas to the extent of about Rs. 12 crores and a small deficit with the United States to the extent of about Rs. 8 crores only. In consequence, by June 1948 India could utilise only £3 million out of a total amount of £83 million released from her sterling balances in the period August 1947 to June 1948.[1]

Since June 1948, however, the situation has completely changed. India suffered from growing deficits in her balance of payments not only with hard-currency areas, but also with sterling areas and other soft-currency areas. Whereas the first half of 1948 showed a surplus of about Rs. 17 crores, in the second half of 1948 there was a deficit of over Rs. 85 crores and in the first half of 1949, the deficit increased still further to Rs. 143 crores. Even during July 1949 to September 1949 there was a deficit on current account to the extent of Rs. 25 to 30 crores. In short, the total deficit in the fifteen months from the middle of 1948 up to the devaluation of the rupee in 1949 amounted to over Rs. 250 crores.

There were different reasons for the deterioration in the balance of payments position with various currency areas. Whereas the deterioration in India's balance of payments position with the sterling area and the other soft currency areas was due to the operation of the various Open General Licenses which became effective after September 1949 as an anti-inflationary measure, the deficit with the hard-currency areas was largely due to the decline in the value of exports.[2] Whereas raw jute manufactures earned over Rs. 50 crores from hard-currency areas from January 1948 to June 1949, they brought in less than Rs. 25 crores in the corresponding six months of 1949. In the first half of 1948 India received $40 million by way of convertible sterling from the Central Reserves of the sterling area and another $44 million from the International Monetary Fund against rupees sold to it, which was more than sufficient to meet the deficit during that period. For the period July 1948 to June 1949, the releases from the Central Reserves as agreed upon in the agreement amounted to $60 million and India got from the International Monetary Fund $56 million. By a subsequent revision of the sterling balances agreement in August 1949, an overdraft to the extent of about $80 million for the period was made available by the U.K. from the Central Reserves.

A striking feature of recent trade is the rise into prominence of soft-currency areas described as 'other areas'. Even with these areas, whereas in the first half of 1948 India had a surplus of nearly Rs. 13 crores, in the second half

1. Reserve Bank of India Bulletin, November 1949, page 747.
2. See Appendix VII.

of 1948 there was a deficit of Rs. 25 crores, and in the first half of 1949 there was a much larger deficit of about Rs. 56 crores. There are various reasons for this change. Perhaps the fact that Switzerland and Sweden which were at one time hard-currency areas were treated after June 1948 as 'other areas' may also explain these deficits. At the same time, it has to be remembered that India's trade with Egypt, Siam and Italy, has tended to increase in recent times on the import side. India is taking more and more cotton from Egypt as the supplies from Pakistan are falling off gradually. Rice from Siam and rayon from Italy are other commodities which have increased in volume.

So far as the sterling areas are concerned, deficits in the balance of payments with these areas are being financed from periodical releases of sterling balances. Appendix VIII shows the periodical releases and depletion of the sterling assets of the Reserve Bank of India. It shows a reduction in these assets from Rs. 1,736 crores in March 1946 to Rs. 828 crores in June 1949, that is by Rs. 908 crores. It is clear from the appendix that out of this reduction of Rs. 908 crores, Rs. 190 crores were transferred to Pakistan, while sterling worth Rs. 357 crores was given to U.K. as capital payment. The remaining amount of Rs. 361 crores represents the deficits in the balance of payments from March 1946 to June 1949, that is a period 3½ years. Much the greater part of this deficit must have been incurred between July 1948 and 1949 during which time sterling worth Rs. 212 crores was used up.

DEVALUATION OF THE INDIAN RUPEE

It has already been indicated above that both during the pre-war years and the war period, India had no dollar problem. In pre-war days, the United States was much less important as a trading country than it is today and trade statistics show that on an average India used to have a favourable trade balance to the extent of Rs. 5 crores with the U.S.A. During the war period also India earned dollars which were credited in her favour to the Empire Dollar Pool. After the war, as sterling was not multilaterally convertible, India could not use sterling balances to the full extent of her deficits in balance of payments with the U.S A. India's deficits in balance of payments with the dollar areas particularly the U.S.A. have risen because of larger imports of machinery and foodstuffs. Her exports could not pay for these increased imports and the difficulties have been aggravated by the partition which has lessened her capacity to export jute manufactures. For the period July 1948 to June 1949, while India had agreed to draw only $60 million from the sterling area Dollar Pool, her actual deficit exceeded this amount by $161 million. When India became a full-fledged member of the Dollar Pool she had to agree to cut down her dollar imports by 25 per cent. In September 1949 when the pound sterling was devalued India followed suit. India had to devalue her currency for the following reasons:—

(a) Once the pound sterling was devalued and other sterling area countries followed suit, India with more than 60 per cent. of her foreign trade with the sterling area had no alternaive. When these countries devalued, if India did not do so, prices of Indian exports would have become higher in relation to world prices and India would have been ousted from export markets. For example, Indian piece-goods would have failed in their competition with Lancashire piecegoods, Ceylon tea would have become cheaper than Indian tea, East and South African groundnut and manganese would have ham-

pered India's exports and Dundee jute goods would have competed with ours with advantage.

(b) Next to the United Kingdom, in recent years India makes the biggest demand for dollars upon the Central Reserves of the sterling area. As a member of the sterling area, India was obliged to devalue.

(c) If India had not devalued, the release of sterling balances from time to time would have been reduced in value in terms of real goods. This would have increased the trade deficit with the sterling area.

(d) The deficits in the balance of payments with the dollar areas had become chronic. Exports to dollar areas were falling. The reduction in the quantum of exports to dollar areas was largely due to a diversion of exports to soft currency areas. In view of the fact that the sterling area had devalued in terms of the dollar, devaluation would stimulate the demand for Indian goods in the U.S.A. because of their relative cheapness.

(e) If India had decided to wait and see the step would not have been taken seriously in the international financial world. There would have been expectations of devaluation of the Indian rupee at a later date. This would have disorganised trade in as much as orders and payments for exports would have been withheld.

Devaluation of the Indian rupee was thus, though not a matter of India's choice, a lesser evil than non-devaluation. India has incurred several disadvantages by this step. Even if exports get an impetus, it is doubtful whether our exports possess the necessary elasticity of supply. Take for example, the exports of manufactured jute goods. The non-devaluation by Pakistan has reduced whatever prospects there were of increasing exports of jute manufactures. Besides, in other goods the export capacity is limited by the limitations of production. While the increase in exports may be thus limited, the total earnings in terms of dollars may on the whole show a decline. Unlike the U.K. which has various export commodities with sufficient elasticity of supply like motor cars, fine woollens and textiles, glass-ware and engineering goods, India, except for jute manufactures sends to the dollar areas primary commodities like manganese ore, mica, spices, hides and skins and oilseeds the supply of which is not so elastic. On the other hand, the imports from dollar areas will now become more costly and as this will reduce the imports of capital goods like locomotives, tractors or heavy machinery, it would reduce industrial production and the pace of planning in the country. The most disturbing effect of devaluation would be in relation to the imports of foodstuffs. Over a third of the total food imports in the country came from the United States and Canada in 1948. For the year 1949 purchases of food were made before devaluation; hence the decision not to import foodstuffs from the dollar areas during the rest of the year 1949. It is doubtful, however, whether in the year 1950, India can do altogether without imports of foodstuffs from dollar areas. Due to inflationary conditions, industries are faced with high costs of production which have become rigid. Devaluation has, however, given a breathing space to industrialists, who were unable to sell their products because of high costs of production. This will not however, be an unmixed blessing because if the rigidity in costs of production persists, the temporary advantage of devaluation will end sooner than expected. The reducion in the imports from dollar areas may not be compensated by increased imports from sterling area to the same extent. The United Kingdom resorted to devaluation in order to increase her exports to the dollar area. In effect this would mean diversion of her trade towards the dollar areas. This would mean that a lesser quantity of goods from the

United Kingdom would be available to India. The deadlock in the Indo-Pakistan trade would also mean a reduction of imports from that area. One may wonder, if the net effect of these reduction in imports would not react adversely on the price levels in India.

There is no doubt that if the internal food production in 1950-51 is not adequate to enable India to reduce imports from dollar areas, costlier imports from these areas have a direct effect on the cost of living indices. Recently, the International Bank for Reconstruction has given dollar loans to India. As these loans are in terms of dollars, the interest payments which would have to be paid by exports would increase in terms of real goods in as much as more will have to be exported to earn the same amount of dollars to finance the payment of interest. Further, the Government of India would have to incur an additional expenditure of Rs. 6 crores a year because of dollar expenses on Embassies, Foreign Missions and payments to the International Monetary Fund.

DEVALUATION AND INDIAN TRADE

In the short run, however, devaluation has given an impetus to exports. The following table shows the sea-borne exports and imports of India during the year 1949-50:—

TABLE 15. Sea-borne Exports and Imports of India, 1949-50

(lakhs of rupees)

Month	Exports	Re-exports	Total Exports	Imports	Balance of Trade
TOTAL	460,54	13,16	473,70	553,51	—79,80
April 1949	32,16	2,30	34,46	51,81	—17,35
May	27,99	1,87	29,86	64,12	—34,26
June	28,50	1,14	29,64	59,93	—30,29
July	29,30	1,81	31.11	56,92	—25,81
August	33,90	95	34,85	51,00	—16,15
September	34,04	76	34,80	38,63	— 3,83
October	34,89	1,07	35,96	58,54	12,22
November	51,58	55	52,13	43,17	8,96
December	51,01	86	51,87	35,78	17,09
January 1950	46,81	68	47,49	36,85	10,64
February	44,75	58	45,33	26,56	18,77
March	45,61	59	46,20	30,20	16,00

The above table which only gives the sea-borne trade figures indicates that India's unfavourable balance has been reduced. If adjustments are made in the table for the land-borne trade with Pakistan, and figures of imports of food are corrected, it appears that India's unfavourable balance has been reduced from Rs. 216 crores in 1948-49 to about Rs. 92 crores in 1949-50. Due to the Indo-Pakistan trade deadlock from September 1949 to March 1950, India had an unfavourable trade balance with Pakistan only to the extent of Rs. 4 crores in 1949-50. In the year 1948-49, the major cause for India's unfavourable trade balance with Pakistan was the import of raw jute worth nearly Rs. 80 crores. Though it is too early to assess the ultimate effects of devaluation on exports the following statement shows some encouraging results:—

TABLE 16. Value of Exports

(in crores of rupees)

Quarterly Average for 1948 ...	107.08
1st quarter 1949...	103.30
2nd quarter 1949...	94.16
3rd quarter 1949...	100.66
4th quarter 1949...	139.97
1st quarter 1950...	136.40

During the months of November and December 1949 exports actually touched the record level of Rs. 50 crores per month, thereby raising the level of exports in the second half of 1949 to Rs. 241 crores as against Rs. 197 crores for the first half of 1949, Rs. 213 crores for the second half of 1948 and Rs. 216 crores during the first half of 1948. The main increases in exports have been registered in the case of tea, spices, cashew-nuts, unmanufactured tobacco, cotton and jute goods. Exports of cotton textiles in particular have been substantial. As the Commerce Minister observed in February 1950, "What is more satisfying is perhaps the fact that the year 1949 was a record year both in terms of quantity and value for the export of a number of commodities, *viz.*, tea, tobacco, cotton waste, black pepper and spices. Not only were their exports higher than in 1948 but they exceeded the pre-war level." The only commodities which showed a decline compared with 1948 were raw jute and raw cotton, because of Indo-Pakistan stalemate and the necessity to conserve the internal supplies; oils and oilseeds, largely due to higher prices; and shellac because of higher prices and lower production. The monthly rate of export increased from Rs. 35 crores to Rs. 50 crores. It appears that Indian goods have become competitive in the export markets. Even the foreign exchange position shows favourable trends. During the period July to December 1949, the dollar receipts of India have actually exceeded the dollar payments by $13 million. This is a temporary phase in as much as orders from the United States which had slackened in the second half of 1949 because of price recession had suddenly increased; besides, for a period of about 2½ months with effect from 25th June 1949, there was a very stringent control over imports from dollar areas and no food was imported. It is to be hoped that all the necessary dollar resources would be available within the limits of the import maxima allowed to India as a member of the sterling area. To some extent the loans from the World Bank may ease the situation and enable India to buy capital goods needed for railway development and food production.

In the short run, it appears that on account of devaluation India received a price advantage in the dollar areas. India utilised this advantage in respect of jute manufactures, by conserving stocks. In the case of the soft currency areas too. because of the fact that countries like U.K. increased their exports to the dollar areas and because Indian prices remained stable from September 1949 to March 1950, commodities like cotton textiles, tobacco and oilseeds found a ready market. The linking of the Japanese yen with the U.S. dollar and its consequent non-devaluation has increased Indian exports of cotton piecegoods still further. The recent increases in the price levels after the Korean war is however significant. Ceylonese tea, Indonesian spices and Brazilian groundnuts would in all probability compete more effectively with Indian products if the situation continues. While in 1948-49, 32 per cent. of the exports went to hard currency areas, and 68 per cent. to soft currency countries, in May 1950 the share of hard currency countries was reduced to 27 per cent. and that of soft currency countries had increased to 73 per cent. The total export has gone down from a monthly average of Rs. 45 crores in the last quarter of 1949-50 to Rs. 33 crores in May 1950. In the year 1950-51, unless production increases, it would be difficult to maintain the quantum of exports as the stocks of raw cotton, raw jute and jute manufactures in the country have gone down to low levels.

Devaluation has also improved the foreign exchange position of India *vis-a-vis* the sterling area. India's sterling balances which stood at Rs. 820 crores at the end of June 1949, had declined to Rs. 776 crores in the beginning of September 1949. Since then they have gradually risen and by the end of

March 1950 increased to Rs. 846 crores, thus indicating an improvement of nearly Rs. 70 crores. This accumulation of sterling was, however, temporary, because it accrued as a result of deliberate delays in the issue of import licenses for the period July to December 1949. Since March 1950 India's imports have increased and by the 3rd of August 1950, India's sterling balances were reduced by Rs. 30 crores compared with the March figure of Rs. 846 crores. During the period July 1949 to June 1950 India was able to import within the limits set by the sterling balances agreement for the period, so far as the sterling area was concerned. Since July 1950 the import position has been made more liberal by the issue of fresh Open General License which included a number of commodities on which restrictions had been imposed previously.

WORLD BANK LOANS FOR INDIA

India has financed a part of her deficits on current account in her balance of payments with the dollar areas with the help of nearly $100 million obtained from the International Monetary Fund. For purposes of rehabilitation of its internal economy through large-scale planning, India applied for loans to the International Bank for Reconstruction and Development. India required these loans to finance the import of the necessary capital goods from dollar areas, and desired that her economy should not be handicapped by want of such imports on the one hand, and should not be faced with continuous deficits in balance of payments on current account on the other. The World Bank has considered India a good risk. India's debt record is an excellent one. Before World War II India borrowed abroad exclusively from the London Money Market, and by 1939 her debt amounted to £350 million at rates ranging from 3 o 5 per cent. Even in pre-war years, India was able to pay interest and amortisation charges on this account to the tune of about £25 million per annum. During the war, India re-paid the whole of her sterling debt and in 1949 she had sterling balances to the tune of £800 million. The World Bank was convinced not merely of the requirements of India but also of her capacity to repay and her credit-worthiness.

Between September 1949 and the end of April 1950 the Bank has given to India three different loans which in the aggregate amount to $62.5 million or Rs. 23.92 crores. The first loan of $34 million was given on 18th August 1949 for the purchase of 650 locomotives, spare parts and boilers. The second loan of $10 million was given in September 1949 for the purpose of reclamation of nearly 5 million acres of weed infested land in C.P., U.P., Madhyabharat, Bhopal and Northern India. The third loan of $18.5 million was given in April 1950, to finance the import of plant and equipment for the Bokaro Thermal Plant at the Damodar Valley.

STRUCTURAL MALADJUSTMENTS

Our review of the post-war and post-partition trends in the foreign trade and balance of payments position of India shows that ever since the end of the war the country has been 'living beyond its means' because of some structural maladjustments in the economy. The fact that the accumulated sterling balances were not multilaterally convertible created a dollar problem for India. Increased food deficits lessened the amount of foreign exchange that would have been otherwise available for a larger quantum of imports of capital and consumer goods. Internally, lack of consistency on the part of the Government in its industrial policy regarding the relative position of public and private sectors, the partition, the refugee movements, transports bottlenecks, successive

failures of monsoons and political uncertainty led to a decline both in agricultural and industrial production. The failure of the borrowing policy as well as the continuation of deficit budgeting by Central and Provincial Governments, followed by a faulty policy of decontrol raised internal price levels. Due to the continuation of the inflationary spiral in the post-war period, prices of Indian export goods went more and more out of tune with world prices, particularly in comparison with those in the U.K. and the U.S.A. The partition itself has aggravated the structual maladjustments, and has increased import liabilities more than export earnings. While joining the International Monetary Fund, India, like other countries, maintained the pre-war rate of exchange. Because of growing deficits in the balance of payments the Indian rupee came to be overvalued. When in the latter half of 1949, India embarked on a policy of liberal imports through Open General Licenses to reduce the internal price levels, the deficits in the balance of payments grew.

The non-devaluation decision of the Pakistan Government, however, considerably compromised the advantages offered to Indian exports by devaluation. Despite the Indo-Pakistan trade deadlock it appears that Indian exports have increased both in quantum and value. But the favourable balance of trade that has accrued in the latter half of the year 1949-50 is due more to the restriction on imports and less to the increase in exports. Apart from the exports of goods such as tea, mica, or jute manufactures, the other export commodities, particularly cotton piecegoods, if pushed up beyond limits, would reduce internal supply and raise price levels. There is no doubt, however, that devaluation has succeeded in raising the quantum of exports of commodities like tea, cotton piece-goods, spices, cashew nuts and unmanufactured tobacco. While there are structural limitations to exports, the need for imports has increased all the more. For industrialisation, India would require more and more capital goods; the ever-growing population requires at least 2 million tons of food from outside and the rising spiral of inflation in the face of a constant rate of production of consumer goods inside the country necessitates increased imports of such goods. To these import requirements have been added the necessity to import raw materials like cotton and raw jute because of the partition. The level of economic activity in any country depends on aggregate outlays which are the resultant of (1) private consumption, (2) private investment, (3) governmental consumption, (4) governmental investment and (5) surplus or deficit in balance of payments. In the ultimate analysis it appears that we are increasing private and governmental investment by inflation only at the cost of private consumption, because we cannot afford to keep up consumption to the requisite extent by supplementing current production of consumer goods by means of increased imports. One wonders whether such a process of squeezing can continue for long without extensive and liberal foreign aid. If countries like the United States, Canada and Australia can be persuaded to supply India two to three million tons of foodstuffs per annum for a few years not in return for exports but as a long-term loan, India's foreign exchange difficulties would be solved and even the internal price levels can be brought down to a reasonable level. The United States and Canada have given such aid on long-term basis to Britain and the European countries: if similar arrangements are made for India there is no doubt that the economy of India could be stabilised so as to enable her to proceed with her schemes of development.

A few relieving features may be noted. India's food imports in 1949-50 have been less than what they were in 1948-49. This has meant a saving in foreign exchange to the tune of over Rs. 30 crores. Towards the end of April

1950, India concluded an Interim Agreement with Pakistan which has reopened Indo-Pakistan trade. The International Bank for Reconstruction and Development has given India three loans, which in the aggregate are valued at $63 millions or Rs. 24 crores. This would give some relief to the foreign exchange situation and will enable India to finance the import of capital goods required for long-term projects. As a result of the Korean War price levels in India have again shown a spurt largely due to speculative activity among businessmen. Unless checked in time the rise in price levels would bring to an end the advantage offered by devaluation. If this happens we shall once again witness the vicious circle of increasing internal prices, reduced exports and growing deficits in the balance of payments. Having exhausted half of her sterling assets in three years, India can hardly afford such a calamity.

NEED FOR AN INTEGRATED TRADE POLICY

While viewing the depletion of sterling balances with grave concern and introducing frequent changes in import policies, it appears that the Government of India have failed to take an integrated outlook on the mutual interrelations between external trade policy and internal pricel levels. When prices were tending to move up in the country, the Government instituted stringent import restrictions instead of increasing exports. For example, the period of decontrol of essential commodities like food and consumer goods from August 1947 to June 1948 unfortunately synchronised with stringent import restrictions to such an extent that India failed to use the released sterling balances and had a carry-over of sterling worth Rs. 80 crores in her Account No. I towards the end of June 1948. History has repeated itself again after devaluation. As a result of the devaluation it was generally believed that prices might move up sooner or later. The Government of India, however, during the period July 1949 to December 1949 imposed such restrictions on imports that India again faces the possibility of non-utilisation of sterling available for release and current use to the extent of Rs. 50 crores. In short, the foreign trade policy has been conceived on the theory of cutting out the long leg of imports rather than lengthening the short leg of exports. It is difficult to give an exact measure of the effects of imports on internal price levels. Efforts should be made to reconcile the needs of current consumption and capital requirements. There is no doubt that looking to the continuation in inflationary conditions in the country there is need to revise our outlook on imports of essential consumer goods which are in short supply within the country. In this respect Pakistan is perhaps following a courageous policy. The Government of Pakistan appear to have decided to look upon the sterling balances only as an asset for meeting deficits in balance of payments. They have already substituted rupee securities to the extent of the reduction in the value of sterling balances in terms of Pakistan rupees after non-devaluation. The Government of India too must bear in mind that managed currency does not require external assets. The policy of allowing released sterling to accumlate should be given up. The Government of India appear to have realised the element of truth contained in this view and import liberalisation, through an extensive Open General Licence has been announced with effect from July 1950.

India's sterling balances which represent forced savings were accumulated against the wishes of the people during the war years. Britain and her allies purchased Indian goods at controlled rates. Since 1945-46, price levels in India have increased. It follows, therefore, that the the real value of sterling balances in terms of goods and services is declining. The sterling balances, however, could have been a great asset in the rehabilitation of Indian economy and in

paving the way for a smooth transition. It would not be wrong to say that but for these sterling balances, India would have found it hard to foot an annual bill of more than Rs. 100 crores per annum for the import of food supply without which semi-starvation conditions, if not famine, would have prevailed. It should be appreciated that the Government of the United Kingdom despite their own acute difficulties in foreign exchange have realised the difficulties of India and have allowed releases and even overdrafts of sterling from time to time. India too has accommodated Great Britain, in her foreign exchange difficulties by accepting limited amounts of sterling releases even at the cost of internal requirements.

VI. FOREIGN TRADE WITH OTHER COUNTRIES—PAKISTAN

Unfortunately it is not possible to give from the available published data a correct indication of the balance of payments position of Pakistan with the outside world, including India. The Government of Pakistan does not publish the accounts relating to their trade on Government account and even the data relating to the purchase and sale of sterling securities by the State Bank of Pakistan does not indicate the extent of governmental transactions. During the year 1948-49, Pakistan had a trade surplus of nearly Rs. 31 crores on private account, but if the import on Government account, roughly estimated at over Rs. 50 crores is included, the balance of payments would show a trade deficit of at least more than Rs. 25 crores. In the year 1949-50 even trade on private account indicates a deficit, mostly due o the trade deadlock with India. In 1948-49, while Pakistan had an overall trade deficit with all other countries excluding India, it was offset by a surplus with the latter. In 1949-50, however, this did not materialise and Pakistan has been left with a trade deficit on private account to the extent of Rs. 20 crores.

STRUCTURE OF PAKISTAN'S EXPORTS

Complete figures for 1949-50 are not available. The statistical data for the year 1948-49 discloses the following structure of exports and imports:—

TABLE 17. Exports and Imports of Pakistan, 1948-49
(on private account)
(In lakhs of rupees)

	Exports		Imports	
TOTAL	1,74,55	100%	1,37,27	100%
Food, Drink and Tobacco	12,73	7%	21,88	16%
Raw materials and produced articles mainly unmanufactured	1,56,46	90%	14,17	10%
Articles wholly or mainly manufactured...	4,36	2%	93,90	68%
Rest	1,00	1%	7,32	6%

The table shows the preponderance of raw materials on the export side and the overwhelming importance of manufactured articles on the import side. Looking to imports, whereas in the case of India, the imports of food, drink and tobacco amounted to 24.3 per cent. of the total in 1948-49, in the case of Pakistan they accounted for only 16 per cent. Moreover, whereas India's main imports in this group were of food grains, Pakistan's main imports under this group consist of sugar, tobacco and tea. Further, though the imports of raw materials and produce mainly unmanufactured, account for more than 30 per cent. of India's imports, they account for only 10 per cent. in the case of Pakistan.

Pakistan's main imports under this group are oils, particularly mustard oil for East Bengal. On the other hand, India has to import such important raw materials as raw cotton and raw jute. Thirdly, the imports of articles mainly manufactured amount to the high figure of 68 per cent. of the total in the case of Pakistan as compared with 44 per cent. in the case of India. Even in this group the imports of machinery in India amounted to Rs. 80 crores as contrasted with only Rs. 5 crores in Pakistan. This shows the differences in the relative requirements of various goods in the two countries.

On the export side, Pakistan's main dependence was on exports of raw materials which bring more than 90 per cent. of her foreign exchange. In the case of India, raw materials accounted for only 45 per cent. of the total exports. Whereas the main exportable raw materials of Pakistan were raw cotton (Rs. 38 crores) raw jute (Rs. 71 crores), hides and skins (Rs. 6 crores), raw wool (Rs. 3 crores), the principal exports of India were oil-seeds (Rs. 15 crores), raw jute (Rs. 24 crores), raw cotton (Rs. 19 crores), mica and manganese (Rs. 6 crores) and hides and skins (Rs. 5 crores). Whereas the exports of manufactured goods from Pakistan were insignificant, they formed an important group of exports from India. The main exports of manufactured goods from India were tanned hides (Rs. 12 crores), cotton piece-goods (Rs. 30 crores) and jute manufactures (Rs. 141 crores).

DIRECTION OF TRADE

Appendix IX indicates the direction of the foreign trade of Pakistan on private account during 1948-49 and 1949-50. India's share in the export trade of Pakistan has declined from 62 per cent. to 35 per cent., while in the import trade too, her share has gone down from 54 per cent. to 31 per cent. Both these are due to the trade deadlock. Contrasted with this, the share of the United Kingdom in the exports from Pakistan has increased from less than 9 per cent. to more than 16 per cent. and in the import trade from less than 20 per cent. to more than 25 per cent. India still remains, however, the most important country trading with Pakistan. Looking to the quantum and value of trade it is significant to note that the importance of trade with dollar areas, particularly the U.S.A., is proportionately less in the foreign trade of Pakistan than in that of India.

TRADE CAPACITY OF THE PORT OF CHITTAGONG

In considering the foreign sea-borne trade of Pakistan, the fact that Pakistan is not one contiguous unit, but consists of two separate regions, Eastern and Western Pakistan, each of which requires the necessary port capacity to handle the foreign trade of that region, must be borne in mind. Prior to the partition all the foreign trade of Assam as well as of East Bengal and of North-East India used to be carried *via* the port of Calcutta, and the East Pakistan port of Chittagong had only a minor importance. Since the partition, East Pakistan solely depends on this port for its sea-borne trade. In August 1947, the port of Chittagong was served by a single track of the East Bengal Railway and had a jetty frontage of about 300 feet, comprising four berths capable of accommodating 4 ships at a time. The port used to handle a total trade of 5 to 6 lakh tons.

As a result of the partition, the port has to face increasing demands both for imports as well as exports. On account of the growing tension between India and Pakistan, East Pakistan could not get its supplies of consumer goods

and necessary foodstuffs like rice and salt along overland routes. The port of Chittagong had to reserve at least 2 berths for these imports. This limited its export capacity. The single-track connecting railway was also another limiting factor. Since the partition one more berth has been added by the Government of Pakistan. The Government's plans undertaken since the beginning of 1948 include the extension and reconstruction of existing sheds, rebuilding of marshalling yards, provision for floating jetties and river lighting equipment for night piloting. The long-term plan of the Government is to provide 13 berths at the port at a total cost of about Rs. 14 crores to handle 30 lakh tons per annum. In the meanwhile, the foreign trade handled at the port has been increasing. The following table indicates the tonnage of exports and imports in 1948-49 and 1949-50:—

TABLE 18. Quantum of Foreign Trade at the Port of Chittagong

(000's of tons)

	Imports			Exports	
	1948-49	1949-50		1948-49	1949-50
TOTAL	360	710	TOTAL	240	298
Food grains ...	130	253	Jute	207	250
Salt	110	115	Tea	14	24
Miscellaneous	120	342	Miscellaneous	18	24

The table shows that the total tonnage of foreign trade has increased from 600,000 in 1948-49 to more than 1 million in 1949-50. In the year 1949-50 the port had to be increasingly used both for exports and imports because of the Indo-Pakistan trade deadlock. The imports were urgently required and we, therefore, find that the figure of import trade at the port has been doubled. This left little space for more of jute and tea to be sent abroad. In 1949-50, Pakistan exported 14 lakh bales of raw jute through the port of Chittagong. The total exports of raw jute in 1949-50 through this port amounts to only 28 per cent. of the normal average production of at least 50 lakh bales in East Bengal. This limited capacity to handle the jute trade is another reason why for some time to come Pakistan will have to retain the Indian market for her raw jute. Further, the figures also show that whenever there is trade deadlock between India and Pakistan, the port of Chittagong has to pay attention to essential imports before it can think of expanding exports. If India and Pakistan can maintain harmonious trade relations, Pakistan would be able to send more and more exports through its port and get some of the essential materials like salt and even rice from West Pakistan along the overland route. It is commendable, however, that within a short time the tonnage handled at the port has gone up by 67 per cent. and the number of wagons loaded by 125 per cent.

PAKISTAN'S FOREIGN TRADE—CONCLUSION

Our review of Pakistan's foreign trade shows that though Pakistan exports to the outside world only a few commodities like raw cotton, raw jute, hides and skins, and foodstuffs, her exports have immense potentialities and are a great asset from the point of view of her foreign exchange earnings. At present when the terms of trade are in favour of agricultural countries, Pakistan's raw materials are in great demand in the outside world. To some extent, her raw jute exports are dependent on Indian demand. In course of time, however, with

the increase in the port capacity of Chittagong, and the establishment of jute mills within Pakistan itself, the dependence on purchases from India will be reduced. Whereas India largely exports finished goods and imports raw materials and capital goods, Pakistan largely exports raw materials and imports large quantities of consumer goods. At present, because of Governmental requirements for military stores and because of the high cost of capital goods and the danger of overcapitalisation, the imports of capital goods amount to only 5 per cent. of the total value of imports, while in India the imports of capital goods are as high as 14 per cent. of the total. With the improvement in trade relations with India, Pakistan will not be dependent on other countries for the supply of consumer goods. By selling her raw materials, she will be able to get imports of capital goods in future in larger quantities. Pakistan has also become a member of the International Monetary Fund and when her rate of exchange is finally settled, she will be able to utilise the Fund for financing deficits on current account and the World Bank for financing long term capital projects. On 21st April 1950, Pakistan's sterling balances amounted to Rs. 104 crores. The depletion of sterling balances by half in three years was due to the non-devaluation decision, which reduced the value of sterling in terms of Pakistan rupees to the extent of Rs. 50 crores, and the deficits in balance of payments with the outside world since the partition to the extent of Rs. 50 crores. While analysing the pros and cons of the non-devaluation decision, we have emphasized the fact that from July 1949 to June 1950, Pakistan overdrew sterling to the tune of £14 million, largely because of the Indo-Pakistan trade deadlock. Besides sterling, Pakistan had Indian rupee securities worth Rs. 21 crores and 'India notes' for which assets worth Rs. 43 crores have yet to be recovered. As against these holdings, however, she has an external debt of nearly Rs. 300 crores in Indian rupees, as her share of the public debt of the Government of Undivided India. From 1951-52 onwards, she will have to maintain an export surplus of at least Rs. 12 to 15 crores per annum on that account.

Consumer goods and defence stores play a more important part in Pakistan's imports, than capital goods. The fast rate of depletion of sterling assets, particularly in view of her smaller sterling holdings, will reduce her capacity to import more capital goods, and her industrialization (unless foreign aid or loans come in), would be at a slower rate in future.

APPENDIX I

INDO-PAKISTAN BALANCE OF PAYMENTS

JULY 1948—DECEMBER 1949

Current Account

(in crores of Rs.)

RECEIPTS	July 1948 to June 1949	July 1949 to Dec. 1949	PAYMENTS	July 1948 to June 1949	July 1949 to Dec. 1949
TOTAL	117.41	34.91	TOTAL	117.41	34.91
A. COMMODITIES	83.09	26.41	A. COMMODITIES	117.15	34.91
1. Cotton piecegoods and yarn	17.45	2.64	1. Raw Jute	80.22	26.17
2. Jute Manufactures	6.85	1.63	2. Raw cotton	17.33	2.25
3. Coal	6.53	4.03	3. Others (mainly hides and skins, betelnuts, cotton seed, fruits, vegetables, cement and salts)	19.60	5.56
4. Mustard Oil	6.85	2.01			
5. Tobacco	4.86	3.35			
6. Artificial Silk	4.74	0.56			
7. Others (mainly chemicals, drugs, medicines, fruits, vegetables, hardware, iron and steel, leather, rubber, glassware, tea, spices, salt and re-exports)	35.81	11.21	B. INTEREST, DIVIDEND, AND PROFITS ...	0.26	...
B. SERVICES	0.48	...			
1. Receipts on account of Mineral Oil ...	0.10	...			
2. Receipts on account of water supplied to West Punjab	0.31	...			
3. Interest, Dividend and Profits	0.07	...			
C. TOTAL CURRENT TRANSACTIONS (A plus B) ...	83.57	26.41			
D. Net disinvestment (*vide* Appendix II on capital account)	6.08	3.50			
E. Errors and Omissions and transactions financed by India notes	27.76	5.00			

APPENDIX II

KNOWN CAPITAL TRANSACTIONS BETWEEN INDIA AND PAKISTAN— 1st July 1948 to 30th December 1949.

Decrease in foreign assets and increase in foreign liabilities reflecting an inflow of capital are indicated by a (+) sign.
Increase in foreign assets and decrease in foreign liabilities reflecting an outflow of capital are indicated by a (—) sign.

(*in crores of rupees*)	July 1948 to June 1949	July 1949 to December 1949
1. Transfer of Gold (at book value) and sterling assets under the Pakistan Monetary System (Reserve Bank of India) Order, and the Payments Agreement	+2,04.42	...
2. Repatriation of the Reserve Bank's liabilities to Pakistan inrespect of its Banking Department, India notes and Inscribed Pakistan notes offset in sterling transfer under the Pakistan Monetary System (Reserve Bank) Order[1]	−2,26.44	...
3. Changes in the rupee liabilities of the Reserve Bank of India	+ 12.83	+8.65
4. Changes in the Pakistan rupee assets of the Reserve Bank of India	− 0.68	+0.67
5. Changes in the liabilities of the Commercial banks	− 8.05	−0.74
6. Changes in the assets of the Commercial banks	− 6.47	−5.10
7. Known transactions in Indian and Pakistan securities, shares, etc., canalised through :		
(*a*) Reserve Bank of India	+ 33.98	0.02
(*b*) Commercial banks	+ 1.25	
(*c*) Others	− 8.17	
8. Others	+ 3.41	...
Net disinvestment (or inflow of capital)	+ 6.08	+3.50

1. Transfers of Rupee coin for obvious technical difficulties have been ignored for this item.

APPENDIX III

MUTUAL REQUIREMENTS OF COMMODITIES

INDIA TO PAKISTAN				PAKISTAN TO INDIA			
Commodities	Unit	1948-49	1949-50	Commodities	Unit	1948-49	1949-50
Coal	'000 tons	3,400	2,040	Raw Jute	'000 bales	5,500	4,000
Cloth and Yarn	'000 bales	400	250	Raw cotton	'000 bales	900	450
Steel, pig iron and scrap	'000 tons	314	80	Food grains :			
Paper and Board	'000 tons	21	...	Rice	'000 tons	100	...
Chemicals and Pharmaceuticals :				Wheat	'000 tons	200	...
Sulphuric acid	'000 tons	2	2	Gypsum	'000 tons	365	...
Hydrochloric acid	tons	270	270	Rosin	'000 tons	4	...
Nitric acid	tons	200	200	Hides and Skins :			
Magnesium Sulphate	tons	800	800	Cow hides	'000 pieces	2,000	1,000
Ferrous sulphate	tons	400	400	Buff hides	'000 pieces	500	200
Copper Wire	'000 tons	1	...	Skins	'000 pieces	1,500	1,500
Asbestos cement sheets	'000 tons	5	2.5	Rock Salt	'000 mds.	2,000	2,000
Paints, enamels and varnishes ...	'000 tons	2.5	2.5	Soda Ash	'000 tons	10	...
Railway stores	Rs. lakhs	39.3	27.3	Potassium Nitrate	'000 tons	5	...
Tyres and tubes	'000 units	130	...	Rape and Mustard seed	'000 tons	15	...
Leather and footwear :				Cattle	'000 heads	1	...
Upper leather	'000 sq. ft.	6,000	...				
Sole leather	'000 lbs.	7,500	...				
Leather shoes	'000 units	600	...				
Canvas	'000 yds.	300	150				
Hardwood	'000 tons	10	10				
Jute manufactures	'000 tons	50	50				
Sea Salt	'000 mds.	...	2,000				
Myrabalams	'000 tons	2	2				
Woollen and worsted goods	'000 lbs.	1,000	...				
Electric steel sheets	tons	...	500				
Mustard oil	'000 tons	50	35				
Groundnut oil	'000 tons	30	15				
Copra oil	'000 tons	6	6				
Linseed Oil	'000 tons	...	6				
Vanaspati	'000 tons	...	15				
Toilet Soap	'000 tons	2	...				
Washing soap	'000 tons	...	5				
Flue-cured tobacco	'000 lbs.	700	2,000				
Tea-chests	'000 pieces	800	...				
Pitching stone and ballast	'000 c. ft.	...	7,500				
Bauxite	'000 tons	...	2.5				

APPENDIX IV

CHANGES IN THE IMPORT, EXPORT AND OTHER DUTIES MADE BY PAKISTAN AND INDIA AFFECTING TRADE BETWEEN THEM

PAKISTAN		INDIA	
Nature of Change	Month and year of revision	Nature of Change	Month and year of revision
EXPORT DUTIES		**EXPORT DUTIES**	
(1) The Export duties on raw jute at Rs. 4-8-0 for cuttings and Rs. 15 for other types were made applicable to India. (These were subsequently raised to Rs. 6 and Rs. 20 respectively.)	November 1947	(1) Duties on oils and oilseeds at Rs. 80 and Rs. 160 per ton were imposed. (These were withdrawn from April 1949)	April 1948
(2) The duty on raw cotton raised to Rs. 60 per bale. (From October 1949 this duty was lowered to Rs. 40 on short staples.)	April 1948	(2) Export duty on cloth converted into an *ad valorem* duty of 25 per cent. (handloom cloth exempted) (This duty was abolished in two stages. In November 1948 the duty was reduced to 10 per cent. and from June 1949 the 10 per cent. duty was withdrawn)	April 1948
(3) Fresh duties on hides and skins and cotton seeds were imposed at 10 per cent. *ad valorem*. (Since April 1949, the duty in respect of sheep and goat skins has been reduced to 5 per cent)	April 1948	(3) Export duty on cotton yarn was withdrawn ...	April 1948
(4) Fresh duties on fish and bamboo were imposed. (Following the Indo-Pakistan agreement on central excise concluded in May 1949, these duties were withdrawn but the duty on fish was reimposed in December 1949.)	April 1949	(4) *Post-devaluation changes in export duties* :	
		(*i*) A duty of 8 annas per lb. was imposed on Mustard Oil	September 1949
		(*ii*) An *ad valorem* export duty of 45 per cent. was imposed on iron and steel. For certain types of sheets made of iron and steel, the duty was to apply at the rate of 30 per cent	September 1949
		(*iii*) The export duty on Jute Hessian was increased from Rs. 80 per ton to Rs. 350 per ton ...	September 1949
		(*iv*) An *ad volorem* export duty of 30 per cent. was imposed on black pepper	November 1949
IMPORT DUTIES			
(5) Duties on cotton piecegoods :—			
(A) First Stage :			
(*i*) Preferential rates ranging from 15 to 21 per cent. *ad valorem* were imposed on Indian piecegoods valued over Rs. 1-8-0 per yard	April 1949		

PAKISTAN		INDIA	
Nature of Change	Month and year of revision	Nature of Change	Month and year of revision
(*ii*) Preferential duties ranging from 15 to 18 per cent. were levied on Indian piecegoods valued at less than Rs. 1-8-0 per yard	August 1949	(*v*) The export duty of 15 per cent. *ad valorem* which had been in operation since April 1949 on cigarettes and cheroots was reduced to 7½ per cent. on expensive brands	November 1949
(B) Second Stage :		IMPORT DUTIES	
(*iii*) The preferential treatment as shown in item (*i*) under 'A' above was withdrawn and standard rates ranging from 30 to 86 per cent were leviable	August 1949	(5) Imports of raw cotton from Pakistan were exempted from the duty of 2 annas per lb.	October 1948
(*iv*) The preferential treatment shown in item (*ii*) under 'A' above was also withdrawn	October 1949	(6) Import duty on betelnuts was raised from 5 annas a lb. to 7½ annas a lb.	April 1949
(6) Preferential rates on Indian artificial silk were imposed. (In October 1949 even this preferential treatment was withdrawn)	April 1949	(7) Excise duties : Under the Indo-Pakistan agreement on Central Excise concluded in May 1949 India agreed to remit the excise duties leviable on goods exported to Pakistan, if similar treatment was given to exports to other countries. Further, remission was granted to all goods exported to Pakistan for period of one year	June 1949
(7) Rates ranging from 10 to 20 per cent. *ad valorem* were applied to Indian tobacco. (Later, in June 1949, as a result of the Indo-Pakistan agreement on Central Excise, these duties were lowered, but were again raised in October 1949)	April 1949		
(8) Duties were imposed for the first time on sugar chemicals, cotton twist and yarn, hemp manufactures, building and engineering materials, earthenware, coconut oil, skins (tanned and dressed), and paints and colour, imported from India	October 1949		

APPENDIX V

POST-WAR BALANCE OF PAYMENTS (1946-48)[1]

(in crores of rupees)

	1946			1947			1948[2]		
	Receipts	Payments	Net	Receipts	Payments	Net	Receipts	Payments	Net
A. CURRENT ACCOUNT									
1. Merchandise (including silver) (Exports f. o. b., Imports c. i. f.)									
(*a*) Private	336.0	280.6	55.4	450.9	427.8	23.1	433.7	852.4	81.3
(*b*) Government	1.5	107.1	−106.6	2.8	106.9	−104.1	...	184.0[3]	−184.0
2. Gold (Non-monetary)	0.9	1.7	−0.8	1.0	15.1	−14.1	...	0.1	−0.1
3. Services :									
(*a*) Private[4]	22.6	49.2	−26.6	31.9	65.6	−33.7	44.6	62.7	−18.1
(*b*) Government	96.0	53.8	42.2	31.7	52.4	−20.7	24.6	45.0	−20.4
4. Unilateral Transfers[5]	...	...	...	...	4.5	−4.5	16.0	5.8	10.2
5. Unclassified	...	...	...	...	...	...	23.2	14.6	8.6
B. CAPITAL ACCOUNT									
6. Change in the Assets of the Banking System[6] ...	56.9	...	56.9	107.5	...	107.5	327.0	...	327.0
7. Change in the liabilities of the Banking System[7] ...	5.8	...	5.8	4.7	...	4.7	12.0	...	12.0
8. Identified Security Transactions[8]	...	6.5	−6.5	10.6	12.3	−1.7	8.3	7.1	1.3
9. Contractual Transactions of the Government :									
(*a*) Purchase of Dollars from the I.M.F.	...	...	...	...	...	...	22.8	...	22.8
(*b*) Others[9]	...	17.8	−17.8	20.3	9.9	10.5	1.4	224.0	−222.6
10. Private and Capital Remittances[10]	...	...	...	...	64.4	−64.4	18.0	34.4	−16.4
11. Miscellaneous	...	9.3	−9.3	...	...	...	...	...	...
C. ERRORS AND OMISSIONS	7.1	...	7.1	97.5	...	97.5	...	1.5	−1.5
	526.9	526.9	...	758.9	758.9	...	931.6	931.6	...

A dash (—) has been used to indicate either that a figure is zero or less than half the final digit shown, or that the item called for does not exist. The non-availability of data is indicated by dots(...)

1. The data for 1946 and 1947 relate to undivided India, while those for 1948 relate only to India and also exclude the exchange transactions with Pakistan.

2. The figures for this year exclude transactions in merchandise under government barter deals.

3. Includes Rs. 60 crores paid for stores to the U.K. according to the terms of the Indo-U.K. Financial Agreement of July, 1948.

4. Covers foreign travel, transportation, insurance, investment income and other miscellaneous services.

5. Mainly migrants' remittances.

6. Includes the change in the sterling assets held by the Reserve Bank of India ; of this, the amount transferred to Pakistan in 1948 has, however, not been shown.

7. In addition to the liabilities of authorised dealers in foreign exchange, this item includes the foreign liabilities of the Reserve Bank representing balances in the current accounts kept by certain foreign institutions with the Bank.

8. Include repatriation of sterling debt, movements in rupee securities held by the Reserve Bank on account of foreigners, rupee securities enfaced for payment in London retransferred to India, amortization payments and certain other contractual payments.

9. Cover the transfer of amounts between the Government of India and Burma, the transactions relating to the loan granted to Siam, subscriptions paid to the International Monetary Fund and the International Bank, and the acquisition of the pensions annuity by the Government of India.

10. Include such items as savings remittances, distribution of capital under trust, repayment of funds, and surplus funds of insurance companies.

APPENDIX VI

INDIA'S BALANCE OF PAYMENTS, JANUARY 1948—JUNE 1949

Current Account—Region-wise

(In crores of rupees)

Item	January-June, 1948[1]			July-December, 1948[1]			January-June, 1949		
	Receipts	Payments	Net	Receipts	Payments	Net	Receipts	Payments	Net
A. STERLING AREA	166.5	151.8	+14.7	146.6	225.2	−78.6	156.8	229.1	−72.4
1. Merchandise									
(a) Private	117.8	65.5	+52.3	97.1	93.9	+ 3.2	103.6	129.5	−26.0
(b) Govt. food and other stores	...	46.8	−46.8	...	89.2	−89.2[2]	...	55.3[3]	−55.3
2. Gold (non-monetary)	...	...	...	...	...	...	...	...	...
3. Services									
(a) Foreign travel, transportation and insurance	2.7	6.9	− 4.2	2.9	6.4	− 3.5	4.3	6.2	− 1.9
(b) Investment income	6.2	12.8	− 6.6	6.0	12.7	− 6.7	5.3	12.0	− 6.7
(c) Govt. transactions (not included elsewhere)	12.7	12.6	+ 0.1	10.7	12.3	− 1.5	15.1	15.9	− 0.8
(d) Miscellaneous	6.5	1.7	+ 4.8	15.5	1.6	+13.9	15.2	3.7	+11.5
4. Unilateral transfers	5.6	2.5	+ 3.1	7.7	2.5	+ 5.2	6.5	2.4	+ 4.1
5. Unclassified	15.0	3.0	+12.0	6.7	6.7	...	6.8	4.2	+ 2.6
B. HARD CURRENCY AREAS[4]	89.6	97.9	− 8.3	58.7	97.1	−38.4	59.9	109.4	−49.5
1. Merchandise									
(a) Private	88.9	68.2	+15.7	56.4	49.7	+ 6.7	51.2	64.7	−13.5
(b) Govt. food and other stores	...	17.0	−17.0	...	35.4	−35.4	0.4[5]	35.8	−35.5
2. Gold (non-monetary)	...	0.1	− 0.1	...	...	...	...	...	...
3. Services									
(a) Foreign travel, transportation and insurance	0.3	1.6	− 1.3	0.4	1.4	− 1.0	0.7	1.7	− 1.0
(b) Investment income	...	2.2	− 2.2	...	2.3	− 2.3	...	3.0	− 3.0
(c) Govt. transactions (not included elsewhere) ...	1.2	3.4	− 2.2	...	5.8	− 5.8	4.0	1.1	+ 2.9
(d) Miscellaneous	1.7	1.7	...	1.5	1.2	+ 0.3	2.15	1.5	+ 0.9
4. Unilateral transfers	2.4	0.4	+ 2.0	0.3	0.3	...	1.4	0.3	+ 1.1
5. Unclassified	0.1	3.3	− 3.2	0.1	1.0	− 0.9	0.1	1.3	− 1.2

APPENDIX VI *(Contd.)*

Item	January-June, 1948[1]			July-December, 1948[1]			January-June 1949[1]		
	Receipts	Pay-ments	Net	Receipts	Pay-ments	Ne	Receipts	Pay-ments	Net
C. OTHER AREAS	46.4	33.7	+12.7	34.3	59.1	−24.8	39.7	95.4	−55.8
1. Merchandise									
(a) Private	45.1	24.5	+20.6	33.3	50.6	−17.3	37.6	61.4	−23.8
(b) Govt. food and other stores	...	2.6	− 2.6	...	1.2	− 1.2	...	28.3	−28.3
2. Gold (non-monetary)	...	...	...	...	...	...	...	...	...
3. Services									
(a) Foreign travel, transportation & insurance ...	0.1	0.2	− 0.1	...	...	...	0.3	...	+ 0.3
(b) Investment income	...	...	...	...	...	...	...	...	...
(c) Govt. transactions (not included elsewhere) ...	...	2.4	− 2.4	...	0.5	− 0.5	...	0.5	− 0.5
(d) Miscellaneous	0.8	3.4	− 2.6	0.1	6.7	− 6.6	0.4	5.2	− 4.8
4. Unilateral transfers	...	...	...	...	...	...	0.1	...	+ 0.1
5. Unclassified	0.4	0.6	− 0.2	0.9	0.1	+ 0.8	1.3	...	+ 1.3

1. The figures given under payments against items 1(*b*) and 3(*c*) incorporate slight revisions over those for 1948 published in the Reserve Bank of India Bulletin, July 1949.

2. Includes payment of Rs. 60 crores to U. K. for military stores.

3. Includes payment of Rs. 11.9 crores to U. K. for military stores.

4. Comprise, for the first half of 1948, the United States, other American Account Countries, Canada, Belgium, Sweden, Switzerland, Portugal and its possessions (excluding those in India), Japan and Germany. For the second half of 1948 and the first half of 1949, Argentina, and Paraguay are also included while Sweden and Switzerland are excluded.

5. Receipt from SCAP in Japan in part settlement of the amounts due to India under the barter agreement of 1947.

APPENDIX VII

CURRENT TRANSACTIONS WITH HARD CURRENCY COUNTRIES, 1946-48

(in lakhs of rupees)

	1946			1947			1948		
	Rsceipts	Pay-ments	Net	Receipts	Pay-ments	Net	Receipts	Pay-ments	Net
TOTAL CURRENT TRANSACTIONS	97,09	1,01,91	− 4,84	1,24,55	2,10,35	−85,80	1,48,24	1,97,90	−49,66
1. Merchandise	88,72	42,39	+46,33	1,19,06	1,44,26	−25,20	1,40,34	1,17,91	22,43
2. Non-monetary Gold movement	...	...	...	...	...	...	...	11	− 11
3. Government expenditure (merchandise & service)	63	4939	−48,76	...	49,47	−49,47	1,18	61,59	−60,41
4. Services									
(*a*) Foreign travel, transportation and insurance	...	2.83	− 2,83	...	4,04	− 4,04	65	3,03	− 2,38
(*b*) Investment income	...	2,51	− 2,51	...	3,64	− 3,64	...	4,49	− 4,49
(*c*) Miscellaneous	2,39	1,05	+ 1,34	2,59	4,30	− 1,71	3,21	2,88	+ 33
5. Unilateral transfers	5,29[1]	92	+ 4.37	2,66	1,03	+ 1,63	2,70	71	+ 1,99
6. Unclassified	4	2,82	− 2,78	24	3,61	− 3,37	16	4,28	− 4.12
7. Errors and Omissions	...	...	...	...	...	...	...	2,90	− 2,90

Note :—Hard currency countries comprise, for 1946, the United States, Canada, Sweden, Switzerland, and Portugal and its possessions (excluding those in India). The 1947 figures also include the other American Account countries. For 1948, in addition to the countries included for 1947, Germany and Japan are taken as hard currency countries for the whole year, while Argentine is included and Sweden and Switzerland excluded for the second half. Throughout the period 1946-48, (even when Argentine was not treated as a hard currency country), the payments made in dollars for imports of food from Argentina have been included in the respective statements.

1. Includes certain dollars receipts on account of Afghan exports.

APPENDIX VIII

PERIODICAL RELEASE AND DEPLETION OF STERLING BALANCES

(in crores of rupees)

Period	Sterling released on current account		Sterling deducted as Capital Payments	Sterling transferred to Pakistan in return for India rupee	Sterling balances in blocked Account No. 2 at the end of the period	Remarks
	India	Pakistan				
July 1947					1547[1]	1. In March 1947 the Reserve Bank had sterling assets worth Rs. 1,733 crores as disclosed by the Finance Minister of the Government of India in his Interim Budget Speech for the period August 1947 to March 1948. By July 1947 the balances were reduced by Rs. 186 crores to Rs. 1 547 crores. The reduction was due to a deficit in the balance of payments during the period March 1946 to July 1947. It should be remembered that for the whole period sterling was freely drawn and was available for convertibility without limit.
July 1947 to Dec. 1947	86.45[2]				1461	2. The First Sterling Balances Agreement was made between the Government of the United Kingdom on the one hand and India and Pakistan together on the other. India and Pakistan together were allotted a working balance of £35 million and a release of £30 million in current account No. 1. The rest of the sterling balances, *viz.* Rs. 1,460 crores were credited to account No. 2. The amount in the blocked account, it was understood, would not be used for financing deficits on current transactions in the Balance of Payments. Sterling was still freely available for convertibility into dollars.
Jan. 1948 to June 1948	24[a]	21.2[b] 5.3[c] 26.5			1410	(*a*) During the Second Interim Agreement India was given a fresh release. (*b*) A separate agreement was concluded with Pakistan was g ven £10 million as working balance,

Period	Sterling released on current account		Sterling deducted as Capital Payments	Sterling transferred to Pakistan in return for India rupee	Sterling balances in blocked Account No. 2 at the end of the period	Remarks.
	India	Pakistan				
						£6 million as release during the period and £4 million were credited to her account as carry-over for her net export earnings up to the end of December 1947 since the partition in August 1947.
July 1948 to June 1949	197.73[a]	18.3	60.3 Stores[b] 197.0 Central pensions 27.0 Provincial pensions	190[c]	828	(a) At the end of June 1948 India had an unspent balance of £80 million. It was expected that between July 1948 and June 1949 this amount would be sufficient for her foreign exchange deficits. But India overdrew and this overdrawal amounted to £81 million or Rs. 107.73 crores including the working balance. The United Kingdom agreed to release from Account No. 1 this extra withdrawal.
July 1949 to June 1950	65.6	.....	.....	.....	.....	(b) At the time that the long-term agreement was concluded in June 1948, the United Kingdom asked for capital payments for her stores and installations which India had taken over and for pensions due to British subjects who had served in India.
						(c) This amount represents Pakistan's share in the sterling assets of the Reserve Bank of India. It is reported that Pakistan was to be given Rs. 101 crores worth of sterling securities from the Issue Department and Rs. 81 crores from the Banking Department.
						(d) According to the Weekly Figures of the statement of affairs of the Reserve Bank of India the amount of foreign securities in the Issue Department on June 24, 1949 amounted to Rs. 695.34 crores and the assets under the title, "Balances held abroad" amounted to Rs. 132.76 crores, thus making a total of Rs. 828.10 crores.
						(e) As a result of the improvement in Trade Balance after September 1949, it appears that the released sterling has not been used.

APPENDIX IX

PAKISTAN'S FOREIGN TRADE, 1948-49 and 1949-50

(in lakhs of rupees)

Countries.	1948-49					1949-50[1]				
	Imports	%	Exports[2]	%	Balance	Imports	%	Exports[2]	%	Balance
TOTAL[1]	[1]39.76 (109,37)	100.0	170.71 (85.71) Plus 6,12 reexports	100.0	30,95 (−17.54)	137,24 (111,40)	100.0	113.38 (81.92) plus 7,62 re-exports	100.0	−23,86 (−21,86)
Belgium	67	.5 (0.7)	5,04	2.9 (5.9)	+4,37	+1,42	1.0 (1.3)	2,74	2.4 (3.3)	+1,32
China	6,89	4.9 (6.3)	3,24	1.9 (3.8)	−3,65	5,38	3.9 (4.8)	1,13	1.0 (1.4)	−4,25
France	44	0.3 (0.4)	4,05	2.4 (4.8)	+3,61	84	0.6 (0.8)	7,40	6.6 (9.0)	+6,56
Germany	34	0.2 (0.3)	3,08	1.8 (3.6)	+2,74	34	0.2 (0.3)	3,64	3.2 (4.5)	+3,30
India[1]	75,33 (44,94)	53.8 (41.1)	106.64 (21,64)	62.4 (25.2)	+31,31 −(23,30)	42.85 (17,01)	31.2 (15.3)	39.19 (7.22)	34.6 (9.4)	−3.66 −(9,29)
Hong Kong	50	0.4 (0.5)	2,43	1.4 (2.7)	1,93	40	0.2 (0.4)	5.83	5.1 (7.1)	+5,43
Italy	3,82	2.7 (3.5)	3,21	1.9 (3.8)	−61	8,24	6.0 (7.4)	3,12	2.7 (3.8)	−5,12
Japan	99	0.7 (0.9)	1,16	0.7 (1.3)	+17	9,41	6.8 (8.4)	5,35	4.8 (6.5)	−4,06
U.S.S.R.	89	0.6 (0.8)	4,43	2.6 (5.2)	+3,54	1,22	0.9 (1.1)	1,91	1.7 (6.0)	+69
U. K.	27,01	19.3 (24.6)	14,85	8.7 (17.4)	−12,17	34,77	25.3 (31.2)	18,89	16.7 (23.1)	−15,88
U.S.A.	7,96	5.7 (7.2)	8,81	5.2 (10.4)	+85	11,97	8.7 (10.7)	6,43	5.7 (7.9)	−5,54
Other Countries ...	15,42	11.0 (14.0)	13,77	8.1 (16.2)	−1,65	20,40	14.9 (18.3)	14,75	13.1 (18.0)	−5,65

1. All trade figures are exclusively sea-borne trade figures; only the figures for India are modified by inclusion of our land-frontier trade.
2. Exports of Pakistan merchandise. The total re-exports are given in brackets below the total exports. The percentage figures in brackets are from the original communique issued by the Pakistan Government.

CHAPTER XII

PUBLIC FINANCE

INTRODUCTION

Before the partition there were differences of opinion as to whether Pakistan would be a financially viable State. Actual experience has falsified these doubts. This does not however mean that the financial position of Pakistan leaves nothing to be desired. India has a diversified economy, with some large scale industries and well-developed financial and banking institutions, which, though disturbed by the partition, have not been shattered. Pakistan is a new state, wholly dependent on prosperous agriculture and foreign trade for its revenues. Banking and commerce in Pakistan before the partition were largely handled by non-Muslims who have migrated to India. Though her commercial position has recovered since then, her taxable capacity is relatively less than that of India due to the lack of industrialisation.

A scientific assessment of the relative financial position of India and Pakistan can be made only in terms of National Income, its distribution as between various occupations and the impact on these of taxation as well as expenditure of Governmental authorities, Central, Provincial and local in each country. Such comprehensive and up-to-date social accounting has yet to be made in India and Pakistan. In the absence of such data, an analysis of the budgetary position in each country is all that can be attempted.

The total combined revenues of the Central and Provincial Governments of India and Pakistan for 1950-51 are given below:—

TABLE 1. Combined Central, State and Provincial Revenues in India and Pakistan, 1950-51

(in lakhs of rupees)

	India		Pakistan	
	Total	Per capita Rs. a. p.	Total	Per capita Rs. a. p.
TOTAL	707,00	20 14 0	125,52	15 10 0
Central Revenues	339,19		77,18	
State Revenues	96,00		} 48,34	
Provincial Revenues	271,81			

Excluding taxation by local authorities, like District Boards and Municipalities for which up-to-date data are not available, it appears that the *per capita* burden of taxation of Central, Provincial and State governments in India is higher than that in Pakistan. With the existence of large-scale industries in India, the fiscal tax base is relatively larger than that in Pakistan. In other words, governmental authorities in India can shoulder the responsibility of relatively larger public debts and can undertake developmental schemes, which in the neighbouring country would seem extravagant.

I. FINANCIAL RELATION BETWEEN THE CENTRE AND THE UNITS

At the time of the partition, the tax structures in the two countries were very much similar both at the Centre and in the Provinces. Since the partition, the financial relations between the Centre and the Provinces in Pakistan have undergone a radical change in favour of the former. This was necessitated by the financial neds of the newly established Central Government, about 65 per cent. of the revenues of which are absorbed in defence expenditure The following table indicates the receipts from some major heads of revenue of the Central Governments of India and Pakistan for the years 1948-49, 1949-50 and 1950-51:—

TABLE 2. Revenues of India and Pakistan
(Figures rounded up to lakhs of rupees)

Heads of Revenue	India			Pakistan		
	1948-49 Accounts	1949-50 Revised	1950-51 Budget	1948-49 Accounts	1949-50 Revised	1950-51 Budget
TOTAL REVENUE ...	3,71,70	3,32,36	3,39,19	58,70	75,46	77,18
Customs	1,26,16	1,20,43	1,06,54	27,50	34,75	31,50
Union Excise Duties ...	50,63	69,19	71,55	5,20	5,75	6,20
Corporation Taxes ...	62,26	40,60	38,10	6,50	9,00	9,50
Taxes on Income other than Corporation Tax	1,19,50	1,08,40	1,29,53	...	...	...
Currency and Mint ...	12,03	9,99	9,52	2,55	1,25	2,50
Net Contribution of commercial departments						
(*a*) Railways ...	7,34	7,00	6,37	80	3,00	4,00
(*b*) Posts and Telegraphs	2,36	3,77	4,04	—3	—6	10
Sales Tax	...	...	...	3,50	2,50	4,00
Salt	...	...	...	3,30	2,50	2,60
Other sources of revenue	32,61	18,72	21,62	9,38	16,77	16,18
Deduct share of Income-tax Revenue payable to Provinces ...	—41,79	—45,74	—48,08	...	...	...

As a result of its peculiar financial position, the Government of Pakistan has been forced to deny the Provincial Governments any share in the Taxes on Income other than the Corporation tax. The Government of India, however, have continued the practice of sharing the divisible pool with the provinces on the basis prescribed by Sir Otto Neimeyer in 1936, recently revised by the award of Sir C. D. Deshmukh. For the year 1950-51 the Government of India has agreed to distribute to the provinces over Rs. 48 crores an amount which is equal to 14 per cent. of their revenues and more than 62 per cent. of the revenues of the Government of Pakistan. Besides, the Government of Pakistan has levied an excise duty on salt, which on the eve of independence was forsaken for good by the Government of India. In India sales taxes are collected by the Provincial and State governments; in Pakistan, however, the Central Government has appropriated to itself 50 per cent. of the total collections of sales taxes. Further, the Central Government of Pakistan has also decided to tap Death Duties as a central source of taxation and a bill to that effect has already been placed before the Constituent Assembly. In India, receipts from Death Duties when levied will be distributed to the Provinces on a prescribed

basis. Further, while the Government of India in their capital budget upto the year 1949-50 have given large amounts as grants to Provincial governments for developmental purposes, the Government of Pakistan gives no grants, but only loans. It is clear that compared to India the financial position of Pakistan in weaker, and that for a federal system of finance, there is greater centralization of tax resources in Pakistan than in India.

FISCAL INTEGRATION OF STATES IN INDIA

As a result of the integration and merger of over 650 states, after the partition, into sizable economic and administrative units, the Government of India have placed the States and States Unions on a financial footing equal to that of the Provinces. Before the partition, all the Indian States had their own independent tax systems. Some of them even collected customs duties and taxes on income. As a result, any imposition of internal indirect taxation in British India, involved, with few exceptions, the conclusion of agreements with a number of states for concurrent taxation within their own frontiers, or in default of such agreement, the establishment of some system of internal customs duties. At the maritime ports situated in the States, the administration of tariffs was imperfectly co-ordinated with that of the British Indian ports, and some states, by discriminating taxation, had even tried to divert foreign trade away from the British Indian ports. A common company law for India, a common banking law, a common body of legislation on copyright and trade marks, and a common system of communications were under such conditions unthinkable. The incidence of taxation varied from state to state and to avoid income taxation, business enterprise often migrated towards States in which there was either no Income Tax or if it was levied, was at a low rate. For all practical purposes, British India and the innumerable States were different financial units. Previous attempts, at bringing the states within the vortex of a federal system of finance in the country had failed miserably.

Even the Union Powers Committee of the Constituent Assembly which drafted the new Constitution of Republican India, at one time, felt that it would not be possible to impose a uniform standard of taxation throughout the Union all at once, and therefore recommended that for a period of 15 years uniformity in taxation throughout the country, should be kept in abeyance. The Expert Committee on the financial provisions of the Union Constitution in their report (December 1947) also agreed with these views. These views were expressed because of the apprehension that the process of fiscal integration would unbalance the budgets of the various States and State Unions, at a time when the financial situation in the country was inflationary, and called for balanced budgeting. The Government of India sought the final verdict on this issue from the Indian States Finances Inquiry Committee. The Krishnamachari Committee which reported in October 1948 studied the problem thoroughly, and confidently recommended that the process of financial integration should not be delayed and that the difficulty of unbalanced State Budgets could be obviated through Central assistance for a transitional period. The main recommendations of the Krishnamachari Committee were as follows:-

1. The federal financial integration of States subject to a few temporary limitations should be complete in all its essential respects from the outset.

2. Except in the case of one or two states, their existing internal customs duties should be abolished forthwith.

3. In cases where States were merged with Provinces, the provincial governments should be given financial assistance during the transitional period for the financial loss involved in federal financial integration.

Accordingly from the budget year 1950-51, all the Indian States and State Unions have been placed on an equal financial footing with the Provinces. The composite governments of the States like Mysore and Hyderabad and States Unions like Saurashtra, Madhya Bharat, PEPSU and Rajastan have been divided on a functional basis and the Centre has taken over the central subjects and services, leaving the State Governments with powers similar to those assigned to the Provinces under the constitution. The result has been, that, while the Centre has got important items and expanding revenue, these States and Provinces with merged areas, have been burdened with the major responsibility of expenditure. Following the Krishnamachari Committee's recommendations, the Centre has agreed to make good to these States and Provinces for a transitional period of ten years, the difference between the actual federal revenue lost by them and the federal expenditure saved. Reimbursements would be made in full for the first five years, while the amount would be reduced gradually over the next five years. The Sates and States Unions like other Provinces would be sharing all divisible sources of revenue with the Centre like taxes on income other than the corporation tax as prescribed in the constitution. But any financial assistance given to them to cover the federal revenue gap, would be reduced by their share in the divisible pool. The privy purses to the former rulers of these States amounting to Rs. 5.86 crores per annum would be a Central liability. In the year 1950-51 the Central Government expects to receive Rs. 10 crores as taxes on income collected in these States, of which Rs. 81 lakhs would be paid back to the states as their share in the divisible pool after certain adjustments described above are made. The Government of India have been burdened with an additional Defence expenditure of Rs. 8 crores per annum on their taking over the liability for the maintenance of Indian State forces. For financial adjustments and grants in aid to the Indian States and the Provinces which have been burdened with merged areas, the Government of India has provided Rs. 15.4 crores in the budget for 1950-51. The following table gives the detailed distribution of these grants to the various Provinces and States to make up the revenue gap created by the financial integration of the States:—

TABLE 3. Grants-in-aid to State Governments to fill up the Revenue Gap on account of Financial Integration, 1950-51

(in lakhs of rupees)

	Under article 273	Under article 275	To cover revenue gap
TOTAL	1,85	1,99	11,56
Assam	40	{ 30 54	
Bihar	85		
Orissa	5		
West Bengal	1,50	40	
Punjab		75	
Mysore			3,25
Travancore and Cochin	...	...	2,80
Hyderabad			76
Saurashtra			2,50
Other States			2,25

Over and above these grants-in-aid, the Government of India has paid Rs. 45 lakhs to the Travancore-Cochin Union as a measure of financial assistance to make up for the loss caused by the abolition of land customs duties. From the above it is clear that the whole of India has now been brought into a single uniform federal financial structure. As a result, in future, it would be possible to institute a uniform and integrated fiscal system throughout the country. Besides, this financial and political integration would enable the Government of India to bring the whole country within the purview of common laws, economic policies, tax systems, tariff schedules and price and control regulations. A co-ordinated trade policy for the whole country can now be evolved. Transport and communications can be planned on an all-India basis to subserve national and regional interests. Income tax evasion in future will be gradually reduced to the minimum, since migration of business enterprise to escape central taxes will no longer prove profitable. With proper vigilance, there is no doubt that, in future, the revenue resources of the Central Government will increase with the widening of the tax base.

FINANCIAL PROVISIONS OF THE NEW CONSTITUTION

Sharing of taxes: On the 26th January 1950, India declared herself a Republic; the financial relations between the Centre and the Provinces are now regulated by the New Constitution. Financial provisions of the new Constitution more or less repeat the relevant clauses of the Act of 1935. Under the present abnormal circumstances, it has not been possible to work out financial relations *de novo*. According to Article 280 of the new Constitution, the President of India within two years from the inauguration of the Constitution, i.e. by January 1952, will appoint a Finance Commission which will make recommendations to the President as to the nature of distribution of financial powers and responsibilities between the Centre and the Provinces. As drafted at present, it appears, that the new Constitution really envisages a federal system of finance for the whole country. In every federal Constitution, provisions are usually made for balancing factors, that is for financial adjustments between the Centre and the Provinces as are found necessary so as to help out one or the other governmental authority (usually the States), which find it difficult to meet their expenditure and responsibilities by their own prescribed sources of taxation. Under modern conditions of large scale business enterprise, which has crossed the urban and provincial boundaries, most of the progressive sources of taxation, like taxes on income can best be administered and collected only by the Centre. The major portion of the financial responsibility on developmental activities like social services and economic activities in aid of production, however, devolves on the subordinate layers of Government. With the expanding role of the State in economic life, therefore, conditions arise when such subordinate governments are not able to fulfil their responsibilities because of restricted tax fields. Financial adjustments in the form of grants in aid and subventions, shared revenues, supplementary levies on central taxes, concurrent legislation, etc., are necessary. In the United States, most problems are solved by concurrent legislation and it is reported that more than 90 per cent. of the tax base is common to the centre as well as to the units. But this involves duplication of taxing authorities, waste of funds and discriminating taxation, which a poor country like India can hardly afford. It is, therefore, in the fitness of things that sharing of revenues and grants in aid have been given an important position in the new constitution. Unfortunately, except for Taxes on Income, the Government of India in the

past, even under the Act of 1935, has not legislated for those taxes the receipts from which were to be entirely given over to the provinces.

Distribution of Divisible Pool of Income Tax: As between grants-in-aid and share in revenues as a means of helping and expanding provincial revenues, the Government of India has hitherto taken the course of distributing money only through shared revenues as in the case of taxes on Income other than the Corporation Tax. Under the Act of 1935, which was effective up to August 1947, the distribution of the divisible pool was based on the recommendations of Sir Otto Neimeyer. After the partition, when Sind and N.W.F.P. went over to Pakistan and parts of Undivided Bengal as well as Punjab were cut off, new financial arrangements became necessary. By an Interim Order, the Government of India redistributed the divisible pool between the various provinces. This Interim Order of December 1947 was effective upto March 1950. In November 1949 the Government of India asked Sir C. D. Deshmukh, to revise the Interim Arrangements and suggest such changes as would become operative until such time as the Finance Commission examined the question *de novo*. The following table gives the percentage distribution of the divisible pool between the various provinces as determined under the Niemeyer Award, revised by the post partition Interim Arrangement, and as finally recommended by Sir C. D. Deshmukh and embodied in the budget for the year 1950-51:—

TABLE 4. Distribution of the Provincial Share in the Divisible Pool of Taxes on Income other than Corporation Tax.

Province	Niemeyer Award	Post-partition Interim Arrangements	Deshmukh Award
TOTAL	100	100	100
Madras	15	18	17.5
Bombay	20	21	21
West Bengal	20 (Undivided)	12	13.5
United Provinces ...	15	19	18
East Punjab	8 (Undivided)	5	5.5
Bihar	10	13	12.5
Central Provinces & Berar	5	6	6
Assam	2	3	3
Orissa	2	3	3
N.W.F.P.	1	...	...
Sind	2	...	...

Deshmukh award: The task of Sir C. D. Deshmukh was very much limited by the terms of reference announced by the Government of India through its press communique in November 1949. Unlike Sir Otto Niemeyer, Sir C. D. Deshmukh was asked not to deal with the Central share in the divisible pool. This was so because the inquiry was occasioned by the fact that some provinces and provincial areas went over to Pakistan. The modification, if any, therefore, was necessary in relation to the redistribution of the lapsed shares as between various provinces, which continued to form part of independent India after the partition. The redistribution of the provincial share has actually given increased percentages to all the non-partitioned provinces, while the Central share remains the same. In re-allocating the provincial percentages, Sir C. D. Deshmukh has only confirmed, with slight modifications, the Interim Arrangements settled earlier by executive orders. He came to the conclusion

that the aggregate quota of lapsed percentages as a result of Sind, N.W.F.P., East Bengal and West Punjab going to Pakistan, would be 14.5 composed of 2 for Sind, 1 for N.W.F.P., 7.5 for East Bengal and 4 for West Punjab. He considered these lapsed percentages as a 'windfall' to the provinces in India. If these were distributed on the basis of collection, he felt that the situation which arose in wartime as a result of which collections in Bombay and Bengal had moved up considerably would be aggravated. He, therefore, redistributed the lapsed percentages on the basis of population after giving a small weightage in favour of weaker provinces. This was added to the provincial quota under the Niemeyer Award.

It appears that the financial arrangements have changed considerably during the period 1937-38 to 1950-51. It is difficult to understand why under the interim arrangements U.P's share increased by 27 per cent., (from 15 per cent. to 19 per cent.) as contrasted with only 5 per cent. for Bombay (from 20 per cent. to 21 per cent). Whereas the original distribution by Sir Otto Niemeyer was neutral as between the population and the collection factors, 'paying to neither factor any pedantic preference', the recent arrangements are on a population basis. This has given special advantages to agricultural Provinces like the United Provinces and Madras. Even from the point of view of population as the basis, the recent arrangements look anomalous. For example, though the population of West Bengal and Bombay (excluding merged areas to which the Deshmukh Award made no reference) are very nearly the same, and though the collection in West Bengal is 34 per cent. as compared to Bombay's 42 per cent. of the aggregate divisible pool in 1948-49, it is strange that the share of Bombay is more than 50 per cent. larger than that of West Bengal. When the whole question is re-examined *de novo* it is hoped that such inequitable arrangements will be modified. A strange result of the arrangements made by Sir Otto Niemeyer as revised by Sir C. D. Deshmukh is the fact that some Provinces get by way of a share in Income Tax much more than what they collect. For example, if Sir Deshmukh's award is analysed with reference to figures of income-tax collections that formed part of the divisible pool during the year 1948-49, the following results would be obtained of the relations between collections and actual receipts from the divisible pool:—

TABLE 5. Relationship between collections and receipts of Income Tax by Province (in percentages)

Province	Interim post-partition arrangement	Deshmukh Award
Bombay	25	25
West Bengal	17	20
Madras	110	107
United Provinces ...	183	173
East Punjab ...	74	81
Bihar	382	868
C. P. & Berar	251	251
Assam	50	50
Orissa	735	735

From the above, it is clear that Bombay, West Bengal, East Punjab and Assam get less than the taxes on income collected in their areas by way of their share in the divisible pool. All the other Provinces get windfall shares. It is particularly disquieting to note that the backward Province of Assam is given such an insignificant share. Apart from the injustice to Assam in not giving her

due share in the divisible pool, it is strange that the Government of India has refused her a loan of a very minor amount of Re. 1 crore during the year 1949-50. Assam is a strategic border Province with untapped resources and forest wealth. If, as is claimed both by Sir Otto Niemeyer and Sir C. D. Deshmukh and by all the financial experts who had a hand in the financial arrangements relating to the Government of India Act of 1935 as well as the new constitution, that in the distribution of the divisible pool, balancing factors to help weaker provinces and undeveloped areas were an important consideration, the Province of Assam should not have been dealt with in the manner described above. When the Finance Commission examines this whole question it will have particularly to answer an important question, is it or is it not the purpose of assigning a share in a divided revenue resource, to give a Province something to which it is entitled because its citizens have in some measure contributed to the size of the tax? Is it justifiable to give a Province by way of receipts in a shared tax many times the amount which is collected in it as has happened in the case of Orissa, Bihar, Madras and United Provinces? And lastly, could not the financial help rendered to agricultural Provinces through receipts in excess of collections, be given in the form of straightforward grants-in-aid? Of course, in deciding this whole question, the peculiar economic conditions in India may also have to be borne in mind. Unfortunately, most of the industrial wealth of the country is concentrated in the two cities of Bombay and Calcutta. If at any time the Province of Bombay is cut into linguistic units and the city of Bombay becomes a centrally administered area or even a city state, the linguistic units of Maharashtra and Karnatak, if not Gujarat, will face financial difficulties, if the principle of collection was rigidly applied in the distribution of the divisible pool. If the Government of India agreed to the principle of linguistic Provinces, and at the same time made Bombay City a centrally administered area, all the Provinces in the country will suddenly find their share in the divisible pool considerably dwindled. In conclusion, one cannot help disregarding the suggestion of the Expert Committee on the financial provisions of the Constitution that the Provincial share in the divisible pool should be raised from 50 to 60 per cent. and that it should be distributed 20 per cent. on the basis of population, 35 per cent. on the basis of collection and 5 per cent. as a balancing factor. On the whole it must be emphasised once again that in distributing relative shares of such a progressive tax resource like the income-tax, collection rather than population or financial needs should be the guiding factor. This assumes, however, that in the meantime the Government of India will have perfected a scientific technique of grants-in-aid.

Sales Taxes: Apart from a revision of the basis of distribution of the divisible pool of income tax other than corporation tax, the new Constitution has laid down certain additional restrictions on the provincial powers of taxation. By 1949-50 some of the nine provinces had exploited sales taxation as one of their most profitable source of revenue. Some provinces had included even exported articles in their provincial trade among taxable commodities under their Sales Tax Act. The new Constitution of India under Article 286 has forbidden any State from imposing a tax on the sale of any goods exported outside or imported into the State. Further, no province can levy a sales tax on commodities declared by Parliament to be essential for the life of the community. The new Constitution has also deprived provincial governments of the right of levying excise duties on tobacco.

II. CENTRAL REVENUES

We may now analyse the relative receipts from some major heads of revenue in India and Pakistan:—

Customs Duties: These are levied both for protection as well as for revenue purposes. The following table gives a detailed breakdown of customs duties in India and Pakistan into export duties, import duties for revenue purposes, protective import duties and land customs duties:—

TABLE 6. Receipts from Customs Duties in India and Pakistan

(*in lakhs of rupees*)

Heads	India			Pakistan		
	1948-49 Accounts	1949-50 Revised	1950-51 Budget	1948-49 Revised	1949-50 Revised	1950-51 Budget
GROSS REVENUE	1,30,41	1,25,43	1,11,54	32,40	42,10	38,40
NET REVENUE	1,26,15	1,20,43	1,06,54	27,50	34,75	31,50
A. Sea Customs						
Exports duties ...	26,54	23,74	25,00	24,90	34,60	32,00
Import duties	98,23	98,37	83,22			
Protective Duties	5,26	8,26	4,15	...	...	...
Revenue Duties	92,97	90,11	79,07	...	...	...
B. Land Customs	4,36	2,00	2,00	7,50	7,50	6,40

The table shows that land customs duties are an important source of revenue in Pakistan as compared to India. They account for more than 20 per cent. of the Customs revenue in Pakistan as contrasted with less than 3 per cent. in India. These land customs duties are levied on the land trade between India and Pakistan. Whereas the major portion of Pakistan's trade is with India and largely by land, the major portion of India's foreign trade is with the outside world. More than 90 per cent. of the land customs duties of Pakistan are derived from the land export duties on raw jute transported across the East Bengal border to Indian jute mills. The raw jute duty is levied at the rate of Rs. 20 per *pucca* bale and Rs. 15 for a loose bale. In 1947-48 India consumed 4.9 million bales of Pakistan's raw jute, while in 1948-49 over a million bales crossed the border.

Customs duties account for 31 per cent. of the Central revenues in India as compared to nearly 41 per cent. in Pakistan. Prior to the war customs duties enjoyed the pride of place in the tax structure of the Government of Undivided India. Since then taxes on income have shown larger receipts. This is even now true of India, though the same cannot be said of Pakistan. In India, among various types of customs duties, import duties for revenue purposes are the major source of revenue and account for nearly 74 per cent. of the total yield of customs duties. Export duties account for less than 23 per cent. In Pakistan, however, the commercial raw materials like raw jute and raw cotton and hides and skins are in ready demand and therefore their main reliance as regard customs revnue is on export duties. Not being an industrialised country, Pakistan cannot tax heavily imports of either consumer goods or of other things. It is for this reason that, export duties have a predominant place.

Taxes on Income: A reference to table 2 shows that whereas the corporation tax in India yields a revenue of more than Rs. 38 crores or 11 per cent. of the total revenue, its contribution to the Central fisc in Pakistan is meagre and amounts only to less than 1 per cent. of the total revenue. This is due to

the lack of large-scale enterprises in Pakistan. Even if the taxation on personal incomes is considered, whereas it accounts for nearly 38 per cent. of the revenues of the Government of India, it constitutes only about 10 per cent. of the total revenue in Pakistan. Taking together both the corporation tax and the personal income tax (excluding the provincial share) the total share of direct taxes in the revenues of the Government of Pakistan and India are 12 per cent. and 35 per cent. respectively. We cannot infer from this that direct taxation in Pakistan is not severe or that its tax structure is regressive. Quite the contrary is true. For a new state like Pakistan in need of large scale investment in industries like jute manufactures, cotton textiles, and leather tanning, for which there is plenty of raw materials, the tax rates on incomes and business profits are relatively high. Central income tax laws both in India and Pakistan do not touch agricultural incomes. Under the circumstances the Central Government in Pakistan, whose more prosperous classes are mainly agriculturists, has to rely for income tax receipts only from commercial and salaried persons, in the absence of large industrialists. In the present situation of world trade, the terms of trade are favourable to agricultural countries like Pakistan. But because of her non-devaluation policy stocks have accumulated and when price levels all over the world go down, her tax system will have to depend heavily on indirect sources of taxation like the turnover tax and excise duties unless Pakistan develops her industries. Under these circumstances, it is quite possible that Pakistan may have to levy new taxes on agricultural classes.

Central Excise Duties: Table 7 gives the detailed break-up of central excise duties in India and Pakistan. These excise duties, though levied at the production stage, fall on the consumer. It is interesting to note that with more than 22 per cent. of the total population of India, Pakistan's excise revenue is less than 9 per cent. To some extent the differences are due to the levy of excise duties in India on steel ingots, tyres, vegetable products, coffee and coal, on which there are no excise duties in Pakistan. The Government of

TABLE 7. Central Excise Revenue in India and Pakistan

(in lakhs of rupees)

	India			Pakistan		
	1948-49 Accounts	1949-50 Revised	1950-51 Budget	1948-49 Accounts	1949-50 Revised	1950-51 Budget
TOTAL	**50,63**	**69,19**	**71,55**	**5,20**	**5,75**	**6,20**
Motor Spirit	1,41	1,58	1,58	33	75	80
Kerosene	20	20	20	*Nil*		
Sugar	6,47	6,89	7,01	22	22	25
Matches	7,30	7,45	7,85	11	11	12
Steel ingots	46	46	47	*Nil*	*Nil*	*Nil*
Tyres	1,98	4,75	3,50	*Nil*	*Nil*	*Nil*
Tobacco	25,46	25,40	27,85	1,90	2,45	3,16
Vegetable Products ...	1,96	1,82	1,54	*Nil*	*Nil*	*Nil*
Coffee	49	48	64	*Nil*	*Nil*	*Nil*
Tea	3,66	5,75	5,92	50	55	50
Coal Cess	1,02	1,22	1,25	*Nil*	*Nil*	*Nil*
Miscellaneous	36	18	18	5	7	7
Cotton Cloth	87	13,50	13,90	1,20	75	50
Betelnuts	*Nil*	*Nil*	*Nil*	90	90	90
Deduct-Refunds ...	**1,01**	**49**	**34**	..	**5**	**10**

India levied these duties and for a considerable time did not allow any rebates when the commodities in question were exported to Pakistan. On Pakistan's complaining to the International Trade Organisation Conference at Geneva, the Government of India consented by mutual agreement to give the necessary rebates. The only commodity on which Pakistan levies excise duty, though India does not, is betelnut.

III. CENTRAL EXPENDITURE

Table 8 gives the major heads of expenditure of the Central Governments of the two countries:

TABLE 8. Expenditure from Revenue of India and Pakistan

(in lakhs of rupees)

Major Heads of Expenditure	India			Pakistan		
	1948-49 Accounts	1949-50 Revised	1950-51 Budget	1948-49 Accounts	1949-50 Revised	1950-51 Budget
TOTAL EXPENDITURE MET FROM REVENUES	3,20,86	3,36,10	3,37,88	58,70	75,23	77,18
Direct Demands on Revenue	8,62	13,69	13,80	1,68	2,13	2,53
Debt services	52,52	38,81	36,50	2,50	3,76	4,26
Civil Administration ...	35,56	40,88	50,05	10,37	13,61	14,83
Defence Services ...	1,46,04	1,70,06	1,68,01	40,28	50,90	50,00
Contributions and Miscellaneous adjustments between Union and State Governments	2,96	2,96	15,41	1,40	1,60	1,60
Extraordinary Expenditure:						
(*a*) Expenditure on refugees	15,20	13,70	6,00	...	...	...
(*b*) Subsidy on foodgrains	32,60	25,00	21,00	...	...	...
Surplus (+) or Deficit (—) ...	50,83	...	1,30	45	23	...

Direct Demands on Revenues: These account for the cost of collection of various taxes. Their proportion to total revenue in India is higher than that in Pakistan. This is due to the wider extent of the area to be administered and the larger number of tax-payers in India necessitating relatively larger expenses on collecting agencies and establishments.

Debt Services: From the table it appears that whereas the net burden of public debt in Pakistan is less than 5 per cent. of the annual revenue, that in India is nearly 12 per cent. This does not mean that the public debt in Pakistan is smaller to this extent. According to the terms of the Inter-Dominion Financial Agreement of 1947, and the Indian Independence (Riots, Property and Liabilities) Order 1947, all liabilities in respect of such loans, guarantees and other financial obligations of the Governor-General in Council of Undivided India outstanding immediately before the partition have been undertaken by India, subject to the recovery of an appropriate contribution from Pakistan. It is estimated that on the 15th August 1947, the total public debt of Undivided India amounted to nearly Rs. 2,400 crores. The share of Pakistan has been estimated to be Rs. 300 crores. As per the terms of the Financial Agreement,

a moratorium of four years has been given to Pakistan for the repayment of interest and debt due from her. In consequence, interest charges on this account are currently borne by the Government of India and no credit has been taken in their debt services estimates. Consequently in the estimates of debt services of Pakistan, no debit has been taken for her share of the pre-partition debt up to now. The estimate of interest charges amounting to Rs. 3.76 crores in 1949-50 is for loans amounting to over Rs. 70.57 crores floated since the partition by the Pakistan Government. After 1952, when the Pakistan Government starts repayment of interest and debt to the Government of India, her total debt charges would exceed Rs. 12 crores, or more than 15 per cent. In other words, during the period of the moratorium i.e. 1947-1952, the tax burden on Indian subjects will have increased by about Rs. 40 crores in the aggregate, as a result of the Financial Agreement.

Defence Services: The following table shows the defence expenditure of India and Pakistan during each of the years 1949-50 and 1950-51 both on current and capital accounts:—

TABLE 9. Expenditure on Defence, India and Pakistan

(in crores of rupees)

	Year	Revenue Account	Capital Account
TOTAL INDIA & PAKISTAN ...	1949-50 (Revised)	220.96	36.70
	1950-51 (Budget)	218.01	33.15
INDIA	1949-50 (Revised)	170.06	12.00
	1950-51 (Budget)	168.01	8.15
PAKISTAN	1949-50 (Revised)	50.90	24.70
	1950-51 (Budget)	50.00	25.00

All hopes of demobilisation and reduced defence expenditure in the post-war period were shattered by the partition. The post-partition disturbances, the need to guard extensive inter-Dominion land frontiers of over 1,360 miles on the Western side and 1,700 miles on the Eastern side of India, the Kashmir war and the consequent unhappy political relations, have necessitated heavy defence outlay in both the countries. To some extent the maintenance and strengthening of the army, navy and air forces in each country was the direct consequence of independence. In consequence, expenditure on defence absorbs nearly 65 per cent. of the revenues of the Government of Pakistan and nearly 50 per cent. of the revenues of the Government of India. Both governments are spending sizable amounts for defence expenditure even on capital account as shown in the above table. The practice of charging to capital account defence expenditure currently incurred, which was discontinued at the end of the war in 1947-48, has once again been resorted to by force of circumstances in each country. Relatively speaking, the expenditure on defence in Pakistan appears too heavy. Explaining this, the Finance Minister of the Government of Pakistan has laid the blame on India's non-delivery of defence stores. At the time of the partition, the major portion of the allied defence stores and ammunition factories were located in India. As per the terms of the Financial Agreement, Pakistan was to receive as her share one-third of the total war materials amounting to nearly 160,000 tons of ordnance stores and 13,746 tons of other war materials. Because of the Kashmir war the Government of India refused to transfer a major portion of this war material as she naturally suspected that Pakistan

would make use of it against the Indian army. The Government of Pakistan have sought to make up for the lack of this material by purchasing ammunition from abroad and by establishing ordnance factories. Besides, the northern and western frontiers of Pakistan have always been scenes of disturbances and turbulence in Indian history. The defence of these frontiers has now become the responsibility of the Government of Pakistan. But overriding all these considerations, there are two main reasons, which explain heavy defence expenditure by the Government of Pakistan. These are, (a) distrust[1] of India and rivalry with her military strength, and (b) the Kashmir war in which she has staked much heavier expenditure in relation to her financial capacity. Withdrawing the troops from Waziristan she has diverted the militant tribesmen and part of her own army towards Kashmir. Looking to her heavy defence expenditure, it would not be wrong to conclude that the Pakistan budget is largely a defence budget.

There is no doubt that the post-partition defence expenditure has meant a heavy strain on the finances of the Central Governments of the two countries. When Mr. Liaquat Ali Khan framed his budget of Undivided India for the year 1947-48, he had provided for a defence expenditure of Rs. 188 crores and had abolished the distinction between revenue and capital expenditure on defence, which was introduced during the war. If the defence expenditure of India and Pakistan were taken together, we find that the total defence expenditure has moved up by nearly Rs. 62 crores. Even allowing for the rise in price levels since 1947-48 and the fact that a free country would require a stronger army, navy and air force, it would not be wrong to suggest that but for the post-partition political tension between the two countries, the defence expenditure of the two governments taken together could have been reduced by at least Rs. 25 crores per annum.

EXTRAORDINARY EXPENDITURE IN INDIA AND PAKISTAN

Refugees: The relief and rehabilitation of millions of refugees who were uprooted from Eastern and Western Pakistan and came over to India has meant considerable strain on Indian finances. The Government of India has spent over Rs. 17 crores in 1947-48, Rs. 15 crores in 1948-49, nearly Rs. 14 crores in 1949-50 (R.E.) and has budgeted for Rs. 6 crores in 1950-51.[2] Besides this aggregate expenditure of Rs. 52 crores on revenue account since the partition, the Government of India has also spent nearly Rs. 30 crores on capital account, including advances to provinces and direct loans to refugees of nearly Rs. 10 crores. This has meant an annual burden of over Rs. 20 crores. Similar assessment of the refugee expenditure in Pakistan is difficult because of the lack of up-to-date and adequate data. One thing, however, is certain, that the main burden of refugee expenditure in Pakistan is at present borne not by the Central Government of Pakistan, but by the Government of West Punjab. To some extent the need for provision for Muslims who went to Western Pakistan and occupied fertile land and large buildings of richer non-Muslims who were uprooted is bound to be less. Even then, considering the fact that nearly 6 million persons went to Western Pakistan, the fact that the Government of

1. " As the Quaid-I-Azam put it the other day, our army forces must be such as to remove all forcible temptation from the path of potential aggression "—Budget speech of the Finance Minister of Pakistan, 1948-49, page 8.

2. The financial provision for Refugee Expenditure for 1950-51 will prove inadequate in view of the large scale exodus of East Bengal non-Muslims to India since January 1950.

Pakistan could not finance either relief or rehabilitation implies that they have considered defence expenditure to be of greater importance. From the budget figures it appears that the Government of West Punjab within the last four years has spent an aggregate amount of Rs. 21 crores both on capital and revenue accounts. The partition of the sub-continent of India was arranged in order that the communal problem might be solved; unfortunately this was not to be. If there was political sanity, an expenditure of over Rs. 25 crores per annum between the two countries together would have been saved.

Food Subsidies: An extraordinary item of expenditure which has been the peculiar liability of the Government of India in recent years is the subsidy on rationed food. This subsidy represents the loss involved in selling large quantities of imported and local food to rationed population at concessional rates. During the year 1948 the Government of India imported 2.8 million tons of foodstuffs at a total cost of Rs. 130 crores. During the year 1949, 3.8 million tons are estimated to have been imported at a total cost of Rs. 160 crores. In the year 1950 only about 1.5 million tons would be imported. The total expenditure on food subsidy amounted to Rs. 32 crores in 1948-49, Rs. 25 crores in 1949-50 and would cost Rs. 21 crores in 1950-51.

The aggregate expenditure on these extraordinary items like relief and rehabilitation of refugees and food subsidy account for more than 14 per cent. of the total expenditure in 1948-49, 11 per cent. in 1949-50 (R.E.) and is expected to be 7 per cent. of the total revenue expenditure in 1950-51. To the extent that these sums could have been otherwise utilised for developmental purposes, the expenditure should be viewed as a heavy but unavoidable drain on central finances in India. It is encouraging to note that this expenditure is being reduced from year to year.

IV. CENTRAL CAPITAL BUDGETS

On 15th August 1947 the Government of India had cash balances amounting to Rs. 400 crores. From this amount, as per the terms of the Inter-Dominion Financial Agreement, Rs. 75 crores were transferred to the Government of Pakistan leaving Rs. 325 crores to the Government of India. Since that time the cash balances have been reduced from time to time and by the end of the year 1950-51 they are expected to amount to Rs. 79 crores. These cash balances have been used by the Government of India to finance their deficits on current and capital account, thereby encouraging the inflationary trends in the country. Making allowance for miscellanesus deficits and advances, the total deficit leading to reduction in cash balances amounted to Rs. 81.67 crores in 1948-49 and Rs. 96.85 crores in 1949-50. The closing balance at the end of March 1950 was reduced to Rs. 95.38 crores.

CAPITAL BUDGETING IN INDIA

Table 10 (p. 490) which summarises the capital receipts and disbursements of the Government of India shows that during 1948-49, 1949-50 and 1950-51 the Government of India budgeted for a deficit on capital account to the tune of Rs. 183, Rs. 120 and Rs. 24 crores respectively. Unfortunately, because of the fact that the capital budget has been mixed up with external expenditure incurred in sterling in the United Kingdom it is not possible to assess the significance of this deficit. To some extent the deficit is due to the failure of the borrowing programme of the Government of India. This is an unfortunate reversal of war-time trends.

TABLE 10. Capital Receipts and Disbursements of the Government of India—1949-50 and 1950-51

(in lakhs of rupees)

Receipts	Revised 1948-49	Revised 1949-50	Budget 1950-51	Disbursements	Revised 1948-49	Revised 1949-50	Budget 1950-51
Sale proceeds of American and Leaselend Surpluses ...	...	30	70	Capital Outlay :—			
New Loans	55,04	57,22	85,36	Railways...	27,15	20,83	19,49
Treasury Bills*	270,65	—1,38	...	Irrigation	1,16	75	50
Treasury Deposit Receipts* ...	4,00	8,50	75	Posts & Telegraphs	2,91	3,82	5,64
Other Floating loans* ...	...	79,02	...	Industrial Development ...	10,94	9,55	9,63
Post Office Savings Bank Deposits*	22,34	14,90	18,20	Aviation	3,00	2,00	1,50
Defence Savings Bank Deposits*	9	— 43	— 30	Broadcasting	69	68	60
Post Office Cash Certifiates* ...	4,50	—3,95	—4,85	Ports	...	15	1,11
National Savings Certificates*...	16,35	15,70	15,50	Currency	6,00	79,16	2
Defence Savings Certificates* ...	35	— 28	— 70	Mint	80	61	49
Other Unfunded Debt* ...	93	3,77	6,72	New Capital at Delhi	...	1,95	1,76
Railway Depreciation Fund* ...	3,98	4,15	6	Multipurpose River Schemes ...	...	1,31	1,60
Revenue Reserve Fund (Railways)*	...	...	2,32	Civil Works	5,68	6,05	7,09
Railway Development Fund*	—2,54	74	4,53	Commutation of Pensions ...	1,16	1,17	43
Telephone Development Fund*	...	75	...	Sterling Pensions	215,68	— 7,42	— 7,37
P. & T. Renewals Reserve Fund*	1	25	—11	Defence Capital outlay... ...	91,66	2,40	2,15
Other Miscellaneous Reserve Funds*	7	10	4	Schemes of State Trading ...	1,73	6,33	7,37
Appro iation for Reduction or Avoidance of Debt*	5,00	5,00	5,00	Grants to States for Development	18,00	24,12	9,59
E.P.T. & Income-tax Deposits*	10,82	—25,99	—41,56	Other Civil Heads	55	60	40
Discount Sinking Fund* ...	95	1,13	1,00	Discharge of Permanent Debt ...	104,95	68,47	47,61
Payment by Reserve Bank for Rupee Coin	5,00	5,00	5,00	Advances to State Governments ...	38,92	52,55	34,81
Repayment of Loans by States	5,57	14,66	13,85	Other Loans & Advances (Net)	7,14	20,15	7,29
Other Deposits and Advances*	23,83	4,07	16,26				
Total ...	356,56	174,93	127,77	Total ...	541,65	295,23	151,71
Deficit on Capital Account ...	185,09	120,30	23,94	Surplus on Capital Account ...	...	...	...
	541,65	295,23	151,71		541,65	295,23	151,71

* Figures are net.

The following table indicates the progress of borrowing by the Government of India since independence as contrasted with the efforts of the British Government of Undivided India:—

TABLE 11. Progress of Borrowing in India

(in crores of rupees)

Year	New Loans	Discharge of permanent debts
1938-39	26.31	26 69
1939-40	15.72	29.02
1940-41	53.40	22.36
1941-42	73.00	118.50
1942-43	60.00	26.79
1943-44	272.22	87.46
1944-45	200.00	4.55
1945-46	334.00	58.79
1946-47	375.00	339.04
1947-48	40.95	59.57
1948-49 (B.E.)	55.04	104.95
1949-50 (RE.)	57.22	68.47
1950-51 (B.E.)	85.36	47.61

The table does not include the Small Savings Scheme and temporary ways and means advances. It is clear that whereas in the war years and even in 1946-47 the Government of Undivided India achieved a net borrowing from the market, in each of the years 1947-48, 1948-49 and 1949-50 there was a net outgo of cash from the treasury. Various reasons contributed to the failure of the borrowing programme after the partition. To mention a few, political uncertainty, indecisive governmental industrial and economic policy, the increased demand in the post-war period for funds for private investment, the speculation in stocks, shares and commodities were some of the factors which increased reluctance to lend to the Government on the part of investors, for whom the low interest rates of government securities, due to the cheap money policy of the Government of India, were relatively unattractive. To some extent, this net outgo of cash during 1947-48 and 1948-49 which was not directly invested served to increase the purchasing power in the hands of the public with consequent adverse effects on price levels. The figures relating to the new loans in 1947-48, 1948-49 and 1949-50 are inclusive of conversion operations of matured debt during the period. Even the receipts from small savings like National Savings Certificates and Post Office Savings Bank Deposits from cultivators and middle-classes have not been able to stem the tide of this reversal during the year 1948-49. The following table summarises the results of borrowing during the years 1948-49, 1949-50 and 1950-51:—

TABLE 12. Progress of Borrowing by the Government of India

(in crores of rupees)

Year	New loans	Small savings net	Total Borrowings	Discharge of permanent debt	Net inflow or outflow of cash from the treasury
1948-49	55.04	32.55	87.89	104.95	—17.06
1949-50	40.00	26.00	66.00	68.47	— 2.47
1950-51	75.00	28.00	103.00	47.00	56.00

We find that there was a net cash outgo of Rs. 17 crores in 1948-49. In the figures of borrowings both during 1949-50 and 1950-51, the receipts under new loans include Rs. 16.77 crores and 10.36 crores respectively on account of dollar loans from the International Bank for Reconstruction and Development. If these amounts were deducted, during 1949-50 the net outgo of cash, would be as high as during 1948-49. As for 1950-51, it remains to be seen whether the expectations of the Government to stem the tide of net cash outgo and keep up to the estimated borrowing of Rs. 56 crores will be realised.

Table 10 indicates also the grants as well as loans to various provinces for developmental purposes. The figures of grants to provinces are being reduced from year to year because of the financial difficulties of the Central Government. This is bound to have an adverse effect on the developmental programmes envisaged by the various provinces. It is certain that the provinces would have to go slow in their reconstruction plans. It is difficult to understand why the Government of India should charge to capital account the grants given to provinces, the major portion of which the latter are likely to spend on current expenditure and extension of their normal activities like education, the grow more food programme, public health schemes, etc. It should be emphasized that the Government of Pakistan does not give any grants to provinces but only loans. Among the major schemes of industrial development included in the expenditure on capital account, the Government of India has made extensive financial provision for the fertiliser factory at Sindri, the multipurpose Damodar Valley Project, the Hirakud Project, the Bhakra Nangal Project, the Industrial Finance Corporation, etc.

CAPITAL BUDGETING IN PAKISTAN

The Government of Pakistan started with an opening balance of Rs. 20 crores on the eve of the partition. This was increased to Rs. 75 crores by the transfer of Rs. 55 crores from cash balances by the Government of India as per the terms of the Inter-Dominion Financial Agreement. So far as borrowing is concerned, it should be said to the credit of the Government of Pakistan that they have been more successful.

Within a period of thirteen months between September 1948 and end of March 1949, the Government of Pakistan were able to borrow about Rs. 70 crores from the market, which may be contrasted with Rs. 40 crores borrowed by the Government of India during the financial year 1949-50. To some extent the circumstances of Pakistan are different. The investors in Pakistan mainly belong to commercial classes, who because of the absence of any large scale industries, have been tempted by government securities. Further, many banks and insurance companies in Undivided India, which had their head offices in India have now been asked by the Government of Pakistan to establish new head offices in Pakistan itself and maintain a prescribed portion of their assets in Government securities. This too might account for the increased borrowing by the Government of Pakistan. Lastly, the enthusiasm of Muslims for their new State must be considered above all as the most important factor in the successful borrowing policy of the Government of Pakistan. According to the figures revealed by the Finance Minister, the total amount of borrowing from the market from August 1947 to the end of February 1950 would be Rs. 86 crores. At the same time, because the grant of the moratorium for a period of four years on its pre-partition liabilities, she has not had to discharge or pay back the old debts for the time being. The following table gives the expenditure on capital account of the Government of Pakistan:—

TABLE 13. Expenditure on Capital Account of the Central Government of Pakistan.

(in thousands of rupees)

	1948-49 Revised	1949-50 Revised	1950-51 Budget
TOTAL—CAPITAL ACCOUNT..	44,72,34	89,15,99	36,51,92
Railway Capital	3,26,22	2,39,00	7,00 00
Posts and Telegraphs..	41.31	49,06	87,25
Salt	7,00	2,50	..
Irrigation	7,00	..	..
Schemes of Agricultural Improvement and Research	..	..	..
Industrial Development	..	1,12,00	4,00,00
Civil Aviation	28,13	81,93	52,80
Broadcasting	13.28	37.50	5,50
Currency	4,77,00	54,00,00	10,00
Mint	1 33	4 54	61
Civil Works	1,91,06	2,96,63	3,28,67
Commuted Value of Pensions.	1,00	2,62	1,62
Purchase of Annuity for Payment of Sterling Pensions	10,38.91	—32.74	—26.41
Printing Presses	34.49	13.50	46,72
Defences Capital Outlay	21,11,00	24,70.00	25,00,00
Schemes of State Trading	41.61	1,11.66	—5,06,16
Grants to Provincial Governments for Development	1,50,00	1,15,00	50.00
Capital outlay on New Federal Capital	..	90	25.00
Capital outlay on Civil Defence	..	..	14,00

It is clear that much the larger portion of the expenditure on capital account has been incurred on defence. Defence capital outlay accounts for nearly 49 per cent. of the total capital expenditure in 1948-49. The proportion in 1949-50 is less because of the expenditure of Rs. 54 crores which was incurred as payment by the Government to the State Bank, to enable it to cover shortfalls in its currency and other reserves arising from the depreciation of the pound sterling and the Indian rupee. In the year 1950-51 the capital expenditure on defence again shows a high percentage of 69. Further the grants to provincial governments for developmental purposes amount to only Rs. 1 crore in 1949-50 and Rs. 50 lakhs in 1950-51. Among the important items of capital outlay, the Government have provided for the establishment of five jute mills, each with one thousand looms and for doubling the port capacity of Chittagong within a period of three years beginning with 1950-51. The total cost of the development of the Port of Chittagong for the long-term plan is estimated at Rs. 14.5 crores. The plan includes the construction of 8 additional new jetties, renovation of 5 existing jetties and the construction of new transit roads and sheds. Expenditure on the development of the port during 1950-51 is estimated at Rs. 66 lakhs in 1949-50, and Rs. 3.37 crores in 1950-51 and these have been provided for in the capital account.

V. CENTRAL PUBLIC DEBT

DIVISION OF ASSETS AND LIABILITIES

A Financial Agreement was reached with Pakistan on 12th December 1947 for the division of assets and liabilities of Undivided India. It laid down certain broad principles of division. It was agreed that all the immovable assets of Undivided India would become the property of each country according to their location. Corresponding liabilities for these were to be undertaken according to their book value. It was also agreed that all liabilities in respect of loans, guarantees, and financial obligations of Undivided India as outstand-

ing on the 15th August 1947, would be taken over by the Government of India subject to the recovery of an appropriate contribution from Pakistan. The share of each country in various importance items of liabilities was to be determined according to the principles laid down in the agreement. Unfortunately a complete balance sheet of assets and liabilities of Undivided India as outstanding on 15th August 1947 which formed the basis of this agreement is not yet available. It is not therefore possible to show the quantitative share of each country under each major category of assets and liabilities.

The liabilities may be divided into three parts:—(i) those which have corresponding assets in yielding interest, (ii) liabilities not covered by any assets and known as uncovered debt, and (iii) liabilities against which the Government has cash and securities held on treasury account. The division of each of these items was based upon different principles agreed to by both the countries.

LIABILITIES COVERED BY INTEREST-YIELDING ASSETS

The most important of these assets are railways, commercial departments like posts and telegraphs and telephones, and loans advanced to the provinces, Indian States and to Burma. The total value of such interest-yielding assets amounted to Rs. 1,000 crores out of a total debt of 2,267 crores as outstanding on 1st March 1947. The most important item among these interest-yielding assets is the capital at charge on railways. It has been decided that each country should hold liabilities for the book value of the railways located in it with one exception. As all the strategic portion of the North Western Railway was located in Pakistan, it was agreed that the book value of the strategic portion would be written down by half in estimating Pakistan's financial liability for it. The strategic railways now located in Pakistan have cost Rs. 32 crores. According to the above principle Pakistan would be liable only for half this amount, that is Rs. 16 crores. This implies that the responsibility for the remaining Rs. 16 crores would be taken over and paid for by the Government of India. So far as the other commercial departments like Posts and Telegraphs are concerned, the basis of division is the same as in the case of the railways. As for the loans advanced to the Provinces and Indian States, it has been agreed that each country will be responsible for the liability of Provinces and States located in its area. There is no reference in the agreement regarding the share of each country in the debt due from Burma.

UNCOVERED DEBT

The uncovered debt of Undivided India was mainly due to expenditure on wars and famines during British rule. The only assets against this expenditure were military stores. It was agreed that Pakistan would get one-third of the military stores as existing on 15th August 1947 in India. Some portion of Pakistan's share in the military stores has already been delivered. The process of transfer however stopped when the Government of India found that the arms and ammunition given to her were being used by Pakistan in the Kashmir war against the Indian army. As Ordnance Factories were immovable assets located in India, it was agreed that Pakistan would be given a lump sum for erecting factories. To this sum was added the money required to have a mint and a security printing press in Pakistan. It is understood that the total amount on this account due from India would be Rs. 6 crores. The total uncovered debt of the Government of India in March 1947 amounted to Rs. 867

crores. It was agreed that the share of Pakistan in this uncovered debt less the amount due to her for starting ammunition factories and the currency and printing press would be 17.5 per cent. of the total. The total share of Pakistan in the public debt of Undivided India is estimated at Rs. 300 crores.[1]

METHOD OF PAYMENT

It has been agreed that the Government of India would be a debtor to the holders of securities of the Government of Undivided India. In other words, all those who hold Government securities issued before August 1947, whether they are nationals of India or Pakistan will receive interest and principal from the Government of India. The Government of Pakistan will pay their share of this debt with interest in equal annual instalments spread over a period of fifty years. The first payment would start from the fifth year after partition, i.e., in 1952. The interest payments would be calculated on the basis of the average yield of the rupee and sterling securities of the Government of India over a period of two years, preceding the date of the partition. The moratorium of four years to Pakistan was given under an assumption, which by actual experience has been found to be incorrect. It is common knowledge that inter-Governmental liabilities can be repaid ordinarily in goods, through excess of exports over imports, or in treasure, gold or silver. At the time of the conclusion of the Financial Agreement, it was assumed that Pakistan would have an unfavourable balance of trade with India and that the new infant State would find it difficult for some time to remit the annual instalments, which would be an added burden to the anticipated deficit in her balance of payments with India. It has been found that these fears were mislaid, and that the true situation was not anticipated by those concerned, thus causing considerable financial loss to India and unnecessary burden to the Indian tax-payer. It is estimated that during July 1948 to June 1949 Pakistan had a favourable balance of trade with India to the extent of Rs. 34 crores.[2] According to the Inter-Dominion Payments Agreement, the Government of India gave Rs. 2 crores in current sterling and Rs. 9 crores in blocked sterling to make up for this deficit. If the moratorium had not been given to Pakistan, this depletion of sterling balances would not have been necessary. Assuming that the share of Pakistan in the total debt would be Rs. 300 crores, the interest charges per year may be estimated at least at Rs. 10 crores. In a period of four years the total interest charges would be Rs. 40 crores. As the Government of India have undertaken the responsibility for paying interest charges to holders of Government securities, they have of necessity to make provision for these interest charges every year in their Revenue Budget. As a result, in a period of four years the people of India will have borne a tax-burden of Rs. 40 crores as interest charges because of the moratorium granted to Pakistan. This is not the whole story. Payments of interest to security-holders in Pakistan can be made in terms of increased exports or in its absence, in the form of a transfer of treasure or sterling. This means that even from the point of view of balance of payments between the two countries, every year up to 1952 the Government of India will be faced with the need of providing for foreign exchange as remittances to Pakistan nationals by way of interest due to them on Government securities. It seems that at the time that the Agreement was reached, the Government of India were actuated more by sentiments of appeasement towards Pakistan and that these sentiments resulted in lack of fore-

1. Budget Speech of the Finance Minister of the Government of India, for the year 1948-49.
2. Supplement to the Indian Trade Journal, November 17, 1949.

sight of its economic consequences. Instead of undertaking this cumbrous procedure which has proved so detrimental to the financial interests of India, would it not have been better if Pakistan had been asked to mobilise and call back from all her nationals the securities that they held in return for new securities for which the Government of Pakistan itself would be responsible? Had this been done the burden of the debt would have been less for India. Further, such a procedure would have been free from the uncertainties and quarrels over inter-governmental debts. The history of international lending shows that creditor countries have invariably lost large amounts invested by them in debtor countries. In future, any political quarrels between the two countries would always raise the fear of repudiation by Pakistan. Even in a trade war between the two countries, the Financial Agreement is likely to prove a serious handicap to the Government of India.

POST-PARTITION DEBT POSITION OF INDIA

The outstanding public debt of the Government of India is estimated to amout to Rs. 2,087 crores at the end of 1949-50 and Rs. 2,126 crores at the end of 1950-51. If the liability for the World Bank loan included in the above statement is excluded, the total outstanding debt would amount to Rs. 2,094 crores at the end of 1950-51, indicating an increase of Rs. 1,165 crores over the corresponding figure in 1938-39. In addition, the Government is liable to pay the balances in the various provident funds, the post-office savings banks, the post-office cash and national savings certificates, the depreciation and reserve funds of the railways, posts and telegraphs, and certain other deposits relating to the excess profits tax and the income tax. These, it is expected, will have grown to Rs. 256 crores on 31st March 1951 after making a rough allowance of Rs. 300 crores for Pakistan's probable share in these. The total outstanding debt would thus amount to Rs. 2,748 crores at the end of the budget year 1950-51. The following table analyses the interest-bearing obligations included in this total liability and the interest-bearing assets held against it:-

TABLE 14. Interest-bearing Obligations and Interest-yielding Assets of the Government of India

(in lakhs of rupees)

	1938-39 (pre-war year)	1949-50 (Revised)	1950-51 (Budget)
TOTAL INTEREST YIELDING OBLIGATIONS ...	12,05,76	25,12,93	25,61,05
TOTAL OBLIGATIONS IN INDIA	7,36,64	24,56,33	24,98,71
TOTAL PUBLIC DEBT (INDIA)	4,84,17	18,13,63	18,47,55
Loans	4,37,87	14,52,15	14,85,32
Treasury Bills and Ways and Means Advances ...	46,30	3,49,09	3,49,09
Treasury Deposit Receipts	...	12,39	13,14
TOTAL UNFUNDED DEBT (INDIA) ...	2,25,13	3,91,71	4,26,29
Service Funds	1,03	58	49
Post Office Savings Bank Deposits, including Defence Savings Bank	81,88	1,65,74	1,83,64
Post Office Cash and Defence Savings Certificates...	59,57	22,51	16,96
National Savings Certificates	...	1,05,55	1,21,05
State Provident Funds	72,40	87,09	93,92
Other items	10,25	10,24	10,23
TOTAL DEPOSITS IN INDIA	27,34	2.50,99	2,24,87
Depreciation, Development and Reserve Funds ...	27,34	1,26,15	1,41,95
Other Deposits	...	1,24,84	82,92

	1938-39 (pre-war year)[1]	1949-50 (Revised)	1950-51 (Budget)
TOTAL OBLIGATIONS IN ENGLAND ...	4,69,12	39,83	36,05
TOTAL PUBLIC DEBT IN ENGLAND ...	4,64,94	36,64	32,92
Loans	3,96,50	2.73	1 34
War Contribution	20,62	20,62	20,62
Capital portion of Railway annuities created in purchase of Railways	47,82	13,29	10,96
UNFUNDED DEBT—			
Service Funds (England)	4,18	3,19	3,13
Dollar Loans	...	16,77	26.29
TOTAL INTEREST-YIELDING ASSETS	9,46,38	15,21,89	16,41,19
Capital advanced to Railways	7,25,24	7,23,80	8,06,43
Capital advanced to other commercial Departments	27,42	68,97	87,59
Capital advanced to States	1,23,28	1,17,61	1,55,55
Other interest-bearing loans	20,71	41.31	31,62
Debt due from Burma	49,73	48,15	48,15
Deposits with the U. K. Government for redemption of Railway annuities	...	13,29	10,96
Purchase of annuities for Sterling Pensions ...	...	2,08,26	2,00,89
Debt due from Pakistan	...	3,00,00	3,00,00
Cash and Securities held on Treasury Account ...	30,30	1,76,99	1,54,30
BALANCE OF TOTAL INTEREST-BEARING OBLIG TIONS NOT COVERED BY ABOVE ASSETS	2,29,08	8,18,55	7,05,56

1. The outstandings at the end of each year are shown in the statement. The accounts for the years 1947-48 (pre partition and post-partition) and 1948-49 have not yet been closed and the figures have, therefore, been worked out on the best information available.
2. Sterling obligations have been converted into Rupees at 1 sh. 6d. to the Rupee.
3. Under Unfunded Debt, Deposits and Interest-yielding assets allowance has been made on a rough basis for the share allocable to Pakistan.
4. The figure entered for debt due from Pakistan is a rough guess.

Against this total debt the Government of India holds Rs. 154 crores as cash. By for the greater portion of this debt of Rs. 2,748 crores is what may be described as productive. The capital outlay on railways up to the 31st March 1951, amounting to Rs. 806 crores, that on posts and telegraphs of Rs. 88 crores, loans and advances including the debt due from Burma of Rs. 235 crores, the purchase of annuities for sterling payments and pensions at Rs. 201 crores and cash and investments including the subscription to the International Monetary Fund and payment for her quota of share in the International Bank for Reconstruction and Development of Rs. 378 crores, make a total productive debt of Rs. 1,708 crores. Taking a further debt of Pakistan to India of Rs. 300 crores, the total would rise to Rs. 2,008 crores of productive debt. The unproductive debt amounts to Rs. 740 crores or 24 per cent. of the total debt. Even this debt cannot be called wholly unproductive because it includes grants to States for development purposes; it also includes part of the expenditure on the construction of Delhi.

PUBLIC DEBT OF PAKISTAN

The total public debt of Pakistan, including the share of Undivided India's excess of liabilities over assets, amounts to Rs. 386 crores.

VI. PROVINCIAL FINANCE

COMPARISON BETWEEN INDIA AND PAKISTAN

Before the partition the tax structures of the provinces in India and Pakistan were similar. Since then for reasons mentioned earlier, the sources of taxation and revenue available to the provinces in Pakistan have been reduced and the partition has meant a heavy financial drain on them. The following table gives the annual revenue and expenditure of the Provinces in India and Pakistan:-

TABLE 15. Revenue and Expenditure of Provinces in India and Pakistan, 1950-51 (Budget)

Province	Revenue Rs. (in lakhs)	Expenditure Rs. (in lakhs)	Population (in millions)	Per capita Revenue Rs.
INDIA	2,85,51	2,83,87	259.7	14.08
Bombay	61,39	61,37	32.7	18.77
Madras	55,21	55,57	54.3	10.19
Orissa	10,65	11,41	14.4	7.40
Assam	9,10	9,88	8.5	10.61
West Bengal	33,89	35,22	24.3	13.95
U. P.	55,26	52,21	61.6	8.48
Bihar	25,90	25,92	39.4	6.57
East Punjab	16,63	16,13	12.6	13.21
C. P.	17,57	16,16	20.9	8.41
PAKISTAN	40,34	49,82	74.7	6.38
East Bengal	17,93	19,66	45.9	3.89
West Punjab	19,62	18,60	20.2	9.82
Sind	6,70	7,32	5.1	13.38
N. W. F. P.	4,09	4,24	3.6	11.30

On the whole, the *per capita* revenue of provincial governments in India is higher than that in Pakistan by nearly 60 per cent. It is significant to note that the *per capita* revenue of East Bengal, which has two-thirds of the total population of Pakistan is less than that of the poorer provinces in India like Assam, Orissa and Bihar. The *per capita* provincial tax burden in West Bengal, which has only half the population of Eastern Bengal, is nearly four times as great as that of the latter. This is because of the fact that the industrial areas of Undivided Bengal are located in Western Bengal. To a great extent provincial revenues in Pakistan have been reduced because of the changed structure of financial relations with the Centre, whereby the provinces get only 50 per cent. in the receipts from sales tax, nothing by way of share in the taxes on income and no subventions excepting Rs. 1 crore to the N.W.F.P.

PROVINCIAL REVENUES

As the budgetary details of provincial governments in Pakistan are not available, it has not been possible to make any detailed comparison of provincial finance in India and Pakistan. So far as the Provinces in India are concerned, table 16 (p. 499) gives the main items of revenue of each Provincial government for the budget year 1950-51. It will be seen that the most important item of provincial revenue is sales tax which accounts for more than 27 per cent. of the total revenue in Madras, 17 per cent. in Bombay, more than 11 per cent. in West Bengal and 10 per cent. in the United Provinces. Prior to the war the most

TABLE 16. Provincial Finance in India, 1950-1951 (Budget)

MAJOR HEADS OF REVENUE

(in thousands of rupees)

(percentages in brackets)

Major heads of Revenue	Bombay	Madras	Orissa	Assam	West Bengal	U.P.	Bihar	Punjab	C.P.
TOTAL ...	61,39,06 (100.0)	55,21,25 (100.0)	10,65,81 (100.0)	9,01,64 (100.0)	33,89,86 (100.0)	52,26,06 (100.0)	25,90,23 (100.0)	16,63,59 (100.0)	17,57,63 (100.0)
1. Taxes on income other than corporation tax	9,84,06 (16.03)	8,20,00 (14.85)	1,55,48 (14.55)	1,92,28 (21.30)	6,92,01 (20.41)	9,70,58 (18.56)	5,99,60 (23.12)	2,59,99 (15.57)	2,81,16 (15.99)
2. Land Revenue	6,06,20 (9.87)	5,72,50 (10.36)	1,13,60 (10.61)	1,60,87 (17.75)	2,06,05 (6.07)	7,30,99 (17.79)	1,40,20 (5.40)	1,01,47 (9.68)	3,71,79 (21.11)
3. Provincial Excise	1,13,23 (1.87)	32,09 (0.57)	1,69,25 (15.86)	68,21 (7.54)	5,87,50 (17.33)	5,80,91 (11.09)	4,94,27 (19.07)	29,92 (13.16)	2,26,93 (12.86)
4. Stamps	4,18,37 (6.81)	4,26,90 (7.71)	45,76 (4.22)	15,68 (1.66)	2,43,00 (7.17)	2,31,31 (4.42)	2,41,68 (9.30)	48,37 (2.88)	85,43 (4.83)
5. Forests	3,13,13 (5.00)	1,75,00 (3.16)	89,36 (8.35)	49,26 (5.43)	62,15 (1.82)	3,05,69 (5.84)	47,37 (1.81)	56,31 (3.36)	2,25,26 (12.80)
6. Registration	35,15 (0.57)	89,88 (1.61)	7,03 (0.65)	2,13 (0.22)	38,63 (1.12)	26,62 (0.49)	70,93 (2.70)	5,47 (0.30)	19,00 (1.08)
7. Receipts under Motor Vehicles Act	1,50,60 (2.44)	2,95,00 (5.35)	5,63 (0.46)	12,66 (1.33)	47,03 (1.38)	52,83 (0.99)	3,07 (0.11)	13,32 (0.78)	38,93 (2.16)
8. Sales Tax	10,45,51 (17.02)	15,50,00 (27.16)	74,70 (6.94)	39,50 (4.32)	4,00,00 (11.80)	5,35,00 (10.23)	2,00,00 (7.72)	1,45,09 (8.71)	2,08,68 (11.13)
9. Other taxes and duties	7,50,55 (12.20)	2,79,02 (5.05)	12,86 (1.12)	19,50 (2.10)	3,70,80 (10.93)	3,84,25 (7.34)	66,72 (2.54)	48,47 (2.88)	40,68 (3.27)
10. Irrigation, navigation, embankment and drainage works ...	47,39 (0.76)	1,96,31 (3.55)	—6,22 (—.56)	....	—78 (—2.30)	2,69,87 (5.14)	7,99 (0.27)	1,62,45 (9.74)	20,62 (1.13)
11. Miscellaneous	16,74,87 (27.26)	11,34,55 (20.54)	3,98,92 (37.37)	3,41,55 (47.84)	6,45,71 (19.03)	9,38,01 (17.94)	7,18,22 (27.72)	5,42,73 (32.60)	2,39,18 (13.60)

important source of revenue of the provinces used to be land revenue and even today some of the agricultural provinces like United Provinces and Central Provinces and the undeveloped province of Assam depend for more than 17 per cent. of their total revenues on it. As a result of the changes in financial relations between the Centre and the Provinces due to the Niemeyer Award, which synchronised with the war and post-war increases in taxes on income, the provinces have realised large sums by way of their share in the divisible pool. All the provinces depend for nearly 15 to 20 per cent. of their annual revenue on the receipts from this item of shared revenue. As a result of complete prohibition policy, the Government of Bombay has foregone an excise revenue of more than Rs. 9 crores and Madras more than Rs. 16 crores per annum. It is expected that in future nearly all the provinces will depend less and less on this source. There is no doubt that the sacrifice of this revenue in Bombay and Madras will slow down the pace of their development programmes. Opinions differ as to whether it would not have been advisable for these provinces to postpone such schemes of moral reforms under the existing inflationary conditions, which to some extent are likely to be aggravated by this policy. The *per capitā* revenue in the industrialised provinces of Bombay and West Bengal is higher than that of the agricultural provinces like Madras, the United Provinces and Central Provinces. The *per capita* revenue in Madras has gone down considerably as a result of the prohibition policy of that government.

PROVINCIAL EXPENDITURE

Table 17 (p. 501) classifies the revenue expenditure of various provincial governments in India according to certain well-defined categories. It appears that the cost of administration is heavier in relation to the total revenue expenditure in the case of poorer provinces like Orissa, Assam and Bihar, as compared to the other provinces excepting Madras. The high proportion of administrative expenditure in Madras is due to the increase in administrative charges up to the year 1946-47 due to the growth in revenues. The provincial revenue went down, on account of the prohibition policy but the administrative charges could not be reduced. It should be remembered however that Madras incurs very little expenditure on ancillary charges, i e. interest on public debt and pensions. From this, it appears that the province has great untapped borrowing capacity. The Province of Madras has a number of productive capital assets in irrigation and electricity, which have given profitable financial results and increase in net revenue. The expenditure on security services like police and jails has increased in recent times and accounts for more than 15 per cent. of the total revenue expenditure in most of the provinces. Nearly all the provinces spend more than 25 per cent. of their revenue expenditure on social services like education, medical and public health. The expenditure on economic activities in agricultural provinces like U.P., Bihar, Assam and Orissa is relatively greater as they are spending large amounts on industrial activities initiated by the State.

DEVELOPMENT PLANNING IN PROVINCES

When the war ended in September 1946, the British Government in India apprehended an immediate post-war depression in India. The Reconstruction Committee of the Government of India suggested in 1945 that post-war planning should be undertaken so as to keep up effective demand and also to rehabilitate the war-torn economy. Accordingly the Provincial Governments were asked to prepare comprehensive plans for post-war reconstruction. The

TABLE 17. Provincial Finance in India, 1950-51 (Budget)

MAJOR CATEGORIES OF EXPENDITURE

(figures in lakhs)

	Bombay	Madras	Orissa	Assam	W. Bengal	U. P.	Bihar	Punjab	C.P.
TOTAL EXPENDITURE ON REVENUE ACCOUNT	61,37 (100.0)	54.72 (100.0)	11,41 (100.0)	9,88 (100.0)	35,22 (100.0)	52,21 (100.0)	25,92 (100.0)	16,13 (100.0)	16,16 (100.0)
1. PRIMARY AND PROTECTIVE FUNCTIONS									
a. Administrative charges ...	12,56 (20.46)	16,42 (29.60)	2,96 (25.94)	2,65 (26.82)	6,29 (17.85)	11,30 (21.64)	6,69 (25.81)	3,86 (23.93)	4.58 (28.34)
b. Ancilliary charges	4,12 (6.71)	1,00 (1.79)	73 (6.39)	47 (4.75)	1,41 (4.00)	4,64 (8.88)	1,06 (4.08)	2,00 (12.39)	1,34 (8.29)
c. Security services	11,34 (18.47)	8,99 (16.17)	1,77 (15.51)	1,41 (14.27)	6,67 (18.93)	9,69 (18.55)	4,65 (17.93)	3,28 (20.33)	2,82 (17.45)
2. SECONDARY AND DEVELOPMENTAL FUNCTIONS									
a. Social services	20,53 (33.45)	17,24 (31.02)	3,21 (28.14)	3,38 (34.21)	9,63 (27.34)	15,54 (29.96)	7,18 (27.50)	4,18 (25.31)	5,45 (33.72)
b. Economic activities in aid of production	6,09 (9.92)	7,50 (13.49)	2,08 (18.22)	1,88 (19.02)	6,16 (17.49)	7,71 (14.76)	4,32 (16.60)	2,53 (15.68)	1,61 (9.96)
c. Irrigation and other commercial services	4,15 (6.76)	2,51 (4.51)	61 (5.34)	... ...	123 (3.49)	95 (1.81)	... ...	28 (1.73)	36 (2.22)
d. Extraordinary charges ...	2,58 (4.20)	1,06 (1.90)	5 (0.91)	9 (10.87)	3,83 (3.04)	1,59 (8.02)	2,08		

Government of India offered considerable support in planning by way of grants-in-aid and loans. The provinces were informed that they might expect to receive from the Centre grants from half to two-thirds of the central surplus of Rs. 500 crores which was expected to accrue in the first quinquenium 1947-1952. On the basis of this promised support of nearly Rs. 250 crores, the Provinces drew up their post-war reconstruction plans, which in the aggregate amounted to nearly Rs. 800 crores. The Government of India intimated the Provinces in March 1946 that grants to them would be distributed on a population basis, subject to increased amounts for undeveloped provinces like Assam, Bihar and Orissa. Instead of the expected depression, the country was involved in inflationary conditions, partly as a result of the partition and partly due to the post-war pent up demand, both on private and government account, which was far in excess of current production and partly also due to the policy of decontrol. The expected central surplus also did not materialise. As a result, between 1946 and 1950 the Government of India could give to the provinces only Rs. 60 crores by way of grants in place of Rs. 300 crores. In consequence, the aggregate expenditure of provincial governments on their development programme had to be reduced to less than Rs. 300 crores in place of Rs. 1,200 crores. Table 18 shows the financing of development programmes by various provincial

TABLE 18. Financing of the Provincial Development Programme, 1946-47[1] to 1949-50

(rupees in lakhs)

(Percentages in brackets)

Province	Central Grants	Central Loans	Provincial Loans	Net Revenue Surplus outside D/Account	Withdrawal from Prov. Balances	Total
TOTAL ...	61,05 (26.6)	47,99 (20.9)	8,42 (3.7)	54,01 (23.6)	58,15 (25.2)	2,29,62 (100)
Assam ...	4,85 (84.2)	... ...	... ...	19 (3.3)	72 (12.5)	5,76 (100)
Bihar ...	5,88 (38.9)	1,78 (11.9)	... ...	5,38 (35.9)	1,99 (13.3)	(14.98) (100)
Bombay ...	5,76 (12.0)	... ...	...	18,78 (39.4)	23,19 (48.6)	47,73 (100)
C.P. ...	4,41 (18.7)	7,13 (30.3)	2,68 (11.3)	5,90 (25.0)	3,45 (14.7)	23,57 (100)
East Punjab ...	2,44 (16.5)	1,124 (82.9)	... ...	... ...	8 (0.6)	14,76 (100)
Madras ...	12,00 (27.4)	3,00 (6.8)	1,13 (2.6)	10,87 (24.8)	16,83 (38.4)	43,83 (100)
Orissa ...	5,19 (32.8)	8,17 (51.6)	... ...	1,22 (7.8)	1,23 (7.8)	15,81 (100)
U.P.	14,97 (31.3)	100,00 (20.8)	4,61 (9.7)	9,07 (18.9)	9,32 (19.3)	47,97 (100)
West Bengal ...	5,60 (36.8)	5,67 (37.3)	...	2,60 (17.1)	1,34 (8.8)	15,21 (100)

1 Adjusted for likely changes in the Provincial Development Programmes consequent on the reduction in Central loans and grants for the current year.

governments between 1946-47 and 1949-50. Even this reduced amount of nearly Rs. 230 crores between 1946-47 and 1949-50 represents for a country like India a very impressive effort, though it is admittedly inadequate from the point of view of overall economic and social requirements. Unfortunately all the provinces have not yet published progress reports indicating the actual achievements of their development programmes. It is not, therefore, possible to pronounce upon the policy of different provinces. Nearly 40 per cent. of the total development expenditure of the provinces is on capital account on schemes of electricity, irrigation and roads, the results of which in terms of economic benefit can be realised only in the long run. From the available information, however, it appears that the Provincial development programmes as a whole are 'unco-ordinated and lack perspective'. The provinces alone are not responsible for this. The Central Government which distributed the grants did not ensure co-ordinated action. With the appointment of the Planning Commission it may be hoped that future planning by provinces in India will be systematic, comprehensive and well-thought out. So far as the development of the revenue expenditure is concerned, there is no doubt that the increase in establishment and overhead charges due to the payment of dearness allowance, etc., must tend to create a sizeable gap between the actual achievement and the targets aimed at. For example, the scheme of compulsory primary education for the whole of Bombay province was estimated to cost Rs. 10 crores on the basis of Rs. 14 per pupil. By 1949, however, the cost per pupil in primary schools went up to Rs. 36 and this is bound to reduce the progress of such schemes. The system of giving grants by the Government of India has fluctuated from time to time with the vicissitudes in the financial position of the Centre. The population basis envisaged earlier in 1946 was changed to 50 per cent. share of only the approved expenditure in 1948-49. In consequence, the richer provinces claimed larger amounts. In September 1949 the Government of India reduced provincial grants from an aggregate amount of nearly Rs. 27 crores to 24 crores. In the budget for 1950-51 provincial governments were informed that they will be given no grants at all except for their grow more food schemes, and the provision for such grants has been reduced to Rs. 9.5 crores only.

FINANCES OF PART B STATES[1]

The following table gives the total revenue, expenditure and *per capita* revenues in 1950-51 (Budget) for the Part B States of India:—

TABLE 19. Revenue and Expenditure of Part B States, 1950-51 (Budget)

	Revenue (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Population (millions)	Per capita Revenue Rs.
TOTAL	90,83	90,83	64.17	14.08
Hyderabad	25,62	25,73	17.69	14.48
Mysore	11,70	11,67	8.06	14.52
Travancore-Cochin	14,00	14,36	8.58	16.31
Saurashtra	7,59	7,56	3.96	19.17
Rajasthan	16,09	16,09	14.69	10.95
Madhya Bharat	10,76	10,88	7.87	13.68
PEPSU	4,57	4,54	3.82	13.75

1. This term refers to the former States and States Unions.

The *per capita* revenue in the States favourably compares with that in the Provinces. However, proper discount will have to be made for the difference in population in the different Provinces and States. The *per capita* revenue is highest for Saurashtra, Bombay and Travancore-Cochin. Bihar and Rajasthan, on the other hand, show the lowest figures for *per capita* revenue. This is due to the relatively larger population of these Provinces. States like Hyderabad, Mysore, Travancore-Cochin have large productive capital assets as the following table shows:—

TABLE 20. Productive Assets in States, end of March 1950

(*in lakhs of rupees*)

	Hyderabad	Mysore	Travancore-Cochin
Irrigation	10,98	6,31	1,36
Hydro-electric schemes	...	15,11	7,95
Industry	9,86	6,11	46

The States also have spent large amounts on development planning. The budgeted expenditure for 1950-51 on capital account in all the Part B States amounts to Rs. 27 crores. The resources have been drawn from cash balances and specially ear-marked funds. The total liquid assets and investments of all the Part B States was Rs. 125 crores at the end of March 1950. The budgeted deficit on capital account for 1950-51 amounted to Rs. 19 crores compared with Rs. 17 crores for the Central Government and Rs. 45 crores for Part A States.[1] Just as in the case of the Provinces, social services like education, medical and public health, etc., account for a large portion of the expenditure on revenue account. Mysore, for example, has the highest *per capita* expenditure on social services with Bombay, Saurashtra and Travancore-Cochin coming next.

1. This term refers to the former Provinces.

CHAPTER XIII

CURRENCY, BANKING AND INSURANCE

I. CURRENCY AND BANKING

TRANSITIONAL ARRANGEMENTS

In view of the peculiar circumstances which brought about the sudden emergence of the Dominion of Pakistan it is easy to understand why that country could not start its career with an independent currency and credit system which is considered to be the essential attribute of a sovereign state. Such an arrangement would have disrupted the entire economic life of Pakistan. With a view to maintaining a unified monetary system for the two countries until the Government of Pakistan could establish its own machinery to regulate currency and banking, the Pakistan Monetary System and Reserve Bank Order, 1947, was issued on the eve of the partition whereby the existing currency and banking mechanism under the aegis of Reserve Bank of India was to continue till 30th September 1948. Later, it was decided to terminate these arrangements on 30th June 1948, by the Pakistan Monetary System Reserve Bank (Amendment) Order, 1948, issued in March 1948. The position in regard to transitional arrangements provided for under the order is summarised below.—

(1) **Currency in Pakistan:**—The standard monetary unit of Pakistan was to be the 'India Rupee' until the Pakistan Legislature provided otherwise. The Reserve Bank of India was to continue to be the sole note-issuing authority in Pakistan till 30th June 1948. All 'India Notes'[1] were to continue to be legal tender in Pakistan till that time. The Reserve Bank was empowered to issue after 1st April 1948 'Pakistan Notes'.[2] After 30th June 1948, however, the Reserve Bank was not to issue any notes for Pakistan and the Government of Pakistan had to make its own arrangements for issuing currency notes. Rupee coins and subsidiary coins issued by the Government of India were to be legal tender in Pakistan at least one year from the introduction of the corresponding 'Pakistan coins'. After 30th March 1948 the Reserve Bank was to put into circulation 'Pakistan coins' as far as possible and use 'India coins' only to supplement them when they were in short supply. After 30th June 1948 the Government of Pakistan was to be responsible for issuing coins.

(2) **Reserve Bank and the Government of Pakistan:**—The Reserve Bank of India was to continue to act as bankers to both the Central and Provincial Governments in Pakistan till 30th June 1948. The management of public debt, the issue of new notes and exchange operations, however, were not to be performed for the Central and Provincial Governments of Pakistan after 31st March 1948, when the financial year ended.

(3) **Relations with scheduled banks:**—The Government of Pakistan could declare a banking company having a paid up capital and reserves of not less than 5 lakhs of rupees to be a scheduled bank, provided it was not a scheduled bank within the meaning of the Reserve Bank Act. The Reserve Bank could, with the previous consent of the Government of Pakistan, make regulations in

1. *India Notes (Coins)*—Notes (Coins) which are legal tender in India.
2. *Pakistan Notes (Coins)*,—Notes (Coins) bearing the inscription "Government of Pakistan."

respect of its relations with Pakistan scheduled banks and the management of clearing houses till 30th June 1948. Every Pakistan scheduled bank was required to maintain with the Reserve Bank of India a balance of not less than 5 per cent. of its time liabilities. It was also required to submit a weekly return showing its assets and liabilities. In case it was not possible to send a weekly return in view of its geographical position, a monthly return was to suffice. Provincial Cooperative Banks in Pakistan, which were covered by the Remittance Facilities Scheme, were also required to submit similar returns to the Reserve Bank of India. The Banking Companies Restriction of Branches Act and the Banking Companies Inspection Ordinance were to apply to the whole of Pakistan until 30th June 1948.

(4) **Assets of the Issue Department of the Reserve Bank:**—Soon after 30th June 1948 assets of a value equal to the 'Pakistan notes' were to be transferred from the Issue Department of the Reserve Bank to the Government of Pakistan. The Government of Pakistan was to accept at par 'India notes' in Pakistan up to 30th June 1949. These notes were to be handed over to the Reserve Bank of India which was required to transfer assets of an equal value from its Issue Department to the Government of Pakistan. Assets to be thus transferred were to be reduced by the amount of rupee securities and advances taken by the Government of Pakistan from the Reserve Bank of India. The different types of assets of the Reserve Bank's Issue Department, viz. gold, sterling securities, India rupee coins, Pakistan rupee coins, and the Government of India securities were to be transferred in the same proportion in which they were held by the Issue Department on 30th June 1948. The amount of sterling securities held on that day was, however, to be reduced by (i) payments in sterling to the United Kingdom under an agreement made for the final settlement of sterling balances, (ii) The amount payable to the Central and Provincial Governments of Pakistan in sterling,[1] and (iii) the balance in the Reserve Bank's account No. 1 with the Bank of England. The amount of Government securities held on that day was to be increased by an amount corresponding to the reduction in sterling securities thus made.

(5) **Assets and Liabilities of the Banking Department of the Reserve Bank:**—Amounts standing to the credit of the Central and Provincial Governments of Pakistan with the Reserve Bank on 30th June 1948 were to be transferred to Pakistan. The transfer was to be made in Pakistan currency held in the Banking Department of the Reserve Bank. If this did not suffice the rest of the payment was to be made by transfer from the balance in the Reserve Bank's Pakistan Account with the Bank of England, and by transfer from the Reserve Bank's Account No. II with the Bank of England.

(6) **Profits of the Reserve Bank:**—The Government of India was to pay to the Government of Pakistan a share in the profits of the Reserve Bank of India for 1948-49 which was to be in same proportion as the total value of Pakistan notes circulating in Pakistan on 30th June 1948 plus the total value of notes returning from circulation in Pakistan between 1st June 1948 and 30th June 1949, bore to the total value of India notes and Pakistan notes in circulation in India and Pakistan on 30th June 1948.

(7) **Reserve Fund of the Reserve Bank:**—The Government of Pakistan was entitled to the same proportion of the Reserve fund of the Reserve Bank on 30th June 1948 as the fraction of the uncovered debt of the Government of India for which Pakistan became liable at the time of the partition.[2]

1. *Vide* paragraph (5) below.
2. Pakistan assumed liability for 17½ per cent. of the total uncovered debt of the Government of India.

(8) **Remittances**:—The Reserve Bank was to provide until 30th June 1948 remittance at par between its offices in India and Pakistan in such amounts and at such rates of commission as were approved by the Governments of India and Pakistan.

(9) **Foreign Exchange**:—The Reserve Bank was to sell to or buy from authorised persons foreign exchange at its Karachi Office at rates and on conditions fixed by the Government of Pakistan in consultation with the Government of India.

(10) **Exchange Control**:—There was to be no exchange control between India and Pakistan until 30th June 1948, nor were any restrictions to be placed on inter-Dominion transfer of funds or securities either on capital or on current account.

STATE BANK OF PAKISTAN

Pakistan assumed complete control over its currency and banking system on 1st July 1948 when the State Bank of Pakistan came to existence and took charge of the central banking functions from the Reserve Bank of India. The State Bank of Pakistan has a total paid-up capital of Rs. 3 crores in fully paid shares of Rs. 100 each. It is neither a shareholders' bank nor a purely state-owned bank in as much as 51 per cent. of the total paid-up capital is subscribed by the Government of Pakistan. The remaining 49 per cent. of the capital which was open to the public was raised with the help of the Imperial Bank, the Lloyd Bank, the Habib Bank, the Provincial Co-operative Banks and Government treasuries. The management of the State Bank is entrusted to the Central Board of Directors which includes a Governor, one or two Deputy Governors and 9 other Directors of whom 4 are elected by share-holders. The Governor, the Deputy Governor and the remaining five members of the Board are nominated by the Government of Pakistan. There are also three Local Boards at Karachi, Dacca and Lahore consisting of elected and nominated directors for performing duties entrusted to them by the Central Board and for advising the Central Board on local matters. The functions performed by the State Bank of Pakistan are similar to those of the Reserve Bank of India.

ADJUSTMENTS IN THE ASSETS AND LIABILITIES OF THE RESERVE BANK OF INDIA[1]

According to part IV(4) of the Pakistan Monetary System and Reserve Bank Order, 1947 as amended in 1948, Pakistan was entitled to the share of the assets of the Issue Department of the Reserve Bank of India equal to the amount of 'Pakistan Notes' in circulation on June 30, 1948 plus 'India Notes' of Rs. 2 and above encashed in Pakistan from July 1, 1948 upto June 30, 1949. The amount of 'Pakistan Notes' in circulation on June 30, 1948 came to Rs. 51.57 crores. 'India Notes' withdrawn from circulation in Pakistan from April 1, 1948 to June 30, 1949 amounted to Rs. 127.18 crores. Assets of the Issue Department of the Reserve Bank equal to Rs. 178.75 crores, were, therefore, claimed by Pakistan against these 'Pakistan Notes' and 'India Notes'. The Reserve Bank of India transferred to the Issue Department of the State Bank of Pakistan assets amounting to Rs. 133.77 crores, comprising Rs. 4.40 crores of gold coins and bullion, Rs. 89.55 crores of sterling securities, Rs. 4.31 crores of rupee coins and Rs. 35.51 crores of Government of India rupee securities. A dispute has

1. Statistical data taken from the following Reserve Bank of India Publications: (i) Report on Currency and Finance, 1948-49, and (*ii*) Report of the Central Board of Directors, 1948-49.

arisen between the Governments of India and Pakistan regarding the transfer of further assets against the remaining amount of nearly Rs. 50 crores. According to Part IV (4) 2 of the Pakistan Monetary System and Reserve Bank Order 1947, only 'India Notes' which may be legal tender in Pakistan on June 30, 1948, i.e. up to the time of the separation of the currency and the establishment of the State Bank of Pakistan, were to be accepted by the Reserve Bank and assets were to be transferred against the return of these notes only. The Reserve Bank, however, found that some of the 'India Notes' returned by Pakistan were actually issued after June 30, 1949. The Reserve Bank, therefore, has disputed the claim of Pakistan for assets in the form of sterling against these notes.

As regards the division of the assets in the Banking Department of the Reserve Bank of India, nearly Rs. 101 crores were transferred in sterling to the State Bank of Pakistan against an equivalent amount of liabilities consisting of the deposits of the Central and Provincial Governments and of scheduled banks in Pakistan. These liabilities were as shown below:—

Deposits of Central Government of Pakistan	Rs. 69.26 crores
Deposits of Provincial Governments of Pakistan	Rs. 5.66 „
Deposits of Scheduled Banks in Pakistan	Rs. 25.65 „
Miscellaneous	Rs. 0.17 „

Sterling securities amounting to Rs. 191 crores have thus been so far handed over by the Reserve Bank of India to the State Bank of Pakistan; nearly Rs. 90 crores represent transfer from the Issue Department and Rs. 101 crores, from the Banking Department.

As a result of the decision of the Government of Pakistan not to devalue her currency along with India the value of the sterling and Government of India securities held by the State Bank of Pakistan in the Issue Department depreciated in terms of the Pakistan rupee by Rs. 35.37 crores and those in Banking Department by Rs. 18.92 crores. Consequently, the backing to the note issue in Pakistan fell below the statutory requirements. In April 1950, therefore, the Government of Pakistan issued Pakistan Government securities worth Rs. 54.29 crores and transferred them to the State Bank of Pakistan in order to make up for the fall in the value of the assets of the Issue and Banking departments in terms of Pakistan rupees.

BANKING OFFICES IN INDIA AND PAKISTAN

An idea of the comparative development of commercial banking in India and Pakistan, before and after partition may be had from table I (p. 509).

Prior to the partition, Pakistan accounted for 16 per cent. of the registered offices of the scheduled banks in the two countries and for 18 per cent. of the total offices. In view of the fact that the population of Pakistan is about 20 per cent. of the total population of the two Dominions, the offices of the scheduled banks were distributed evenly as between India and Pakistan, although the former had a slightly greater share in respect of registered offices. Pakistan had nearly one-fifth of the total number of non-scheduled banks and of the total number of offices of those banks. As regards exchange banks, the position of Pakistan was sound in that it had nearly one-fourth of the total offices of exchange banks. The dependence of Pakistan on India in respect of banking facilities can be gauged from the fact that the number of branches of Indian banks located in Pakistan greatly exceeded the number of branches of Pakistan banks in India.

TABLE 1. Banking Offices in India and Pakistan (including States).[1]

	Before partition 31-3-1947			15-8-1947			After partition 30-6-1948		
	India	Pakistan	Total	India	Pakistan	Total	India	Pakistan	Total
Scheduled Banks									
Registered Offices	68	13	81	79	2	81	82	3[2]	85
Total Offices	2,860	633	3,496	2,884	576	3,460	2,961	447	3,408
Non-scheduled Banks									
Registered Offices	603	148	751	631	120	751	631	120	751
Total Offices ...	2,794	704	3,498	2,812	634	3,446	2,599	475	3,074
Exchange Banks	60	19	79	61	19	80	63	19	82

As a result of the disturbances and the mass migration, banking business in Pakistan, particularly in West Punjab, was disorganised. The table reveals that by the time the actual partition took place the number of registered offices of scheduled banks had declined from 13 to 2. This is due to the fact that before the partition 11 scheduled banks had transferred their registered offices from Pakistan to India as against only 1 from India to Pakistan. The United Sind-Punjab Bank which had its registered office at Karachi was merged with the United Commercial Bank Ltd. Similarly there was also a reduction in the total number of offices in Pakistan due to temporary closing of offices. The position of exchange banks, however, was not affected. Several non-scheduled banks also transferred their registered offices from Pakistan to India and there was also a reduction in the number of their offices in Pakistan. Consequently, the number of offices in India of both scheduled and non-scheduled banks showed a small increase.

After the partition, the communal disturbances and mass migration gathered momentum and consequently the economic structure was dislocated. The situation in Pakistan became worse as is evident from the table which shows that between the date of the partition and the end of June 1948 as many as 129 offices of scheduled banks were forced to close down. As a result of this, the proportion of offices of scheduled banks in Pakistan fell to 13 per cent. There was a severe reduction in the number of offices of non-scheduled banks. The position of exchange banks remained more or less the same. So far as India is concerned, there was a rise in the number of offices of scheduled banks after partition, but a reduction in the number of offices of non-scheduled banks.

It would also be of interest to examine the relative position of East and West Pakistan in respect of banking facilities. Table 2 (p. 510) shows the distribution of banks in East and West Pakistan respectively.

The most striking feature brought out by this table is the predominance of scheduled banks in West Pakistan and of non-scheduled banks in East Bengal. Western Pakistan had three-fourths of the registered offices and more than three-fourths of the total offices of scheduled banks, and all offices of the exchange banks except one were situated until the partition in the

1. The figures given are approximate as owing to the abnormal conditions following the partition announcement it has not been possible to obtain accurate statistics relating to the number and location of the offices of banks.

2. Includes the Bank of Bhopal, a Pakistan scheduled bank, which has its registered office at Bhopal (then a State) and an office at Karachi. It had no office in the Provinces of India.

TABLE 2. Banking Offices in East and West Pakistan

	Before Partition 31-3-1947			At the time of partition (15-8-47)			After partition 30-6-1948		
	West Pakistan	East Pakistan	Pakistan	West Pakistan	East Pakistan	Pakistan	West Pakistan	East Pakistan	Pakistan
Scheduled Banks									
Registered Offices	10	8	18	2	...	2	3[1]	...	3[1]
Total Offices	469	167	636	416	160	576	326	121	447
Non-scheduled banks									
Registered Offices	33	115	148	18	102	120	18	102	120
Total Offices	204	500	704	179	455	634	160	315	475
Exchange Banks	18	1	19	18	1	19	16	3	19

1. Includes the Bank of Bhopal.

Western zone. In regard to non-scheduled banks, however, East Pakistan was in a more favourable position. As a result of the disorganisation of banking business in Pakistan consequent upon the disturbances which immediately preceded the partition, the position of banking in Western Pakistan became worse. Many banks, both in East and West Pakistan, transferred their offices to India. Thus at the end of June 1948 East Pakistan did not have a single registered office of any scheduled bank. But on the whole the Eastern zone did not suffer so much as the Western zone. In view of the increased importance of Chittagong, two exchange banks, the Lloyds Bank and the Chartered Bank, opened offices there.

BANKING BUSINESS IN INDIA AND PAKISTAN

The following table indicates the paid-up capital and reserves of scheduled banks registered in India and Pakistan respectively:—

TABLE 3. Paid-up Capital and Reserves of Scheduled Banks in India and Pakistan

(in crores of rupees)

	31-12-1946			31-12-1947		
	India	Pakistan	Total	India	Pakistan	Total
TOTAL	50.71	5.25	55.96	58.52	0.82	59.34
Paid-up capital	31.56	3.59	35.15	36.49	0.57	37.06
Reserves ...	19.15	1.66	20.81	22.03	0.25	22.28

The table shows that before the partition of the country the paid-up capital and reserves of scheduled banks registered in Pakistan did not amount to more than 10 per cent. of the total paid-up capital and reserves in Undivided India. As a result of the transfer of the registered offices of a number of scheduled banks from Pakistan to India in anticipation of the partition, this proportion was reduced to 1½ per cent. The share of Pakistan in the paid-up capital and reserves of the scheduled banks in Undivided India was very much smaller than its share in the total number of scheduled banks. This indicates that the size of these banks in Pakistan was much smaller than in India.

The following figures from the statements issued by the Reserve Bank of India and the State Bank of Pakistan regarding the position of scheduled banks in each country give an idea of the relative magnitude of their banking business.

TABLE 4. Assets and Liabilities of Scheduled Banks in India and Pakistan

	22-8-1947				30-12-1949			
	India	Pakistan	India	Pakistan	India	Pakistan	India	Pakistan
	(Rs. Crores)		(Per cent)		(Rs. Crores)		(Per cent)	
TOTAL LIABILITIES	929	104	89.9	10.1	854	111	88.5	11.5
Demand Liabilities...	625	65	90.6	9.4	585	90	86.7	13.3
Time Liabilities ...	304	39	88.6	11.4	269	21	92.7	7.3
Cash	36	5	87.8	12.2	38	4	90.5	9.5
Balances with Reserve/ State Bank[1] ...	...	...	...	...	75	21	78.1	21.9
Advances and Bills Discounted ...	375	44	89.5	10.5	411	44	90.3	9.7

1. Separate figures are not available for balances with the Reserve Bank for 22-8-1947.

Although at the time of the partition Pakistan had nearly one-fifth of the total number of offices of scheduled banks in Undivided India, its share in respect of deposits as well as of advances and bills discounted was just over one-tenth, indicating that the business transacted *per capita* as also per office in Pakistan was on an average much smaller than in India. Therefore, although Pakistan was not deficient in respect of the number of banking offices, it was backward as compared to India in regard to the actual banking business transacted. This wide gap between Pakistan's share in respect of the number of offices of scheduled banks and in respect of the deposits and advances and bills discounted has narrowed down appreciably in the two years following the partition, mainly owing to a steep reduction in the number of offices, its share in the business transacted being more or less constant. Between the date of the partition and the end of December 1949, total deposits increased in Pakistan while they declined in India. Demand deposits increased at the cost of time deposits in Pakistan. There has also been a slight rise in the share of Pakistan in the total deposits in both the Dominions.

Before the partition, the liabilities of the scheduled banks in Pakistan areas were not always balanced by corresponding assets. The relative size of their assets held in India and Pakistan depended on convenience and profitability. At the time of the partition the assets held by the scheduled banks in Pakistan fell considerably short of their liabilities in that country. After the establishment of the State Bank of Pakistan, the branches of Indian scheduled banks in Pakistan were required to maintain a minimum cash reserve with the State Bank of Pakistan and later on they were required to keep the minimum of 70 per cent. of their liabilities in Pakistan in the form of assets in Pakistan; this was later on increased to 75 per cent. In order to bring their assets in line with these statutory requirements these banks had to transfer over Rs. 14 crores from their Indian offices to Pakistan branches.

CLEARING HOUSE RETURNS

There were at the time of the partition 25 clearing houses in India as against 4 in Pakistan.[1] Clearing house returns give some indication of the

1. At present only two centres are working, namely Karachi and Lahore.

volume of business activity in commercially important towns. The table below compiled from the Reserve Bank of India Reports on Currency and Finance gives an idea of the comparative position of India and Pakistan.

TABLE 5. Annual Clearing House Returns

Year	Amount of cheques cleared (*Rupees in crores*)	
	India	Pakistan
1938-39	1878	43
1946-47	6358	359[1]
1947-48	6150	324[2]
1948-49	6687	n.a.

As compared to the share of Pakistan in respect of the number of offices of the scheduled and non-scheduled banks, the share of Pakistan in regard to clearings is too low, being only five per cent. in 1946-47. This may be partly because there are fewer centres in Pakistan which have clearing houses, and partly because the highly agrarian character of Pakistan's economy is responsible for a lower velocity of circulation than in India.

EFFECTS OF PUNJAB DISTURBANCES ON BANKING STRUCTURE

The sudden eruption of communal riots in the Punjab adversely affected the structure of banking in both the countries, particularly in Pakistan. The capital and deposit resources of many of the banks in West Punjab were provided mainly by non-Muslims. As we have already seen, a number of banking companies transferred their registered offices from Pakistan to India and they also closed down a number of branches during the riots. Consequently, the credit structure of Pakistan was considerably weakened. Pakistan also suffered heavily on account of the wholesale migration of the predominantly non-Muslim banking staff. The Hindu indigenous bankers, who were providing a major portion of the capital required for agricultural and industrial purposes in Pakistan, also migrated from West Pakistan. The West Punjab Government attempted to restrict the flow of funds by issuing an ordinance in the first week of September 1947. But that ordinance had to be withdrawn as it was *ultra vires* of the Pakistan Monetary System and Reserve Bank Order. Pakistan also attempted to prevent the refugees from carrying valuable property, currency and bullion with them.

The partition of the country was also threatening to undermine the banking system in the border provinces of East Punjab and Delhi in India. Many refugees from West Punjab were frantically trying to withdraw money from the Indian branches of banks in which they had deposited their money before their migration. But the banks could not speedily transfer their assets to India. Under such circumstances the panicky withdrawal of deposits by the refugees would have caused a 'run' in which many intrinsically sound banks would have suffered. The Banking Companies (East Punjab and Delhi) Ordinance was, therefore, promulgated in the last week of September 1947, by which the Government of India could pass an order staying for three months

1. Figures include clearing house returns for four centres—Karachi, Lahore, Lyallpur and Rawalpindi.

2. Figures for Karachi and Lahore only; the clearing houses at Lyallpur and Rawalpindi ceased to function since 3-9-1947 and 20-10-1947 respectively.

all proceedings against a banking company whose registered office was situated in East Punjab or Delhi. During this period the bank concerned was required to make payments to the depositors not exceeding 10 per cent. of their deposits or Rs. 250 whichever was less. The Government of India could also render positive assistance to the banks seeking relief by granting them advances for making payments to the depositors. The conditions for the repayment of these advances were to be decided by the Government on the expiry of the period of the moratorium, but in case a bank was wound up the amount due to the Government was to be the first charge on the assets of the bank in respect of any loan advanced before the commencement of the ordinance. A similar ordinance was also issued in Pakistan.

In exercise of the powers conferred by the ordinance, the Government of India issued an order staying all actions and proceedings against the Laxmi Commercial Bank Limited, Ludhiana, the New Bank of India Limited, Amritsar, and the Traders' Bank Limited, Delhi, for a period of three months with effect from the 27th September 1947. After a few days, the Government of Pakistan issued orders granting moratorium to these banks. The following consolidated figures for these three banks, however, show that these banks were very small and that the Indian banking system on the whole was in a sound position:

Paid-up capital	Rs. 50 lakhs
Reserves	„ 22 „
Deposits	„ 4,34 „
Advances & bills	„ 8,43 „

The Government of India did not find it necessary to assist any bank. After the lapse of the moratorium granted under the ordinance all the three banks submitted to the Court schemes of arrangement with their creditors which were sanctioned.

The Banking Companies (East Punjab and Delhi) Ordinance, 1947, by which banks which were granted moratorium were not required to pay more than 10 per cent. of the deposits, did not contain any provision regarding payments of drafts issued by the banks before the date of the moratorium. As a result of representations received from the holders of such drafts, the Government of India decided that payments against drafts were to be allowed to the same extent as in the case of deposits. An amending ordinance provided for payment up to 30 per cent. of the amount of the draft or Rs. 750/- whichever was less, during the three months' period of the moratorium.

The Reserve Bank of India Act of 1934 was amended by an Ordinance issued on September 20, 1947 so as to enable the Reserve Bank to grant emergency advances to scheduled and non-scheduled banks against any type of security which it might consider sound, but the acceptance of which might not be permissible under the original Act. The Reserve Bank, however, had no occasion to grant such advances and the ordinance was allowed to lapse on March 20, 1948.

In order to enable the banks to meet the difficulties experienced in dealing with bills drawn on firms and companies situated in distributed areas, an ordinance temporarily amending the Negotiable Instruments Act was promulgated on December 27, 1947, giving banks the power to treat bills as dishonoured when presentment was impossible owing to the prevalence of disturbances. Further, the Indian Limitation Act was temporarily amended to provide for the institution of time-barred suits in cases where the court was satisfied that the suit could not be instituted within the period of limitation owing to disturbances.

The measures mentioned above mitigated the adverse effects of the partition on the banking system in India. But the developments in West Pakistan shook the foundations of its credit structure. With a view to meeting the shortage of finance the Government of Pakistan adopted the following measures:—

Department of Agricultural Credit: It proposed the setting up of a separate department of Agricultural Credit to study the requirements of finance for agricultural purposes. In the meanwhile, finance for agricultural operations was provided through *Takavi* loans, Co-operative societies and banks. The Government of Sind decided to float a network of Taluka Agricultural Banks on limited liability basis to provide credit to agriculturists. The trade requirements were met to a considerable extent by commercial banks which opened more offices at various places in the country. Co-operative banks in the West Punjab and N.-W.F.P. took an increasing part in financing trade and business.

Industrial Finance Corporation: An Industrial Finance Corporation was started under an Act passed in February 1949 with a view to providing medium and long-term capital to industrial concerns. The Corporation has an authorised capital of Rs. 3 crores of which 51 per cent. is subscribed to by the Government of Pakistan and the rest by the State Bank of Pakistan, Provincial Governments, commercial banks, Provincial Co-operative Banks, insurance companies and the public. Upto now Rs. 2 crores of the capital has been called up. The Industrial Finance Corporation is under the management of a Board of Directors, majority of whom, including the Managing Director, are nominated by the Government of Pakistan, the remaining being elected by share-holders. The Corporation is empowered to guarantee debentures floated by industrial concerns which are repayable within a period of 20 years. It cannot, however, guarantee or grant loans exceeding 7½ per cent. of its paid-up capital to any one concern. Such sums can, however, be guaranteed with the special permission of the Government of Pakistan provided they do not exceed Rs. 30 lakhs. The Corporation can raise capital whenever necessary by issuing debentures or by accepting deposits. The Government of Pakistan provides guarantees of (i) loans and debentures issued by the Corporation, (ii) prescribed minimum dividend to share-holders, and (iii) against losses incurred by the Corporation.

National Bank of Pakistan: Another institution started by the Government of Pakistan is the National Bank of Pakistan which is a semi-Government Bank with an authorised capital of Rs. 6 crores consisting of ordinary shares of Rs. 100 each. Normally only half the capital can be called up. Any increase or decrease in the share capital can be effected with the permission of the Government of Pakistan. A quarter of the capital is subscribed by the Government of Pakistan. The bank has a Central Board of Directors consisting of the Managing Director and three other Directors nominated by the Government of Pakistan and eight other Directors elected locally by the shareholders in Karachi, Lahore and Dacca. The National Bank of Pakistan has also three Local Boards at these three centres, to carry out duties entrusted to them by the Central Board. Offices of the National Bank of Pakistan are located at Karachi, Lahore, Dacca, Narayanganj and Mymensingh and it also has pay offices in Rangpur and Chandpore. In the initial stages the National Bank was entrusted with the emergency work of financing the marketing of cotton and jute, but the main function will be one of conducting general commercial banking. It also has limited power of undertaking foreign exchange transactions and performing fiscal functions. In view of its special status and functions the National Bank of Pakistan is expected to occupy a position similar to that of the Imperial Bank.

INDO-PAKISTAN AGREEMENTS ON BANKING

In order to minimise the inconvenience caused to evacuee depositors, the Governments of India and Pakistan enterd into an agreement on 25th December 1947 on the question of the operation of safe deposit vaults and the transfer of bank accounts from one country to the other. According to this agreement, valuables in safe deposit vaults were to be restored to their original owners. So far as West Punjab was concerned, any person wishing to remove his valuables had to apply to the Custodian of Evacuee Property for a permit to operate his locker. No restrictions were to be placed by either country on transfers of bank accounts and action was to be taken to ensure smooth and speedy transfers. A Committee of six members comprising the representatives of Central and Provincial Governments and banking interests was to be constituted to investigate the difficulties of banks and to suggest measures to the Governments of India and Pakistan for restoring the normal functioning of the banks. For the convenience of depositors who desired to get their accounts transferred from one country to the other, it was decided that each bank should notify one of their branches in each country to which their depositors could apply.

As a result of the further discussions between the representatives of the Governments of Pakistan, India, West and East Punjab and the Reserve Bank and the other banks, the following arrangements were made for facilitating resumption of business by banks which had closed their offices owing to disturbances, or which found themselves unable to carry on their normal functions owing to insufficient staff. The West Punjab Government agreed to make all the necessary arrangements for the protection and housing of non-Muslim staff of banks in Lahore and also to provide guards at bank premises in Lahore at the expense of the banks. Arrangements were also made for the training of Muslim candidates in Lahore for recruitment to banks' services. When banks were unable to carry on business except at one branch at Lahore or a limited number of branches at a few centres, they were allowed to close the remaining branches and to remove their business to such of their offices as were functioning. Necessary permission to remove all their valuables, cash, securities, records, etc., to the branches at which the business was to be consolidated, had to be sought from the Custodian of Evacuee Property. To avoid inconvenience and distress to evacuee depositors, banks were requested to desist from returning cheques and refusing to transfer accounts on minor grounds. To facilitate transfers of accounts from one country to the other, banks were requested to designate one office in India and one in Pakistan. Both the countries agreed not to place any restrictions on transfer of accounts or remittance of funds by banks in connection with such transfers. Banks which had claims to their own property or the property of their depositors were asked to take early steps to register their claims with the Custodian of Evacuee Property of the Province in which the property was situated. The West Punjab Government agreed to give facilities to banks in making a survey of their financial position.

The next important step in Indo-Pakistan banking agreement was taken when the Governments of India and Pakistan ratified the decisions arrived at the inter-Dominion Conference on Banking held at Lahore on April 1949. The Conference discussed problems affecting evacuee depositors and commercial and co-operative banks in the Punjab. The following were the main provisions of the agreement:—

Commercial Banks: (i) Muslim accounts which had been transferred by banks from West Pakistan to India without application from the depositors were to be re-transferred to their branches in West Pakistan by the end of June

1949. In case these banks had no longer any branches in West Pakistan, arrangements had to be made for the payment of deposits on application from the depositors through a bank in West Pakistan specified for this purpose.

(ii) It was recognised that there should be an arrangement whereby indemnity bonds obtained in one country in the case of loss of fixed deposit receipts, cheque books, and pass books were accepted by the other Dominion.

(iii) It was agreed that banks in both the countries should notify the names and addresses of depositors who did not operate their accounts during the period January 1948 to March 1949 to the Central Banks in order that this information could be exchanged and the depositors traced.

(iv) The Government of Pakistan agreed to consider the grant of annual permits to bank staff stationed permanently in West Pakistan and specified officers of the head office.

(v) Banks which were not normally functioning in Pakistan were to be allowed to remove their account books and to remit surplus funds if they deposited an amount equal to their outstanding liabilities in West Pakistan.

(vi) Banks functioning in Pakistan could sell stocks pledged by evacuee depositors and deposit with the Custodian only the surplus sale proceeds. In the case of stocks hypothecated to banks but requisitioned or sold by the Government, where the entire sale proceeds had to be depositd with the Custodian, the banks could adjust their dues against the sale proceeds on the Custodian's admitting their claims. In the case of mortgages of immovable property, the Custodian was to admit the claims of banks on the production of necessary evidence and the banks were not required to file suits in civil courts. The Custodian was also to register claims relating to unsecured debts incurred by evacuees on proof of debt supported by an acknowledgement from the debtor.

(vii) As regards the accounts of firms and companies with the Imperial Bank, it was stated that there should be no difficulty in transferring them in case they had no liabilities in Pakistan.

(viii) Two representatives were to be nominated by each country to watch the implementation of the decisions reached in regard to commercial banks.

Co-operative Institutions in the Punjab: (i) the Punjab Provincial Co-operative Bank, Lahore, was required to transfer to the Reserve Bank of India securities of the face value of Rs. 104.66 lakhs which had been deposited with it by the co-operative institutions in East Punjab before the partition. On the completion of this transfer the Provincial Co-operative Banks in East and West Punjab could be authorised to make payments to depositors migrating from the other Provinces.

(ii) Both the countries were to invite claims from evacuee depositors which were to be listed by the Registrar in each country and sent to the Registrar in the other country for verification. The claims were to be verified and settled by the end of August 1949 and payment to evacuee depositors was to be made through the Provincial Registrars.

The Implementation Committee set up under the Indo-Pakistan Banking Agreement made arrangements in June 1950 by which facilities for the transfer of bank accounts of evacuees in both the countries were provided. As a result of this arrangement, about 35 scheduled and non-scheduled Indian banks working in Pakistan were benefited. The arrangement was to work in spite of the absence of an exchange rate between the two currencies. The Committee also decided to provide facilities for solving the difficulties of banks which were under liquidation or were working under schemes of arrangements.

PRICE TRENDS IN INDIA AND PAKISTAN AFTER THE PARTITION

A comparative idea of the price trends in India and Pakistan after the partition can be had from the following table:—

TABLE 7. Index Numbers of Prices in India and Pakistan

Month and Year.	India[1]			Pakistan[2]
	Food articles	Industrial raw materials	General Index	Wholesale Price
September 1947	296	372	302	307
December 1947	321	395	314	323
March 1948	347	398	341	331
June 1948	377	452	382	349
September 1948	397	435	382	373
December 1948	398	458	384	373
March 1949	377	463	370	352
June 1949	382	460	378	n.a.
September 1949	403	469	390	n.a.
December 1949	374	478	381	n.a.
March 1950	396	490	392	n.a.
June 1950	403	491	396	n.a.
September 1950	430	517	413	n.a.

It will be seen from the table that on the whole both the countries continued to experience increased inflationary pressure, the problem being more acute in India than in Pakistan. Various factors have been responsible for this development. During the immediate post-partition period both India and Pakistan were affected by serious disturbances which resulted in economic dislocation with consequent adverse effects on industrial and agricultural production as well as trade. The natural effect of such a development was bound to be inflationary in both the countries. Even in this respect India was in a worse situation than Pakistan in view of the fact that the asssets left behind by Hindu refugees in Pakistan far exceeded in value those left behind by Muslims in India. Consequently less expenditure from current income had to be incurred by refugees in Pakistan than in India. The pressure of such expenditure has therefore been much greater in India than in Pakistan. While this was the situation so far as the immediate post-partition period was concerned, the economic trends upto the devaluation of the Indian rupee were also responsible for a greater inflationary pressure in India. It may be noted, in the first place, that a major part of the rise in prices in India is on account of agricultural commodities viz., food and raw materials. Pakistan emerged relatively better off than India both in respect of food and important raw materials like jute and cotton. Food prices, therefore, tended to be much lower in Pakistan. On the other hand it was found very difficult after the partition to maintain food control and rationing and the Government of India decided to decontrol food supply. This factor aggravated the inflationary situation in India and the index number increased from 302 in November 1947 before the decontrol to nearly 382 in the month of June 1948. The index number was only stabilised after the re-imposition of food controls in the middle of 1948. In regard to agricultural raw materials also, the partition tended to aggravate the inflationary tendency witnessed in the pre-partition period. These difficulties were further increased by the imposition of export duties by Pakistan and the reduction in the exports of raw materials from

1. Base year ended August 1939=100.
2. Base year 1937=100. This index number is with reference to the wholesale prices in Karachi. A detailed breakdown is not available as in the case of India.

Pakistan owing to their diversion to third countries. As regards manufactured articles, it might appear that India would have been in a better position in view of its being relatively more advanced industrially; but this is not so. Firstly, the prices of industrial products also tended to rise on account of the increased prices of raw materials and the increase in wage rates which became necessary on account of a rise in food prices. In the second place, although Pakistan did not have her own industries she was in a position to accumulate a large amount of foreign exchange for importing manufactures from abroad in view of her large surpluses of cotton, jute and hides and skins and in view of the favourable terms of trade which she enjoyed. India, on the other hand, was faced with adverse balance of trade because of the necessity of importing food, raw materials and capital goods for her developmental programme. In this connection, it may be stated that the inflationary pressure of developmental expenditure is quite an important factor accounting for rising prices. This factor is almost negligible in Pakistan where the expenditure on both consumption and investment is relatively smaller on account of its backwardness and the absence of any immediate ambitious development programmes. Although the expenditure on defence constitutes nearly two-thirds of the total expenditure of its Central Government, Pakistan has been more or less able to balance its budget and has not incurred large deficits on capital account as in India.

DEVALUATION

On the 17th September 1949 the United Kingdom devalued the pound sterling by 30½ per cent. and reduced its dollar parity from $4.03 to $2.8. Almost immediately the Commonwealth countries including India followed suit. As a result of the devaluation, the dollar value of the rupee was reduced from $0.30 to $0.21, while its parity with the sterling was maintained at 1sh. 6d. The Government of Pakistan decided, after a delay of three days, not to devalue the Pakistan rupee. The main reason put forward for this course of action was that Pakistan did not have an unfavourable balance of payments. As a result of the divergent action taken by the Governments of India and Pakistan, 100 Pakistan rupees are equal to 144 Indian rupees.

The lack of unified policy on the part of the two Dominions has created complex problems. The extent to which Inter-Dominion trade has been dislocated and the repayment of debt upset as a result of this divergence has already been discussed in previous chapters. Suffice it to point out here that according to the Payments Agreement arrived at between India and Pakistan the concurrence of both the countries was necessary for any change in the parity of their currencies. The Governments of India and Pakistan blamed each other for a breach of this agreement. The Government of India refused to quote an exchange rate for the Pakistan rupee. As there was no likelihood of an agreement on this issue, the State Bank of Pakistan announced on November 15, 1949 official selling and buying rates of 143-11/16 and 144-3/16 Indian rupees respectively for 100 Pakistan rupees. Scheduled banks in Pakistan were authorised to sell or purchase Indian rupees at the prescribed rates. They were also permitted to make remittances and to receive remittances from India within their own resources. Conversion of Pakistan rupees into foreign currency or *vice versa* at rates other than the prescribed rates was forbidden. It, however, seems strange that the State Bank of Pakistan was not prepared to purchase or sell Indian rupees itself.

The Government of Pakistan was admitted to the International Monetary Fund and the International Bank for Reconstruction and Development. The I.M.F. is expected to give its decision on the Pakistan exchange rate in November.

PRICE LEVELS AFTER DEVALUATION

Price Trends in Pakistan: The devaluation of the Indian rupee and the non-devaluation of the Pakistan rupee have resulted in the continuation of the inflationary situation in India, while it has given rise to a considerable deflation in Pakistan. A serious situation which would have arisen in India was, however, more or less successfully averted by the Government by the adoption of the Eight-point programme, which imposed stringent anti-inflationary measures, immediately after the devaluation. The objects of Pakistan in not devaluing were (i) to improve her balance of payments as well as terms of trade and (ii) to bring about an internal disinflation. It did not succeed so far as the first objective was concerned, since it was not in a position to maintain the pre-devaluation prices of its exports because of the reduction of its competitive capacity in the world market following non-devaluation. Although it appeared that Pakistan would be able to maintain jute prices in view of its monopolistic position in regard to jute production, it could not achieve this objective because of the collective action by jute mills in India. Although the jute trade between India and Pakistan is an instance of bilateral monopoly, India emerged much stronger, being a well-organised monopoly purchaser. In Pakistan, on the other hand, the jute sellers consisted of numerous small unorganised farmers and in spite of the attempts of the Government of Pakistan to increase their holding power, Pakistan was forced to write down the price of jute in terms of the Pakistan rupee.

As regards the second aim of the non-devaluation decision, Pakistan found itself faced with a serious deflation rather than a healthy disinflation. Table 8 (page 520) gives an idea of the price trends in Pakistan in respect of important agricultural commodities. In the case of wheat, rice and jute, prices have shown a steep decline between June 1949 and June 1950. Dacca jute (Middle), Lyallpur wheat and Mymensingh rice (coarse) have registered price falls which amount to more than 30 per cent. Hence the prices of these commodities were less in June 1950 in terms of Indian currency as compared to prices ruling in the pre-devaluation period. While the fall in food prices might to some extent have eased the food problem in East Bengal, we have also to consider as against it the fact that the general purchasing power too had gone down on account of the fall in jute prices. The prices of wheat in West Pakistan also fell very heavily. In view of the fact that agricultural population accounts for the bulk of the total population in Pakistan, the adverse effects on the economy of a steep decline in agricultural prices are bound to be serious. It is evident that the steep decline in the prices of all these commodities in terms of Pakistan currency must result in wide fluctuations in the incomes of the agriculturist classes. This also explains the existence of a strong sentiment among the farmers against the non-devaluation decision of Pakistan. Except in the case of cotton Pakistan does not appear to have improved her terms of trade in the post-non-devaluation period. It must, however, be noted that the strong deflationary effects on prices and incomes in Pakistan are not due to any policy of Pakistan but have been mainly brought about on account of India's persistent refusal to buy Pakistan products at their rate. So far as the prices of manufacturers are concerned, it is true that Pakistan benefited from the lower import prices in terms of Pakistan rupees. But as against this it must be noted

TABLE 8. Price Trends in Pakistan.

Month & Year	COTTON (Per maund)				JUTE (Per maund)					
	4F (Karachi)		Sind N.T. (Karachi)		Dacca (Middle)		Dacca (Bottom)		Mymensingh (Bottom)	
	Pakistan Currency	Indian Currency[1]	Pakistan Currency	Indian Currency[1]	Pakistan Currency	Indian Currency	Pakistan Currency	Indian Currency	Pakistan Currency	Indian Currency
June 1949	83 8 0	793 4 0	88 0 0	806 0 0	35 0 0	35 0 0	32 0 0	32 0 0	25 0 0	25 0 0
September 1949	82 0 0	1121 11 0	87 0 0	1190 2 9	32 0 0	41 1 3	29 0 0	41 12 2	25 0 0	36 0 0
November 1949	74 0 0	1015 4 6	78 8 0	1077 0 4	26 0 0	37 7 0	23 0 0	33 1 11	23 0 0	33 1 11
December 1949	74 0 0	1015 4 6	75 0 0	1029 0 0	35 0 0	50 6 5	32 0 0	46 1 3	23 0 0	33 1 11
January 1950	71 8 0	980 15 8	72 0 0	1001 0 0	26 8 0	38 2 7	37 13 6	23 0 0	23 0 0	33 1 11
February 1950	68 0 0	960 9 5	69 0 0	967 4 2	33 0 0	47 8 4	30 0 0	43 4 2	23 0 0	33 1 11
March 1950	67 0 0	919 3 10	69 0 0	946 10 11	26 0 0	37 7 0	23 0 0	33 1 11	23 0 0	33 1 11
April 1950	70 8 0	967 4 2	72 0 0	987 13 5	26 0 0	37 7 0	23 0 0	33 1 11	23 0 0	33 1 11
June 1950	77 8 0	1063 4 10	78 8 0	1077 0 4	22 8 0	32 6 5	27 0 0	38 14 1	24 0 0	34 9 0

Month and Year	WHEAT				RICE			
	Lyallpur		Lyallpur (Ordinary)		Mymensingh (Coarse)		Dacca (Controlled ex-godown)	
	Pakistan Currency	Indian Currency	Pakistan Currency	Indian Currency	Pakistan Currency	Indian Currency	Pakistan Currency	Indian Currency
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
June 1949	9 8 0	9 8 0	...	...	36 0 0	36 0 0	21 4 0	21 4 0
September 1949	9 8 0	13 10 11	...	...	43 0 0	61 15 0	21 4 0	30 9 7
November 1949	9 8 0	13 10 11	...	...	40 0 0	57 9 7	21 4 0	30 9 7
December 1949	9 8 0	13 10 11	...	...	20 0 0	28 12 10	20 0 0	28 12 10
January 1950	9 8 0	13 10 11	13 4 0	19 1 3	19 0 0	27 5 10	20 0 0	28 12 10
February 1950	9 8 0	13 10 11	13 4 0	19 1 3	18 0 0	25 14 9	20 0 0	28 12 10
March 1950	9 8 0	13 10 11	13 4 0	19 1 3	13 0 0	18 11 6	20 0 0	28 12 10
April 1950	9 8 0	13 10 11	13 4 0	19 1 3	16 0 0	23 0 8	20 0 0	28 12 10
June 1950	6 5 0	9 1 5	13 8 0	19 7 0	23 0 0	33 1 11	20 0 0	28 12 10

1. Per candy of 784 lbs.

that the balance of payments position of Pakistan became worse and consequently the imports of manufactures had to be severely curtailed.

Price Trends in India: Although the Eight-point programme to some extent arrested the upward inflationary spiral in India the situation, however, began to worsen by the middle of 1950. This was mainly the result of crop failures and floods in many parts of the country. The Provinces of Madras, Bihar and Bombay were affected greatly by food shortages. The inability to procure foodgrains to the extent of the quotas fixed resulted in great difficulty in maintaining the rationing system, and food prices began to soar up. The tighter import controls instituted after the devaluation created a scarcity of imported goods and their prices also began to show an upward trend. Unfortunately it was under these very conditions that a section of the Congress party began to advocate decontrol for a second time in spite of the bitter experience which the country had as a result of the previous experience of decontrol. Of course, the supporters of decontrol this time, did not receive the support which they had received previously. Further, the Planning Commission, which has to take longer views in this respect seems to have opposed such as an idea, although it was prepared to agree to a rise in some sectional price levels, where costs had already mounted. But the final blow to the decontrol movement was given by the Korean War which started in the middle of 1950. The developments in Korea led to increased war preparations in the Western countries, entailing the stock-piling of commodities and raw materials. The possibility of extension of the conflict to other parts of the world reduced the prospects of large-scale imports. In view of the fact that India was suffering from a serious shortage of food and other articles, the Korean war gave a further impetus to the upsurge of prices. The situation as regards imports of food, particularly from Burma and South-East Asian countries, became gloomy and tended to reinforce the inflationary pressure. The prospects of reduced imports from abroad and the possibility of greater demand for local manufactures as a result of warlike preparations served to increase the prices of both imported as also local manufactures. The stock-piling programme of Western countries reacted on the prices of industrial raw materials. It was under these conditions that the Government of India was forced to promulgate the "Supply and Prices of Goods Ordinance, 1950" providing for the control of prices, supply and distribution of eleven articles in early September. These articles mainly comprise consumer goods and industrial raw materials, viz., non-ferrous metals, bicycles and accessories, raw rubber, electrical apparatus, razor blades, caustic soda, soda ash, tanning materials, kerosene and infant foods. The Government of India was empowered to bring more items in the scope of the Ordinance, if necessary. The Ordinance fixed the maximum prices of these commodities at the level which was prevalent on June 15, 1950. It also laid down the maximum which could be stocked and required those possessing excess stocks to declare them. Manufacturers and dealers were required to display price lists. In order to make the Ordinance effective, severe punishment was prescribed and summary trials were provided for.

The Supply of Price of Goods Ordinance, 1950 is in many respects similar to the Anti-Hoarding and Profiteering Ordinance which was in existence during the war period. But the scope of this Ordinance is to some extent narrower. The range of articles covered is much smaller. Further, there is no separate machinery to enforce the Ordinance, the work being entrusted to senior police officers. In view of the unfortunate experience of the wartime Anti-Hoarding and Profiteering Ordinance, the possibility of success of the recent ordinance

is greatly doubted. Fears have been expressed as to whether it would be possible to make the ordinance effective in villages and smaller towns where the subordinate police officers do not have the power to enforce it. The delay between the announcement of the Government's intention to pass the measure and the actual promulgation of the Ordinance gave considerable time to traders to send stocks underground. But the main limitation in enforcing this ordinance will be the ability of the Government to make available the necessary supplies. The decision of the Government to relax some of the import restrictions may to some extent result in increasing the available supply of goods. But not much can be expected, if the Government cannot prevent traders from hoarding undeclared stocks and selling them in the black market. Further, it must be remembered that since the general price level is a complex of the price levels of innumerable items which enter into consumption and manufacture, it would not be possible to hold the price line at any particular level by trying to control only a few of them. In this connection, the prices of foodgrains and of industrial raw materials like cotton assume the greatest importance, because to a very great extent it is the prices of these basic commodities that are responsible for movements in the general price level. The Government of India's food policy, as we have already seen, has to a large extent prevented the effective checking of the rise in food prices. In the first place, there is no uniform policy of procurement and rationing throughout the country, with the result that while the surplus provinces have plenty of food, the deficit provinces are on the border of scarcity and famine conditions. Although the Government of India expects the deficit provinces to become self-sufficient by increasing the production of food, it allows surplus provinces a free hand in regard to procurement and rationing with the consequence that the latter have not done their utmost to procure the necessary foodgrains in order to meet the shortages in deficit provinces. There is therefore the greatest need for having a uniform policy of procurement and rationing for the entire country. The Government has further decided to stop food imports by 1951 and it is trying to achieve self-sufficiency not only in food but also in cotton and jute in a very short time. It is, therefore, surprising that there are reports to the effect that the Government of India lost an opportunity to purchase a substantial quantity of wheat from Pakistan in the middle of 1950 because of a hitch over the price. Under the present conditions, however, the attainment of self-sufficiency seems to be an impossible task. It would be possible to arrest the rise in food prices and to prevent hoarding of foodstuffs only if the Government imports substantial quantity of food grains to serve as buffer stocks, to be rushed at short notice to any place where there is actual scarcity.

INSURANCE

INSURANCE COMPANIES IN INDIA AND PAKISTAN

Table 6 (p. 523) gives the location of the head offices of insurance companies in India and Pakistan in 1946, 1947, and 1948.[1] No statistics are available regarding the location of branch offices.

Although the total number of companies increased during 1947 and fell during 1948 the number of companies in Pakistan decreased by more than half during 1948 and by more than two-thirds during 1947 and 1948. Before the

1. Unfortunately separate statistics regarding insurance business in India and Pakistan are not available.

TABLE 6. Location of Head Offices of Insurance Companies[1]

	30-9-1946	15-11-1947	7-10-1948
TOTAL	239	245	240
INDIA	218	236	234
PAKISTAN	21	9	6

partition, only 10 per cent. of the companies were located in Pakistan, but after the partition, only 3 per cent. were left there as a result of the transfer of many insurance companies to India in the wake of the disturbances in the Punjab.

EFFECTS OF PARTITION ON INSURANCE COMPANIES IN PAKISTAN

Insurance companies operating in Pakistan were faced with grave problems. Even before the partition they had to bear the brunt of the losses incurred by policyholders during the disturbances which started as far back as August 1946. The partition aggravated the destruction of property in the Punjab and endangered the insurance structure. In view of the inability of the companies to shoulder these responsibilities single-handed, the business community in India pressed the Government of India for the introduction of Riots Risk Insurance similar to the War Risks Insurance which existed in war time. It may be noted that a number of companies had to close down their offices. In all, fifteen insurance companies, thirteen from Lahore and two from Karachi, transferred their head offices from West Pakistan to India, mainly to East Punjab and Delhi. Most of these transfers took place before the partition. In addition to these transfers, which were the result of the disturbed conditions in West Pakistan, a few companies in other parts of the country also transferred their offices from one country to another. Thus one insurance company in East Bengal transferred its registered office to Calcutta. Similarly seven Provident Societies transferred their head offices from East Bengal to Calcutta and Assam. As against these transfers from Pakistan to India, two insurance companies, located in Calcutta and Bombay, migrated to Chittagong and Karachi respectively and four Provident Societies from Calcutta to East Bengal. The net result of the transfers of insurance companies and Provident Societies was to worsen the position of Pakistan.

TRANSFER OF ASSETS AND RECORDS OF INSURANCE COMPANIES IN PAKISTAN

Although most of the insurance companies which shifted their offices from West Pakistan could manage to transfer their liquid assets to India, they could not transfer their other assets and records owing to the disturbed conditions. Some insurance companies having their head offices in India, but having a large business in West Pakistan, also were in a similar predicament. The Evacuee Insurance Companies' Association was, therefore, formed to safeguard the interests of 29 companies which had either migrated from West Pakistan or had a substantial business there.

Since the insurance companies could not settle claims or otherwise function without their records, the Governments of India and Pakistan arrived at an agreement in December 1947. According to this Agreement insurance companies could move records, equipment and furniture from their head offices in West Pakistan their provisionally earmarking 15 per cent. of their statutory deposits with the Reserve Bank of India for the benefit of their

1. Indian Insurance Year-Books, 1947-1949.

policy-holders in Pakistan, until the exact percentage of liability to these policyholders was determined by the Superintendent of Insurance. These companies had to give an undertaking that their assets would not be withdrawn to the detriment of policy-holders in Pakistan. The Governments of India and Pakistan were to give protection and facilities for the investigation of claims to the representatives of these companies. With the help of the Evacuee Insurance Companies' Association, insurance companies were able to transfer all their assets and records to India.

ARRANGEMENTS FOR EVACUEE POLICY-HOLDERS

A number of evacuee policy-holders lost their policies during the disturbances. In order to minimise the inconvenience thus caused to them, the Indian Life Assurance Offices Association recommended to its member companies that duplicate policies should be issued to policy-holders in West Pakistan, East Punjab and Delhi on their providing satisfactory proof regarding the loss of policy and on their executing an indemnity bond. Some evacuee policy-holders were unable to pay their premiums in time as a result of the dislocation caused by communal riots and loss of source of income. In order that they might not suffer on account of this, the Superintendent of Insurance requested companies to allow such policy-holders to adjust the surrender value of their policy towards the payment of outstanding premiums, interest being calculated on overdue premiums at the lowest practicable rates. In case the policy lapsed owing to inadequate surrender value, the companies were requested to revive the policy, in case the policy-holder desired, at the previous premium rate without insisting on a thorough medical examination.

INDO-PAKISTAN AGREEMENT ON INSURANCE, DECEMBER 1948

The Governments of India and Pakistan arrived at an agreement in December 1948 which defined the terms and conditions on which Indian Life Insurance Companies could function in Pakistan. The following were the main provisions of the agreement:—

(1) **Statutory Investment in Approved Securities**: Under the Pakistan Insurance Act, Indian Life Insurance Companies doing business in Pakistan were required to invest in respect of their liabilities to policy-holders in Pakistan a certain percentage of their assets in specified securities. The Government of Pakistan agreed that these investments could spread over in the following manner, viz. 25 per cent. in Government of Pakistan securities, 15 per in Government of India securities and 15 per cent. in Pakistan approved securities. The Government of Pakistan were prepared to allow four years' time to Indian Insurance Companies to adjust their investments accordingly. The Government of Pakistan was to consider the question of requiring British companies to invest 25 per cent. in Government of Pakistan securities and the remaining 30 per cent. in Pakistan approved securities. If the British companies were not required to comply with such a provision by the end of 1950, Indian companies also were to be put on the same footing as the British companies.

(2) **State Bank of Pakistan as trustee**: The Government of Pakistan felt that the statutory investments held in trust should be located in Pakistan in order to inspire confidence among policy-holders. The State Bank of Pakistan was to be the trustee, unless the Government of Pakistan and the Indian Insurance Companies agreed upon some other trustee resident in Pakistan. Arrangements were to be made for the periodic realisation of interest on Government of India and U.K. Government securities held in trust. The State

Bank of Pakistan was to be entitled to charge reasonable fees for acting as a trustee.

(3) **Withdrawal of Indian Companies from Pakistan:** Indian companies withdrawing without doing fresh business were to be in the same position as non-Indian companies were in British India. Those withdrawing after doing further business in Pakistan, however, were not to be freed of all obligations under the Pakistan Insurance Act. The Government of Pakistan, however, gave an assurance that in case more onerous conditions were to be imposed, they would give sufficient notice and that such conditions would not be applicable to companies withdrawing before that.

(4) **Payments of Claims:** It was agreed that the two Governments should persuade insurance companies to make payment of claims on life policies not exceeding Rs. 2,000/- without insisting on succession certificates but on the production of a guarantee or indemnity from two sureties. Steps were to be taken to ensure that succession certificates granted in one country were treated as valid in the other.

(5) **Revival of lapsed policies:** In view of the fact that great hardship would be caused to policy-holders, who were unable to make regular payments of premiums. owing to conditions arising out of the partition, if their policies were allowed to lapse in accordance with the strict policy conditions, it was decided that the Governments of India and Pakistan should request insurance companies within their jurisdiction to consider sympathetically such cases of lapse. All policies which lapsed before the end of 1949 under such conditions were to be treated liberally and revived. The companies could insist on a medical examination and also charge interest not exceeding 6 per cent. on arrears of premiums.

POSITION OF POLICY-HOLDERS IN PAKISTAN

Indian insurance companies, which even after the partition continued to have a large volume of business in Pakistan, had to face further difficulty when the Evacuee Property Ordinance of June 1949 classified insurance policies of evacuees as evacuee property and vested them in the Custodian of Evacuee Property. As a result of this, policy-holders in Pakistan discontinued payment of regular premiums and allowed their policies either to lapse or got them paid-up. Those policy-holders were not able to assign their policies or take loans against them, nor could they or their heirs receive payment when the claims matured. The insurance companies requested the Government of India to exclude insurance policies from the scope of the ordinance because of the loss of premium income from Pakistan, and also because of the fear that the Government of Pakistan might treat the immovable property of Indian insurance companies as evacuee property, and sell it in order to compensate the policy-holders for the loss suffered by them as a result of the ordinance.

The suspension of financial transactions between India and Pakistan following the devaluation of the Indian currency made it impossible for the policy-holders in Pakistan to remit their premiums or to receive benefits from their policies. They, therefore, applied for surrender of paid-up values. The Indian Insurance Companies Association came to their rescue by deciding that the payment of premiums and policies should be in Indian rupees, and all the premiums paid by Pakistan policy-holders should be kept in suspense until the rate of exchange between the two nations was settled. If premiums

were tendered on the basis of parity between the two currencies, the policy-holders in Pakistan were to be entitled to the benefits accruing to them in Indian currency in India.

CONCLUSION

Insurance companies, particularly those doing substantial business in Pakistan received a rude shock as a result of the partition. While on the one hand, they had to make good the losses of their policy-holders, on the other, their functioning was rendered difficult on account of difficulty of transferring their records and assets from Pakistan. West Pakistan, especially West Punjab, was the best organised and most productive field for insurance business in view of the large proportion of well-to-do insuring classes. This business has now disappeared as a result of the overnight transformation of this clientele into homeless refugees. Policy-holders in Pakistan have suffered greatly on account of the inclusion of insurance policies within the scope of the Evacuee Property Ordinance and the suspension of Indo-Pakistan Financial transactions following non-devaluation by Pakistan. As in the case of the banking system the net loss to Pakistan as a result of the transfer of insurance companies to India has been very great. Industry and commerce have been handicapped by the lack of insurance facilities, particularly at a time when they were increasingly necessary in view of the civil disturbances. The extent of the dearth of insurance facilities can be gauged from the fact that the Government of Pakistan had to introduce compulsory riots risk insurance for cotton in Sind. The Government of Pakistan offered reasonable terms to Indian companies operating in Pakistan, but insurance circles are not very optimistic regarding the resumption of business in Pakistan by Indian companies in view of unsuitable working conditions in that country.

POSTSCRIPT

THE REFUGEE PROBLEM

Magnitude of the Movements: In chapter I we have estimated that approximately 6 million persons migrated from West Pakistan to India. This estimate was prepared by us after taking into account the communal composition of population existing in West Pakistan in 1948. We assumed that almost all non-Muslims had migrated from West Pakistan to India. Official figures as given in the Rehabilitation Review for the month of July 1950 indicate that 5 million persons on the whole migrated from West Pakistan. Thus there is a discrepancy between our estimate and the estimate of the Ministry of Rehabilitation. The Rehabilitation Ministry's figures are presumably based on Census of Displaced Persons conducted in 1948 with a slight addition for possible errors. This Census did not cover all the Provinces and States. Secondly, it did not sufficiently take account of the number of persons who migrated before the partition. In order to arrive at a correct estimate we have also to note the number of people who migrated in the post-census period. Considering all things we adhere to our estimate.

The Government of Pakistan has estimated that about 7.8 million Muslims migrated to West Pakistan, whereas we have put the figure at 6.5 million. In this case also our estimate is based on the communal composition of population in North Western India and on the assumption that all Muslims migrated to West Pakistan. The Rehabilitation Review estimates the size of the migration from East Pakistan at 3.2 million, while we have estimated it at 4 million. The difference arises on account of the fact that we have taken 2 million as the figure representing the influx from East Pakistan to India prior to January 1950. This was the figure given by earlier official announcements. Until the results of the 1951 Census are available, it will not be possible to ascertain the exact magnitude of the refugee movements.

Public Opinion in India regarding the Refugee Problem: It appears that public opinion in India, particularly in recent months, has hardened about the possibility of mutual co-operation between the Governments of India and Pakistan as regards the solution of the refugee problem. Despite the Nehru-Liaquat Pact migrations to India have continued from East Pakistan. This has given rise to the belief in certain quarters in India that the Government of Pakistan has not been successful in carrying out the spirit of the minority pact. Whether this has been due to the unwillingness of the Government of Pakistan or to its inability to control dissentient elements, the result has been that people in India have come to feel that the Government of Pakistan is not sincere in fulfilling its obligations. The continued influx into West Bengal has created explosive conditions in that overcrowded and heavily congested Province. The non-settlement of the evacuee property problem has also created strong feelings of bitterness among the refugees. The displaced persons in India have, however, developed a feeling that the property left in Pakistan is as good as lost with the consequence that even the Government of India's request that evacuees should file their claims about the nature and value of property lost in Pakistan is reported to have met with a poor response. On account of this, a

section of the public in India has mooted the idea of a compulsory exchange of population as the only way of solving the refugee problem. Such a compulsory transfer, it is felt would create the necessary opportunities in the country for the non-Muslims from East Pakistan. The proponents of this view also maintain that such a decision would establish by law what has been actually going on. It would facilitate easier migration and lessen transitional sufferings. Unless a corresponding number of people go from India to Pakistan, it is felt in these quarters that the problem of incoming refugees cannot be solved. Such a transfer would in their opinion also result in the complete disappearance of the minority problem in both the countries.

The Government of India has stoutly resisted the notion of compulsory transfer and mass exchange of population. The Constitution of India has declared India to be a secular state. A mass exchange of population would involve exercising powers of compulsion over large sections of citizens. The Constitution has not provided any special safeguards for Muslims. If a section of the people agree to reside in the country and are reconciled to the conditions existing therein, it would be cruel and inhuman to force them to leave it. Moreover, the Government of India has held the view that its attitudes as regards its citizens cannot be dictated by considerations of what happens in a neighbouring State. The Government of India cannot, therefore agree to measures which are motivated by purely communal considerations.

It would be beyond the scope of our work to go into greater detail over the problem of compulsory transfers. The notion of transfer as a remedy for solving an acute minority problem has been developed only in recent times.[1] It was in 1915 that Georges Montandon, a French scholar drew up a memorandum delimiting state frontiers according to ethnic criteria and suggested the transfer of ethnic minority groups within these frontiers to secure their stability. Montandon claimed that Nansen's proposal concerning the exchange of population between Greece and Turkey was influenced by this memorandum. Responsible statesmen, scholars and writers among whom can be counted Herbert Hoover, Bernard Newman and President Benes have also advocated the transfer plan. Many European countries have accepted this view. The U.S.A., Soviet Union and Great Britain in the Potsdam Declaration of August 1945, recognised that transfers to Germany of German population remaining in Poland, Czechoslovakia and Hungary would have to be undertaken. As against those who advocated the idea of population transfers, there is also a powerful section of writers like David Thompson, Stephen T. Ladas and Professor Hula, who have voiced their strong protest against the notion of population transfer. Sir George Hope Simpson, one of the recognised authorities on the Refugee Problem, while admitting that only a compulsory population exchange offers an adequate solution for a hopelessly complicated minority problem, emphasized that it was an inhuman and cruel remedy. Prof. Hula rejecting the idea of population transfer from the moral point of view, has contended that it involved the recognition of collective rights as against individual rights by degrading man to an appurtenance of the race to which he was supposed to belong.

The most far-reaching question which is posed by any scheme of population transfer is that of compulsion. It would result in the exercise of authority over the rights of individuals. Only two transfer treaties between 1920 and

1. Please refer to "European Population Transfers, 1239-1945" Joseph B. Schechtman Oxford University Press, 1946, pp. 444-479, and also "The Refugee Problem" Sir John Hope Simpson, Oxford University Press, 1939.

1944 made transfer legal and compulsory (i) the Greco-Turkish Treaty, 1923 and (ii) The Bulgaria-Rumanian Treaty, 1950. Most of the transfers have been affected unilaterally, the right of option having been recognised. By and large, leading jurists and students of minority problems agree with Schechtman that, "Unconditional compulsory transfer is wholly inconsistent with democratic concepts of human rights. There is something deeply shocking in the idea that human beings may be indiscriminately transferred or exchanged like goods or cattle, without having any legal right to protest or appeal".[1] The Government of India has, however, kept its head high above feelings of communalism. Even then it must be remembered that if the migrations from East Pakistan continue unchecked it would be difficult for the Government to stem the tide of public opinion. However obnoxious and repugnant the notion of compulsory transfer may be to those wedded to ideals of sacredness of individual rights and the need for secularism, such enlightened and democratic ideals might be powerless against the pressure of popular emotions. It is difficult to establish and retain objectivity and a sense of proportion in the face of widespread dislocation, unemployment and misery. It must also be noted that if a policy of mass exchange of population is carried to its logical end, the Government of Pakistan would have to resettle afresh 37 million Muslims. The economic consequences of such a huge influx on the backward and truncated economy of Pakistan would mean tremendous upheaveals and dislocations. That is why it is necessary for the Government of Pakistan to take a realistic view of the situation and prevent further migrations of non-Muslims by creating an atmosphere of security for them. That is the only way by which it can strengthen the hands of the enlightened sections of public opinion in India, who are trying their utmost to regulate popular sentiments along democratic and secular channels.

Proposal for a Capital Levy: As the chances of getting compensation from Pakistan have receded into the background, suggestions have been made that the Government of India should give compensation to refugees and collect the funds by means of a capital levy. Such a levy, apart from its impracticability on account of lack of adequate data, would also result in the transfer of purchasing power for purposes of current consumption, thus aggravating the inflationary pressure on the economy. As we have pointed out in chapter IV, the problem of rehabilitation of refugees will be speedily solved without detriment to national interest, if the pace of economic development is accelerated. In the execution of development projects a weightage for displaced persons as regards employment opportunities is desirable.

The rehabilitation programmes, therefore, must be dove-tailed into the general development plans of the Government. It may not be out of place if we point out that the Governments of India and Pakistan should try ways and means of getting international financial assistance for solving the refugee problem. The League of Nations and the Nansen office very liberally helped resettlement programmes in European countries by way of international loans. The refugee problem of India and Pakistan has been unparalleled in size and suffering. It would be perfectly legitimate therefore to approach international organisations for liberal assistance. It is true that existing organisations like the I.M.F. and the World Bank are limited by their charters, but it would be quite consistent with the aims of the United Nations to make special arrangements for such a peculiar case involving such large numbers.

1. Schechtman, pp. 474.

AGRICULTURAL PRODUCTION

Failure of monsoons in several areas, huge floods in Bihar, U.P., Assam and Orissa, the occurrence of the catastrophic earthquake and dislocations caused in Assam and the locust pest in Rajasthan have all contributed towards the deterioration of agricultural production in India in the current year. It is feared therefore, that the procurement targets may not be reached. By the end of August 1950, only 3.8 million tons as against an estimate of 5.4 million tons were procured. Assam had procured only 120,000 tons against a target of 290,000 tons, West Bengal only 300,000 tons as against 400,000 tons, Madras 800,000 tons as against 1,600,000 tons and U.P. 465,000 as against 551,000 tons. The foodgrains supply position in Bihar and Travancore is reported to be highly critical. On account of these reasons the Government import policy as regards foodgrains may have to be revised. A welcome trend, however, is that cotton production in 1950-51 is expected to touch 35.81 lakh bales as against 28.85 lakh bales in 1949-50.

POWER-PROJECTS IN INDIA

It is reported that the Government of India has decided to give the highest priority for accelerating the progress in the construction of river valley projects. The total allocations for these projects would, therefore, be increased from Rs. 19 crores to Rs. 26.35 crores. The Bhakra project, the Damodar Valley, the Hirakud Dam and the Firoze Canal schemes would gain from these increased allocations. It is stated that the early completion of these projects would solve problems of shortages in food, raw materials and power. A Central Control Board has been set up in order to execute the Bhakra project. The Board will be assisted by an Advisory Committee consisting of the representatives of the East Punjab, PEPSU, Rajasthan, Bilaspur and the Central Governments.

I. M. F. AND FIXATION OF THE PAR VALUE OF PAKISTAN RUPEE

The authorities of the International Monetary Fund, who met in Paris in September 1950 decided to postpone the decision on the fixation of the par value of the Pakistan rupee. It appears that the Board of the Executive Directors of the Fund decided on this step on the ground that the matter was very complicated and that the staff of the Fund had not had adequate time to study the relevant considerations. It should be pointed out that though Pakistan became a member of the Fund only in July 1950, there was an urgent need for a final decision of the par value of the rupee both in the interests of Indo-Pakistan and of world trade. The postponement of the decision will increase the uncertainty in trade circles particularly in India and Pakistan. The Pakistan authorities claimed that they had a sound case for non-devaluation, whereas the Indian representatives held a different view. Even in Pakistan itself it appears that opinion is divided on the issue though the Cabinet Ministers continue to reaffirm their desire to stick to the present value of the Pakistan rupee. Mr. Fazlur Rahman, Commerce Minister of the Government of Pakistan, during the course of his address to the newly-formed Pakistan Foreign Trade Development Council maintained that Pakistan had not been worse off in spite of her non-devaluation decision. He informed the Council that the value of exports in the last six months was Rs. 58.06 crores in the annual total

1. Figures of trade however tell a different tale. The total exports from Pakistan in 1949-50 including land-borne exports to india amounted to about Rs 115 crores, while the total imports on private account amounted to about Rs. 140 crores, thus indicating a deficit on trade account of about Rs. 25 crores. The figures of total deficit will increase if the imports on Government account are included. It is well known that Pakistan has been heavily drawing on her sterling balances to meet such deficits. These facts are not cousistent with the complacency shown by the Pakistan authorities.

of Rs. 89.31 crores. He claimed that exports to countries other than India had substantially risen with the consequence that the balance of trade on private account showed a substantial improvement. Mr. Rahman also stated that India's share in Pakistan's trade had declined from 46 per cent. in 1948-49 to 25 per cent. in 1949-50.[1] Refuting the impression that the trade deadlock initiated or occasioned reduction of trade between the two countries, Mr. Rahman maintained that it however accelerated the process, 'but the trend was already there'. Pakistan had to diversify her trade to spread and reduce the risk inherent in dependence on one trading partner and could not follow a policy of putting all her eggs in one basket. He indicated that in regard to cloth and yarn Pakistan was able to import requisite quantities from Japan at prices which were competitive with those of cloth and yarn formerly being supplied by India.

Though the Pakistan Minister tried to strike an optimistic note and maintained that Pakistan was and would be able to carry on well without devaluing her rupee, it should not be forgotten that the figures given by Mr. Rahman referred to trade on private account only. In the absence of details of imports on Government account, the statement about the favourable balance of trade must be accepted with reservations. It is not correct to take as a standard the trade operations of Pakistan in 1949-50 when there was complete suspension of normal trade between India and Pakistan. The fact that Pakistan was able to buy cloth from Japan, though not from India, does not prove that India would not have sold any cloth to Pakistan. It is quite possible that if India had competed with Japan as regards supplies of cloth and yarn, Pakistan might have enjoyed lower prices. It must also be remembered that the non-devaluation decision of Pakistan has adversely affected the farmers both in East and West Pakistan, as there has been a steep decline in the prices of agricultural commodities with the consequence that the farmers' incomes have fallen. As against this, the prices of imported manufactured articles and of raw materials for industry have, however, been high. Mr. Rahman's remarks that Pakistan's non-devaluation decision did not bring about the reduction of trade between India and Pakistan cannot also be accepted. It has seriously distorted the normal trade relations and trade pattern between the two countries. Though the prices of commodities in Pakistan have come down it must be noted that India's refusal to buy from Pakistan has been an important contributory factor in this, the trade relations between the two countries having more or less partaken the character of a bilateral monopoly in the short run particularly in the case of raw jute. It will take a period of time before India can be fully self-sufficient in respect of raw jute, and before Pakistan can remove the bottlenecks which have come in the way of larger exports of raw jute. Thus the interests of both the countries are complementary in regard to jute. The I.M.F. authorities cannot afford to ignore the natural importance of Indo-Pakistan trade in the foreign trade of Pakistan given normal trade relationships. It is in the interest of Pakistan itself to build up a large exportable surplus in respect of India as she will have to repay her portion of the public debt of Undivided India from 1952. If the evacuee property question is also solved, Pakistan will have to pay more to India as the value of property left by the non-Muslim displaced persons in Pakistan is definitely larger than the value of property left by the displaced Muslims who migrated from India.

The Commerce Minister of Pakistan also maintained that as 40 per cent. of the world's jute loomage was located outside India and as Pakistan wanted to

1. If we take land-borne trade also, India's share in the total foreign trade of Pakistan declined from 60 per cent 1948-49 to 32 per cent in in 1949-50.

sell to customers on whom she could more securely rely over a long terms of years and whom increased supplies would assist to survive competition from cotton and paper, Pakistan was giving priority to countries other than India in respect of raw jute exports. The Minister estimated India's production in 1949-50 at 2 million bales, and calculated the non-Indian demand for raw jute at 4¼ million bales. As against these remarks, it may be pointed out that India's position as regards raw jute supply has been improving. The production for 1949-50 was put at 3.5 million bales and not at 2 million bales as stated by the Commerce Minister. Moreover as has been indicated in chapter VII more than 40 per cent. of raw jute produced in Pakistan is unsaleable to countries other than India.[1] Secondly, the baling capacity in East Pakistan is limited. The Port of Chittagong though it has increased its capacity cannot accommodate for as much of raw jute as Pakistan wants to export. The continuance of trade deadlock with India has necessitated a larger amount of import trade through the Port of Chittagong. East Pakistan was heavily dependent upon India for a major portion of her goods which were formerly being supplied over the rail and river route. The statement that Pakistan should sell more raw jute to European countries in order to maintain the competitive capacity of jute goods against paper and cotton goods ignores the fundamental fact that the superiority of jute goods can only be maintained by supplying more of raw jute to Indian mills which produce more than 60 per cent. of the jute goods produced in the world, the remaining 40 per cent. being made up by scattered units in several countries.

The Government of India raised the export duty on jute goods from Rs. 350 to Rs. 750, i.e., by about 114 per cent, in October 1950. This may not affect the market for jute goods as on account of stock piling programme of the U.S.A. and other countries the demand for jute goods may be considered to be inelastic. The increased export duty will, however, add to the revenues of the Government and also increase the dollar earnings.

SUPPLEMENTARY BUDGET

Though the Finance Minister of India had anticipated a small surplus in the Budget for 1950-51 on revenue account, particularly on account of the relief and rehabilitation of refugees, a large deficit is expected. Efforts are being made to reduce expenditure all round to meet the situation. In the case of Pakistan, the Finance Minister had to introduce fresh taxation proposals to the extent of Rs. 2.10 crores in his Supplementary Budget for 1950-51. Duties on petrol, cigarettes, surcharges on railway tickets, additions to the levies on entertainment and betting taxes and a tax on newspaper advertisements were included in the proposals. A cess on land owners in East Bengal and on agricultural incomes in West Punjab, a levy on broadcasting licenses and land revenue in Sind, fees for licenses in respect of import and export, and for motor vehicles and vessels lying in inland waters and toll on goods carried by road were also included in the proposals. The main aim of the proposals was to provide the finance for meeting the expenditure on account of rehabilitation of refugees. These proposals would mean a change in the central policy as regards refugees in Pakistan. We have indicated in the chapter XII that the main burden of expenditure on refugees was borne by Provincial Governments, particularly West Punjab. The fresh tax proposals indicate that the Central Government is now undertaking some financial responsibility for rehabilitation of refugees.

1. As the Indo—Pakistan interim trade agreement expired by the end of September 1950, it was reported that Pakistan had offered to supply more of raw jute to India on barter basis and on the same terms as were specified in the interim agreement.

LIST OF STATISTICAL TABLES

(The statistical tables given in different chapters of this book either in the text or in the appendices have been in most cases specially compiled from different scattered sources. In a few cases they have been adopted or borrowed from standard publications. The sources have not been indicated in the text. It has been thought advisable to give an index of the tables in the following form for convenience of reference and also to indicate the sources for each tables. As far as possible the source is indicated in brackets along with the title of the table.)

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ERRATA

In line 1 page 146 please read "38 per cent of the area" instead of "48 per cent. of the area", Read foot note 1 page 167 as "Vide Appendix VI, Chapter XI". On p. 233 read the table number of the second table as "Table 15". On p 234 read the table number as "Table 16". On p. 254 omit title "DEMAND FOR PAKISTAN COTTON" occurring at the end of the page. On p. 302 in line 14 read "average value" in place of "average cost". On p. 330 add below the title of Table 44 "(in thousand tons)". On p. 459 read section title as "IV instead of VI". On p. 522 read section heading "II. INSURANCE" instead of "INSURANCE". On p. 522 in line 41 read "table 8" instead of "table 6". On p. 523 in the title of table read "Table 8." in place of "Table 6."

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