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PLANNING FOR INDIA

By

BIMAL C. GHOSE

B.Sc. (Econ) (Lond),. B.Com. (Lond)



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PREFACE

THE publication of the memorandum embodying a scheme for the economic development of India, popularly known as the Bombay Plan, has evoked country-wide discussion and enthusiasm. Much of this enthusiasm may be ascribed to the fact that the Plan has introduced a ray of light and hope into an atmosphere of unrelieved gloom and depression. It has challenged the almost fatalistic belief that poverty is our birthright. It indicates a way out of the present misery and degradation towards a condition of things which would make life worth living, instead of the burden it now is for the vast majority of Indians. It is small wonder, then, that enthusiasm for the objects of such a plan is unbounded. But an object which remains merely a pious aspiration is of little avail. It must be realized in practice. Enthusiasm is undoubtedly a great asset, but by itself will not carry us to the goal. It must be tempered by an adequate appreciation of the magnitude of the task that the implementing of a plan will involve.

It is also necessary that we should fully comprehend the implications of an economic plan and the conditions under which it may attain success. This booklet attempts to clarify some of these implications and conditions, so that their proper understanding may help us as much in the final framing of the plan as in preparing ourselves for the heavy sacrifice that its execution will entail. In examining the implications and problems of economic planning, with special reference to the Bombay Plan, I have delved unreservedly into the rich treasure-house of

experience that is provided by the Russian Five-Year Plans and for sufficient reason. Russia on the eve of the Five-Year Plans was a backward agricultural country in many respects similar to, if not worse than, the India of today. Russia again is the only country in the world where economic planning has been deliberately and consciously pursued so as to transform a country with a weak and agrarian economy into a powerful industrial nation within the short compass of just over a decade with such success that she commands today the respect and admiration of the whole world. Her experiences of economic planning should therefore prove of inestimable value to us.

I must finally acknowledge my debt of gratitude to my friend, Mr Kiran Basak, for the valuable assistance I have received from him.

B. C. G.

Calcutta
May, 1944

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CHAPTER I

IMPLICATIONS OF PLANNING

PLANNING, like socialism, is a much overworked expression. Different persons attribute different meanings to the term, with the result that not unoften arguments about its merits or demerits and its feasibility or otherwise are conducted on entirely different planes leading naturally to no satisfactory conclusion. There are some who consider that the mere exercise of choice or action with some purpose involves planning. It is said that the consumer who in the present society is spending his limited income, the producer who is manufacturing goods for the market, and the capitalist who is investing his surplus money, are all acting with some purpose, and are, therefore, planning. This, however, is a very broad and loose definition of planning. But planning, as we shall understand it, means production and distribution with a social purpose—not only for a short period but also for a long period. Planning, in this sense, may well demand of the community the sacrifice of a large or small part of its immediate comforts in the interest of the not too distant future. This naturally assumes an appropriate mechanism of distribution in conformity with the plan for production* A planned economy will mean some system by which broad decisions as to what will *be* produced both for internal and export markets, what will be imported, the amount of capital needed and its utilization will be made collectively in the interest of the whole society. This is in contrast to the present system under which decisions about all

these things are left to individuals or corporations, the guiding factor being profit.

This definition of planning has not made any assumption as to the form of society or the Government under whose auspices planning is to be effected. The issue between capitalism and socialism has not been raised, although it should be evident that it cannot be ignored. Planning should be discussed in the context of some objective* that we desire to attain. Usually, this object is the attainment of full employment as well as the progressive improvement in the standard of living of the people* The question naturally arises how far this objective may be attained by planning under capitalism.

The fundamental feature of capitalism is that production is undertaken for profit. In the context of growing capital accumulation, which results in the production of a larger and larger volume of finished commodities without a simultaneous proportionate increase in the purchasing power of the masses, this profit motive in production inevitably leads to periodic crises and unemployment. This crisis in capitalism was prophesied by Marx long ago at a time when the system was by all tokens making rapid strides forward. He foresaw that the system contained within it germs which would eat into its vitals. The growth of capitalism implies the continual investment and reinvestment of capital for the purpose of earning profit. With the drive for increasing profit grows the productive power of society. But with it the share of the masses in the total production progressively diminishes. As a result of this process there comes a stage when further increase in productivity ceases to augment

profit, but, on the contrary, even lowers it. Then new investment stops, production slows down, a crisis supervenes and unemployment rears its ugly head.

Such planning as is possible under capitalism can serve only limited ends. It is unable to attain the objective of full employment or the progressive improvement in the standard of living of the community as a whole. It cannot escape periodic crises. The full development of a planned economy is only possible under a socialistic form of Government. This should become evident from the following facts. If the object of a planned economy is to abolish unemployment it is impossible of realization under a capitalist system, for since the capitalist works for profit, it is not to his interest to abolish unemployment completely, which would have the effect of abolishing the reserve army of unemployed, the purpose of which is to bring pressure on the labour market and to ensure cheap supply of labour. A planned economy also means increased production of such goods as are particularly needed by the masses. Under capitalism, however, capital would flow into those branches of production which assure the highest possible rate of profit. A capitalist has no reason or urge to accept a lower rate of profit or incur a loss for the purpose of satisfying the needs of the people. Again under capitalism ownership of the means of production as well as command over the services of workers is in the hands of the capitalist. Vested interest, not the well-being of society as a whole, is the motivating force of his action, while any possible encroachment upon his power designed in the interest of the community as a whole is sure

to be violently resisted, as this may affect the rate of profit.

The growth of productive forces, which is the fundamental basis of human progress, is not unconditional under the capitalist system. It is conditioned by the fact that the expansion or contraction of production is determined by the volume and the rate of profit gained by the capitalist, instead of being determined by the relation of production to social wants. Thus, the capitalist method of production continually sets a barrier to itself, which is periodically overcome by violent methods, such as the destruction of machinery and material resources,—the characteristics of an economic crisis. For all these reasons it is impossible to realize fully the principles of planned economy while preserving the economic basis of capitalism.

While no country where the capitalist method of production prevails can escape the consequences outlined above, the extent and depth of the crisis will depend on the maturity of the capitalist economy in individual countries. In developed capitalist countries of the West, the most severe form of economic crisis is bound to appear more or less periodically, unless the economy of these countries be bolstered up by vast expenditure on armament which, in the long run, is far more devastating than the periodic economic crises themselves, or the burden of such crises, to some extent at least, is passed on to the colonies they may possess or acquire.

The position of undeveloped or under-developed countries like India and China, however, stands on a different footing. In these countries, there is a vast amount of human and material resources still

awaiting development. The domestic market is also very extensive. There is thus a wide scope yet for the profitable use of vast amounts of capital. Under certain conditions, capital accumulation even under the present economic system of India can continue and earn a profitable return for some time to come. A primary condition is, of course, the necessity of insulating Indian economy from the effects of any possible severe competition from highly industrialized countries, at least until such time as our industries have passed through their gestation period. The economic development of our country is still so low, our idle resources in men and material so vast, our internal market so extensive that, there is yet a considerable scope for capitalistic development in this country, provided our economy is protected against serious competition from highly advanced countries. There is no doubt, however, that once we reach the stage of development of Western countries, we shall be faced with the same contradictions and difficulties as they are confronted with unless we are wise enough to institute measures in time for altering the fundamental basis of our economic structure. This consideration provides the limit up to which desirable development can take place in Indian economy under the existing order of society. It may be readily conceded that we shall have to advance quite a long way to reach this limit.

Compared with advanced countries of the West, there is still scope for even *laissez faire* capitalist development in India under certain conditions. Provided a suitable fiscal policy is adopted by the Government and necessary assistance offered by them for the rapid industrialization of the country,

the result may be expected to be beneficial to our people. There may not be a rapid utilization of our idle natural resources or labour power nor may economic development proceed along lines socially desirable, nor may economic well-being of the masses increase at a rapid pace. Yet industrialization of the country will help to relieve the existing pressure on agriculture, will develop a more balanced economy and will improve to some extent the economic condition of the masses. There are many capitalists and businessmen in India who are clamouring for and will be satisfied with such a development, as under it their profit-motive will be left untrammelled. But as such development will naturally be halting, slow and dictated merely by the profit-incentive of capitalists, there is almost a unanimous demand in the country for planning our economic growth. Considerable difference of opinion, however, exists as to the nature and content of such planning. Such difference of opinion naturally centres on the control that the state will exercise and the extent to which private enterprise and the profit-motive will be allowed full play in any scheme of planned development. It should, however, be clear that any comprehensive or large-scale plan of economic development presupposes as a necessary condition for its success a large measure of state interference in economic activity. Thus, the plan of economic development of India which some of our leading industrialists have formulated is of such a comprehensive nature and seeks to attain a doubling of the national income even after allowing for the increase in population at the present rate within the short compass of fifteen years that it will inevitably involve for its successful execution rigorous

state control over the accumulation and allocation of capital, the distribution of productive resources, foreign exchange and even consumption. It is doubtful if the authors of the plan fully realized all these implications when they evolved the plan, popularly known as 'the Bombay Plan', and whether, had they appreciated them, they would have been so enthusiastic over their plan. Having elaborated a plan which incidentally has appealed strongly to the public, they cannot escape from* accepting much of the processes, however they may deny or dislike them, involved in the implementation of the Russian Plans. It is, however, a moot point whether, if and when it may be decided to put a plan of this magnitude into operation with all the consequences that it implies, they or at least many of their confreres would accord it the whole-hearted and enthusiastic support that its success would call for. Such action would really amount to a merging of selfish private ends in the larger and common social objectives,—a transformation for which capitalists have not so far betrayed any great liking. There is, however, no escape from the conclusion that if, instead of a comprehensive plan affecting the economy as a whole and inspired by the ideal of progressively improving the standard of living of the masses, we evolve only a haphazard plan, which will not seriously affect the interests of free private enterprise and capitalists, we can only hope for limited results.

It is sometimes claimed that the Fascist economic system and Roosevelt's New Deal have demonstrated the possibilities of planning under capitalism. How far is this true? There is indeed a superficial resemblance between Fascist and progressive or socia-

list planning. But the resemblance is no more than superficial. It consists in certain measures of control both in a progressive or socialist and a fascist economy. There is, for instance, control in respect of foreign exchange, investment and prices, including the price of labour. But the differences between a progressive and a Fascist economy are fundamental. Fascism represents the full development of monopoly capitalism. In the interests of a few capitalists, it seeks to eliminate competition completely, thus rendering innocuous what was considered the essential characteristic of capitalism, namely, a self-adjusting mechanism responsive to market demands. Under Fascism, the profit-incentive continues to remain the guiding force in production. The means of production in a Fascist economy is owned by capitalists. The enrichment and aggrandizement of the capitalists and their supporters continue to be the main purpose of this system. This is effected in the traditional capitalist way of exploiting labour. The masses of workers are forced to sell their labour power to capitalists at prices fixed by the latter or the Government. All these characteristics of Fascist economy demonstrate the fundamental differences between it and a progressive or socialist system. The existence of competition or the interference by the state in economic activities is not the essential attribute of capitalism. 'The essential basic characteristic of capitalism is not competition, but the ownership of the means of production by a small class, so that the mass of the population must live by selling their ability to labour to that class.' Thus, the fact that competition has been eliminated under Fascism, or that employers are forced to direct investment

along certain channels, or that foreign exchange, price and wages are controlled, does not transform it into a progressive economic system. Fascism cannot invest and reinvest the surplus capital in ways which would progressively improve the standard of living of the masses, for this will affect profit and thus make production unremunerative. It may be argued that under Fascism economic stability may be sought to be maintained by gearing production to armament-building. If, however, all surplus capital is to be invested for armament production, it will not only mean that the workers will be compelled to live on a mere subsistence level, but, further, that simultaneously the interests of other capitalists not producing armaments will have to be seriously curtailed. Both the workers and a large section of the capitalists would thus be opposed to such an economic policy. Merely building armaments for maintaining stability will appear senseless and be strenuously resisted by both workers and even a section of the capitalists themselves. But armaments may be utilized in acquiring fresh conquests which would expand the scope and temporarily at least solve the problem of profitable investment of capital. The necessity of fresh conquests for extending the field of profitable exploitation by capitalists becomes therefore imperative in a Fascist state. That is why Fascism inevitably leads to war. The same tendencies are at work, although with less vigour, in democratic capitalist countries like Britain or America, and explain why they are periodically involved in wars to gain markets in the interests of their capitalists. There can, however, be no doubt that planning for the purpose of improving progressively the economic

condition of the masses is impossible under Fascism. Planning under Fascism is designed only for preparing for war for wresting markets for exploitation by a small group of capitalists and their supporters in the Fascist state.

The American New Deal offers an example of a temporary expedient to deal with a particular economic malaise rather than of economic planning. It was not a scheme for planning production. It was rather a device to supply cheap capital to American producers and purchasing power to American consumers so that industry might expand and reabsorb the unemployed population. It effected no material change in the capitalist system, nor did it fetter in any way the profit-motive in production. What it demonstrates is that if more purchasing power can be put in the hands of the masses in ways which will not affect profits, a stimulus will be given to production. Such action in a depression will begin to turn the wheels of industry and engender prosperity. Under the American New Deal, cheap capital was offered to American producers and vast quantities of new money were distributed to American consumers. As none of these methods adversely affected profits, but, on the contrary, created conditions for the profitable investment of capital, industry expanded and the processes of recovery were set in motion. The channels through which money began to flow into the hands of the American public were many and varied, such as the Agricultural Adjustment Act, the House Owners Loan Corporation, the Reconstruction Finance Corporation, the public works section of the N. R. A., and various Unemployment Relief Acts. Such receipts of money by

the public did not increase the entrepreneur's costs, **but**, on the contrary helped the processes of recovery. **But** they sent prices rising, and larger and larger outlays of public money were necessary to prevent American economy from drifting into a slump. This would have meant more spending and borrowing by Government, and larger budgetary* deficits. The inflationary danger was felt by a large section of the American public to be real, and a strong demand was made to put national finances on a sound basis. The Government's contribution to purchasing power was rapidly reduced and the result was the inception of the slump in 1937. It is a moot question whether a continuance of Government policy to contribute to purchasing power would not have led to increased production of consumer goods and thus prevented any inflationary tendency from developing. But the point to notice about the American New Deal is that it was not a programme of economic planning. It was aimed at producing recovery and absorbing the unemployed labour force primarily by the device of augmenting the purchasing power of the American public in various ways.

The above discussion proves that effective planning is impossible within the framework of a capitalist society. Fascism involves planning, if at all, for war and imperialist aggrandizement. Admittedly this is not an ideal to work or die for. The New Deal was really not planning at all. /The only example of successful economic planning is offered by Russia, that is, under conditions of socialism. This lesson of history has particular significance for us in India.

The whole world including ourselves is today mad about planning. But a difference is to be

noticed in the emphasis on the objective aimed at in Western countries and in India. With Western countries, it is essentially a problem of planning for full employment. With us, it is essentially one of improving the standard of living. This difference in emphasis is quite understandable. In Western countries, a fairly high standard of living has already been attained. Their problem now is to find employment for the whole of their population without any diminution of their existing standard of living, but, on the contrary, and if possible, at a still higher level of comfort. In India, on the contrary, the standard of living is depressingly and deplorably low. A very large section of the population is living well below the subsistence level. It is, therefore, imperative for us to develop our economy to such an extent as will assure to our masses the minimum comforts of life. In stating our objective in terms of the attainment of a minimum standard of life, we do not obviously desire it for only a section, large or small, of our population. We desire it for the whole of our population. In fact, the underlying assumption is that the provision of a minimum standard of living to the masses will involve such far-reaching developments in every sphere of economic life that conditions of full employment will also thereby have been created. In the context of our conditions, the objective of raising the standard of living for the masses assumes at the same time a state of full employment for all our able-bodied people, the physically and mentally weak or infirm being taken care of by the state.

A pertinent question is how and how soon we wish to attain our objective. India being an undeveloped country with vast potential resources

in men and material, there is some scope for even *laissez j aire* capitalist development Which will, although very slowly and haphazardly, improve somewhat the economic condition of the masses, provided a forceful policy of economic nationalism is pursued by the Government. But if we desire, as, I believe, most Indians do, an all-sided and rapid progress towards our objective, there is no other way than to evolve and implement consciously a planned scheme of economic development. If, however, this is what we really hope for and wish to achieve, the considerations urged in this section should be borne in mind.

CHAPTER II

MINIMUM STANDARD

ONE problem that dwarfs all other problems in India is that of poverty. The word 'poverty' conveys a different meaning in India compared with the meaning it conveys in Britain. In Britain, it is a question of a section of the people failing to reach a fairly high standard of living. In India, it means a very large section of the people living well below the subsistence level. The object of planning in India, therefore, as already stated, is so to improve the standard of living as will assure to the masses a minimum level of comfort.

The extreme poverty of India is demonstrated by her very low *per capita* income. Against Rs 980 in the U.K., Rs 1,406 in the U.S.A., Rs 1,038 in Canada, Rs 792 in Australia, and Rs 218 in Japan, the *per capita* national income in 1931 was only Rs 65 in India. A *per capita* income of Rs 65 is much too low for assuring a minimum standard of comfort. But even this income is not available to a large section of the people first, because, the total national income is very unevenly distributed, and, secondly, because a portion of it is burdened with debt and therefore not available as a free income to be spent on the essential requirements of life. With such meagre earnings, it is not to be wondered at that a large section of the Indian people live in conditions of unimaginable squalor, ignorance, disease and starvation. In fact, a large portion of our population is starved, and, in this sense, famine conditions are a permanent feature of our society.

How far our masses are below the subsistence level may be gauged by a reference to the present position in respect of the main ingredients of a minimum standard of life, namely, food, clothing, shelter, medical relief and education.

FOOD

Although India is primarily an agricultural country, the great majority of the population actually exists on one meal a day. Inquiries into a large number of working-class budgets have revealed that industrial workers in many parts of the country have a diet worse than that of convicts, and usually small peasants and agricultural labourers fare worse than industrial workers. The diet is not only inadequate in quantity, but also sadly deficient in nutritive value. On the assumption that a balanced diet requires about 2800 calories for an adult person, Dr Radha Kamal Mukherjee estimates that 'India has now (1935) fallen short of food for 48 millions of her average men. The average deficit is 423 calories in each man's daily ration'. Further, in view of the backward condition of agriculture, the position in regard to food-supply in the context of increasing population has been deteriorating. Dr Mukherjee observes that 'since 1930-31, the margin in the case of aggregate food production has been steadily diminishing, until in 1937-38 there was an actual deficit of 15 per cent, while the food supply actually available for consumption diminished by 7 per cent as compared with 1910-15'.

Dr B. C. Guha has constructed an optimum or nearly optimum diet consisting of about 280a

calories for an average adult of ordinary active habits. The diet is as follows¹:

	<i>Quantity</i>
Unmilled or lightly milled rice ...	... 10 OZ.
Whole wheat	... 6 "
Pulses	... 4 "
Eggs	... one or two
Sugar	... 2 OZ.
Milk and milk products ...	... 10 "
Fish and meat (or extra milk product for vegetarians)	... 4 >*
Non-leafy vegetables	... 5 "
Green-leafy vegetables ...	... 5 "
Fats and oils	... 2 "
Fruits	... 3 "

In pre-war prices, this diet would cost per head per day between 3 and 3½ annas in rural areas and between 4 and 4½ annas in urban areas. The annual cost for food alone on the basis of such an optimum diet would amount to between Rs 80 and Rs 90 per head or between Rs 3,120 and Rs 3,510 crores for a population of 390 millions. It would be about 2.5 times these amounts in present-day prices. This cost is based on a diet with an energy value of 2800 calories, which is considered optimum or nearly optimum. But even this may be an under-estimate, for Bacharach and Drummond have recommended for Britain a marginal diet of 3000 calories and an optimum one of 3500 calories. The Bombay Plan's estimate of total annual cost of feeding a population of 389 millions is Rs 2,100 crores, or about Rs 65 per head.

The diet recommended by Dr Guha is translated into an annual food requirement for 390 million persons as follows:

¹ See article 'Planning for Nutrition' in *Science & Culture*, March 1944.

	<i>Required</i>	<i>Present Production</i>
Cereals (mostly rice and wheat)	... 64 million tons	53 million tons
Pulses	•.. 16 „	75
Eggs	... 15 billion	3,365 millions
Sugar and gur	... 8 million tons	4 million tons
Milk and milk products	... 40 „	23 „
Fish and meat	... 16 „	—
Non-leafy vegetables	... 20 „	—
Green-leafy vegetables	... 20 „	—
Edible oil	... 7½ „	1 million tons
Fruits	... 121 „	—

Statistics of the present production of the above items are either unavailable, or, where available, are very unsatisfactory except in the case of cereals. What statistics are available, however, show that much expansion in production is necessary in respect of every item: cereals by about 20 per cent; pulses by over 100 per cent; eggs by over 300 per cent; sugar and gur by 100 per cent; milk and milk products by about 100 per cent; edible oils by about 650 per cent, etc. These figures convey an idea of the magnitude of the task that faces us in assuring to our people a more or less balanced diet.

CLOTHING

As India is a tropical country, our clothing requirement is much less than what is necessary in cold climates. Further, habits and manner of living also influence the quantity and quality of clothes required. The per capita consumption of piecegoods in India was estimated in 1929 at 1;6.1 yards as against 64 yards in the U.S.A., 37.7 yards in Canada, and 21.4 yards in Japan. A per capita consumption of 16.1 yards is undoubtedly inadequate. The National Planning Committee estimated the minimum requirement of clothing at 30 yards per person, which

also appears rather low. On this basis, however* we would require about 117,00 million yards to clothe a population of 390 millions. As our present production of both mills and handlooms is about 65,00 million yards, it has to be increased by about 80 per cent in order to assure the minimum requirement of clothing. At an average pre-war rate of $3\frac{1}{2}$ annas per yard the cost of 11,700 million yards* amounts to about Rs 256 crores. This is the estimate of the Bombay Plan as well. At present prices, the total cost will be Rs 585 crores on the basis of the average standard cloth price of 8 annas per yardt or Rs 1,024 crores on the basis of an average price of 14 annas per yard for other cloth.

HOUSING CONDITIONS

Although palaces and mansions are not rare in this land of contradictions, the great majority of our people live in appalling conditions. The average village dwelling consists of mud walls* mud floor and thatched roofs, with little or no facilities for drainage or, ventilation. Industrial workers live in one-room, tenements and the average number of occupants, per room is between four and five. In many parts workers' dwellings have no adequate provision for water or drainage or sanitary arrangements.

On the basis of 100 square feet of house room per person, the Bombay Plan estimates that the total expenditure required for housing the entire population will be about Rs 1,400 crores, and the annual cost of maintenance at $7\frac{1}{2}$ per cent of the total capital expenditure will be Rs 258 crores. The running cost amounts to about Rs. 6.5 per head at pre-war prices,:

As construction cost has increased by about 300 per cent now compared with pre-war prices, at present-day prices this cost would amount to about Rs 26 per head per annum.

HEALTH & SANITATION

The general standard of health in India is admittedly very low. The average expectation of life in India is less than half as many years as in England, and it is surprising that it has declined from 30 years in 1881 to about 27 in 1931, it is only 27 years in British India as against 63 years in England and Wales, 67 years in Australia and 47 years in Japan. The general death rate in India is 22.4 per thousand against 12.4 in England, 9.4 in Australia and 17.0 in Japan. Maternal mortality per thousand varies from 2.4 in Holland*to 8.5 in the U.S.A., while in India it is 24.5. Our infant mortality rate, *i.e.*, deaths under one year per 1,000 live births, is one of the highest in the world: 167 against 53 in England. It has been estimated that during the first three decades of this century, the mortality from the chief epidemic diseases has been as follows: cholera 10.75 millions; influenza 14 millions; plague 12.5 millions; and malaria 30 millions. The number of deaths from preventible diseases alone is between 5 and 6 millions, the number of days lost by each worker for the same reason is estimated at two or three weeks a year, and the loss of efficiency due to malnutrition and disease at not less than 20 per cent. Millions of people are afflicted with such diseases as leprosy, syphilis and tuberculosis. The number of blind in India is estimated at about 450 per hundred

Personnel	Available now	Proportion to population	and to area	Required	Basis
Doctors	... 40,000	1 to 10,000 (U.K. 1 to 1,000)	1 to 40 sq.m.	3,00,000	on basis of 1 to 1,500
Nurses	... 7,000	1 to 56,000 (U.K. 1 to 3000)	1 to 226 sq.m.	7,78,000	on basis of 1 to 500
Health Visitors	... 1,000	1 to 3,50,000	1 to 1,582 sq.m.	70,000	on basis of 1 to 5,000
Midwives	... 5,000	1 to 70,000	1 to 316 sq.m.	90,000	on basis of 1 to 4,000 (or per 100 births)
Qualified Pharmacists	75	1 to 40,00,000 (U.K. 1 to 1,300) (U.S.A. 1 to 1,100)	1 to 20,000 sq.m.	1,00,000	on basis of doctor to pharmacist 3 to 1 as in U.K.
Qualified Dentists	... 1,000	1 to 3,50,000 (U.K. 1 to 2,700) (U.S.A. 1 to 2,200)	1 to 1,582 sq.m.	1,20,000	on basis of 1 to 3,000

thousand, which is about three times the proportion in England and Wales.

There are; according to J. B. Grant, only 6,500 curative dispensaries and hospitals in India, which can treat annually only a total of 35 million new and old patients. By far the largest "bulk of India's population still depends upon indigenous practitioners for their treatment. This demonstrates the extremely poor scientific medical facilities available in this country. This backwardness may also be testified by the estimates (page 20) made by Major-General J. B. Hance, Director-General, I.M.S., of the present position and the minimum requirement in respect of the personnel of a national health service.

If the requirement of medical personnel in the above statement is compared with that of the Bombay Plan, the number of doctors and nurses required under the latter will be found to be about double the estimate of Major-General Hance. This is primarily due to the fact that the unit in rural areas under the Bombay Plan is one village, although two or three villages will probably constitute a more reasonable unit as the average population per village is only 517. However, as Major-General Hance's estimate includes a few additional services, the total expenditure provided under the Bombay Plan may be considered reasonable. To ensure a minimum standard of health and sanitation, the Bombay Plan provides for the following preventive and curative measures:

	Non-Recurring cost. Rs (crores)	Recurring cost. Rs (crores)
W Adequate arrangement for sanitation and water supply in rural and urban areas	100	7.5
le) Rural dispensaries	132	141.9
(*) General Hospitals	22	16.5
M Maternity Clinics	8	6.6
M Specialized institutions for the treatment of tuberculosis, cancer, venereal diseases, mental disorders etc.	19	12.5
Total ...	281	185.0

The recurring cost works out at about Rs. 5 per head at pre-war prices. In terms of present-day prices, it would amount to Rs 13 per head per annum.

EDUCATION

The extent of illiteracy in India is appalling and naturally acts as a great impediment to progress in every direction. Except in a very few compulsory areas, attendance at schools is on a voluntary basis. The percentage of literacy above the age of 5 is about 14.6. In advanced countries, this percentage is over eighty. It should be added, however, that the number of school-going pupils provide no sure index of literacy, for it has been estimated that less than one out of every four children who goes to school stays long enough at school to reach the earliest stage, namely, class IV, at which permanent literacy is likely to be attained. Thus, money spent on nearly eighty per cent of the pupils may be regarded as wasted.

The minimum educational needs consist of provisions for basic (primary and middle) education, pre-

primary education, adult education, technical and commercial education, and the training of teachers. On the basis of pre-war standards both in regard to population and cost of living, the Sargent scheme estimates the cost of these branches of a national system of education as under:

	Rs. in lakhs
Basic (primary and middle) Education	200,00
Pre-primary Education	3,20
Technical and Commercial Education	10,00
Adult Education	3,00
Training of Teachers	6,20
Total ...	222,40

These estimates do not take into account the cost of buildings but include cost of repairs. The Bom-^{*} bay Plan estimates the cost of buildings in both rural and urban areas for schools imparting ordinary education at Rs 86 crores. Excluding permanent expenditure, the cost per head per annum is about Rs 5 at pre-war prices. At present-day prices, the construction cost on a basis of 300 per cent increase, will amount to Rs 344 crores. Of the recurring cost the main constituents are salaries and repairs. As the cost of living has gone up by about 150 per cent while construction cost has increased by 300 per cent, the running expenses at present-day prices may be computed at about Rs 580 crores. The running cost at present prices comes to about Rs 13 per head.

The minimum annual income per head that is necessary to meet the barest requirements of human life may be calculated as under:

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PLANNING FOR INDIA

	Pre-war prices.	Present prices.
Food	8 0 0	2 0 0
Clothing	65	15
Housing	6.5	26
Medical Relief	5 0	13
Education	5 0	13
Total ...	103	267

According to the estimate in the Bombay Plan a minimum *per capita* annual income of Rs 74 at pre-war prices is necessary to secure a minimum standard of living. The estimate given above is nearly 40 per cent more than that of the Bombay Plan. This estimate is, however, very tentative, and no special merit or accuracy is claimed for it. "But it probably indicates that the estimate in the Bombay Plan is too low and that an annual income of Rs 74 would not ensure minimum comforts—at least not an optimum or a nearly optimum diet. The position has, however, deteriorated still further today. Dr V. K. R. Rao has estimated the per capita income in 1942-43 at present prices at Rs 114, which is only a little over 40 per cent of the amount needed to assure a minimum standard of living at current prices. In fact, a *per capita* income of Rs 114 is not even sufficient to assure an optimum diet at prevailing prices. It is no wonder that a large section of the people is undernourished and in a starved condition.

Except for education, we have so far confined our attention to physical needs only. But man does not really live by bread only. He should have facilities for the development of his mind, for cultural and recreational activities. Some of these facilities may be provided by the state. But an individual

should also have some means of pursuing some particular avocation or hobby,—not necessarily associated with the earning of his livelihood—to suit his special taste. His income should not be just sufficient to cover only basic needs, but should be a little more to enable him to appreciate and enjoy the finer things in life. The target of minimum *per capita* income that we should, therefore, aim at should be something between Rs 100 and Rs 115 at pre-war prices* The Bombay Plan aims at a *per capita* annual income of Rs 130 and assumes that this would ensure a minimum of Rs. 74 per head per annum. Whether or not this assumption will be fulfilled will depend upon the distribution of the national income among different classes in a capitalist society. If, however, the estimate of minimum *per capita* income that has been urged in this section as necessary is accepted, we shall have to aim at and plan for a national income very much in excess of what has been proposed in the Bombay Plan.

CHAPTER III

IMPLEMENTATION OF MINIMUM STANDARD

ANY improvement in the standard of living is dependent upon an increase in the national income, and the principal and speedy method for increasing national income is rapid industrialization. We desire a rapid industrialization of India not only because it will augment national income, but also because, in the process, it will relieve the excessive pressure on agriculture* The removal of the uneconomic burden on agriculture will eliminate some of the causes of certain of the worst defects in our agricultural economy, such as the increasing tendency towards subdivision and fragmentation of holdings. It will also help to develop a more balanced economy. The following observation from the Hot-Springs Conference Report is in this context very pertinent: 'The real clue to a solution of agricultural over-population lies in industrialization. . . . It is also necessary if we are to raise the general standard of living.'

It is an objective historical fact that all agricultural countries are characterized by a poor economic development and a low national income. National income and the level of comfort of the people increase with the development of secondary and tertiary production, that is, industries and services. Further, an excessive dependence upon primary production or agriculture involves the association of an uncertain factor in our national income inasmuch as agriculture is largely conditioned by natural factors. In the exchange between agriculture and industry, again, the former, but for exceptional circumstances, is usu-

ally at a disadvantage. Agricultural countries are also weak politically and are an easy prey to exploitation by highly-industrialized and powerful countries. In fact, they are usually looked upon as colonial or semi-colonial countries. It is for all these reasons that we desire a speedy development of industries and services.

This problem of the relative importance to be assigned to agriculture and industry in a plan of economic development must confront all agricultural countries whenever the urge to evolve and implement a plan is strongly felt. It also faced Russia and produced heated controversy at the 14th Congress of the Communist Party in 1925. The decision was taken in favour of rapid industrialization rejecting the proposal of the Right opposition for a Two-Year Plan to begin with in which the central link in the development of national economy was to be, not industry, but agriculture. It is true that in taking this decision, Stalin was considerably influenced by the threat of foreign war or the danger of capitalist encirclement. It may be argued that this factor should not weigh so heavily with us in India. At the same time, we should not forget that we have to assume, as the Bombay Plan also does, a free national government as an essential condition precedent to the implementation of any scheme of planned development. We should not and cannot, therefore, escape our responsibilities for adequate defence of the country, particularly if it is agreed to, as has been urged here, that successful planning on the scale and at a pace desired is only possible under socialism.

It should be emphasized that the object of rapid industrialization does not imply that we are only or

primarily concerned with industries. Industrialization is necessary for the development of the other spheres of national economy as well, such as agriculture and transport. It would ensure the supply of agricultural machinery and tractors which are essential for undertaking substantial improvements in agriculture. Further, the application of technique and mechanical appliances to agriculture will remove many of the handicaps from which it now suffers, and greatly expand agricultural production. In Russia, also, it is the rapid industrialization of the country, particularly the development of heavy industries, that has enabled its agriculture and transport to be reconstructed on a new, modern, technical base.

Industry may be sub-divided into two broad categories: (a)-heavy and construction industries, (b) light and food industries. These correspond to basic or production goods and consumption goods industries. Industries such as machine-building, power and fuel, iron and steel, chemical, building and timber come under the first category, while industries such as paper, textile, woollen, shoe, sugar, canned goods, etc. fall under the second category. The priority to be attached to these two categories of industries in any scheme of planned development is often the subject of acute controversy. A rapid development of heavy industries, particularly in a predominantly agricultural country, involves great sacrifice and privations on the part of the people in the early stages. But once they have been set up at heavy cost, the improvement in the material condition of the people takes place rapidly. The heavy industries are also the basis for building up an effec-

tive defence, and their development renders a country independent of other highly industrialized countries in respect of the supply of many types of plants and machinery. It is primarily for these reasons that, in spite of the sacrifices involved, the development of heavy industries is made the central point in any scheme of economic planning, for once they are established, they not only subserve important military needs, but also assure the rapid expansion of light and food industries as well as the improvement of agriculture on a new technical basis. In this way, the establishment of heavy industries creates 'the material basis for an enormous increase in the production of articles for general consumption and for a further improvement of the material well-being of the masses of toilers.'¹ In the Russian Five-Year Plans, particularly in the first one, very high priority was given to the development of heavy industries. The same principle is accepted in the Bombay Plan, although the priority allotted to heavy industries is not so high under it as it was in the case of Russia.

The assigning of a pre-eminent position to industry in our scheme of economic planning does not and cannot mean that agriculture will be neglected. Industry has been singled out for special attention because of its "vital" importance. In reconstructing a comparatively backward national economy, in fact, its rapid expansion will also considerably accelerate agricultural improvement and expansion. Agriculture must not only produce all the food necessary for feeding our people on the basis of what may be considered an optimum diet, but must also supply

¹ Summary of the *Fulfilment of the First Five-Year Plan*, p. 64.

raw materials to our industry and produce a surplus for export abroad so as to enable us to import necessary plants and machinery in the early years of planning. For the financing of imported machinery that will be required to implement our programme of industrialization, we have indeed an advantage in our accumulating sterling balances and hoarded gold. But beyond that, we must have an export surplus to pay for the importation of very large quantities of machinery in the early stages. This export surplus can only be built up by the export of agricultural commodities. Agricultural improvement and expansion is, therefore, essential as much to provide an adequate quantity of food for our entire population as to ensure the success of a policy of rapid industrialization.

We have to improve both the quantity and the quality of our agricultural produce. To this end, the first essential condition is the removal of the existing crippling handicaps upon agriculture. The principal handicaps are the very small size of agricultural holdings,—the result of excessive sub-division and fragmentation which again is partly a result of the excessive* pressure upon agriculture—and the very low stage of technical development of our agriculture. Not only are holdings small and uneconomic for even the existing stage of agricultural development, but the methods of cultivation are also almost primitive. Little use is made of agricultural machinery, while tractors and harvesting machines are useless in the present stage of agriculture. In truth, as Lenin said, 'small farming cannot extricate itself from poverty'.

The characteristic feature of fragmentary and

small holdings which are the bane of our agriculture, is that they are unable to utilize, in an adequate measure technique, machines and the facts of agricultural science, with the result that their marketable output is small. [The most effective means to increase agricultural productivity and output is to re-equip agriculture on the basis of the new technique, that is, to replace small-scale farming by large-scale co-operative or collective production.] The principles of co-operation will have to be firmly implanted among the agriculturists. This will be no easy task, for the agriculturist is by nature an individualist, at least until such time as the indisputable advantages of large-scale co-operative or collective farming has been conclusively demonstrated to him. In this task, the State will have to play a positive part. Model farms should be set up all over the rural areas to demonstrate to the agriculturist the advantages of large-scale farming and special facilities should be given to those who adopt the method of collective farming. The principles of co-operation and collectivization should be extended among the peasantry in gradual stages. The history of Russian agricultural development is witness to the necessity of proceeding gradually in the sphere of agriculture, of not attempting to transform it by decrees overnight. The co-operative principle may first be introduced in the marketing of agricultural produce and in supplying the ryot with the products of urban industry, and subsequently in gradual stages in agricultural production. Without the application of this principle to agriculture, without transforming agriculture from small-scale into large-scale farming, without, that is, the investment of more capital in the shape of improved

implements and machinery in the processes of cultivation, neither productivity of agricultural labour nor agricultural output can be materially increased, and without such expansion in agriculture paralleled by a simultaneous industrial development there is no prospect of an appreciable improvement in the material well-being of the masses.

Measures for increasing agricultural output may be extensive or intensive. The prospects of extending cultivation have to be examined and the evil of soil erosion eradicated. Among measures for improving the yield may be mentioned better manuring, better seeds, irrigation, and the application of improved technology to agriculture. Further, new scientific agricultural technique such as vernalization of grains, artificial insemination, etc., have demonstrated enormous potentialities for increased production. When it is remembered that the yield per acre in tons is, for rice, 1.61 in Japan and only 0.35 in India, and for wheat, 0.52 in Canada, 0.42 in Australia and only 0.32 in India, the potentialities in India of increasing the yield per acre of our agricultural products will be easily appreciated. It has been estimated that the provision of an optimum diet assumes in respect of cereals an increase over our present production of less than 20 per cent. Our yield of rice per acre is, however, only 22 per cent of that of Japan, and of wheat per acre a little over 50 per cent of that of Australia. Apart, therefore, from the question of extending cultivation, even better methods of farming undertaken on a large-scale basis should be able to assure the desired increase in the production of cereal crops.

Although we have confined our attention so far

to food crops, live-stock breeding and the problems of improving the stock and raising its productivity must also constitute an essential element in our plan for agricultural development. Stock-raising is a very neglected branch of agriculture in this country. It demands much more attention, and it is necessary that the achievements of science must be applied in the sphere of animal husbandry with the object of raising its productivity and improving its quality. It may be mentioned here that such measures as cross-breeding and artificial fertilization have yielded in other countries noteworthy results.

With the increase in output of both industry and agriculture from year to year as a result of the introduction of a planned programme of development, an ever-growing demand will be made upon the rail and water-transport services for the carriage of vast quantities of freight. These services will, therefore, require progressive expansion, but on a co-ordinated basis. The development of these services is now haphazard with the result that there has been overlapping between them as also much uneconomic competition. This must now *yield* to a planned programme of expansion, in which rail, road and shipping must all be co-ordinated with a view to yield the maximum benefit to the people. The place of aviation in such a planned scheme of development must also be given due consideration. Inland water-borne transport attention. Not only is it cheaper than other Sim but, further, India possesses a net-work of rivers, which, with such improvement as may be necessary, must be fully utilized in our future transport system. The war has revealed not only the inadequacy of our

railway system, but also the lack of wisdom in having neglected to develop more fully in the past our inland water-transport system. Famine conditions in the country have been aggravated not a little by transport difficulties. A three inland water-way system would have been of inestimable advantage in these times. As we have an extensive sea frontier, the development of coastal shipping would also provide a convenient and cheap form of transport.

The way in which industries develop has a bearing on the burden that transport services have to shoulder. In planning industrial development, an eye should be kept on avoiding all unnecessary and irrational haulage. If industries, their respective raw materials and markets are located in areas far removed from one another, the burden on the transport services will be much heavier than if they are close to each other. Unless justifiable grounds exist to the contrary, industries should be so located to avoid long and irrational haulage.

A rapid and progressive development on a planned basis of industry and agriculture will increase national output from year to year, while the planned development of transport and communications will facilitate its distribution all over the country. In such fashion will the people be assured of a progressively improving standard of material comforts. But the execution of such a programme of development will necessitate the services of a vast number of administrators, technicians, research workers, skilled labourers, doctors, nurses, teachers, etc., and also demand from the people untold sacrifice and privation for some years in the beginning. The problem of personnel will be discussed in a later chapter. But

it is imperative that the most enthusiastic support and the fullest co-operation of the vast majority of the people should be forthcoming to make the plan a success. This condition can only be fulfilled by the existence of a government of the people sharing its aspirations and enjoying its implicit confidence.

No attempt is made here to lay down a concrete plan of economic development for India indicating the rates of progress that we should aim at in the different branches of national economy or in its constituent elements or the period or the successive periods in which they are to be attained, or the amount of capital equipment and personnel they would require. That is indeed a Herculean task involving a great deal of research and patient work. It is a task which can be undertaken only by a Planning Committee composed of a variety of experts imbued simultaneously with a burning idealism and a sense of realities, and with a competent economic general staff at its command. What is needed is machinery similar to the Russian State Planning Commission, popularly known as the Gosplan, with a staff of competent experts in every field of national economy. This should be the apex of a hierarchy of organization reaching out to all territories, regions and districts of the country. Such machinery alone is competent to prepare a plan or successive plans* of economic development comparable to the Five-Year Plans in Russia, The Bombay Plan, however, incorporates a general and rough outline of a concrete plan of economic development extending over three five-year periods, and is discussed in the next chapter.

The conditions in which a plan is to be launched

and implemented have naturally considerable bearing upon its success. A comparative study of conditions obtaining in Russia prior to her socialist reconstruction with those existing in India today will, therefore, prove instructive. Russia, on the eve of the launching of the first Five-Year Plan was, in spite of progress made between 1920 and 1928, still predominantly an agricultural country like India. The agrarian character of both countries is expressed in the high proportion of agriculture in the national economy. Even in 1927-28, agriculture equalled 44.1 per cent and industry 27.6 per cent of the national income in Russia. The proportion contributed by agriculture and industry to the national income of British India in 1931-32 was 53 and 17 respectively, and it has not appreciably changed even now.

The Russia before the Revolution of 1917, which the Soviet Government secured as their legacy, was in an exhausted condition. The backward peasant economy of 1914 Russia was unequal to the stresses of a modern war, and by 1917, when the Soviets came to power, the economic situation of the country had become critical. Then came two years of Civil War and of foreign armed intervention which still further disorganized Soviet economy. 'So far had economic breakdown gone by 1920 that industry was at this date producing at no more than a fifth of its normal capacity, and the area sown with crops had shrunk to little more than half the peacetime normal.' Such was the deplorable state of Soviet economy in 1920, and developments up to 1928, when the first Five-Year Plan was launched, had only brought it up more or less to the pre-war level. Further, all foreign powers were hostile to-

wards Russia and she could not, therefore, count upon foreign capitalist states for capital which is so vital for undertaking a vast developmental programme. A comparatively poor country with a low level of industrial development, she could not expect to obtain large capital from internal savings. Yet foreign borrowing was not possible on account of the inimical attitude of foreign powers towards Soviet Russia. And it was also doubtful, even if foreign capital were available, which it was not, if the Soviet Government would have resorted to much foreign borrowing as it was feared that such borrowing might have placed her in a dependent position in relation to the leading capitalist states. Again, the strength and cohesion of the Communist party itself was weakened to some extent by the acute controversy which raged over the question of 'socialism in one country'. The opposition to Stalin believed that the successful development of a socialist economy in Russia was dependent upon the victory of the proletariat in the more important countries of Europe. Urging that it was impossible for a backward country like Russia to undertake large-scale socialist reconstruction of her economy on the strength of her internal resources alone, the Right opposition stressed the necessity of obtaining foreign capital by allowing, if necessary, even political and economic concessions. In the final outcome, however, Stalin's policy of building up socialism in one country by a policy primarily of industrialization and collectivization was adopted, although Russian potential in such vital matters as internal capital resources and technical personnel was admittedly poor on the eve of the first Five-Year Plan.

			1922-23	1938-39	1941-42
Pig Iron	...	...	455.000 tons	1,575*500 tons	1,800,000 tons
Steel Ingots	...	...	131.000 „	977.400 „	1,200,000 „ (estimated)
Cement	...	...	193,000 „	1,169,944 „	
Coal	...	...	19,000,000	28,300,000 „	...
Sulphuric Acid	...	...	529,637 cwt.	607,000 cwt.	
Cotton piece-goods	...	1,713,500,000 yds.		4,269,300,000 yds.	4,466,400,000 yds.
Jute	...	1,187,500,000 „		1,774,000,000 „	1,967,800,000 „
Matches	...	...	16,943,000 gross boxes (1934-35)	21,063,000 gross boxes	16,059,000 gross boxes
Paper	...	...	23,576 tons	59,198 tons	93,548 tons
Sugar	...	...	84,000 „	1,040,048 „	1,167,600 „

By all tokens, conditions in India are much more favourable than they were in Russia to the execution of a programme of planned economic development. There has not been, and it may be expected that there will not be, any large-scale devastation in the country as a result of this war. Although subjected to heavy strain, the internal economy has recorded some development during the war. Some idea of the industrial development of India during the last two decades is offered in the table of production¹ on page 38.

The table below shows the increase in the number of workers employed in industries between 1939 and 1942:¹

	1939 In thousands	1942 In thousands
Textiles	.. 817	965
Engineering	.. 148	224
Minerals and Metals	.. 55	82
Food, Drink and Tobacco	... 97	12X
Chemical, Dyes etc.	... 56	73
Paper and Printing	... 44	49
Wood, Stone and Glass	... 52	82
Hides and Skins	13	30
Miscellaneous	20	38
	1,302	1,664

The percentage increase of total workers in 1942 over 1939 is about 28. There has also been some increase in technically qualified workers as a result of technical training schemes inaugurated by the Government to augment the number of technicians for employment in factories engaged in the production of war requirements. Since the inception of the

¹ Lokanathan: *Industrialization* (OXFORD PAMPHLETS ON INDIAN AFFAIRS), p. 8.

* *Commerce*, March 4, 1944, p. 350.

technical training scheme nearly three years ago, over 63,000 men have been trained. The total number of Bevin trainees sent to the U.K- for training, some of whom have already returned to India, is nearly 600.

In the sphere of agriculture no appreciable improvement has taken place during the war. The 'Grow More Food' campaign initiated by the Central and many Provincial Governments still lacks vigour.

India has greatly strengthened her financial position during the war. The war has not only wiped out her foreign debt, but also helped the accumulation of a sterling credit balance of over Rs 850 crores. Thus the war has transformed her from a debtor into a creditor country. The sterling balance should be available to her for importation of necessary capital equipment after the war.

Thus, India is to-day in a much better position than was Russia in 1928 for the launching of a comprehensive plan of economic development as soon as conditions return to normal. She also possesses another inestimable advantage. If we aim at a planned socialist reconstruction of our economy as we should, a hostile attitude on the part of capitalist countries need not cause any serious difficulty, for we should be able to depend upon the active assistance of an immensely powerful socialist state, Soviet Russia. From every point of view—industrial development, technical personnel, financial position and foreign assistance—conditions in India are much more favourable than they were in Russia for the implementation of a planned scheme of economic developments

The Russian experience should also teach us that even the intervention of unexpected adverse factors

need not make a plan go astray, provided it is based upon the enthusiastic and willing support of the people* The first Five-Year Plan in Russia was launched under conditions which cannot be considered favourable. The measure of success it nevertheless achieved becomes all the more astonishing when due note is taken of the very heavy weather it had to experience during the process of its fulfilment* The Five-Year Plan had an initial and an optional variant; and the State Planning Commission had expressed the opinion that the fulfilment of the optional variant would require especially favourable conditions, which, if lacking, would drag out its fulfilment for six years. These conditions included among others: (a) absence of any serious failure of harvest in the course of five years, (b) an expansion of economic intercourse with world economy and (c) % diminution of the proportion of expenditure on national defence. None of these assumptions were fulfilled. There was a serious failure of harvest in 1931 owing to exceptionally unfavourable meteorological conditions. Apart from the hostile attitude of capitalist countries, the severe depression of 1929, instead of widening international economic intercourse, led to a sharp reduction in world trade, the shrinking of credits and the intensification of tariffs. A sharp fall in the prices of agricultural commodities also upset the programme for the financing of the importation of necessary capital equipment and the services of technical experts. Finally, in view of the growing danger of war, Russia was obliged to increase progressively her defence expenditure. In spite, however, of all these assumptions going wrong, it was the optional variant of the Plan that was adopt-

ed, and, what is even more surprising, completed With a very large measure of success in less than five years. This experience of Russia has not only a great lesson for us but it should also serve as an inspiration for going forward with our Plan.

CHAPTER IV,
THE BOMBAY PLAN

SIR PURSHOTAMDAS THAKURDAS and his seven other colleagues deserve very high encomium for the memorandum they have drawn up incorporating a Fifteen-Year Plan of economic development for India. High praise is due to them not so much because the plan they have formulated is to be regarded as perfect—they themselves do not claim that—but because they have succeeded not only in focussing the attention of the public on this important problem but also in evoking great enthusiasm for the object of the plan. The extreme poverty of India is a commonplace fact—so commonplace indeed that there is a danger of it being accepted as almost a natural phenomenon calling for no conscious effort on the part either of the authorities or of the public for eradicating this cancer from our body-economic. The great merit of the Plan is that it rouses us from our stupor and throws out to us a challenge to combat this evil by indicating in concrete terms how this can be done. Unlike most discussions on economic planning in India, it does not repeat platitudes nor express vague aspirations about the urgent necessity of improving the standard of living of the masses by instituting a scheme of planned economic development. Instead, it gives a concrete shape to such vague aspirations. This Plan has no doubt its defects, and serious ones too. In time, it will undergo large or small modifications and may even give way to a newer and better plan. But nothing will take away from it the great credit that is its due for having

focussed public attention on a vital problem, provoked vigorous discussion and formed the basis of any plan that may eventually be evolved for adoption.

The Bombay Plan in brief outline is as follows. It is a Fifteen-Year Plan, divided into three Five-Year Plans, involving an expenditure of Rs 10,000 crores. The object of the Plan is to raise 'the national income to such a level that after meeting the minimum requirements, every individual would be left with enough resources for enjoyment of life and for cultural activities'. In material terms, the object is to plan for a three-fold increase in the national income within a period of fifteen years from the time the Plan will be put into execution. Taking into account the normal increase in population during this period, a three-fold increase in the national dividend would, it is estimated, only amount to a doubling of the 1931-32 figure of *per capita* income. The Plan aims at developing a more balanced economy. According to national income figures for 1931-32, the contribution of industry, agriculture and services to the total national dividend of British India was estimated at 17.53 and 22 *Per cent* respectively. Under the Plan, these percentages would be changed roughly to 35, 40 and 20 for the whole of India. The Plan therefore envisages the following increments in the net income from the sources mentioned below:

		Net Income to 1931-32 — Rs (in crores)	Net Income expected after 15 years Rs (in crores)	Percentage increase Rs (in crores)
Industry	...	374	2,240	500
Agriculture	...	1,166	2,670	130
Services	...	484	1,450	200

The total capital requirement of the Plan, both recurring and non-recurring, is Rs 10,000 crores, distributed roughly as follows:-

		Rs. [in crores)
Industry		4,480
Agriculture	...	1,240
Communications	...	940
Education	...	490
Health	...	450
Housing	...	2,200
Miscellaneous	...	200
		<hr/>
		10000

The Plan is to be put into execution in three five-year periods, involving expenditure as indicated

Derow .		First	Second	Third	Total
Rs (crores)		Plan	Plan	Plan	
Industry		(790)	(1,530)	(2,160)	(4,480)
Basic Industry	...	480	1,200	1,800	3,480
Consumption	...				
goods Industry		310	330	360	1,000
Agriculture		200	400	640	1,240
Communications		110	320	510	940
Education		40	80	370	490
Health	...	40	80	330	450
Housing	...	190	420	1,590	2,200
Miscellaneous		30	70	100	200
		<hr/>	<hr/>	<hr/>	<hr/>
		1,400	2,900	5,700	10,000

The necessary finance for implementing the Plan will be raised in the following manner:

External Finance:		Rs (in crores)
Hoarded Wealth, mainly gold		300
Sterling Securities held by		
Reserve Bank of India		1,000
Favourable Balance of Trade		600
Foreign Borrowing		700
		<hr/>
		2,600
Internal Finance:		
Savings	...	4,000
'Created Money' i.e. borrowing against	...	
ad hoc securities from the Reserve		
Bank of India	...	3,400
		<hr/>
		7,400
		<hr/>
		10,000

As Russia is the only country in the world where economic development has been made to proceed according to plan, some comparison of the progress achieved in Russia under the Five-Year Plans¹ with what is hoped for in India under the Bombay Plan may prove instructive. What we shall really be comparing, however, is the actual achievement of Soviet Russia under the first two Five-Year Plans covering a period of 9¼ years with what the Bombay Plan hopes to attain over a period of fifteen years.

The target aimed at by the Bombay Plan is a trebling of the national income in 15 years. Between 1928 and 1937, the national income of Russia increased from 25 to 100.2 billion rubles or by 4 times in 9½ years. At the end of the third Five-Year Plan in 1942, it was planned to rise to 174 billion rubles or by 7 times that of 1928.

The Bombay Plan expects a five-fold expansion of industrial production in 15 years. In Russia, the gross output of census industries alone in billion rubles in 1926-27 prices increased from 15.7 in 1928 to 36.8 in 1932 and to 83.6 in 1937. Thus in 9½ years, it increased by more than five times. It may be added that by 1940, the last year before war with Germany broke out, the value of the gross output of all industry rose to 137.5 billion rubles.

Agriculture did not record any noteworthy increase in yield or out-turn during the first Five-Year Plan. But mechanization and collectivization proceeded apace during this period, and thus laid the basis

¹ Russian statistics have been compiled from the Reports of the State Planning Commission entitled *Summary of the Fulfilment of the First Five-Year Plan*, and *Summary of the Fulfilment of the Second Five-Year Plan*, and *U.S.S.R. Speaks for Itself*.

for rapid improvement during the succeeding years—Yet the total sown area increased from 113 million hectares in 1928 to 134 million hectares in 1932, and the marketable grain surplus from about 700 million poods in 1928 to 1,400 million poods in 1932. But this doubling of the marketable grain surplus in 1932 was probably not so much the result of actual surplus which the agriculturist could comfortably spare as a reflection of the necessity of the state to obtain large quantities of grain to feed the growing number of industrial workers and pay for the importation of capital goods. Further, during the first Five-Year Plan, there was a serious failure of harvest in one year, while considerable opposition had to be faced from *Kulaks* to the process of rapid collectivization. During the second Five-Year Plan, however, the value of total agricultural production increased from 13.1 billion rubles in 1932 to 26.2 billion rubles in 1937, or by 100 per cent. Of this total increase, land cultivation was responsible for an increase of from 9.8 to 18.1 billion rubles, and stock-raising from 3.1 to 7.1 billion rubles. The third Five-Year Plan provided for an increase in 1926-27 prices to 30.5 billion rubles, or an increase of about 133 per cent over a ten-year period between 1932 and 1942. It has also been estimated that the average harvest of all crops for the period 1933-37 exceeded that of 1926-32 by 28 per cent and the average yield per hectare by 2r per cent. The Bombay Plan, however, fixes for agriculture an increase of 130 per cent over a period of 15 years. It is needless to add that this increase will be impossible of attainment unless small-scale farming gives way to large-scale production, and unless machinery and the fruits of scientific research

are harnessed to the task of improving the quantity and the quality of the produce.

The expenditure on capital construction in Russia during the first two Five-Year Plans was as under:

	First Five-Year Plan		Second Fives-Year Plan	
	In billion rubles	In crore ¹ rupees	In billion rubles	In crore ¹ rupees
Total for the whole of national economy	50.5	2525	1334	6670
of which:				
(a) Industry	248	1240	695	3475
of which:				
Group A <i>i.e.</i> heavy industry	21.3	1015	534	2670
Group B <i>i.e.</i> light and food industries	3.5	175	161	805
(b) Agriculture	97	485	152	760
(c) Transportation	8.9	445	263	1315
of which:				
Railways	64	320	174	820
Waterways	1.9	95	43	215
Construction for social and cultural purposes:				
(a) Urban, housing and housing reserved for factory workers	4	200	125	625
(b) Construction for municipal services	1.9	95	71	355
(c) Education	1.2	60	40	200
(d) Public Health	.7	35	3*5	175

The total expenditure on capital construction in 91 years in Russia may now be compared with the

* Rubles have been converted into rupees at the rate of 1 rupee « 2 rubles as per rates quoted in Annex IV of the Net* work of World Trade published by the League of Nations, 1942, viz. 1 rupee*0.36 cents and 1 rouble=0.18 centrs

total expenditure envisaged in the Bombay Plan for the same purpose over a period of fifteen years.

	In crore rupees	
	India in ¹ 15 years	Russia in 9½ years
Industry ...	4480	47*5
of which:		
(a) Heavy Industries ...	3480	3685
(b) Light and Food Industries ...	1000	980
Agriculture	845	1245
Transportation	897	1860
Education	267	260
Public Health	281	210
Housing	2200	1275

These figures show that the target of the Bombay Plan has been fixed at a level which is even lower than what was attained in Russia in a much shorter period under initial conditions which, as already explained, were much more unfavourable than what we may expect in India. Further, it is also a striking phenomenon that the *per capita* income in the two countries at the time of the launching of the plans is not likely to be very jvide of each other. Thus in 1928 with a population of 154 millions, the total national income of Russia was computed at 25 billion rubles. This yields a *per capita* income of 162 rubles or Rs 81 in 1928. The *per capita* income in India in 1931-32 was computed by Dr Rao at Rs 65 and his revised estimate for 1941-42 is about Rs 70 in 1931-32 prices. The severe indictment of the Bombay Plan on the ground that it is sheer madness to hope to realize the progress that it envisages in view of our low *per capita* income is, in the light of the Russian experience, proved unmerited and futile. The tempo of the Bombay Plan is much lower than

¹ Non-recurring expenditure only.

that of the Russian Plans. In 1937, the per capita income in Russia was 555.5 rubles or 278 rupees. Thus in 9J years it increased by nearly 3[^] times. The Bombay Plan only aims at a doubling of the per capita income in course of 15 years. Even so, it cannot be too strongly emphasized that even this comparatively modest objective will not be achieved unless we are prepared to make great sacrifices and bear severe hardships in the initial period and unless the plans are nurtured under conditions of socialism.

The Bombay Plan provides for a much slower pace of industrialization than the Russian Plans. This should be evident from the respective amounts of capital investment for industry, particularly heavy industry, provided for under the two plans. It is also revealed in the proportion contributed by industry and agriculture to national income. Under the Bombay Plan, the proportion contributed by industry and agriculture to national income which stood at 17 and 53 in 1931-32, is expected to be changed to 35 and 40 at the end of _f the fifteen-year period. As a result of the first two Five-Year Plans, the contribution of industry and agriculture to national income in Russia changed in the following manner:

	1928	1932	1937
Industry	... 276	45	46
Agriculture	... 441	18	18

A few important omissions in the Bomoay Plan may be mentioned. The Plan does not explicitly provide for the cost of social security services, nor for general administration. There is no question but that their cost will have to come out fcf the national income. The difficulty in the Bombay **Plan** arises

from the fact that the relation between the *per capita* income aimed at, Rs 130, and title income per head that is necessary to assure a minimum standard of living, Rs 74, is not clarified. If the underlying idea is that an average *per capita* income of Rs 130 would, taking into consideration the inequality of distribution, assure everybody a minimum income of Rs 74, the question arises whether, even assuming that this were true—which incidentally is open to question—the government would be able to collect sufficient funds for running the administration efficiently as well as for financing social security services and defence expenditure. This point requires further elucidation.

The process of capital accumulation, which is of vital importance in economic planning, has not been explained. The authors of the Bombay Plan appear to be anxious only to indicate how over a period of fifteen years Rs 10,000 crores may be obtained, the whole of which amount will be expended in financing the Plan, as if the question of development thereafter will not be equally, if not even more, important. From the statement on page 53 that the first plan 'will lay the foundation for the second plan which in its turn will be the basis for the third one', it is to be presumed that the amount required for capital development will come out of our total resources. But the problems and processes of capital accumulation should have been discussed separately. Further, defence would require large capital expenditure. This has not been explicitly provided for.

The cost of the Bombay Plan has been worked out in 1931-32 prices. There is nothing wrong in this. But its implication in present prices should

have been clearly stated. Discussion of the cost of the Plan on the basis of 1931-32 prices may convey a wrong impression, and fail to produce an adequate appreciation of the sacrifices and privations that its execution will now entail. Rs 10,000 crores in 1931-32 prices converted into prevailing prices will amount to anything between Rs 25 to Rs 30,000 crores. There has been no proportionate increase in real income, and as such the burden of sacrifice for implementing the Plan will be much heavier when it may actually be put into operation.

The Bombay Plan makes two political assumptions for its success. They are the existence of a national government and the economic unity of India. There is no difference of opinion in any quarter that only a government enjoying the full and implicit confidence of the masses will be in a position to undertake such a colossal project. It has, however, to be underlined that a plan of such wide sweep and vast magnitude as is the Bombay Plan can be successfully accomplished within fifteen years only if the government represents the masses and functions solely in their interest. If the national government that is desired be of the liberal-democratic form as obtains today in the U.K. or the U.S.A., the productive-distributive mechanism or the economic system will be impeded by inherent stresses and conflicts. It is not denied that even under a national liberal democratic government, we shall be able to make considerable progress in the direction of improving the standard of living of the people, although haphazardly and probably with interruptions. But, at least, we should give up the illusion that we would be able to achieve what is aimed at by the Bombay Plan within

fifteen years. The other assumption about the economic unity of India appears to stand on much weaker ground. Unity of India, at least in the economic sphere, is eminently desirable, and all efforts should be made to preserve it. Yet there is no reason why if a small portion of India is perforce to be taken out of the control and authority of the popular government, economic planning would be rendered impossible for the rest, and by far the major portion, of India. If we assume that India were originally devoid of what may be the Pakistan area, it does not follow that we would not have considered the question of a planned economic development of our country. Admittedly, leaving a small portion of territory from out of what should be regarded as a compact entity renders the task of planning more, and one may add in the Indian context, unnecessarily difficult. The difficulty at the moment is enhanced by the absence of any precise definition of the Pakistan area. If, however, Pakistan is to consist mainly of the Punjab and Eastern Bengal, the rest of India will not suffer materially from the point of view of economic resources. We shall lose an important cash crop, particularly for export, viz., jute. But as the Pakistan area is sure to have an unfavourable balance of trade with the rest of India, the over-all balance of trade position of the latter is not likely to be adversely affected. Pakistan will undoubtedly create unnecessary difficulties, but it need not and should not hold up the execution of any scheme of planned economic development of the rest of India. By all tokens, if narrow sectionalism and a short-sighted policy should succeed in carving out India, a much worse sufferer will be the Pakistan area.

The Bombay Plan refers to two serious difficulties in the initial stages, one of which has given rise to severe criticism and produced heated controversy. They are the problems of finance and personnel. In a plan of this nature, the controversy over the question of finance is largely pointless. Finance is but a convenient mechanism of expression for the real resources in men and material that will be needed for the development of the various branches of national economy. The important fact is not finance, but the problem of organizing these real resources. The problem of personnel, particularly technical personnel, although it has not raised so much public controversy, is of exceptional importance. Both these problems, finance and personnel, will be discussed more fully in the next chapter.

A careful reading of the Bombay Plan reveals an interplay of contradictory forces in relation to the conditions under which the Plan is to be carried into effect. Herein would appear to lie the most serious weakness of the Bombay Plan. Revolutionary changes in certain parts of the socio-economic system are suggested without an adequate appreciation of their bearing on the whole structure, and appear therefore rather half-hearted. Thus it is suggested in the sphere of agriculture that go-operative farming should be introduced as early as possible, and by compulsion, if necessary. This would at least entail an abolition of the land, if not its nationalization. A capital construction programme of the magnitude envisaged in the Plan will certainly involve a strict control over the accumulation and the direction of the flow of capital. It would also entail very extensive control over pro-

duction and consumption, particularly in the initial stages. That these consequences are inescapable have also been more or less admitted by the authors of the Plan, for in explaining it to the public, practically all the signatories to the memorandum incorporating the Plan have conceded—each of course on his own responsibility without committing his colleagues—that a very large measure of state control would be necessary. This admission makes a serious inroad into the bastions of capitalism. Withal the authors of the Plan are also anxious to preserve as much of the capitalist framework as is possible. That their approach to the problem is more traditional than revolutionary is revealed in their great preoccupation with the purely financial aspect of the Plan, the discrepancy between the average *per capita* income aimed at and the minimum that is considered necessary, their desideratum of a national government which should enjoy only *sufficient* popular support, and their constant emphasis, in explaining the Plan to the public, that it is not designed to make the rich richer and the poor poorer. There is little doubt that they are anxious to evolve a happy marriage between capitalism and socialism. But a forced and incompatible union may lead to a serious rupture and produce unhappy consequences. A revolutionary plan demands a revolutionary setting for its success. If we are not prepared for this, we would do better not to pitch our aim too high, nor to speak of plans reminiscent of the Russian experience, nor evoke unbounded popular enthusiasm, but, on the contrary, to be satisfied with a more moderate and equally modest achievement.

CHAPTER V
PROBLEMS OF PLANNING

'No one will deny that certain contradictions exist between the proletariat and the peasantry/¹ observes Stalin. These contradictions are at their acutest in the initial stages of economic planning involving large-scale and rapid industrialization in a country predominantly agricultural. A policy of rapid industrialization in an agricultural country entails heavy sacrifices and sufferings on its peasant population. The problem poses itself in the form of securing sufficient quantities of food and of agricultural raw materials as much for feeding a rapidly growing number of urban workers as for export with a view to pay for the importation of necessary capital equipment. In fact, this is the most difficult problem that planners have to tackle. In the early stages of planned development, there will inevitably be a shortage, more or less acute, of consumer goods, as by far a major portion of the resources will be diverted towards the development of heavy industries. In the absence of an adequate quantity of consumer goods, the incentive to the agriculturist for larger production as well as for exchanging his produce would be lacking, while such exchange as would take place between finished commodities and agricultural produce under these conditions would be disadvantageous to him. Another difficulty is the substitution of small-scale peasant economy by large-scale co-operative or collective farming' with modern equipment

¹ *Stalin's Kampf* edited by M. R. Werner, p. 144.

• The difference between co-operative and collective farm-

and machinery. The characteristic feature of fragmentary and small farms, observed Stalin—and his comments apply with equal force to Indian conditions—is that they are unable in the required degree to utilize machines, technique and the results of agricultural research. The consequences are an insufficient output of marketable agricultural products and the consequent danger of a rupture between town and country, between industry and agriculture. Hence the necessity of speeding up agricultural development in order to bring it up to that of industry. But the greatest handicap here is provided by the fact that the peasant is conservative and individualistic in outlook. It is necessary, therefore, to break down his conservatism by demonstrating to him that it is only by a wide-spread organization of the peasantry in co-operative societies that he can be saved from poverty and ruin while assuring, at the same time, a progressive development of the community as a whole.

Economic planning in India cannot escape these problems in very acute form. Its success will naturally depend upon how satisfactorily and quickly they will be attacked and solved. In fact, they constituted the most serious problems in the execution of the Five*Year Plans in Russia. A careful study of the Russian experience should, therefore, provide us with

ing is not always clear. According to Sir John Maynard, the difference may be stated as follows: 'Co-operators choose their own associates and presumably exclude the less promising of the applicants for admission, whereas every local peasant who is ready to pool his rights has a legal claim to membership of the collective farm, unless he is an impenitent enemy of the Soviet Government.' It would appear, however, that when the authors of the Bombay Plan speak of co-operative farming, they mean collective farming as understood by Sir John Maynard.

valuable lessons and guide in tackling similar problems in India.

Agricultural development in Soviet Russia has taken a tortuous course. Although the objective of all-embracing collectivization has never changed, practical policy has undergone many changes dictated by objective facts. The original policy of "war communism had to be abandoned in favour of the New Economic Policy in 1921 which again was reversed in 1927 by the decision to adopt collective farms as the basis of agrarian policy". Even during the Five-Year[^] Plans-minor modifications have been introduced in the policy of collectivization without, however, impairing its essential characteristics. As in almost all human affairs, what is evolving is the result of a process of trial and error which is still proceeding, the object being the attainment of complete collectivization.

During the period of 'War Communism', peasants reduced their cultivation, and, owing to the lack of consumable goods, there was no incentive to produce a surplus. The acuteness of food shortage and the tendency on the part of the peasants to withhold grain from the market led the government in 1918 to adopt a policy of grain requisitioning. The result was that the peasant produced only enough food for his immediate consumption and was not anxious either to produce a marketable surplus, as there were no manufactured goods to be had in exchange, or a reserve, as it would have been requisitioned by the government. The shortage of agricultural was adversely affecting industrial development as well. The *policy of War Communism* was, therefore, replaced by the New Economic Policy announc-

ed in March, 1921. The main features of the N.E.P. in agriculture were the reduction of the peasant's compulsory delivery of grain from the whole of his surplus to a fixed quantity and the freedom allowed him to dispose of the rest of his crops as he wished. To the economy as a whole of the N.E.P. period, Lenin had given the name of 'State Capitalism' as it consisted of socialist industry and peasant agriculture, the link between the two being provided by the market. The N.E.P. period in agriculture witnessed two noteworthy developments, the 'sales crisis' of 1922 and the 'scissors crisis' of 1923. The 'sales crisis' presented a singular phenomenon of the interchange between industry and agriculture being to the former's disadvantage, and is just the opposite of that of the 'scissors crisis'. 'The "sales crisis",' writes Dobb,¹ 'was an expression of a disproportion between agriculture and industry, under which the marketed surplus of the village was insufficient to supply the requisites of expanded production in the towns.' By 1923, the 'sales crisis' was over, but the 'scissors crisis' developed. It meant that the rate of interchange between town and village turned heavily in favour of industry, namely, at a ratio in September, 1923, of over 3:1. The government met this crisis by reducing industrial prices, by stabilizing the currency, and by efforts directed towards raising agricultural prices by such measures as an altered price-policy in agriculture, liberal credits to organizations purchasing grains, and a development of the export of grain. In 1925 the land code affecting peasant holding and production was modified in favour of the

¹ *Russian Economic Development since the Revolution*, p. 2x4.

private agriculturist. The period for which land could be leased was extended and the employment of a certain amount of wage-labour was also permitted. All these measures produced heated controversy and the opposition parties spoke of the danger of the extension of *Kulak* influence. The official point of view was that this was a necessary temporary phase, and that, even during this period of transition, *Kulak* influence could be effectively held in check by the application of such economic methods as taxation and credit. By 1927, the government felt strong enough to reverse its policy again and adopted in 1928 a policy of collectivization in agriculture. The policy was not carried through without serious difficulties. At the beginning of the Five-Year Plan, which introduced collectivization, there was in many parts a form of organized passive resistance of the peasantry. There was, for example, a large-scale slaughter of cattle. However, the government steadfastly pursued its policy, and as a result of compulsion varied by encouragement, collectivization proceeded apace. In 1928, less than one per cent of the peasantry had joined collective farms. By 1937, the area covered by individual peasant farm was under 1 per cent. A collective farmer is, however, 'allowed to retain in his possession and for his own use a certain number of dairy cattle, sheep and goats, pigs and fowls; and he is permitted to have a garden or allotment for his own use and private cultivation of between half an acre and two acres in extent; these plots being chiefly intended for market gardening'.¹ A collective farmer receives both in kind and in cash his share of the

¹ Dobb: *Soviet Economy and the War*, p. 60.

collective farm income calculated according to the number of work-day units based upon work performed on the basis of a standard quota fixed for each type of work. After making deliveries of grain to the State of a certain quota at a fixed price and to the machine and tractor stations towards payment for services rendered, and providing for seed and fodder, a collective farm or *Kolkhoz* sells a portion of the remainder in the market and distributes the balance still left to its members. Thus in a particular *Kolkhoz* in 1938, members received 11 lb. of grain and 5 rubles 10 kopecks in cash for every work-day unit.

This brief outline of agricultural development in Soviet Russia demonstrates its great importance and complexity in a scheme of planned economic development. When the authors of the Bombay Plan recommend that some measure of compulsion is desirable in order that co-operative farming may come into vogue without delay, it may be questioned whether the full implications of the proposal have been realized, we must aim at the development of co-operative or, rather, collective farming. But the Russian experience should teach us to proceed slowly and cautiously. In the initial stages of economic planning when the problems of industrial development will occupy most attention, private farming, even, though inefficient, should be tolerated, while all efforts should be made to induce the peasant not only to improve his method of cultivation as much as may be possible but also to develop collective farming. Simultaneously, a close watch must be maintained on the trading between the town and the country so that the agriculturist may not be forced to pay uncon-

scionably high prices for such manufactured goods as may be available for sale. It is necessary to this end that industrial costs must be kept as low as possible, unnecessary middlemen eliminated, and all exploiting tendencies on the part of agencies purchasing raw produce or selling manufactured goods effectively curbed. During this early period, the only way out, as Stalin said, in his Report to the 15th Communist Party Congress, 'is to unite the small and dwarf peasant farms gradually but surely, not by pressure, but by example and persuasion, into large farms based on common, co-operative, collective cultivation of the soil, with the use of agricultural machines and tractors and scientific methods of intensive agriculture'. Only when conditions are more favourable, that is when industrialization has developed to some extent and co-operative farming has made some progress, can a frontal and determined attack be made upon private farming.

But collectivization will not be achieved without tears, for the simple reason that the peasantry, by its very position, is not socialistic. But all sacrifices and privations will be worth while when the process will have been completed, for it will not only jeaagre a fuller and more prosperous life but also will strengthen immeasurably national economy. As Maurice Hindus¹ observes in reference to agricultural development in Russia, "the transformation of Russian agriculture from individual ownership to collectivized holdings and tillage, because of the very speed of the process, was accompanied by inordinate sacrifice of comfort, substance and life. . . . Yet without the

¹ *Mother Russia*, p. 193.

collective farm Russia could never have fought as she has been fighting. She would not have had the mechanical-mindedness, the organization, the discipline, above all the food. In the writer's judgement she would have lost the War'.

The financial proposals of the Bombay Plan have aroused the most acute controversy, and have been held to demonstrate its great weakness, and vulnerability. Yet the fundamental problem in economic planning, as in the case of a war economy, is not financial. It is essentially a question of diverting the desired amount of resources in men and materials into pre-determined channels. In a socialist economy, the financial problem is of secondary importance; under capitalism, it is usually of crucial significance which explains why in discussions on planning it is invested with exceptional importance. This distinction is due to the fact that in a capitalist economy, the operations of the pricing process determine the flow of resources into particular directions, while under socialism it is the production plan which determines the inter-relationship between different parts of economy. The production plan itself, of which the plan of capital construction is the backbone, is determined by the amount of real resources in men and materials that may be available for building plant, equipment and factories. Once the production plan has been settled, the necessary financial arrangements for giving effect to it will naturally follow.

That finance plays a subsidiary role in socialist planning is demonstrated by Soviet experience. As Dobb observes,¹ 'The Soviet economic plan includes

x. *Soviet Economy and the War*, p. 84.

a financial plan as a constituent part of it. This financial plan can be regarded simply as the production plan translated into terms of prices'. The essential constituent of the Five-Year Plan is the production plan which embodies the output programmes for the important products of the economic system. These output programmes are then translated into money costs. And the purpose of the financial plan is to evolve a credit plan, on the one hand, and a system of prices, on the other, as will be appropriate for the successful execution of the production plan. The financial plan estimates the amount of credit that will be required by industrial units to finance the purchase of raw materials as also the amount of cash they will need to pay wages. This is the credit plan. On the basis of such cost plus overhead and a small margin of profit, it fixes the prices at which industries will be credited for goods produced. Finally, and this is of utmost importance, it fixes the retail prices at such levels as will 'equate the planned output of consumable goods with the spendable funds of the population'. The agency through which this adjustment is effected is the Turnover tax. This brief exposition will show that what really matters under socialist planning are decisions about the amounts of real resources of men and materials that may be diverted for purposes of capital construction—decisions which, in their turn, will be influenced by considerations of the extent of sufferings and privations that the community may be expected to bear for the present in the interest of future development. Once these decisions are taken it becomes a question of translating them into appropriate financial arrangements.

Some features of the Soviet financial system are noteworthy. On the revenue side, by far the most important constituent is the Turnover tax, while on the side of expenditure, new investment and defence are the major items. The Turnover tax has the leading role in the Soviet financial system. Not only does it provide the main source of revenue, but it also functions as the central regulator of Soviet economy. In this latter capacity, it bridges the gap between cost-price and retail-price, and does it in such a way that the bulk of the price rise is concentrated on luxuries and non-essentials, thereby modifying to some extent in actual practice wage differentials arising from piece-rates, bonuses, higher earnings for skilled workers, etc., which are considered necessary for stimulating increased effort.¹ As an indication of the importance of the Turnover tax in the Soviet financial system, it may be mentioned that by 1932 it contributed 17[^] billions out of a total revenue of 30 billion rubles, by 1935, 50 billions out of a total revenue of 67 billions, and by 1940 nearly 106 billions out of a revenue total of 178 billion rubles. It is significant that the combined total of expenditure for capital investment and defence and the revenue from the Turnover tax were respectively in billion rubles 25 and 17 in 1932, 37 and 37 in 1934, 100 and 92 in 1939 and 113 and 106 in 1940. These items

¹ Incidentally in respect of the contention that such wage differences and consequent inequality of income, such as it exists, show that the 'profit-motive' and therefore capitalism still flourishes in Russia, it has to be observed that the Soviets have made no concession to private enterprise. Land and capital, the means of production, are in social ownership. No income differences due to ownership of property can exist; and 'there are not two sources of income, with social or class differences contingent on them, but only one'.

are responsible for between two-thirds and three-quarters of the whole Soviet budget. The relative unimportance of the two other sources of revenue, loans and direct taxation, which play so important a role in capitalist countries, is due to the absence of any large inequality in income in Russia. The result is that the yield of direct taxation and the contribution of voluntary saving are small. They account for less than a fifth of the capital investment financed out of the Budget. The reason why income-tax was not more severely utilized to collect the increased flow of income is that it would have adversely affected the incentive to increased work that was being provided by wage differentials. Although the increased spending power was being drawn into the State coffer, this was done indirectly through the agency of the Turnover tax, which, while it allowed people with some surplus income to spend it as they wished on the supply of goods available in the market, succeeded in diverting this income into the Treasury by a suitable adjustment of prices of different categories of consumers' goods.

The financing of an economic plan under capitalism is an entirely different proposition from what it is under socialism. The former raises many difficult issues. Under capitalism, it is necessary first to have command over necessary finance in order that the resources of men and materials required for the production plan may be obtained. But the way in which finance is raised has repercussions on the plan itself. If taxation is raised so high as to impair seriously the profit-motive or if recourse is taken to large-scale inflation, not only will the production plan be dislocated but future accumulation will also

be endangered. The bitter experiences during the present war have demonstrated what inflationary finance entails, while very heavy taxation will sap the incentive to expand production. If these crippling consequences are to be avoided, the question arises whether the financing of an economic plan can be effected primarily by saving supplemented by reasonable taxation and, if at all, a modest inflation. The crucial problem is the potentialities of saving. Thus, in expounding the financial implications of the Bombay Plan, Mr G. D. Birla, one of the signatories to the memorandum embodying the Plan, admits that of the total planned investment of Rs 10,000 crores in 15 years, hoarded wealth, foreign borrowing and sterling balances are expected to yield only Rs 2,000 crores so that the balance of Rs 8,000 crores 'whether you call it favourable balance of trade or savings or created money, ultimately it comes out of our own saving and thus the whole sum may as well be called saving'. This works out at a saving of Rs. 533 crores a year, or about 16 per cent of an average annual income of Rs 3,300 crores. In the Plan itself, the proportion of annual income to be saved was estimated at 6 per cent. A 16 per cent annual saving of national income is much larger than the rate of saving in even highly developed Western countries, and is extremely unlikely to be attained in a free and backward capitalist economy as it obtains in India. Mr Birla is also conscious of the improbability of this assumption, but argues in its support that 'after all, this so-called economics of a country is no more than the economics of a family in a much magnified form\ He further adds that instead of speaking in terms of money, one might convert the

sum of Rs 8,000 crores in terms of human labour, and estimates that, on the basis of an average wage of Rs 300 per year, the services of less than 1.80 crores human labour which is about 4½ per cent of the population would be required to implement a plan involving an annual expenditure of Rs 533 crores. But in arguing in this fashion, Mr Birla is, albeit unconsciously, postulating for the success of the plan conditions under which the individual will have to submerge his interest completely into that of the collective, or, in other words, he is assuming in effect the existence of a socialist economy. It should probably cause no surprise that the sponsors of a plan of such magnitude as the Bombay Plan should be forced, in spite of their personal predilections to the contrary, to assume conditions which run directly counter to the fundamental bases of a capitalist economy in order to demonstrate the feasibility of the Plan. Just as a capitalist economy is afflicted by contradictions, so also do contradictions underlie the Bombay Plan.

The problem of personnel, especially technical personnel, is one of exceptional difficulty which a plan of economic development in a backward country will have to face and overcome. Basic industry is the central point in an economic plan, and its development calls for enormous financial expenditure and the availability of a certain minimum of experienced technical force without which, speaking generally, the building up of basic industry is impossible. It is a consideration of the lack of technical personnel in this country that has led the authors of the Bombay Plan to keep the pace of capital construction low in the initial stages. But the question arises: how

slow shall we go? Must the Plans at each stage be conditioned by the availability of an adequate number of technical personnel? Or should not the Plans themselves function as a school for the training of cadres? Russia, where the question of personnel in 1928 was not dissimilar to, if not more acute than, what it is in India now, adopted the second alternative. 'The Russians,' writes Maurice Hindus,¹ 'were seeking not only to cover the country with a network of modern factories within the briefest possible time but to train millions of men and women, many of whom had never seen anything more advanced than a village blacksmith shop, in the successful operation of blast furnaces, rolling mills, and all other modern and highly complicated machinery, also within the briefest time. They had no time for individual instruction. They literally flung masses of people, millions of them, into the task with the purely businesslike calculation that the immediate losses would be more than compensated in the long run by the competence which these masses would acquire by being obliged to perform tasks they had never before known/ When Hindus says that Russians had no time for individual instruction, he does not mean that they were not making strenuous efforts for training up cadres. Thus the percentage of workers among the students in technical and other universities rose from 25 per cent in 1928 to 50 per cent in 1933, and the number of specialists with higher education in all branches increased from 179,000 in 1928 to 303,000 in 1933. What Hindus does mean is that Russians did not hold up their Plans on the ground that sufficient technical cadres were not immediately available.

¹ *Mother Russia*, p. 152.

In the initial stages, foreign experts had to be imported on a large scale. But by 1938, it was recognized that 'the plans themselves had been a great school; Russia had now almost enough technicians of her own, and would ordinarily henceforth call in the foreigner only as a consultant for a special task with a time-limit'.¹

The war has provided a salutary impetus to the growth of technical cadres in India. Not only has work in defence industries requiring technical skill greatly increased, but the growing number of Indian soldiers, who come mostly from rural areas, will also have gained some knowledge of and experience in handling intricate machines in actual fighting and thereby become somewhat mechanically-minded. The problem of technical personnel is likely to be somewhat easier in India than what it was in Russia in 1928. Yet, considered in relation to the magnitude of the task involved in the Bombay Plan, it is likely to present serious difficulties, and will have to be tackled in much the same fashion as it was in Russia. It may be mentioned that the speed with which the Russians had decided to pursue their Plans was dictated largely by the danger of foreign aggression. The importance to be attached to this factor will have a large say in decisions about the tempo of our economic plans.

A large population, which should normally be considered a valuable asset, has been a source of grave anxiety to many in India. Instead of being regarded as a valuable aid to the prosecution of a plan of economic development, the large labour force available in this country is sometimes represented

¹ Bernard Pares: *Russia*, p. 157.

as a great handicap. Dr Gyan Chand, for example, asserts¹ that the increase in our population 'is our liability, it has to be put on the debit side of our national account'. He suggests that 'we have to reduce our birth-rate in India if we are to succeed in solving the problem of want and misery'.² This, however, is an approach to the problem and an attempt at a solution from an entirely wrong angle. On the possibilities of increasing our national wealth by a rapid industrialization of the country and thereby solving the problem of poverty, Dr Gyan Chand observes that we have been caught in a vicious circle. 'Agriculture cannot thrive and become progressive unless the surplus population on the land is taken off it. Industry, which alone could provide the alternative means of livelihood, cannot be developed because the products of industry cannot be purchased by the agriculturist owing to his extreme poverty.' But why cannot this vicious circle be broken, and what would happen if it could? Even Dr Gyan Chand concedes that the vicious circle will be broken, but adds that this will be attended by such far-reaching political, economic and social changes that 'their course is unpredictable and, therefore, the whole position quite inscrutable'. While, thus leaving the question of over-population undecided, even after the deadlock between agriculture and industry is resolved, he goes on to conclude that the increase in our population is a liability.

So weighed down is Dr Gyan Chand by this

¹ *The Problem of Population* (Oxford Pamphlets on Indian Affairs), p. 22.

* *Ibid.*, p. 28.

³ *Ibid.*, p. 20.

phenomenon of our growing population that he argues that even socialist reconstruction will fail to solve the problem set by it, and that there is no escape from the conclusion that 'restriction of numbers is essential for the remaking of the nation'. He admits that socialism has succeeded in Russia, but adds that conditions in India are in many respects significantly different. But he mentions only one point of difference of utmost significance, namely, that unlike Russia, 'India is already densely populated and has no open spaces to fill'. It is open to question whether there is any necessary inverse causal connexion between density of population and material well-being. France and Australia, which are not highly industrialized countries, have a density of population of 184 and 199 respectively as against 195 in India, yet the standard of living is much higher in the former countries, the *per capita* income in France, for example, being £41 in 1928 as against £5 in India in 1931. An interesting fact bearing on the question of over-population is the increase in our per capita income in spite of the increase in our population from year to year. Thus, Dr Rao has estimated that *per capita* income in 1941-42 would be about Rs 70 in 1931-32 prices as against Rs 65 in 1931-32. Dr P. J. Thomas has also estimated that both our agricultural and industrial production has been increasing at a faster rate than our population. But the neo-Malthusians would still argue that the improvement in the condition of the people would have been much greater if only the rate of population growth had been slower. The reply to this is that it is yet another instance of an approach to the problem from a wrong angle.

The crucial problem in this question of over-population is the potentialities of Indian agriculture. On this issue, there is no justification for assuming that our agriculture will be unable to support a much larger population. The total area cultivated in British India is 267 million acres, while 154 million acres or over 57 per cent of the area actually brought under the plough, are classified as 'cultivable' waste. Much of this must be land of inferior quality, but there is no reason why science will not succeed in making these lands fairly productive. Further, there is still a wide scope for increasing the yield of crops from land already tiffbler cultivation by better methods of farming and the application of technology and science. In Russia, for example, the yield" per hectare of all grains increased in 1937 by 33 per cent over the average yield during 1928-32. The following comparative figures quoted in the Bombay Plan of yield for different countries demonstrate the great scope that still exists in India for improvement:

Yield per Acre (in Tons)—1959-40

	Rice	Wheat	Sugarcane	Cotton
U. S. A.	101	037	2006	011:
Canada	—	0-52	—	—
Australia	—	0-42	—	—
Japan	1-61	—	—	—
Egypt	—	—	—	0-23
Java	—	—	5491	—
India	035	032	1266	0-04

It was estimated that an optimum diet would require about 65 million tons of cereals for a population of four hundred millions. Our present output has been calculated at 53 million tons. A little over 20

per cent increase in yield will produce 65 million tons. But the possibilities of increasing the yield with the help of science and technology are much greater. Our present cultivated land, without for the moment taking into consideration the 'cultivable' waste that can be brought under the plough, should be able to support a much larger population than 400 millions. The forces of progress which socialism would unleash should bring about a revolution in our agricultural methods and output. In the course of a discussion by British doctors on India's health problems, Dr Forrester observed that it was on the goal of expansion rather than of restriction, whether of production or population, that we must fix our gaze, and quoted in support the following comment of the Hot-Springs Conference Report: 'Given the will, we have the power to build in every nation a people more fit, more vigorous, more competent, a people with longer, more productive lives and with more physical and mental stamina than the world has ever known.'

There is yet another consideration. Even if we assume, although it is not really true, that agriculture in India would be unable to support our growing population, the question remains why we should not be able to develop our industries sufficiently and obtain in exchange for our industrial products food from abroad. Such a position may entail considerable danger during war. Great Britain is however in this predicament. She imports a large portion of her food and agricultural raw materials from abroad, yet nobody argues that she is over-populated. Unless therefore, we assume that we shall continue to remain a subject colonial country with appalling illiteracy, backward agriculture and little industrialization, it

becomes difficult to sustain the hypothesis that we must always be haunted by the Malthusian spectre.

It has been urged here that an economic plan of the magnitude of the Bombay Plan can be attended with success only under conditions of socialism. But whether we desire to carry through a plan of this dimension or be satisfied with a more modest plan to be implemented under existing conditions with certain modifications, the need for setting up an appropriate machinery for a careful examination of the hundred and one problems that the building up of such an extremely complex structure as an economic plan entails, cannot be too strongly emphasized. Although the first Five-Year Plan was initiated in Russia in 1928, the origin of the planning machinery is usually dated from 1920, when, even before the civil war was completely over, the State Commission for Electrification (Goelro) was set up for preparing an electrification plan for the whole country within fifteen years. It should be added that even prior to 1920, there was in Russia a number of planning commissions charged with the task of drawing up sectional plans. But these sectional plans were un-co-ordinated. It was with the setting up of the Goelro that an attempt was being made for a co-ordinated development. In 1921, the Goelro was replaced by the Gosplan or the State Planning Commission. It was to be an advisory, not an executive, body, the Council of Labour and Defence exercising the supreme executive authority in the economic sphere. In conjunction with this Council, the Gosplan was 'to work out a unified economic plan for the whole of the State on the basis of the electrification plan approved by the Eighth Soviet Congress and to exercise a general

supervision over the execution of this plan'. About the Gosplan, Dobb says,¹ 'The total personnel of the Planning Commission at first numbered forty, chiefly economists and engineers. By 1923, after further reorganization, its staff had been enlarged to three hundred. In 1925, subordinate branches of Gosplan were set up in the republics," regions and provinces, linked with/ and subordinated to, the parent body.'

It is essential that an organization similar to the Gosplan should be set up immediately in India to work out some economic plan for the whole country. Politicians *per se* should be eschewed from the planning organization. Planning is the task of experts. Their judgement should not be influenced or deflected by extraneous considerations projected by politicians into scientific discussions. When experts have once evolved plans or made their observations, politicians will have an opportunity of expressing their opinion on them from their standpoint before any particular plan may be finally adopted for execution.

¹ *Soviet Planning and Labour in Peace & War* P. 17.

