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INDIAN ECONOMICS

A COMPREHENSIVE AND CRITICAL SURVEY

BY

G. B. JATHAR, M.A.

Indian Educational Service

Principal, Elphinstone College, Bombay

AND

S. G. BERI, M.A.

Bombay Educational Service (Class I)

Professor of Economics, Sydenham College of Commerce and Economics, Bombay

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PREFACE

The tempo of economic development in India, especially in relation to rural and industrial programmes and policies, has been appreciably quickened since the assumption of power by the Congress Party in the majority of the British Indian provinces. Economic development even in non-Congress provinces and Indian States has been stimulated by economic thought and policy in 'Congress' provinces.

In fully revising Volume I of *Indian Economics* for this (the sixth) edition, the opportunity has been taken to bring facts and figures up to date and to review the economic position of India, especially in relation to rural legislation and programmes.

In Chapter II, 'Environment and Resources', the present position of the mineral wealth of India and recent developments in hydro-electric projects have been briefly indicated. In Chapter III, 'Population', facts and figures in relation to the growth of the Indian population and the controversy relating to over-population have been brought up to date. In Chapter VI, 'Agriculture: Production and Export', the progress and problems of the sugar industry have been reviewed and the transition from depression to partial recovery in agricultural exports indicated. In Chapter VII, 'Land and its Problems', recent developments in irrigation have been mentioned. In Chapter VIII, 'Labour, Equipment and Organization', new ideals of education as embodied in the Wardha scheme and the Abbot-Wood Report have been stressed and the need for adjusting the landlord's position in rural economy to present-day needs emphasized. Also the recent market surveys carried out by the new marketing organization and the steps taken to improve it have been briefly indicated. In Chapter IX, 'Rural Indebtedness', legislative measures enacted or contemplated in order to conciliate and scale down rural debts and regulate money-lending in the several provinces have been reviewed. In Chapter X, 'The Co-operative Movement in India', the Reserve Bank's survey of agricultural credit with special reference to the Co-operative Movement has been analysed, and the lines on which a re-orientation of the movement could be effected have been indicated. The progress made by Land Mortgage Banks in Madras, Bombay and other provinces has also been examined. In Chapter XI, 'The State in relation to Agriculture', the new village uplift schemes, especially the one recently adumbrated by the Congress Ministry of Bombay, have been dealt with, and the work done by

the Imperial Council of Agricultural Research reviewed. In Chapter XII, ' Land Revenue ', tenancy legislation in zamindari and ryotwari provinces has been examined and the lines on which the relations between landlords and tenants should be adjusted indicated. The progress made by legislation to regulate the process of land revenue settlement by statute in the various provinces has been referred to, and the new (1939) Bill to amend the Bombay Land Revenue Code has been briefly analysed. Lastly, in Chapter XIII, 'Industries : A General Survey', industrial recovery and recession in recent years have been reviewed and the nature of the new Congress move for industrial planning for India explained.

Bombay
June, 1939

G. B. JATHAR
S. G. BERI

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CHAPTER I

INDIAN ECONOMICS: SCOPE AND DEFINITION

§1. **Definition.**—Indian Economics, as generally understood, may be briefly, simply and sufficiently described as a study of the principal economic problems in India with an analysis of their probable causes and of any measures that have been or might be taken to deal with them. An examination of the economic position of the country will naturally lead to a criticism or appreciation of public policy in India and to the formulation of schemes for effecting improvements in the economic condition of the country. The point of view throughout will be national, the object aimed at being, first and last, the material advancement of the Indian people. Sir John Strachey, presenting his Financial Statement in 1877, repudiated the doctrine that it was the duty of the Government of India to think of Indian interests alone, and confessed to the sentiment that there was no higher duty in his estimation than the duty which he owed to his own country. This is really an echo of the old colonial policy which regarded the overseas possessions of England as primarily intended to serve English interests. We can obviously have nothing to do with this view of the matter. Nor can we consent to any sacrifice for the greater glory of the Empire, of which we are a part, unless we are convinced that the sacrifice asked for is ultimately to the national advantage. As a general rule, we must put our country first without hesitation and our wider and less immediate loyalty to the Empire, second. This has also been the attitude of the self-governing colonies who have primarily sought to advance their own national interests; and their love for the mother country, the Empire, or the world as a whole has always been tempered by their determination to raise themselves to the highest possible pitch of material prosperity. And it is a matter of common knowledge that in the pursuit of this object they have sometimes adopted measures—for instance, in connexion with their tariff arrangements—resulting in immediate injury to the mother country. This still remains a substantially correct description of the attitude of the colonies, in spite of the fact that the experiences of the War of 1914-18 have somewhat increased the willingness on the part of the constituent members to undergo some sacrifice, if necessary, in order to knit the Empire closer

together. India also desires similar freedom to regulate her economy principally in her own interests.

To sum up, then, Indian Economics is a study of the present economic position of India from the Indian national point of view.[1]

§2. **A second possible meaning.**—The sense in which, following common usage, we propose to employ the term Indian Economics is perfectly natural and otherwise justifiable, and in justification of one particular use of a term it is really not necessary to prove that it is incapable of bearing other meanings as well. As a matter of fact, the term Indian Economics is capable of yielding at least two other meanings.[2] In the first place, it may mean the history of Indian economic thought from the earliest times to the present day. Possibly such a history may make rather uninteresting reading if, as is alleged, there is no continuous development of thought to trace—no movement of thought to record—and if the ideas held in one century are more or less the ideas held in the succeeding centuries, until we reach quite recent times when we have to reckon with western influences. It is also likely that such a history will be discontinuous in the sense that it will have to be frequently punctuated by admissions of ignorance. For, as things stand at present, we know next to nothing about the prevalent conditions of many periods of our past history, though the progress of research may succeed, in the course of time, in illuminating much that is now enveloped in deep obscurity. These objections, however, are by no means fatal to the use of the term Indian Economics in the sense of a History of Indian Economic Thought (though confusion may be easily avoided by making use of the fuller term when this sense is to be conveyed).

§3. **A third interpretation.**—We have similarly to concede that, so far as it is merely a question of language, Indian Economics may also quite legitimately mean a novel system of economic doctrines, different as they would be from those current

[1] In attaching this meaning to the term Indian Economics, it does not seem to us that any violence is being done to the English language; and moreover, we have the sanction of a long-established usage to plead in justification of this interpretation. The late Principal Percy Anstey thought that the term Indian Economics was as 'uncouth and infelicitous' as it was 'misleading'. We suspect that this criticism is widely quoted more for its happy arrangement of adjectives than for its inherent justice. As to the term being uncouth and infelicitous, this is purely a matter of taste. As to its being misleading, when we have precisely defined our term, there is no reason why it should mislead anybody.

[2] See V. G. Kalé, *Indian Economics*, vol. I, Introduction.

in the west, if it were true that Indian society and conditions are so fundamentally opposed to western society and conditions that the usual basic assumptions of Political Economy are entirely inapplicable in this country.[1] However, as there is no such thing as 'an altogether new science of Economics' created 'out of Indian materials', the term Indian Economics will never actually be required for this particular use. Indian human nature is essentially the same as human nature in the west, and the fundamental presuppositions on which the science of Political Economy is based hold good in India as elsewhere. If in the west the motive of self-interest is considered sufficiently strong and continuous in operation to serve as a basis for the science of Economics, there is no reason why we in India should have to assume that people are normally moved by the altruistic and not the economic motive. Similarly, with regard to the other assumptions, such as that of free competition, mobility of labour and capital, etc., although perhaps they cannot be made with the same confidence with reference to Indian conditions as in the west, they are nevertheless sufficiently valid to make the general principles of economics, as elaborated by western thinkers, of great value in understanding the economic situation in India; and western experience in the domain of practical economics is full of valuable lessons for India to learn.

Since human nature everywhere is the same and the science of Economics is based upon certain universal characteristics of human nature, there can, indeed, be only one Economics, as there is only one Mathematics, one Physics, one Chemistry, etc. If a student, therefore, who is acquainted with western economic theory takes up a book on Indian Economics in the hope of discovering an altogether new set of economic theories he will be disappointed. At the most, he will rise from the perusal of the book with a fuller realization of 'the unity of the substance of Economics under varying forms' (Marshall) and also with his sense of the relativity of economic doctrines wholesomely strengthened.

§4. **Indian Economics: a separate subject of study.**—But the admission that there is only one science of Economics does not preclude us from holding that a separate study of the economic conditions in every country is not only justifiable but indispensable. It is quite clear that in the absence of such a study economic policy is likely to be mistaken, and detrimental to the true

[1] This certainly was the view of those who first introduced the term Indian Economics: it, however, does not prove that its present use as explained in the text is unjustifiable.

interests of the country. This is what we mean when we say that Indian Economics must be regarded as a separate subject for study. We must not, however, make the mistake of supposing that the study of economic conditions in India somehow stands on an entirely different footing from a similar study in other countries.

§5. **Indian Economics not merely an exposition of economic principles with Indian illustrations.**—Textbooks on Indian Economics often treat the different problems under the usual headings of Land, Labour, Capital, Production, Distribution, Exchange, etc. This has the advantage of making the treatment appear systematic and methodical and ensuring the inclusion of all the important topics. Such an order of treatment, however, should not lead us to imagine that Indian Economics is merely an exposition of economic principles with facts of Indian economic life thrown in merely by way of illustrating theory. Economic theory with Indian illustrations would no doubt be more easily assimilated by the Indian student than theory with illustrations drawn from unfamiliar conditions. This, however, has no title to be called Indian Economics, which is a realistic study wholly concerned with the facts and problems of Indian economic life, reference to economic theory proper being relevant only in so far as it helps the understanding of these facts and problems.

Such a separate study with reference to India, we call Indian Economics, as we may well call a similar study of English conditions by the name of English Economics. The numerous treatises dealing with the different aspects of English economic life, such as her Banking, Currency, Transport, Agriculture, may with perfect appropriateness be spoken of as belonging to English Economics.

§6. **Ranade's valuable work.**—During the greater part of the nineteenth century, Government policy in this country was unduly doctrinaire and professed to be guided by universal principles of Political Economy as expounded in popular English textbooks, forgetting the hypothetical character of the laws of Political Economy. Because free trade was good for England, it was urged that it must be good for India also. Because *laissez-faire* was on the whole best suited to English conditions, it was argued that it must be equally beneficial to India, in spite of the fact that in India the spirit of private enterprise was practically non-existent or very feebly developed. The appeal by Government to the conclusions of economic theory was sometimes honest and at other times disingenuous. And in the judgement of many thinking people Government policy in economic matters did not serve

the true interests of India. It was attacked by politicians, who roundly accused the Government of sacrificing Indian national interests to promote imperial or British interests, and it was also attacked by economists, the foremost among whom was the late Mr Justice Ranade. Ranade pressed the attack from the economic point of view with his accustomed erudition and in words unmatched, at least by any other Indian writer, in respect of vigour and brilliance. He set himself the task of proving that many of the assumptions at the back of all dogmatic treatment of the subject of Political Economy were inapplicable to India, and that public policy, if it was really to further the economic development of the country, could not afford to ignore the many peculiarities exhibited by Indian conditions. In the following oft-quoted passage he points out what he considers the important distinguishing characteristics alleged to have been disregarded by the Government. 'As these assumptions [Ranade is referring to assumptions such as enlightened individualism, free competition, mobility of labour and capital, etc.] do not absolutely hold good of even the most advanced societies, it is obvious that in societies like ours, they are chiefly conspicuous by their absence. With us an average individual man is, to a large extent, the very antipodes of the economical man. The family and the caste are more powerful than the individual in determining his position in life. Self-interest in the shape of the desire of wealth is not absent, but it is not the only nor principal motor. The pursuit of wealth is not the only ideal aimed at. There is neither the desire nor the aptitude for free and unlimited competition except within certain predetermined grooves or groups. Custom and state regulation are far more powerful than competition, and status more decisive in its influence than contract. Neither capital nor labour is mobile, and enterprising and intelligent enough to shift from place to place. Wages and profits are fixed, and not elastic and responsive to change of circumstances. Population follows its own law, being cut down by disease and famine, while production is almost stationary, the bumper harvest of one year being needed to provide against the uncertainties of alternate bad seasons. In a society so constituted, the tendencies assumed as axiomatic, are not only inoperative, but are actually deflected from their proper direction. You might as well talk of the tendency of mountains to be washed away into the sea, or of the valleys to fill up, or of the sun to get cold, as reasons for our practical conduct within a measurable distance of time.'[1]

[1] See 'Indian Political Economy' in Ranade, *Essays on Indian Economics*, second edition, pp. 10-11.

§7. **Western economic theory and Indian Economics.**—In uttering his energetic protest against the blind imitation in India of the economic policy found suitable in the entirely different environment of nineteenth-century England, Ranade did a great service to his country. But, contemplating his words at this distance of time, it must be admitted that he seems to have been partly responsible for giving currency to the notion that western economic theory was utterly useless in interpreting economic phenomena in India and indicating methods of economic progress. So far as Ranade himself was concerned, it may well be urged that an overstatement of the case was necessary for purposes of practical emphasis and effectiveness. The Government did in those days profess an exaggerated respect for classical Political Economy, for which they seemed to claim universal authority, and sometimes the only way of correcting exaggeration in one direction is overstatement in the opposite direction. Ranade wrote at a time when the habit was common of appealing with overmuch confidence to the so-called eternal laws of Economics to settle practical questions, without adequately realizing the necessity of guarding theoretical conclusions by historical and inductive study so as to ascertain the extent of their applicability to a particular human society. Ranade's work in India bears a close resemblance to the parallel achievement in Germany of Friedrich List, who in his *National System of Political Economy* (1842) protested emphatically against the dogmas and the so-called universal truth of classical Political Economy. 'It was particularly against the cosmopolitan principle in the modern economical system that he protested, and against the absolute doctrine of free trade, which was in harmony with that principle. He gave prominence to the national idea, and insisted on the special requirements of each nation according to its circumstances, and especially to the degree of its development.'[1] In fact, Ranade drew his inspiration principally from the writings of List, and in his generation he performed for his country the same kind of valuable service that List did for Germany. However, he set the fashion in this matter, which has continued much beyond its proper time. There is, for example, much less justification for the opinion that is sometimes advanced even today that hardly any of the assumptions of Political Economy are applicable to Indian conditions and that 'the great hedonistic principle requires not merely tinkering modifications here and there: it ceases to be

[1] Article on F. List in *Encyclopædia Britannica*, eleventh edition.

serviceable altogether in India.'[1] Opinions of this character sometimes lead people to suppose that a special study of Indian economic problems requires an altogether new economic technique, the western technique being pronounced utterly valueless for this purpose.

As a matter of fact, however, in dealing with Indian economic problems we have to invoke the aid of western economic theory at every step. Also, as Professor Brij Narain has pointed out in his *Essays on Indian Economics*, since Ranade wrote, both Political Economy and India have changed their character. Political Economy has learnt properly to emphasize the hypothetical nature of its conclusions and has become chary of claiming universal validity for them.[2] It has also become more human and practical by modifying its assumptions so as to bring them more into accord with actual conditions, and by losing its old-time artificial simplicity it has vastly increased in usefulness. Indian conditions have also undergone a very considerable change during the last forty years and are tending to approximate more and more rapidly to western conditions. We believe that the time has arrived when more is to be gained by stressing the points of similarity between Indian and European economic evolution than harping ceaselessly and unprofitably on the points of difference.

[1] See P. Anstey's paper before the Third Indian Economic Conference at Madras.

[2] 'The theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions.'—J. M. Keynes, General Introduction to the 'Cambridge Economic Handbooks'.

CHAPTER II

INDIA'S PHYSICAL ENVIRONMENT AND NATURAL RESOURCES

§1. **Natural resources and their importance.**—The important role played by natural resources in determining the economic life of a nation can hardly be exaggerated. Even in the case of England, as Nicholson observes, 'in spite of the predominance of her trade and her manufactures, natural conditions are of primary importance. The coast-line and rivers, the proximity of rich coal and iron fields, the temperate, moist climate, and the fertility of the soil are still the foundations of the wealth of the nation'.[1] And although with the growth of knowledge and intelligence the mastery of man over nature may increase, there are definite limits to this process and, in the last resort, man must depend upon the materials and powers of nature. We shall, therefore, begin our inquiry into the economic position of India by a brief description of her physical environment.[2]

§2. **India: area and population.**—British India is 1,096,171 square miles in area with a population of 271,526,933, while 712,508 square miles of territory with a population of 81,310,845 is under Indian States and Agencies.[3] The length of the country from north to south is about 2,000 miles and about 2,500 miles from east to west. India is thus a world in herself, being fifteen times as large as Great Britain and equal to the whole of Europe excepting Russia. She has a land frontier of about 6,000 miles and the length of her coast-line is roughly 5,000 miles.

§3. **Geographical location.**—Geographical location, at all times important, becomes increasingly so in the later stages of economic development. India occupies a highly favourable situation as regards the rest of the world for purposes of international trade. She stands at the very centre of the eastern hemisphere and commands trade routes running in all directions. On account of her extensive seaboard the sea routes are by far the most

[1] *Principles of Political Economy*, vol. I, p. 66.

[2] This description is largely based on Bampfylde Fuller, *The Empire of India*, ch. i, *The Imperial Gazetteer of India*, vol. I. and D. E. Willington, *The Economic Geography of the British Empire*.

[3] According to the Census of 1931, which includes Burma.

important, and if she is provided with the requisite maritime equipment, she bids fair to become one of the principal carriers of the world's trade.

§4. **Deficiency of harbours.**—One of India's handicaps is the deficiency of natural harbours such as would accommodate modern vessels. The ports on the western coast with the exception of Karachi, Bombay, Cochin and Marmagao are practically closed to traffic throughout the monsoon period. The east coast is surf-bound and without any natural harbours. The harbour of Madras, however, has been greatly improved by an extensive outlay on the construction of sea-walls. The recent extension and improvement of the Vizagapatam harbour may be mentioned as another effort to overcome the difficulties arising from the absence of indentations on the east coast. Calcutta, although otherwise admirably situated, suffers from the bars which tend to form in the Hooghly, and Chittagong is in a similar case. Rangoon, Moulmein, Bassein and Tavoy besides being distant from the sea are subject to the additional handicap of unsatisfactory communication with the interior. It is, therefore, easily understandable why six-sevenths of India's foreign trade is confined to five ports, namely Calcutta, Bombay, Rangoon, Madras and Karachi, of which Karachi and Bombay are the only natural harbours. The need for a vigorous policy, calculated to increase the number of suitable harbours and involving the construction of new harbours as well as the revival of old, neglected ones in order to cater effectively for the coastal as well as the foreign trade, is clearly indicated in view of the present unsatisfactory position. The shipping position also gives cause for much dissatisfaction as India has hardly any mercantile marine of her own worthy of her old traditions of maritime activity.

§5. **Inland communications.**—The principal ports of India are already connected with internal trade centres by a network of railways and roads.[1] The position in regard to internal communications is easier in northern India than in the peninsula. Apart from the possession of navigable rivers, the great plains of northern India lend themselves to easy construction of roads and railways, unlike the peninsula, where the rugged and mountainous nature of the country presents great obstacles which can only be overcome at great expense. The contrast with respect to river navigation between the peninsula and northern India is strikingly in favour

[1] For the principal trade centres in India see vol. II. ch. vi.

of the latter. The whole transport situation is discussed at greater length in volume II.

§6. **Attempts to overcome disadvantages of physical location.**—Referring to the possibility of overcoming the disadvantages of physical location, Seligman speaks of a threefold improvement, namely, as regards (i) transportation of men and commodities, (ii) transmission of power, and (iii) communication of ideas. We have just touched upon the first of these topics. The question of transmission of power will receive treatment later on in this chapter. As regards communication of ideas or intelligence, the post, the telegraph, the telephone and the wireless have gone a long way towards reducing the significance of geographical location and have become important adjuncts of modern trade and economic activity. Some of these agencies, like the post and the telegraph, are now sufficiently familiar and widespread in India, and have, in conjunction with improvements in transport, transformed in many ways the economic life of the country. The isolation of the village is largely a thing of the past, as is the isolation of the country as a whole from the rest of the world. India is, however, still backward in the use of wireless for the spread of commercial intelligence, while the telephone has as yet scarcely been pressed into service except in the larger towns.

§7. **Three well-marked divisions of India.**—India falls into three well-marked divisions: (i) the peninsula of India embracing the country lying south of a line stretching from Karachi to Delhi, and from Delhi to Calcutta; (ii) the Indo-Gangetic plain between the peninsula and the Himalayas forming the most extensive sheet of level cultivation in the world; and (iii) the Himalayan range overlooking the Gangetic plain.

§8. **The peninsula.**—This is an elevated plateau separated from the Indo-Gangetic plain by the Vindhya and Satpura ranges, a line of low hills and scarps. It is flanked by coast ranges known as the Western and Eastern Ghats, of which the Western Ghats are much the more considerable and form a gigantic and continuous sea-wall, pierced by no valleys of any size and unbroken except for a very curious gap two hundred miles from its southern extremity. The Eastern Ghats are much less formidable and are interrupted by broad valleys which lead to the drainage of the peninsula into the Bay of Bengal by rivers like the Mahanadi, the Godavari, the Kistna and the Cauvery. There is only a narrow strip of land between the Western Ghats and the sea on the ocean side of the Bombay Presidency, a fact which makes penetration inland on this side from the sea difficult, and even

the monsoon clouds are compelled to deposit their moisture on the mountainous barrier, making the inland region peculiarly liable to drought and famine. There is, however, considerable space between the Eastern Ghats and the coast. Over the lower sea-walls of the Eastern Ghats the monsoon can sweep inland more easily, and consequently the eastern parts of the peninsula, enriched by its rivers providing much low-lying fertile soil, support a dense population and are comparable in this respect to the plains of the north.

The surface of the peninsula is generally uneven and rocky with more or less forest-clad hill-peaks and ranges, and it affords many contrasts in vegetation and scenery. In the east, the low hills look down upon stretches of riceland; to the west, as the land rises—for the peninsula tilts like the roof of a house from west to east—and the regions of comparatively scanty rainfall are reached, rice gives place to millet and cotton grown on broad treeless tablelands.

§9. **The Indo-Gangetic plain.**—This is entirely composed of rivers and silt, and is traversed by two great river systems tending in two directions. The five western rivers which give the Punjab its name flow down the lower reaches of the Indus into the Arabian Sea. Seven other large rivers to the east, including the Ganges and the Jumna, similarly unite in the Ganges to reach the Bay of Bengal. As they approach the sea, their waters are mingled with those of the Brahmaputra which flows from the east down the valley of Assam. The silt borne by the waters of these rivers is gradually enlarging an extensive delta at the head of the Bay of Bengal, upon which is situated the city of Calcutta.

§10. **Himalayan and peninsular rivers.**—The Himalayan rivers are as a rule perennial, as they receive a plentiful supply of water even in summer from the melting of the Himalayan snow. Flowing through broad basins, they form large tracts of rich alluvial soil on either side. It is no wonder therefore, that their fertile basins have been the seats of the ancient Aryan civilization and even today play the role of the natural granaries of the country. Some of them, like the Ganges and the Indus, are navigable and served as great carriers of commerce in the pre-railway days. They are also the feeders of those important productive irrigation works on which the prosperity of the Punjab, Sind and the United Provinces so largely rests. The peninsular rivers, on the other hand, while they flow in torrents during the monsoon, shrivel up into mere puddles during the hot weather. Many of them cut their way through deep gorges, making

navigation impossible. A different and more costly system of irrigation works, necessitating the construction of huge reservoirs in their valleys to store up the rain water, has had to be devised to overcome the periodical deficiency of water from which they suffer.

§11. **The Himalayas.**—The Indo-Gangetic plain is dominated by the Himalayas, some of whose peaks rise to a height of 30,000 feet. The Himalayas account for 1,250 miles out of the total length of over 2,000 miles of the great mountain ranges which cut off India from the rest of Asia. It is the melting of the snow of the Himalayas which contributes the necessary water supply to the great rivers that irrigate the plains of northern India. At either end of the Himalayas there is an abrupt change in the trend of the mountains. They run north and south instead of east and west, and form, with the Himalayan chain, a three-sided barrier shutting in the plain of India from Afghanistan and Baluchistan. Apart from their political significance as an impregnable barrier, the Himalayas exercise a dominating influence on economic conditions by their effect on rain, winds, heat, cold, moisture and vegetation.

§12. **Physical and climatic contrasts.**—The physical and climatic contrasts between one part and another are very great in India. 'In the north rise magnificent mountain altitudes bound by snowfield and glacier in eternal solitude. At their feet lie smooth wide spaces of depressed river basins either sandy, dry and sun-scorched, or cultivated and waterlogged under a steamy moisture-laden atmosphere. To the south spreads a great central plateau, where indigenous forest still hides the scattered clans of aboriginal tribes; flanked on the west by the broken crags and castellated outlines of the ridges overlooking the Indian Ocean, and on the south by gentle, smooth, rounded slopes of green uplands.'[1] 'To one, for instance, who has gained his knowledge of India in lower Bengal, India is a country of almost constant heat and damp, luxuriant vegetation, rivers, tanks, rice fields, and cocoanuts, with few cities, and densely inhabited by a mild and timid population.' Transfer the scene to Agra or Lahore, and 'instead of one of the dampest and greenest countries of the earth we find in the early summer one of the brownest and most arid—a country scorched with winds like the blast of a furnace, with a cold and bracing winter climate; instead of the tropical vegetation of Bengal we find thousands of square miles covered with wheat and

[1] *Imperial Gazetteer*, vol. I, p. 1.

barley and the products of temperate zone.'[1] It is a country with famous cities and splendid monuments containing a strong and virile population.

Meteorologically, India presents a greater variety of conditions than probably any other part of the world, combining tropical and temperate region conditions in a most remarkable manner. 'It is influenced from outside by two adjoining areas. On the north, the Himalayan range and the plateau of Afghanistan shut it off from the climate of central Asia, and give it a continental climate, the characteristics of which are the prevalence of land winds, great dryness of the air, large diurnal range of temperature, and little or no precipitation. On the south, the ocean gives it an oceanic climate, the chief features of which are great uniformity of temperature, small diurnal range of temperature, great dampness of the air, and more or less frequent rain. . . . In the cold season the mean temperature averages about thirty degrees lower in the Punjab than in southern India. In the Punjab, the United Provinces and northern India generally the climate resembles that of the Riviera with a brilliant cloudless sky and cool dry weather; . . . . In south India it is warmer on the west coast than on the east, and the maximum temperature is found round the headwaters of the Kistna. Calcutta, Bombay and Madras all possess the equable climate that is induced by the proximity to the sea, but Calcutta enjoys a cold season which is not to be found in the other presidency towns, while the hot season is more unendurable there.'[2]

§13. **Seasons in India.**—'The hot season begins officially in the Punjab on 15 March and from that date there is a steady rise in the temperature, induced by the fiery rays of the sun upon the baking earth, until the break of the rains in June. During this season the interior of the peninsula and northern India is greatly heated; and the contrast of temperature is not between northern and southern India, but between the interior of India and the coast districts and the adjacent areas. The greater part of the Deccan and the Central Provinces are included within the hottest area, though in May the highest temperatures are found in upper Sind, north-west Rajputana, and south-west Punjab. At Jacobabad, the thermometer sometimes rises to 125° in the shade.'[2] Where the seasons are clearly defined in India they are three in number: (i) a cool dry season (winter), when northerly trade

[1] Sir J. Strachey, *India, its Administration and Progress*, fourth edition, pp. 3-4.

[2] *Imperial Gazetteer*, vol. I.

winds prevail and when there is little or no rainfall except in the northern provinces where moderate cyclonic storms occasionally occur; (ii) a wet season, sultry and oppressive with the inflowing south-west monsoon of summer; and (iii) a hot dry season before the beginning of the rains, which usually come suddenly with heavy thunderstorms.

§14. **Rainfall.**—The normal annual rainfall varies from something like 460 inches at Cherrapunji in the Assam hills to less than three inches in upper Sind. Climatically the Indian peninsula is part of the great monsoon area of Asia, and exhibits the monsoonal control in a more perfect form than any other part of this area. The term monsoon technically applies to the reversal of winds which takes place throughout the monsoon area and which divides the climatic year into two distinct periods, that of the south-west monsoon, and that of the north-east monsoon. The south-west monsoon is really an extension of the south-east trade winds which cross the equator and are then deflected to the right, becoming south-west winds. By July the system is fully established over India, the winds being generally south-west over the Deccan, south over the Ganges delta, and south-east up the Ganges valley. The Indus basin is the last area reached by these winds, and the first from which they retreat, so that here the yearly rainfall is very low. It is heaviest on the Western Ghats and the Himalayas, where it is accentuated by the relief of the land. In September the force of the monsoon begins rapidly to decline, and after about the middle of the month it ceases to carry rain to the greater part of north-western India. In its rear springs up a gentle, steady north-east wind, which gradually extends over the Bay of Bengal and is known as the north-east monsoon. The rainfall of India has a definite periodicity due to this monsoonal control, and for this reason the climatic year may be divided as follows:—(*a*) Season of the south-west monsoon: (i) middle of June to the middle of September—season of general rains; (ii) middle of September to the middle of December—season of retreating monsoon. (*b*) Season of north-east monsoon: (i) January and February—cold weather season; (ii) March to middle of June —hot weather season. One set of crops is sown in June and reaped in autumn, namely rice, cotton, bajra, etc. This is called the kharif crop. The second set of crops is sown when the monsoon ends, that is about the middle of September, namely wheat, barley, linseed, etc., and is reaped between January and March. This is called the rabi crop.

§15. **Vital importance of rainfall.**—This is only a general description of the climatic and agricultural regime throughout

India, subject to qualifications when applied to any particular part of the country; but it serves to bring out the importance to the country as a whole of the seasonal rainfall, fluctuations in which as regards quantity, distribution and timeliness bring misery or prosperity to millions of the people.[1] Perhaps in no other region of the world does the rainfall enter so much into every aspect of life as in India. Life here is primarily based on agriculture, which is dependent for its very existence on the rainfall, in its turn almost wholly dependent on the south-west monsoon, which accounts for nearly 90 per cent of the total rainfall. The south-west monsoon is from this point of view far more important than the north-east monsoon and may be described as the pivot upon which the whole of Indian life swings.

The peculiarity about the Indian rainfall is its marked discontinuity. In England, for instance, rain may be expected at any time of the year. In India it is confined to certain definite seasons. Much of the rain is also received in heavy falls and runs off the soil without soaking into it. This causes a shortage of soil moisture, soil erosion and waterlogging.

The lack of uniformity from place to place as regards the amount of annual precipitation has been made the basis of the following classification: (i) areas of almost unfailing rainfall, including Assam, eastern and lower Bengal, and the coast strip between the Western Ghats and the Arabian Sea, from the extreme south of the peninsula to the southern boundary of Surat district; (ii) areas of precarious rainfall varying from ten to thirty inches, for instance, Udaipur, Ajmer and Bombay Deccan excluding the Western Ghats; (iii) areas of drought where cultivation without irrigation is exceedingly precarious and in some cases impossible, such as upper Sind, western Rajputana, western Punjab, etc.

§16. **Climate.**—It is impossible to make any general statement about the climate of India because, as we have seen, within its boundaries almost any extreme of climate that is known to the tropics or the temperate zone may be found. On the whole, however, the Indian climate may be described as semi-tropical; its effect on the human frame is depressing in contrast with the bracing effect of the climate of the temperate zones, and leads to a relatively low tone of health and physique. A more favourable climate is at least one of the causes of the superior efficiency of European as compared with Indian labour. The influence of

[1] 'For several months in every year, India is on trial for her life, and she seldom escapes without a penalty.'—Quoted by L. C. A. Knowles, in her *The Economic Development of the British Overseas Empire*, p. 278.

climate in this connexion, although it must not be exaggerated, must none the less be recognized.

§17. **Tropical climate in relation to economic progress.**—It is commonly urged that in the tropics nature yields the means of livelihood with comparatively little effort on the part of man (whose needs, moreover, are much more modest in the tropics than in the temperate regions), and makes him disinclined to constant struggle and forethought and to the vigorous employment of all his faculties. In the temperate regions, on the other hand, a more niggardly nature yields nothing except in response to hard labour. Work being a universal necessity, labour becomes dignified, well-paid, intelligent and independent. As the winter is cold and stormy, it necessitates forethought in the preparation of clothing, food and shelter during the summer. Carefully planned, steady, hard work is the price of living in these zones, and this encourages the development of a high type of civilization.

Professor Carr-Saunders, however, has recently combated the view that when nature yields her gifts too easily economic progress and civilization lag behind. He holds on the contrary that 'it is in those regions where there is the greatest abundance in quality and quantity of useful objects that there will be the greatest chance of their usefulness being observed and that there will be derived the highest return per head from any improvements in skill. The greater the fertility, therefore, the greater the incentive to skill.'[1] However that may be, neither the tropical climate nor the fertility of India have prevented the rise of a glorious civilization in the past. For the backwardness of the Indian people and the spirit of apathy and listlessness which characterize them today we must seek other causes than the climate of the country or the excessive bountifulness of nature.

§18. **Forests.**—Among the most valuable natural resources of India must be reckoned her magnificent forests. The character of the forests in the country is largely governed by rainfall and elevation. Where the rainfall is heavy, evergreen forests of palm, ferns, bamboos, india-rubber trees, etc. are found. Under a less copious rainfall deciduous forests appear, containing teak, sal, and a great variety of other valuable trees. Under a still smaller rainfall the vegetation becomes sparse, containing acacias, tamarind, etc. In the Himalayas, sub-tropical to arctic conditions are found, and the forests contain, according to elevation, pines, firs, deodars, oaks, chestnuts, magnolias, bamboos,

[1] A. M. Carr-Saunders, *The Population Problem*, p. 422.

etc. It has been the experience of all countries that the natural processes of growth and reproduction by which forests are kept alive are incapable of keeping pace with man's destructiveness, and the State has generally found it necessary to take special measures in the ultimate interests of the country to preserve its forests from reckless destruction. Although the question whether forests are required to be maintained in a particular country and if so, to what extent, depends on certain special conditions, such as the position of the country, its communications, the possibilities of using land otherwise than for growing forests, the density of population, the amount of capital available for investment, etc., there is nevertheless a consensus of opinion that the forests of India are a valuable national asset, and their proper conservation constitutes one of the most important economic functions of the Indian Government.

§19. **Utility of forests.**—In the economy of man and of nature forests are of direct and indirect value. Among the indirect uses of forests are the following: (i) forests render the climate more equable, increase the relative humidity of the air, reduce evaporation and tend to increase the precipitation of moisture; (ii) they help to regulate the water supply, produce a more sustained feeding of springs, tend to reduce violent floods, and render the flow of water in rivers more continuous; (iii) they increase the fertility of the soil, as they help to form rich vegetable mould even from mineral soils; (iv) they reduce the velocity of air currents, protect adjoining fields against cold or dry winds, and afford shelter to cattle, game, and useful birds; (v) under certain conditions they may improve the healthiness of a country and render assistance in its defence; (vi) they increase the beauty of the country and produce a healthy aesthetic influence upon the people.

The direct utility of forests is chiefly due to their produce, such as timber and firewood, and the raw materials they supply to various industries. Another important use, especially in India, is the grazing for cattle which they provide. This is, however, liable to interfere seriously with the preservation of the forests. To meet both requirements, the method adopted in India is to close entirely to grazing part of the forest area, to close another part only against the grazing of certain animals, like goats, sheep and camels, and to leave a large area open to the grazing of all kinds of cattle. The areas closed in ordinary years constitute reserves of fodder for years of scarcity and famine, when they are either opened to grazing or grass is cut in them and sent to districts where it is badly wanted. The complaint, however, is often heard that the Indian forest administration is less sympathetic

to the needs of the agricultural population than it might be, consistently with a proper discharge of the duty of forest conservation and development. A closer co-ordination between the Forest Department and those departments like the Agricultural and Co-operative, which concern themselves directly with the question of promoting the welfare of the agriculturist, is desirable in order to reconcile the two conflicting points of view. Although the principal function of forestry is the preservation and development of forests, we must never lose sight of the fact that it has also an important vocation as the handmaid of agriculture. For forests can supply many of the needs of the peasant, such as firewood to replace manure used as fuel, small timber for houses and wood for implements, as well as grazing and fodder for the cattle—concessions to which the Indian farmer has been accustomed for long centuries, and the sudden curtailment of which is resented by him as arbitrary and unduly harsh.

The following are some of the recommendations made by the Agricultural Commission with a view to increasing the utility of forests to the agriculturist while enabling him to take an enlightened view of forest administration:—(i) Appointment in each province of a forest utilization officer, whose main function should be to develop forest industries—a matter of great importance to agriculturists, especially to those who live in the neighbourhood of forests. (ii) A reclassification of forest areas into a major division in charge of commercial forests and those necessary on physical and climatic grounds; and a minor division in charge of minor forests, fuel plantations, village woodlands and waste lands; and the transfer of more or less wooded areas now under the control of the Forest Department to village management through popularly elected committees or panchayats on the lines adopted by the Madras Government. (iii) Institution of short courses at the agricultural colleges for all newly recruited forest officers to foster a closer touch between the Agricultural and Forest Departments.[1]

§20. **Forest conservation.**—The process of reckless destruction of forests had gone on for centuries in India even before the advent of British rule. In the early years of the British rule this destruction became intensified owing to various factors, such as increase of population, multiplication of herds of cattle, extension of cultivation and the demand for timber and firewood on the part of railways. The Government eventually became alive to the necessity of putting a stop to this process of reckless deforestation,

[1] *Agricultural Commission Report* (1928), pars. 229-33.

and the first organized steps to protect the forests were taken during Lord Dalhousie's regime, about the year 1855. At that time Conservators of Forests existed in Bombay, Madras and Burma. Soon afterwards other appointments followed, and in 1864 an organized State department under an Inspector-General of Forests was established. Since then the Indian Forest Department has grown and now controls more than one-fifth of the total area of British India. In 1894, the Government of India issued an important circular which forms the basis of Government policy with regard to forests. It classified forests under four heads: forests the preservation of which is essential on climatic or physical grounds; forests which afford a supply of valuable timbers for commercial purposes; minor forests which include tracts which, though true forests, produce only the inferior sorts of timber or smaller growths of the better sorts; and pastures and grazing ground proper, which are usually forests only in name.[1]

§21. **Area under forest in India.**—Of the whole area of the provinces,[2] a total of 1,101,356 square miles, the forest area accounted for 266,019 square miles in 1935-6 or 24·2 per cent. Of the forest area, 106,122 square miles were Reserved Forests, 6,812 square miles Protected Forests, and 153,085 square miles Unclassed State Forests.[3] Forests are classified as Reserved, Protected and Unclassed State Forests in descending order as regards the control exercised by the Government in respect of rights of user. The relative importance of the forest areas in different provinces in 1935-6 can be seen from the following table which clearly brings out the fact that Burma (before its separation from India from 1 April 1937) and Assam were the leading major provinces in this respect.

Province	Proportion of forest to whole area of province	Province	Proportion of forest to whole area of province
Madras	11·6	C. P. and Berar ...	19·7
Bombay	11·5	Assam	37·6
Bengal	14·0	N.-W. F. Province ...	2·2
United Provinces ...	4·9	British Baluchistan ...	1·7
Punjab	5·4	Ajmer-Merwara ...	5·1
Burma	65·6	Coorg	53·4
Bihar and Orissa ...	3·6	Andamans and Nicobars	87·3

[1] *Agricultural Commission Report* (1928), par. 215.

[2] Excludes Delhi Province and the British Pargana of Manipur (Central India), but includes Burma.

[3] Unclassed State Forests or 'Public Forest Lands' include in many provinces all unoccupied waste, often entirely treeless, land. So the above statistics do not necessarily represent the wooded area.

The great forest lands of India are located for the most part in the hills, but there are forests and woods in the plains interspersed with cultivation. As the above table shows, the interprovincial distribution of the forest area is markedly irregular. Moreover, much of the area consists of waste ground, often entirely devoid of trees. These two features increase the difficulties of supplying all the needs of the agricultural community.

§22. **The object of forest administration.**—The object of forest administration is to eliminate the danger of overworking the forests and at the same time to improve their yielding capacity, and on the whole the Government have succeeded remarkably well in fulfilling both these objects. For the first fifty years of the existence of the Forest Department in India, the potential value of research into forest economics was not recognized, and no special steps were taken by the Government for the promotion of research. A Forest Research Institute was, however, established in 1906 at Dehra Dun and has been recently enlarged considerably in accordance with the recommendations of the Indian Industrial Commission of 1918. As a result of this, many valuable investigations have been undertaken and steady progress is being registered in scientific and practical knowledge which should ultimately lead to the fuller and better utilization of the raw products yielded by Indian forests.[1] The average out-turn of timber and fuel from the forests in 1935-6 was 3,180,000 cubic feet, the value of minor produce Rs. 1,10,39,678; and the net profit to the Government was Rs. 1,52 lakhs as compared with Rs. 2,65 lakhs in 1929-30. The fall in the revenue was due to the slump in trade.

§23. **Indian forests as suppliers of raw materials.**—The Indian forests also play an important role as suppliers of the necessary raw materials for various industries and as providers of employment for large numbers of people. There is, for example, a considerable jungle population deriving sustenance directly from the products of the forests. Again, there are large numbers of woodcutters, sawyers, carters, carriers, raftsmen, etc., working in and near the forests. Lastly, there are those engaged in working up the raw products of the forests, for instance, carpenters, wheelwrights, boat-builders, rope-makers, tanners, lac manufacturers, etc.

§24. **Major and minor forest produce.**—Forest produce is divided into two main heads: (i) major produce, i.e. timber and

[1] For more details regarding the activities of the Forest Research Institute see *India in 1927-28*, pp. 121-4, *India in 1929-30*, pp. 154-5, *India in 1932-33*, pp. 87-8, and *India in 1934-35*.

firewood; and (ii) minor produce, which comprises all other products such as lac, tanning materials, essential oils, turpentine and resin. The minor products from Indian forests are increasing in importance and many of them have already established themselves in the markets of the world. One of the important results of research has been to prove that bamboos can be utilized for the manufacture of paper pulp, in addition to grasses like sabai and bhabar which have already been in use, for example, in the Calcutta paper mills. With our extensive forest areas of bamboo and savanna we may hope ultimately to produce within the country itself all the paper we require. Having regard to these possibilities the Government have granted protection to the Indian bamboo paper pulp industry as recommended by the Tariff Board. As already noted above, the Agricultural Commission recommend the appointment in every province of a forest utilization officer in order that the development of forest industries may be made his definite and special responsibility.[1]

§25. **Potentialities of Indian forests.**—During the War India had to depend on her own resources for supplying the needs of the British armies engaged in Mesopotamia, etc., and the special effort put forth for fulfilling this function on an adequate scale brought out, in a striking manner, the great latent possibilities of Indian forests, and may be said to have opened a new era in forest exploitation. A steady and extensive development of industries dependent on the forests may be confidently anticipated in the near future.[2]

§26. **Geological composition.**—The geological survey of a country includes the consideration of its surface soil and sub-soil. We shall first deal with the surface soil of India, indicating the broader differences characterizing the chief kinds obtained from the three principal geological formations. (i) The alluvial tracts are the most extensive and agriculturally the most important. They occupy the greater portion of Sind, Gujarat, Rajputana, the Punjab, the United Provinces, Bengal; and the Godavari, Kistna and Tanjore districts of Madras. An alluvial strip of varying width extends along the eastern and western coasts of the peninsula, widening at the deltas of the great rivers of peninsular India in many places. With moderate and well-distributed rainfall the alluvial soils, especially those of the Indo-Gangetic plains, which

[1] *Agricultural Commission Report*, par. 224.

[2] Compare (i) *Encyclopædia Britannica*, article on Forests and Forestry; (ii) *Indian Year Book* (1937-8); (iii) *Industrial Commission Report*, pars. 61-8; and (iv) *Work of the Forest Department in India*, edited by R. S. Troup (1917), pp. 5-6.

are for the most part porous in texture, easily ploughed and naturally endowed with a sufficiency of chemical and organic ingredients, are capable of growing most of the kharif and rabi crops. (ii) The Deccan trap formation covers the greater part of the Bombay Presidency, the whole of Berar, the western third of the Central Provinces and the western part of Hyderabad (Deccan). The soils throughout this area vary greatly in character and fertility. True black cotton soil occurs within the area of the Deccan trap in undulating or sloping situations, below the general level of the foot-hills. It varies in depth according to position and, where very deep, has been accumulated by alluvial deposits, and owing to its dense consistency in places like the valleys of the Tapti, Narmada, etc., becomes unworkable during heavy rain and is better adapted for rabi crops of wheat, linseed and gram. The black cotton soil of the Deccan trap area, which grows cotton and jowar as staple crops in the kharif season, is as a rule only three or four feet deep and is mixed with limestone and small fragments of disintegrated trap. The sub-soil contains a good deal of lime and being shaly allows free drainage to the trap rock below. (iii) The remaining soils belong to what is known as the crystalline tract, comprising almost the whole of Madras, Mysore, the south-east portion of Bombay, the eastern half of Hyderabad and two-thirds of the Central Provinces. Though on the whole deficient in chemical constituents and producing the poorest crops, certain varieties, for instance, the red or the red-brown loams and clay loams in Mysore and Madras, are very fertile. Soils of medium fertility are also found in considerable variety, and those of fair or good depth can be irrigated with advantage and made to yield rice as the chief crop, where canal irrigation is available, and other valuable crops with the help of tank and well irrigation. The reddish-brown or yellow-red soils of this formation found in Belgaum, Dharwar, etc. are specially suitable for the growth of fruit trees, particularly mangoes.

§27. **Mineral production.**—In the opinion of the Industrial Commission (1918) the mineral deposits of India are sufficient to maintain most of the 'key' industries except those that require vanadium, nickel and possibly molybdenum. The belief was, however, current for a long time that these deposits were as a rule too poor to be worked profitably on the modern scale. Up to the early eighties, practically nothing had been done in the experimental development of Indian minerals and therefore it was not possible to form any reliable judgement regarding the mineral potentialities of India. Subsequent investigations, however, have led to the discovery and opening up of many kinds of mineral

deposits, and we can now assert with some confidence that, although India's mineral resources cannot be spoken of as unlimited or unparalleled, they are by no means negligible and can supply the basis for the development of a number of metallurgical industries in the country. With the expansion of the modern transport system, the development of banking, and the growing industrialization of the country they are being more and more fully developed. The War gave a stimulus to the production of several minerals, and though the advance then made has not been fully maintained, lasting benefit has accrued and the position of mineral production still remains distinctly more favourable than before the War.

The following table[1] gives an idea regarding the quantity and value of the chief minerals produced in India, including Indian States and Burma, in 1914 and 1935 :—

Name of mineral	1914		1935	
	Quantity	Value (Rs.)	Quantity	Value (Rs.)
Coal (tons)	16,464,263	5,86,10,695	23,016,695	6,52,20,840
Salt ,, ...	1,348,225	72,49,347	1,948,173	1,16,89,137
Gold (oz.)	607,388	3,50,75,330	327,653	3,04,01,775
Petroleum (gallons) ...	259,342,710	2,41,05,892	322,662,336	6,23,14,929
Saltpetre (cwt.) ...	316,211	42,01,476	173,259[2]	13,35,583
Chromite (tons) ...	5,888	39,160	39,127	4,79,965
Copper Ore ,, ...	5,324	1,09,410	307,690	60,58,592
Diamonds (carats) ...	55	11,867	1,401	55,877
Iron Ore (tons) ...	441,574	5,44,740	2,364,297	35,50,327
Jade Stone (cwt.)[3]	4,971	10,05,771	990	65,725
Lead (tons) ...	10,548	30,34,185	72,060	1,37,98,466
Magnesite (tons) ...	1,680	8,353	16,984	1,05,310
Manganese Ore (tons) ...	682,898	1,31,58,965	641,483	1,26,43,379
Mica (cwt.) ...	40,506	13,21,351	58,754	25,52,612
Monazite (tons) ...	1,186	6,21,165	3,819	1,65,625
Platinum (oz.) ...	37	3,195	...	...
Rubies, Burma (carats) ...	304,872	6,46,988	904,571	1,14,392
Silver (oz.) ...	236,446	4,03,460	5,850,406	1,02,33,741
Tin concentrates (cwt.) ...	5,395	3,29,274	117,194	1,01,48,976
Wolfram (Tungsten ore) (tons)	2,326	26,78,152	3,837	39,46,027
Zinc Ore (tons) ...	8,553	1,61,430	76,599	28,75,272[4]

The total value of minerals, for which returns of production were available, for the years 1932 and 1935 was Rs. 20·26 crores and 26·03 crores respectively. The increase in value may be

[1] Compiled from *Statistical Abstracts for British India* for 1914-5 and 1935-6.

[2] Export figures (nearly the whole of the output).

[3] Export by sea and land.

[4] Exports by sea of 'zinc of all sorts'.

regarded as an index of the partial economic recovery of the country from the recent acute trade depression.

We shall now proceed to take a brief survey of some of the most important minerals exploited on a commercial basis in India.[1]

§28. **Coal.**—Coal is India's most important mineral. The coal industry in India owes its origin to the construction of railways in the country, which at once created a large demand and also led to the opening up of India's coal-fields during the second half of the last century. The search by the East Indian Railway Company for a cheaper and more accessible supply than the imported British coal led to the development of the Indian coal industry by a number of joint-stock companies, mostly European-owned and managed, formed for the purpose. Between 1884 and 1901 the production of coal rose from 1·3 million tons to 6·6 millions.[2] In addition to obtaining a practical monopoly in Bengal, Indian coal found its way into certain eastern markets such as Colombo, British Malaya and the East Indies. With the increase in internal consumption the production advanced to an annual average of 14·7 million tons in the five years preceding the War. During the same period, the average imports (mostly of British coal) amounted to 455,000 tons and average exports to 825,000 tons. With the exception of the United Kingdom, India produces more coal than any other part of the British Empire. Most of the coal raised in India comes from Bengal, Bihar, and Orissa (the Gondwana coal-fields). Outside these provinces the most important mines are Singareni and Sasti in Hyderabad State, in the Central Provinces, Burma, Assam, the Punjab and Baluchistan. Rajputana, Bikaner and Central India also contribute a small amount to the total coal supplies of India. Indian coal is thus very unevenly distributed, the deficiency being especially marked in the case of the peninsula. The absence of coal supplies in Madras, coupled with the high cost of railway transport, acts as a great handicap to the successful exploitation of the iron ores of the Presidency. Even in Bombay a similar difficulty arising from a lack of local supplies of coal has had to be overcome partially by the use of hydro-electric power and the import of South African coal. Another defect is that Indian coal is generally poorer in quality than foreign

[1] The following main sources have been consulted in preparing the sections on minerals :—Cotton, *Handbook of Commercial Information for India*; J. C. Brown, *India's Mineral Wealth*; *Report of the Geological Survey of India* (1937); *Annual Report of the Chief Inspector of Mines in India* (1935); *Statistical Abstracts for British India*; and *Indian Year Book* (1937-8).

[2] Vera Anstey. *The Trade of the Indian Ocean*, pp. 107-8.

coal. Only the Bengal coal can compare with foreign coal as regards the production of good metallurgical coke.

The War and early post-War years, especially the period 1917-21, witnessed a remarkable expansion of the industry. The cutting off of British supplies consequent on shortage of shipping, the rise in coal prices, the demand for coal from Government up to April 1920 and the increase in internal consumption during the post-War industrial boom period were some of the factors that stimulated the growth of the industry, the only limiting factors being the shortage of wagons for carrying coal and supply of labour for mining it.[1] In the post-War boom period new collieries were freely opened and several of the large collieries were opened by the Government to make the Railways independent of the market. In the meanwhile, the South African exports of coal to eastern markets including India were making rapid strides, thanks to the substantial help given by the South African Government, the cutting off of British imports and the embargo on the export of coal from India between 1920 and 1923, which was imposed in view of the internal scarcity of coal and the congestion on the railways. Even when these difficulties ceased to operate, Indian coal was not able to regain more than a portion of its former sales abroad, while it experienced increasing competition in the home market. However, during the last few years, the balance of South African trade having changed and freightage at ballast rates being no longer easily available for coal, South African coal is gradually losing its former advantage in eastern markets although even today it is the largest individual source of imports of foreign coal.[2] The changes in the import and export trade in coal and coke are illustrated by the following table:—

	Pre-War average	War average	Post-War average	1926-7	1930-1	1935-6	1936-7
Imports							
Quantity (in 1,000 tons)...	455	133	630	155	179	76	92
Value (in 1,000 rupees)...	80,89	30,41	2,25,39	35,69	34,69	13,21	15,18
Exports							
Quantity (in 1,000 tons)...	825	526	434	645	430	200	251
Value (in 1,000 rupees)...	75,77	48,46	57,24	81,33	49,35	17,33	20,41[3]

[1] See *Report of the Tariff Board* (Coal Industry), 1926, par. 11.

[2] Anstey, op, cit., p. 55.

[3] India enjoys a very limited market for coal exports, Ceylon and the Far Eastern countries, viz., Hongkong, Straits Settlements, China, Siam, etc.,

The progress made by the coal industry during the War and post-War periods may be gauged from the fact that, while in 1914 the total production of coal in India was 16,464,263 tons valued at Rs. 5,86,10,695, it increased to 23,803,048 tons valued at Rs. 9,26,25,323 in 1930. With the advent of the economic depression and the consequential fall in internal consumption, prices slumped and many collieries were forced to close, and production fell to 19,789,163 tons valued at Rs. 6,11,86,083 in 1933. (The peak production of 23,803,048 tons was reached in 1930.) In 1934 the direction of change was reversed and production increased to 22 million tons valued at Rs. 6,30 lakhs. In 1935 the increase continued but at a less rapid rate, the total production being 23,016,695 tons. Output in 1936 fell below the 1935 mark, but during the year 1937, 22,313,205 tons of coal were raised—an increase of nearly $1\frac{3}{4}$ million tons over the previous year's figures. In the latter year Bihar and Orissa contributed 12,438,058 tons and Bengal 6,682,752 tons. The net internal consumption of coal was estimated by the Tariff Board at 18·4 million tons in 1925, and the percentage share of Indian coal in supplying the internal demand at 97·5. The increase in internal consumption from 9·8 million tons in 1910 to 18·4 millions in 1925 was the result of increased demand from railways—the largest individual consumers of coal, from the expanding iron and steel industry and from other industries. Though the supply of electric power and the use of oil fuel are increasing in India, coal still holds its own and might even be considerably more widely used in the future. For, as will be seen from the figures in respect of exports and imports and of internal consumption, the principal support of the industry is the growing market for coal in the country itself.

The imports of South African coal have been the cause of a good deal of discontent, and in March 1924 the Legislative Assembly passed a resolution recommending the imposition of a countervailing duty on South African coal. As an outcome of this, the Indian Coal Committee was appointed in order to investigate the technical aspect of the matter before referring the question of protecting Indian coal from foreign competition to the

being the only destination for these exports. Even in these markets Natal and Japanese coal is displacing Indian coal. The figures for 1936-7 show some improvement in the export trade. That trade showed increased activity in 1937 owing to the decline in the exports of coal to these markets from Japan and South Africa following the Sino-Japanese conflict and scarcity of railway wagons in South Africa.

Tariff Board.[1] This Committee made various recommendations with a view to strengthening the position of the Indian coal industry and more especially to stimulating the export of Indian coal from Calcutta to Indian and foreign ports. They found that the paramount considerations were those of quality and price. In order to secure the former, they recommended the establishment of a Coal Grading Board whose certificates would be accepted as a guarantee of the quality of the coal to which they related. This recommendation was accepted by the Government. The necessary legislation was passed in the shape of the Coal Grading Board Act, 1925, and the Board was formally constituted on 20 January 1926. The Committee also recommended that the freight on certified export coal from the mines to Calcutta should be reduced by the grant of an increased rebate of 37½ per cent on railway charges and a reduction of four annas per ton on the river dues. These recommendations have been accepted by the railway companies concerned and the Port Trust authorities.

As the *Trade Review* of 1934-5 pointed out, while industrial progress was fairly generally maintained during 1934-5, there was not much improvement in conditions in the coal industry. The sad plight of this basic industry was due to the fact that demand fell short of the immediate productive capacity and prices were thereby greatly depressed. The proposal (1934) of the coal industry that the outturn of coal should be restricted by legislation was not accepted by the Government. But in order to stimulate the demand for coal and to assist the recovery of the industry generally, the surcharge on the railway freights for coal was reduced from 1 April 1935. It was not till the end of 1936 that a change for the better occurred. The quickening of the tempo of economic recovery, the anxiety of the industrial concerns to build up a satisfactory coal stock position following a rise in the price of coal and shortage of miners owing to good harvest of rice and withdrawal of women from coal mines (see vol. II, ch. iii) helped greatly to improve the condition of the coal industry by raising prices in the year 1937.[2]

The question of the conservation of India's coal resources has come to the fore in recent years following the warning contained in an official bulletin issued in 1936 by Sir Lewis Fermor, Director of the Geological Survey of India, regarding the possibility of

[1] The question of grant of protection to the coal industry is discussed in vol. II, ch. ii.

[2] See *Capital*, Indian Industries, Trade and Transport Supplement (December 1937), pp. 46-7 and *Commerce*, Special Supplement (December 1937), p. 28.

complete exhaustion of India's resources of good quality coal within the next hundred years. It is felt that faulty mining methods tend to waste the none too abundant resources of Indian coal. The two questions of conservation of coal and safety in mines were examined by the Coal Mining Committee appointed by the Government of India in October 1936. The committee in its Report issued in May 1937, while expressing the view that reserves of second-class coal are practically unlimited in India, favours the adoption of legal measures of conservation of all good quality coals, and suggests stowing as the best means of conservation. It recommends the creation of a Statutory Conservation Authority for carrying out its proposals.[1] The coal industry, while welcoming the committee's proposals for ensuring the safety of the miners, has criticized the suggested measures for conservation as being very elaborate and expensive. The whole question is at present under the consideration of the Government of India, who may be expected to take a broad national view.

§29. **Iron.**—The knowledge of iron metallurgy is of high antiquity, and before the competition of the imports of the metal from Europe the indigenous iron industry was in a flourishing condition and was carried on in all parts of the country.

The introduction of modern processes of iron manufacture on a large scale may be said to date from 1874, when the Barakar Iron Works started operations. These works later became the Bengal Iron and Steel Company, the forerunner of the present Bengal Iron Company. The Tata Iron and Steel Company was inaugurated at Sakchi in Bihar and Orissa in 1911. The manufacture and rolling of Indian steel was successfully established towards the end of 1913, being facilitated by the proximity of coal-fields and iron deposits in Bihar and Orissa. The proper place for the discussion of the further developments of the iron and steel industry will be in our chapter on Indian Industries (vol. II).

The progress made in the production of iron ore in India is brought out by the following figures:—

1914		1921		1929		1935	
Quantity (tons)	Value (Rs.)	Quantity (tons)	Value (Rs.)	Quantity (tons)	Value (Rs.)	Quantity (tons)	Value (Rs.)
441,574	5,44,740	942,084	21,08,329	2,428,555	64,91,236	2,364,297	35,50,327

[1] *Report of the Coal Mining Committee* (1937), pars. 136, 176 and 273.

Between 1930 and 1933 the prevailing depression was reflected in a decrease in the output and a fall in value, the figures for the latter year being 1,228,625 tons and Rs. 24,97,914 respectively. In 1934, however, there was a turn of the tide and production recovered sharply to 1,916,918 tons and in 1935 rose still further to 2,364,297 tons. There were also substantial increases in the output of pig iron and steel in 1935 and subsequent years. (See vol. II, ch. ii.) In 1937 the output of iron ore rose to 2,522,750 tons, which exceeds the figure for 1929.

By far the most important of the iron deposits are those that occur in Singhbhum and the Keonjhar, Bonai and Mayurbhanj States of Orissa, where recent 'discoveries include what appears to be a range of iron ore running almost continuously for forty miles'. It is said that at one place a ravine cutting across the iron ore range shows a continuous thickness of 700 feet of high-grade haematite containing over 60 per cent of iron and estimated to contain no less than 2,800,000,000 tons of ore. The Mysore State also contains iron ore deposits which are being exploited by the works at Bhadravati.

As we see our way in course of time to exploiting these deposits of iron, India's dependence on foreign supplies of iron must eventually come to an end.

§30. **Manganese.**—This is a very valuable industrial mineral. It has been asserted that at least 90 per cent of the world's output of manganese ore is required for the Bessemer and open-hearth processes for the manufacture of steel. It is also used in the heavy chemical, electrical and glass industries.

The manganese industry in India dates from 1892 when quarrying began in Vizagapatam in the Madras Presidency. In 1900-1 90,000 tons were shipped, but since then the Central Provinces have come to occupy the pride of place as the largest producers of manganese. The total output in India in 1929 was 994,279 tons valued at Rs. 2,10,51,802 as compared with 682,898 tons valued at Rs. 1,31,58,965 in 1914-15. The output declined tp 212,604 tons and the value to Rs. 18,62,293 in 1932. These were the smallest quantities and values reported since 1901. In none of the major Indian mineral industries were the effects of the slump so seriously felt as in the manganese industry. The majority of the mines in the Central Provinces were closed during 1932 and 1933. In 1934 and 1935 there was a partial recovery as shown by the fact that production increased to 406,000 tons valued at Rs. 51,63,592 and to 641,483 tons valued at Rs. 1,26,43,379 respectively. Manganese-ore production amounted to 828,411 tons in 1937. There is a steady consumption of manganese

ore at the works of the three principal Indian iron companies for use in steel furnaces for the manufacture of ferro-manganese and for addition to the blast furnaces in the manufacture of pig iron.

The principal manganese-producing areas are the Central Provinces, Madras, Bombay and Mysore. The industry reached its zenith in 1907 when India displaced Russia as the first among the world's producers of this metal, though in 1912-13 she gave way again to Russia. After 1914, however, Russian exports practically ceased. In recent years Russia, by non-economic methods of exploitation and finance, has been able to place large quantities of ore on the market at low prices. The South African deposits are also being developed. During the War, with the increasing production of ferro-manganese in India and the great rise of prices, the production of manganese was considerably stimulated. The quantity available for export was 816,000 tons of ore valued at Rs. 2,29 lakhs in 1929-30. These record exports declined during the slump to 198,000 tons valued at Rs. 48 lakhs in 1932-3 owing to the increase in stocks as well as to the decrease in steel production throughout the world, and therefore in the demand for manganese. There has been some recovery in the demand reflecting the increased activity in the world's iron and steel and armament industries as shown by the fact that the exports of manganese ore amounted to 729,000 tons valued at Rs. 132 lakhs in 1935-6. In the following year the exports declined to 677,000 tons and their value to Rs. 131 lakhs.

§31. **Gold.**—India contributes only about three per cent of the world's production of gold. The most important gold-producing area is the Kolar field in eastern Mysore which contributes nearly 98 per cent of the total Indian output. The production of the Kolar field is, however, on the decline, having reached its highest point in 1905 when 616,758 ounces were raised. The greater portion of the balance comes from the Anantapur fields in Madras Presidency. The Nizam's mine at Hutti was opened in 1903 but has not been worked since 1920. The gold dredging in the bed of the Irrawaddy proved disappointing, its contribution being negligible. Insignificant quantities are also derived by washing in the Punjab, Central Provinces and United Provinces. The total quantity of gold produced during 1935 amounted to 327,653 ounces valued at Rs. 3,04,01,775 as compared to 330,488 ounces valued at Rs. 2,08,01,943 in 1931. The high price of gold in recent years has compensated for the decline in the output, and has served to impart a stimulus to gold production, which increased from 322,143 ounces in 1934 to 327,653 ounces in 1935, and 330,690 ounces in 1937.

§32. **Silver, lead, zinc.**—Silver has only been added since 1909 to the list of metals produced within the boundaries of the Indian Empire. Nearly the whole output is derived from Bawdwin in Upper Burma and is quite negligible in comparison with the country's needs, India being the largest consumer of silver. It is obtained as a by-product of the smelting of the lead-zinc ores of Bawdwin. The opening up of the great ore deposits of Burma has made it possible to hope that before long Burma will be the chief new factor in the world's production of lead, of which about 72,060 tons valued at Rs. 1,37,98,466 were extracted in 1935. The Indian consumption is about 14,000 tons per annum so that a large amount is available for export. These same deposits are also an important source of zinc, of which a considerable quantity is exported. As in the case of lead, so in the case of zinc also, there is a prospect of India contributing an important portion of the world's supply. The deposits of Bawdwin must also be mentioned in another connexion, namely, that the lead, silver and zinc sulphides apparently provide a reserve of sulphur sufficient to meet India's present demand for the sulphuric acid which is so essential for industrial advancement, though this promise has not so far been realized.

§33. **Petroleum.**[1]—There are two distinct oil-bearing areas in India on either side of the Himalayan arc; the one on the east, and by far the most important, includes Assam and Burma, contributing 95 per cent of the total output; the other on the west includes the Punjab and Baluchistan. The most successful oil-fields are found in the Irrawaddy valley in Burma (which until its recent (1937) separation from India was a British Indian province), from which nine-tenths of the indigenous petroleum is obtained.

The production of petroleum in India and Burma has increased from about 118 million gallons in 1904 to about 323 millions in 1935. The enormous home demand for kerosene now exceeds even the greatly increased Burma supply, necessitating a large volume of imports of foreign kerosene oil, for example 62·21 million gallons valued at Rs. 1,96 lakhs in 1936-7. In the same year the production of kerosene in India and Burma was reported to be 173·8 million gallons. The Tariff Board estimated in 1928 that the home supply stood at between 35 and 40 per cent less than the total demand.[2] In 1936-7 the foreign oil consumed in India accounted for 26·3

[1] For an interesting account of the progress of the petroleum industry see *Report of the Tariff Board* (Oil Industry), 1928, ch. i, noticed in our chapter on Indian Industries (vol. II) in connexion with the rates war with foreign oil.

[2] *Report of the Tariff Board* (Oil Industry), par. 33.

per cent of the total consumption in the country. Out of the petroleum products of India practically no kerosene is exported, the chief articles of export being petrol, benzine, paraffin wax and candles. Owing chiefly to increase in home consumption, exports of petroleum including petrol, benzine and benzol, are declining rapidly. In spite of the increased output of indigenous petrol the supply is not sufficient to meet the home demand, which was estimated at 101·6 million gallons in 1936-7. In the same year home production amounted to 91·1 million gallons. The export of petrol has practically ceased and the Tariff Board apprehend an imminent shortage in India which will have to be met by increased imports. Imports amounted to 10 million gallons in 1936-7.

Petroleum statistics up to the year 1927 indicated a definite tendency towards a gradual decline of output, due especially to the decreased yield of Yenangyaung, the oldest and the most developed of the Burmese fields. They point to the increasing difficulty of maintaining the output of India (including Burma) at the high levels reached in 1919 and 1921, when peak productions of well over 305½ million gallons were reached, the production thereafter falling to 281,113,909 gallons in 1927. Nevertheless the figures of output in recent years appear to supply a corrective to this tendency. The output of petroleum was 305·9 million gallons in 1928, 306·1 million gallons in 1929, 311·0 million gallons in 1930 and 322·7 million gallons in 1935, the last total being the highest recorded so far. The increases of 1930 and 1935 were the result of a very large proportionate increase in the production of Assam and of a small recovery in the output of Burma. The increased output from Assam has roughly neutralized the fall in the output of Burma during the same period and also the heavy fall in the output of the Punjab. Unless, however, new fields of importance are discovered, it would seem desirable to follow a policy of careful economy rather than one of intensive development. The Tariff Board hold the view that the possibilities of both the Attock and the Assam fields are considerable.[1] The Indian production of petroleum represents only a small (being less than 1 per cent) and decreasing percentage of the total world production, which has rapidly increased in recent years. With the separation of Burma from India since 1 April 1937, the production of petroleum in India proper naturally makes a poor showing and her dependence on 'foreign countries', Burma now being one of them, has very considerably increased. Petroleum showed a satisfactory

[1] *Report of the Tariff Board* (Oil Industry), par. 5.

increase in 1937. The production in Assam amounted to 65·72 million gallons, in the Punjab to 10,026,560 gallons, and the large oil-fields in Burma registered an increase of over 8 million gallons, the total output for that country being 273,807,738 gallons.

§34. **Mica.**—Mica is used principally in the electrical industry as an insulating medium, and it assumed a position of great importance during the War in connexion with the developments of wireless telegraphy, of aeronautical science and of motor transport, which would have been impossible without it.

India has for many years been the leading producer of mica with an output of more than three-fifths of the world's total. Mica is found in Bihar, and in the Nellore, Salem and Malabar districts of the Madras Presidency, Travancore and Ajmer-Merwara and other parts of Rajputana. In 1936-7, 180,000 cwt. valued at Rs. 94 lakhs were exported. This probably represents the total annual production of India.

§35. **Wolfram.**—This is the chief ore in tungsten and is indispensable for the manufacture of high-speed steels invaluable for War purposes. Tungsten also enters into other important uses, for instance, the manufacture of wire for the filaments of incandescent lamps and for dyeing, fire-proofing, etc. Wolfram mining commenced in India in 1910, and the very next year an output of 1,300 tons made Burma the leading wolfram-producing country in the world. The wolfram deposits of Burma, more particularly of the Tavoy fields, were of the greatest importance to the Empire during the Great War. Since the close of the War the industry has languished owing to the withdrawal of the War-time stimulus.

§36. **Saltpetre.**—Saltpetre is in considerable demand for industrial purposes, for instance, in connexion with the manufacture of glass, for the preservation of food and for manurial purposes. Its production in India is practically restricted to Bihar, the United Provinces and the Punjab. There was a time when India possessed a practical monopoly of the world's supply of nitrates so important in the manufacture of explosives and chemical manure. But partly owing to the tariff policy of the Government of India, who for some time tried to exploit the Indian monopoly for revenue purposes by the imposition of a heavy export duty, and partly owing to other causes, India was dislodged from this position by rival foreign producers. During the War a certain revival in the production of Indian saltpetre, which was required for munitions, took place. The cessation of the War demand and the competition of Chilean nitrate and French potash salts

in foreign markets have reacted adversely on the industry, and the post-War exports have declined from the War average of 440,000 cwt. valued at 80 lakhs to 167,000 cwt. valued at 11·5 lakhs in 1936-7.[1]

Nearly the whole of the output is exported, a small part being retained in the country for consumption as a fertilizer, especially in the Assam tea gardens.

§37. **Other minerals.**—Other minerals of subordinate importance as regards the place they occupy in Indian mineral production are lead, tin, copper, zinc, bauxite (aluminium), jade, chromite, potash, amber, diamonds, rubies, sulphur, etc.

§38. **Salt.**—About three-fourths of the annual consumption of salt in India is produced in the country itself, the total consumption being above two million tons. The total output of salt during 1935 was 1,948,173 tons valued at Rs. 1,16,89,137. In the same year, 393,972 tons of salt were imported into India, the bulk of the imports being from Aden and Dependencies. About sixty per cent of the Indian salt is obtained by evaporation of sea-water on the coasts of Bombay, Madras and Burma. Another source of salt is the Salt Range and the Kohat Mines in the Punjab. In Kohat the salt resources are said to be practically inexhaustible. The other two sources are brine salt from the Sambhar lake in Rajputana and salt brine condensed on the border of the lesser Rann of Cutch. The question of extending the production of salt in India so as to make the country self-sufficient was referred in 1929 to the Tariff Board, which reported in 1930. The normal demand for foreign salt may be placed at approximately 500,000 tons for the Bengal market. The primary considerations in the Bengal market are 'whiteness, evenness of grain and absence of moisture'. Price is also a determining factor. Prices fluctuate violently in the Calcutta market owing partly to changes in freight rates, but mainly to operations of combines and dealers. The Tariff Board express the view that the whole demand of the Bengal market could be met by India and Aden (which produces about 300,000 tons annually) if the sources of sea-borne salt (Karachi and Okha) as well as rail-borne salt (Khewra, Sambhar and Pachbhadra) were properly developed.

From the standpoint of national interests the supply of rail-borne salt from Khewra, etc. for Bengal is preferable to sea-borne salt from Karachi and Okha, though the latter centres enjoy certain special natural advantages. Rail-borne salt offers

[1] *Review of the Trade of India* (1936-7), p. 196.

a guarantee against war-time shortage, additional traffic for railways and reduction in the price of salt following increase in production. But the deficiency of rail-borne salt should be made good by sea-borne salt. The Board recommend a thorough examination by the Government of these sources with a view to their development, and of the question of reduction of railway rates. To secure stabilization of price, so essential for the development of Indian sources of supply, the Board recommend, as an interim measure, assumption of control by the Government of the import of salt into Bengal. The Government should purchase Indian sea-borne salt at a fair selling price and popularize the use of rail-borne salt. The balance of requirements should be purchased from foreign manufacturers. This policy will prevent existing salt works at Karachi, Okha, and even the smaller works at Aden from being ousted by foreign competition. Since, however, the Government are not the best agency for the sale and distribution of imported salt, the Board recommend the constitution of a Marketing Board as a public utility company which would be in charge of the import and sale of salt in northern India. In making its purchases the Marketing Board should give preference to Indian salt of the required quality, and a fair selling price should be fixed, subject to alteration in freight. The Government should be permanently represented on the Board of Directors and enjoy the right of veto.[1] In view of the serious fall in the price of imported salt and the consequent need for prompt action simpler in character than the proposed Government control, a Committee of the Assembly recommended an additional temporary duty of 4½ annas per maund on all foreign salt (except that from Aden, which is to count as part of India for this purpose). This recommendation was incorporated in the Salt (Additional) Import Duty Act, 1931, which came into force on 18 March 1931. The life of this Act, which was initially limited to one year, has been extended from time to time by subsequent Acts. The Supplementary Finance Act, 1931, imposed a surcharge of 25 per cent on the customs and excise duties on salt.[2] As recommended by the Salt Industry Committee of the Legislative Assembly, the additional duty was reduced from 4½ as. to 2½ as. per maund in 1933. It was further reduced to 1½ as. per maund with effect from 21 April 1936. The additional duty is resented by the members from Bengal on the ground that it has the effect of helping the producers of Aden at the expense of the consumers

[1] See *Report of the Tariff Board* (Salt Industry), 1930.

[2] See vol. II, ch. xi.

in Bengal. The assignment of quotas to different salt works and the limitation of the quota to Aden together with the very substantial reduction in the duty have largely met this criticism. During the period of salt protection, while imports of foreign salt have declined, production of salt in India has increased. Thus while production increased from 1·71 million tons in 1930 to 1·95 million tons in 1935, during the same period imports declined from 0·69 million tons to 0·39 million tons. The hope may be expressed that India will become self-sufficient in respect of salt—an article of prime necessity for the masses—in the near future.

§39. **Building stones.**—Among the most important of the building stones available in India are the sandstones which belong to the Vindhyan system of rocks and cover an immense area, from Dehri-on-Son to Hoshangabad and to Gwalior and from there to Agra and to Neemuch. Many of the great masterpieces of Indian art from the time of Asoka to the present day have been constructed out of this material. In the southern part of the peninsula, various igneous rocks are largely used. Other kinds of building materials are slates and limestones in the centre of southern India, basalt rock in the Central Provinces and central India, laterite, which is widely distributed throughout India, the famous Porbunder stone much in use in Bombay and Karachi, the marble of the Jubbulpore district and other parts of the Central Provinces, and many other varieties too numerous to be mentioned.

§40. **Cement-making materials.**—The chief raw materials required for making cement are chalk or limestone, and clay, which are found extensively in India, for instance near Lakheri (Bundy State, Rajputana) and also at Katni, where limestone and clay of good quality are available. Other areas are Porbunder in Kathiawar, and the vicinity of Lucknow and Cawnpore in the United Provinces. Portland cements made in India are supposed to be equal to the best English brands. Altogether, the Indian cement-making industry seems to have a promising future before it.

§41. **Lime.**—The principal source of lime is limestone, which has already been referred to in connexion with its other uses. Its supply is practically unlimited, although only those deposits are worked which are most conveniently situated for purposes of transport or for some other special local reason.

§42. **Vegetable resources.**—The extensive area of the country, differences in elevation, the wide range of latitude, climate and soil make it possible for India to produce a large variety of vegetable products belonging to sub-tropical and temperate zones,

as the following enumeration will show. (i) Food-grains: rice in Bengal, Bihar, Orissa, and Burma and to some extent in Madras and Bombay; wheat in the north-west parts of India; millet, such as jowar and bajra, in Bombay and Madras; barley in the United Provinces and Bihar; ragi in Madras, the United Provinces and Bombay; maize in Bihar, Orissa, the United Provinces and the Punjab; gram in the Punjab, the United Provinces, Bihar, Orissa, and the Central Provinces. (ii) Herbs: condiments and spices in Madras, Bombay and Bengal; sugar-cane all over India, especially in the United Provinces; coffee in Madras and Coorg; tea in Assam and Bengal. (iii) Seeds: oil-seeds such as linseed, sesamum, rape and mustard, groundnut, castor, etc. in Madras, the United Provinces, the Central Provinces, Bombay and Burma. (iv) Fibres: cotton in Bombay, Berar, the Punjab and Madras; jute in Bengal. (v) Miscellaneous: opium in the United Provinces; tobacco in Bengal, Bihar, Bombay and Madras; fodder crops in the Punjab and the United Provinces; cinchona in southern India and Burma; india-rubber in Assam, Khasi Hills and Burma; and forest products.

A more detailed survey of the principal crops of India along with the efforts made by the Agricultural Department to improve the quality and yield will be found in the chapter on Indian Agriculture.

§43. **Animal resources.**—There is hardly any need for emphasizing the importance of animal life to an agricultural country like India. The variety of Indian conditions has naturally developed a great variety of animal life, and the number of animal species found in India is much greater than that in Europe. The cow and the buffalo are mainly prized as supplying milk. The bullock plays an important part in the agricultural economy both as a draught animal and on the field, the use of horses or mechanical power being practically unknown. Animals used in agricultural operations, as well as goats and sheep, contribute practically all the manure used by the Indian cultivator, the use of artificial manure being as yet in its infancy. The humble donkey is ubiquitous and is used as a pack-animal everywhere. The camel is found in the sandier parts of the country and is used for purposes of transport across deserts. Fish is of immense importance, especially in provinces like Bengal, Assam and the coast-strips of the peninsula, where it supplies the people with the nitrogenous elements in their diet, elsewhere obtained by the use of pulses. The Indian seas contain many varieties of edible fish, but these resources still await properly organized exploitation along modern lines.

The extensive forests of India shelter a large variety of wild animals and birds and provide excellent game for the hunter.

§44. **Sources of power.**—The principal sources of power available in India are coal, wood-fuel, oil and alcohol, wind and water. Coal has already been dealt with under minerals. We have also referred to the utility of forests as suppliers of wood-fuel. Many of the Indian forests are, however, confined to hilly tracts from which transport is a matter of great difficulty and expense. Even if this difficulty were to be effectively surmounted, it is doubtful whether the supply of wood-fuel could keep pace with the demand for it for industrial purposes unless extensive planting were undertaken. The Industrial Commission direct particular attention to the advantages of wood-distillation as a method of obtaining charcoal and certain valuable by-products like methyl alcohol, wood-tar, etc., by the sale of which the local cost of the charcoal would be greatly reduced. They suggest the employment of suction gas plant for all but the smallest units of power as extremely convenient and efficient, and from this point of view recommend the adoption of such methods as are likely to cheapen the cost of fuel for such plants. The position with regard to India's oil resources has already been examined under minerals and the need for careful economy in their exploitation has been insisted upon. As the possibility of the oil-bearing areas in Baluchistan, the Punjab, Assam, etc., must still be regarded as problematical and as the Burma fields are being rapidly exploited, we cannot place much reliance on this particular form of power.

So far as the possibility of utilizing alcohol for supplying power for industrial purposes is concerned, certain vegetable materials seem to be capable of being treated so as to yield the requisite quantity of alcohol, but this is still a matter of conjecture and requires careful investigation and experiment. To facilitate this, certain relaxations of excise restrictions have been suggested by the Industrial Commission.

§45. **Water-power.**—The supply of cheap motive power is one of the essential conditions of successful industrial development. The situation in India with regard to the supply of coal, wood-fuel or oil for purposes of generation of power is for reasons already indicated not quite so favourable as might be desired. There are, however, fair prospects for the development of water-power, which has been limited so far on account of the seasonal character of the rainfall, making costly storage works indispensable. Before the electric transmission of power over long distances became a practical success, only one or two fairly large cotton mills such as those at Gokak (Bombay) and a number of

small factories on the planters' estates in the hills utilized water-power to any appreciable extent, apart from the use of water-wheels on hill streams and at waterfalls on the irrigation canals to work flour mills. Within recent times, however, considerable attention has been given to large hydro-electric power schemes. The Mysore Durbar set up the first hydro-electric installation in the east on the Cauvery river at Sivasamudram with the main object of supplying power to the Kolar gold-fields (1903). Since then the supply of electrical energy from Sivasamudram has been provided for Bangalore and Mysore Cities and about 200 other towns and villages in the Mysore State.[1] Subsequently the Kashmir Durbar established similar works on the river Jhelum, which have a capacity of carrying water sufficient for the generation of 20,000 electrical horse-power. The Western Ghats in the Bombay Presidency specially lend themselves to projects of this kind. Accordingly it is no matter for surprise that the greatest water-power undertakings in India are situated there. The Tata hydro-electric schemes mark a big step forward in the industrial development of India. The first of these works was started in the neighbourhood of Lonavla in 1915 by the Tata Hydro-electric Power Supply Company. The great industrial demand of the Bombay mills, however, still remained partially unsatisfied, and the necessity of further developing the electric supply was urgent. The next scheme, known as the Andhra Valley power scheme (1922), is designed to yield 100,000 horse-power in its full development. Another important project, which was carried out under the name of the Nila-mula scheme by the Tata Power Company (1927), is calculated to supply 150,000 horse power: and a gigantic Tata scheme is contemplated in the huge valley of the Koyna river. As a result of the completion of these schemes, which operate as a unit under one management and have a combined normal capacity of 246,000 horse-power, the handicap imposed upon Bombay by the absence of coal in its vicinity will be entirely removed; while the substitution of electricity for steam will also considerably alleviate conditions of public health in Bombay, whose cotton mills and other factories consume about 150,000 horse-power. Thana, Kalyan and Greater Poona also get their supply of electrical energy from this source. Another important hydro-electric venture is the Mandi scheme in the Punjab which, when completely carried out, is expected to supply such enormous quantities of power that it will be able to serve a very large number of industrial centres and

[1] *Indian Year Book* (1937-8), p. 347.

will be able to serve distant places like Delhi. The scheme came into operation in 1933. In Madras, which is even more seriously handicapped by the absence of coal than Bombay, certain interesting developments have taken place in recent years. The Pykara hydro-electric scheme, which was started by the Madras Government at the end of 1929, is now in operation. The waters utilized for the development of the scheme are taken from the Pykara river which drains from the Nilgiri plateau. The Mettur hydro-electric scheme, which is combined with the famous Mettur Irrigation Project, is now under construction and will be capable, when completed, of a maximum output of 60,000 horse-power. The scheme came into operation in 1933. Another interesting project is the hydro-electric scheme in United Provinces which will carry electrical power to a large number of towns and villages and will, it is anticipated, assist greatly in the development of rural areas.[1] In accordance with the recommendations of the Industrial Commission, the Government of India undertook, in 1918, a comprehensive hydrographic survey of India. The results of the survey have brought out various interesting possibilities in connexion with the development of hydro-electric power. For example, it is estimated that the minimum flow of the seven great rivers eastwards from the Indus is capable of giving not less than three million horse-power for every thousand feet of fall from the Himalayas, and similar considerations apply to rivers in other parts. It is hoped that the hydro-electric schemes will not only serve the purpose of supplying power to the industries but also of extending the irrigation facilities in India.

We may even be tempted to dream of a time when every village within a reasonable distance from a hydro-electric power station will receive its supply of electric current to help the development of rural industries and increase the amenities of rural life. The great obstacle to the realization of all these bright visions is the heavy initial expense of most of the hydro-electric schemes in India. The rainfall being seasonal, costly storage constructions are necessary and the expenditure thus incurred makes it difficult to supply power sufficiently cheaply. Even in industrial centres like Bombay, where coal is dear, the relative cheapness of hydro-electric power is not yet sufficiently pronounced. Whether science will be able to remove this difficulty, the future alone can show.[2]

[1] *Indian Year Book* (1937-8), p. 348.
[2] Gadgil, *Industrial Evolution of India*, pp. 338-9.

§46. **A poor people in a rich country.**—The foregoing survey has disclosed the rich and varied character of the natural resources of India. It is a commonplace remark that while nature has showered her bounties on India with a liberal hand, man has failed to profit adequately by them. The contrast between the bounty of nature and the poverty of man is here very striking. Hence the usual statement, which has almost become a proverb, that India is a rich country inhabited by the poor.

CHAPTER III

POPULATION

§1. **Total population.**—The total population of India according to the last Census (1931) is 352,837,778, British territory containing 271,526,933 and the Indian States 81,310,845. With an area of about half that of the United States, India has a population almost three times as large. The population of India forms almost one-fifth of the population of the whole world.

§2. **Statistics of population and religions by Provinces and States.**—The table on p. 43 gives particulars (by Provinces and States) of (i) the total population and density per square mile; (ii) number of females per 1,000 males; (iii) variation per cent in the total population from 1881 to 1931. Table II on p. 44 indicates (i) the distribution of the population according to religion and (ii) variation per cent in religions. The several aspects of the population statistically presented in these tables are dealt with below.

§3. **Factors determining density.**—The density of population (i.e. number supported per square mile) depends on climatic conditions, security of life and property, standard of comfort, economic resources and stage of economic development; in other words, on the external environment and the use of it made by man.) If the economic resources are rich, obviously, other things being equal, a country will be able to support a higher density of population than if the resources are poor. Similarly, *ceteris paribus*, the more advanced the community in respect of its arts of civilization, the greater its capacity for supporting a dense population. A highly industrialized and commercial country with intensive cultivation normally shows great density, for example, England and Wales (685) and Belgium (654). A purely agricultural country will generally support a very much smaller population. The fact that India is primarily an agricultural country explains the low average density of her population.

Again, the pastoral stage will support a smaller number per square mile than the agricultural stage, and the hunting stage even less. In an agricultural country, density of population will also depend upon the character of cultivation.

Mere numbers supported per square mile have small significance unless we also take into account the standard of comfort of the population in question. The density of Bengal (646), for instance, approaches that of Belgium or England and Wales.

TABLE I

Population Distributed by Provinces

with variation per cent and mean density per square mile[1]

Province, State or Agency	Population in 1931 (in thousands)	Mean density per square mile		No. of females per 1000 males (in 1931)	Percentage of Variation Increase + Decrease —		
		1931	1911		1921-31	1911-21	1881-1931
India	**352,838**	**195**	**174**	**940**	**+10·6**	**+ 1·2**	**+ 39·0**
Provinces	**271,527**	**248**	**222**	**940**	**+10·0**	**+ 1·3**	**+ 36·8**
Ajmer-Merwara	560	207	185	892	+13·1	− 1·2	+ 21·6
Andaman and Nicobar Islands	29	9	8	495	+ 8·8	+ 2·4	+ 101·4
Assam	8,622	157	120	909	+15·6	+13·4	+ 79·2
Baluchistan	464	9	8	717	+10·2	+ 1·5	+ 21·3[2]
Bengal	50,114	646	587	924	+ 7·3	+ 2·7	+ 37·9
Bihar and Orissa	37,678	454	415	1005	+10·8	− 1·4	+ 21·6
Bombay Presidency including Aden	21,931	177	159	901	+13·3	− 1·8	+ 32·8
Burma	14,667	63	53	958	+11·0	+ 9·1	+ 292·5
Central Provinces and Berar	15,508	155	139	998	+11·5	0·0	+ 29·8
Coorg	163	103	110	803	− 0·3	− 6·4	− 8·4
Delhi	636	1110	722	722	+30·3	+18·0	+ 81·3
Madras	46,740	328	291	1025	+10·4	+ 2·2	+ 51·6
North-West Frontier Province (Districts and Administered Territories)	2,425	179	163	843	+ 7·7	+ 2·5	+ 53·9
Punjab	23,581	238	197	831	+14·0	+ 5·7	+ 39·2
United Provinces of Agra and Oudh	48,409	456	440	902	+ 6·7	− 3·1	+ 10·6
States and Agencies ...	**81,311**	**114**	**100**	**941**	**+12·8**	**+ 1·0**	**+ 46·6**
Assam States	626	51	39	...	+17·8	+10·2	+ 96·8
Baluchistan States ...	405	5	5	855	+ 6·9	− 9·8	− 5·5[2]
Baroda State	2,443	299	249	942	+14·9	+ 4·6	+ 12·0
Bengal States	973	179	151	886	+ 8·5	+ 9·0	+ 39·4
Bihar and Orissa States ...	4,652	162	138	1033	+17·5	+ 0·4	+ 93·0
Bombay States	4,469	160	138	952	+15·5	+ 0·1	+ 28·2
Central India Agency ...	6,633	129	119	948	+10·5	− 2·1	+ 22·0[2]
Central Provinces States ...	2,483	80	68	1010	+20·1	− 2·4	+ 79·0
Gwalior State	3,523	134	123	887	+10·3	− 1·3	+ 14·6[2]
Hyderabad State ...	14,436	175	162	959	+15·8	− 6·8	+ 46·6
Jammu and Kashmir State ...	3,646	43	37	881	+ 9·8	+ 5·1	+ 43·3[3]
Madras States Agency ...	6,755	631	450	...	+23·7	+13·5	+ 101·9
Cochin State	1,205	814	620	1043	+23·1	+ 6·6	+ 100·7
Travancore State	5,096	668	450	987	+27·2	+16·8	+ 112·2
Other Madras States ...	454	285	292	1079	− 4·6	+ 2·2	+ 32·1
Mysore State	6,557	224	198	955	+ 9·7	+ 3·0	+ 56·6
North-West Frontier Province (Agencies and Tribal areas)	2,259	99	71	864	−20·0	+74·2	+2590·8[3]
Punjab States	438	75	71	832	+ 7·3	− 1·0	+ 21·5
Punjab States Agency ...	4,472	143	122	...	+11·6	+ 5·5	+ 27·7
Rajputana Agency	11,226	87	82	908	+14·2	− 6·5	+ 11·1
Sikkim State	110	39	31	967	+34·4	− 7·1	+ 260·5[3]
United Provinces States ...	1,206	203	200	951	+ 6·3	− 4·6	+ 9·7
Western India States Agency ...	3,999	113	99	974	+12·9	+ 0·5	+ 16·5

[1] *Census of India* (1931), vol. I, p. 35.

[2] Variation calculated from 1901-31.

[3] Variation calculated from 1891-31.

TABLE II

DISTRIBUTION OF THE POPULATION ACCORDING TO RELIGION, AND VARIATION PER CENT IN RELIGIONS[1]

Religion	Actual Number in 1931 (*Thousands*)	Proportion per 10,000 of population in						Variation per cent (Increase +) (Decrease −)					
		1931	1921	1911	1901	1891	1881	1921-31	1911-21	1891-1901	1881-1901	1881-91	1881-1931
Hindu ...	239,195	6,824	6,856	6,939	7,037	7,232	7,432	+ 10·4	− 0·4	+ 5·0	− 0·3	+ 10·1	+ 26·8
Jain ...	1,252	36	37	40	45	49	48	+ 6·2	− 5·6	− 6·4	− 5·8	+ 15·9	+ 2·5
Buddhist ...	12,787	365	366	342	322	248	135	+ 10·5	+ 7·9	+13·1	+ 32·9	+108·6	+274·1
Sikh ...	4,336	124	103	96	75	67	73	+ 33·9	+ 7·4	+37·3	+ 15·1	+ 2·9	+133·9
Zoroastrian ...	110	3	3	3	3	3	3	+ 7·8	+ 1·7	+ 6·3	+ 4·7	+ 5·3	+ 28·5
Muslim ...	77,678	2,216	2,174	2,126	2,122	1,996	1,974	+ 13·0	+ 5·1	+ 6·7	+ 8·9	+ 14·3	+ 55·0
Christian ...	6,297	179	150	124	99	79	73	+ 32·5	+22·6	+32·6	+ 28·0	+ 22·6	+238·1
Jew ...	24	1	1	1	1	1	1	+ 10·9	+ 3·8	+15·1	+ 6·0	+ 43·1	+101·0
Tribal ...	8,280	236	309	328	292	323	259	− 15·3	− 5·1	+19·9	− 7·5	+ 41·2	+ 28·8
Minor religions and religions not returned ...	571	16	1	1	4	2	2	+3072·6	−51·5	−71·4	+203·7	− 28·7	+179·3

[1] *Census of India* (1931), vol. I, p. 387.

There is, however, no comparison between Bengal and either of the other two countries mentioned as regards standard of well-being. The high density in the case of Bengal can only signify great poverty, because Bengal is predominantly an agricultural province; and it is estimated that agriculture under the best conditions cannot maintain more than 250 persons per square mile at a reasonable level of comfort.

§4. **Density and prosperity.**—According to the latest census the average density over the whole of India is 195 to the square mile. For purposes of comparison, figures for the average density in some other countries are given in the following table.[1]

Belgium	654	Spain	107
England and Wales	685	Japan	215
France	184	United States	41
Germany	332	New Zealand	11·8
The Netherlands	544	Egypt	34
Austria	199	China	200

A glance at the above table makes it clear that it is not possible to draw inferences about economic position from average density. For example, the United States and Egypt both show low density, but the United States is incomparably the richer of the two. On the other hand, there is a great difference as regards density between the United States on the one hand and England and Wales on the other, which, however, does not prevent the two countries from being on a par as regards their economic position. The case of every country must be studied separately to find out the relation, if any, between the density of its population and its economic condition.

The table on page 43 reveals great variation in density from province to province and state to state in India.

It is seldom possible to explain these disparities with reference to any one of the numerous factors which have a bearing on the density of the population. It would, for example, be erroneous to say that in India rainfall primarily determines density. Lower Burma receives the heaviest rainfall in India, but it is nevertheless one of the most sparsely populated tracts. Beyond a certain point, rainfall, far from being beneficial, is positively injurious. In most parts of India the optimum conditions would require an average annual precipitation of about 40 inches of rain, provided it is properly distributed. It is only when the rainfall is less than this or badly distributed that the differences in the amount received exercise any considerable influence on cultivation and,

[1] *Census of India* (1931), vol. I, p. 4.

therefore, on density of population. In so far as success in cultivation depends on water, irrigation will obviously have the same influence as rainfall and, therefore, when it is provided it is an important factor determining density.

Having regard to the fact, however, that irrigation affects only a very small proportion of the total area of India its general influence on density is negligible. Taking the country as a whole, configuration is a far more important factor. Other things remaining the same, successful cultivation depends largely on the shape of the surface. Where it is level, every inch of the land can be cultivated. Where it is undulating, although the lower slopes may be very fertile, cultivation is difficult and precarious. Throughout India the most thickly populated tracts are the level plains, for example, in Bengal, east United Provinces and the low-lying tracts along the east coast in the southern part of the peninsula. Extensive plains with vast streches of fertile land and adequate rainfall are obviously conducive to high density as in the case of Bengal and the United Provinces.

The fact that conditions are not so favourable in these respects explains the relatively lower density of Bombay. Burma, containing as it does a large forest area, is comparatively sparsely populated (though, even as it is, it is considerably under-peopled). Sometimes an unfavourable climate cancels all other advantages and leads to a comparatively low density, as in Assam.

The nature of the soil becomes an important factor only when combined with the requisite amount of rainfall. Taken by itself its influence is not very marked in India. Moreover, the variations are on the whole too minute to be taken into account when dealing with large areas.

These disparities in regard to density are also due in some measure to the stay-at-home habits of the people and other difficulties in the way of free internal migration. The case of Delhi (density per square mile=1,110) stands by itself, as the large urban population of the city of Delhi contributes the major part of the total population of the province.

§5. **Distribution of the population according to religion.**[1]— Roughly speaking, of every 100 persons in British India, 68 are Hindus, 22 Mohammedans, 3 Buddhists, 3 Animists, 1 Sikh and 1 Christian. 'Of the remaining 2, one is equally likely to be a Buddhist or a Christian, and the other most probably a Jain.' As the table on page 44 shows, the Hindus largely outnumber other communities in the centre and south of India, more especi-

[1] *Census of India* (1931), vol. I., p. 387 and *Indian Year Book* (1935), p. 40.

ally in the Madras Presidency, where they are no less than 89 per cent of the population. Other provinces where the Hindus are in the majority are Assam, Bihar and Orissa, the United Provinces, the Central India tract, Rajputana and Bombay. The population of the North-West Frontier Province, Baluchistan and Kashmir is almost exclusively Mohammedan, and is predominantly Mohammedan in the Punjab, Eastern Bengal and Sind. The Buddhists are almost entirely confined to Burma, contributing 85 per cent of its population. The Sikhs are similarly confined to the Punjab. At the 1931 census the number of Jains in India was 1,252,105, and almost half of this total was in the Bombay Presidency (including Indian States) and Baroda.[1] Those who are classed as Animists (following tribal religions) are principally to be found in Bihar and Orissa, the Central Provinces and Assam, though a fairly large number were also returned in Bengal, Burma, Madras, Rajputana, Central India and Hyderabad. More than three-fifths of the total number of Christians reside in South India. The Parsis and Jews belong primarily to the Bombay Presidency.

§6. **Distribution of population according to occupation.**—The figures[2] on page 48 serve to indicate the relative importance of the occupations from which the people of India derive their livelihood, and the overwhelming preponderance of agriculture which is the mainstay of the great majority of the people.

Since 1921 there is no reason to suppose that there has been any fundamental change in the occupational distribution except for the fact that there has been some real increase under Transport, as 'communications have everywhere increased, roads are better, and motor traffic has become ubiquitous during the decade'. There has also been a slight increase under Professions and Liberal Arts, reflecting the gradual spread of literacy. The proportion of the people engaged in agriculture was 70·9 in 1921 as against 65·6 per cent of the total number of workers in 1931. This decrease is, in the opinion of Dr Hutton, the Census Commissioner, apparent rather than real, and is probably due to a large number of females actually supported by agriculture having been wrongly returned as domestic servants. It should also be noted that while the percentage of workers engaged in industries (to the total number of workers) is 10·38, only 1·5 per cent of these are supported by organized industries.[3] The bulk of

[1] We are obliged to Mr Findlay Shirras for pointing this out to us (see *Economic Journal*, September 1932, p. 469).

[2] See *Statistical Abstract for British India from 1922-3 to 1931-2*, Table No. 18.

[3] See also vol. II, ch. ii.

Distribution of Workers according to Occupation or Means of Livelihood
(Census of 1931)

Occupation or means of livelihood (Classes and Sub-classes)	Total[1] following occupation	Actual Workers[2]		Subsidiary occupation Both Sexes	Percentage of Workers to total following occupation
		Males	Females		
A. *Production of raw materials*	*111,164,586*	*74,700,585*	*28,939,854*	*7,524,147*	*65·84*
I. Exploitation of animas and vegetation ...	110,760,324	74,441,002	28,853,437	7,465,885	65·60
II. Exploitation of minerals	404,262	259,583	86,417	58,262	0·24
B. *Preparation and supply of material substances*	*29,639,471*	*18,682,341*	*6,924,615*	*4,032,515*	*17·56*
III. Industry	17,523,982	10,797,527	4,554,426	2,172,029	10·38
IV. Transport	2,778,520	2,099,198	242,208	437,114	1·65
V. Trade	9,336,969	5,785,616	2,127,981	1,423,372	5·53
C. *Public Administration and Liberal Arts* ...	*4,819,452*	*3,783,454*	*363,445*	*672,553*	*2·86*
VI. Public Force	941,323	834,453	7,021	99,849	0·56
VII. Public Administration	1,153,963	962,741	32,543	158,679	0·69
VIII. Professions and Liberal Arts	2,724,166	1,986,260	323,881	414,025	1·61
D. *Miscellaneous*	*23,203,489*	*7,917,432*	*12,601,208*	*2,684,849*	*13·74*
IX. Persons living principally in their income	280,955	168,829	47,045	65,081	0·16
X. Domestic service	12,674,110	2,094,487	8,803,790	1,775,833	7·51
XI. Insufficiently described occupations ...	8,499,689	4,599,238	3,179,404	721,047	5·03
XII. Unproductive	1,748,735	1,054,878	570,969	122,888	1·04
	168,830,114[3]	105,083,812	48,829,122	14,914,064	100·00

[1] Including subsidiary occupation.

[2] Earners *plus* working dependents.

[3] Includes 3,116 (2,521 male and 595 female) earners whose occupations were not returned.

the remainder are engaged in unorganized industries connected with the supply of personal and household necessities and the simple implements of work. The administration and protection of the country engages only 1¼ per cent of the total number of workers, and the remainder are supported by domestic, miscellaneous and 'unproductive' occupations. Though the extent to which agriculture predominates in individual provinces varies, there is no region in which it does not in some form or other easily take the first place. In spite of the trade of Calcutta and the numerous industrial and mining concerns of Bengal, and Bihar and Orissa, the population of the eastern provinces is overwhelmingly agricultural and contains a higher percentage of persons supported by the land than any other tract of India. Of industrial workers, the largest proportions in the local population are in the Punjab, the United Provinces and Bombay. Of these three provinces, however, agriculture dominates the economic life of the first two, where the industrial occupations, though they engage a substantial number of persons, are mostly of the cottage industry type. In Bombay the development of organized industry is of some economic importance but is at present largely confined to a few of the biggest cities. In the category of unclassified occupations the majority of persons are labourers whose particular form of labour is unspecified, and the rest mostly unspecified clerks.

Among the civilized countries of the world India has the highest percentage of people dependent on agriculture and the lowest percentage of those employed in industries, trade, transport, etc. For instance, in 1931 in England almost 58 per cent made their living by industry and 8 per cent by agriculture, as compared with 9·95 and 66·4 per cent respectively in India.

The economics of a country dependent on agriculture to so great an extent as India must be unstable. Dependence on agriculture means dependence on rains; and if the rains fail there is necessarily widespread distress, involving the majority of the people. This will not be the case if a considerable section of the people cease to be directly dependent on agriculture. The Famine Commission of 1880 correctly diagnose the situation when they say that 'at the root of much of the poverty of the people of India and of the risks to which they are exposed . . . lies the unfortunate circumstance that agriculture forms almost the sole occupation of the masses of the population', and by way of remedy they recommend the development of manufacturing industries. A more even vocational distribution of the population through an all-round development of the economic resources of the country is greatly to be desired.

§7. **Population in towns and villages.**[1]—The preponderant position of agriculture is further reflected in the distribution of the population between urban and rural areas as the occupations of the people determine their habitat. The census of 1931 showed a slight increase over 1921 in the urban population from 10·2 to 11 per cent of the total population. The following figures show the variations in urban and rural populations respectively, 'and the very small proportion that the urban population bears to the whole is clearly indicated by the close relation between the variation in total population and that of the rural population as contrasted with the general antithesis between the total and the urban variations'.

Increase 1921-31

Total	Urban	Rural
10·6 per cent	20 per cent	9·6 per cent

'The greatest degree of growth has been in the number of towns with a population of from 20,000 to 50,000, the total population of which is now nearly double that of towns of 50,000 to 100,000 and not very much less than that of the 39 towns whose individual populations exceed 100,000. The large industrial and semi-industrial towns have benefited at the expense of the smaller towns (with populations of 10,000 and under).

The percentage of urban population ranges from 3·4 in Assam to 22·6 in Bombay which is the most urbanized of the major provinces of India.

Compared to India as a whole with its 11 per cent, the urban population is 49 per cent in France, 50·8 per cent in Northern Ireland, 53·7 per cent in Canada, 56·2 per cent in the U.S.A. and 80 per cent in England and Wales.

Table A[2] on p. 51 shows the distribution of population in groups of towns according to size and in the rural areas and clearly brings out the small progress in urbanization achieved during the last 40 years or so.

Table B[3] on p. 52 shows the chief cities whose population exceeds 100,000. There are only 39 such cities in India. Only seven of them have more than 400,000 inhabitants.

In most of the western countries the nineteenth century witnessed a great development of organized industries, resulting in a phenomenally rapid growth of the town population, in marked contrast with the almost stationary character of the urban

[1] *Census of India* (1931), vol. I, pp. 44 ff.
[2] ibid., p. 46.
[3] ibid., p. 50.

TABLE A

Class of Places	1931		1921		Per mille of total population				
	Places	Population	Places	Population	1931	1921	1911	1901	1891
1	2	3	4	5	6	7	8	9	10
Total Population	699,406	352,837,778	687,981	318,942,480	1,000	1,000	1,000	1,000	1,000
Urban areas	2,575	38,985,427	2,316	32,475,276	110	102	94	99	95
Towns having									
I. 100,000 and over	38	9,674,032	35	8,211,704	27	26	22	22	22
II. 50,000 to 100,000	65	4,572,113	54	3,517,749	13	11	9	12	11
III. 20,000 to 50,000	268	8,091,288	200	5,968,794	23	19	18	17	16
IV. 10,000 to 20,000	543	7,449,402	451	6,220,889	21	19	20	22	19
V. 5,000 to 10,000	987	6,992,832	885	6,223,011	20	20	19	20	21
VI. Under 5,000	674	2,205,760	691	2,333,129	6	7	6	6	6
Rural areas	696,831	313,852,351	685,665	286,467,204	890	898	906	901	905

TABLE B

Town	Population	Town	Population
Calcutta[1]	1,485,582	Patna	159,690
Bombay	1,161,383	Mandalay	147,932
Madras	647,230	Sholapur	144,654
Hyderabad	466,894	Jaipur	144,179
Delhi	447,442	Bareilly	144,031
Lahore	429,747	Trichinopoly	142,843
Rangoon	400,415	Dacca	138,518
Ahmedabad	313,789	Meerut	136,709
Bangalore	306,470	Indore	127,327
Lucknow	274,659	Jubbulpore	124,382
Amritsar	264,840	Peshawar	121,866
Karachi	263,565	Ajmer	119,524
Poona	250,187	Multan	119,457
Cawnpore	243,755	Rawalpindi	119,284
Agra	229,764	Baroda	112,862
Nagpur	215,165	Moradabad	110,560
Benares	205,315	Tinnevelly	109,068
Allahabad	183,914	Mysore	107,142
Madura	182,018	Salem	102,179
Srinagar	173,573		

population in India.[2] The overwhelming increase in the urban population in England as a result of the Industrial Revolution is too well known a fact to be dwelt upon at length here.

The present excessively uneven distribution between city and country, with only a negligible proportion of the people living in cities, is an index of the economic backwardness of the population. Ranade, commenting on the progressive ruralization (for he was writing at a time when the slight reverse movement towards urbanization was not in evidence), pointed out that it meant loss of power, intelligence and self-dependence. Civilization and progress have always originated in cities, from which they have radiated into the countryside which, left to itself, has seldom displayed the capacity for progressive development. The present distribution of the population between city and country in India could be radically altered in favour of towns only by the development of industries, trade and transport. We must not, indeed, overlook the perils associated with vast aggregations of population into a few mammoth cities like London, New York, Bombay and Calcutta, but the rise of medium-sized towns scattered all over the country would afford all the economies of large-scale

[1] With Howrah.

[2] In an article on 'Reconstruction in India' which was contributed by Sir Frederick Sykes to the *Daily Telegraph* in 1935 the contrast is well brought out. Whereas in England some four-fifths of the population are town dwellers, in India, on the other hand, six-sevenths live in villages.

production and the amenities of town life, while avoiding the dangers to moral and physical health associated with modern slums.

§8. **Population according to sex.**—According to the census of 1931, the proportion of females to every thousand males is 940. The only British Indian provinces showing an excess of females over males are Madras and Bihar and Orissa.

The deficiency of females at birth is a universal phenomenon (in India there are 108 male children born for every 100 female children). This disparity is corrected in European countries by the higher rate of infant mortality in the case of males than in the case of females. 'Organically, woman is the stronger and not the weaker vessel.'[1] But conditions in India are distinctly unfavourable to female life in contrast with European conditions. From the age of 10 and especially after the period of adolescence is reached, the death-rate among females shows an excess over that of males contrary to European experience. An explanation is afforded by the existence of certain social practices such as that of the purdah, which is especially disastrous in its effects on the health of women residing in crowded towns and which is found among comparatively well-to-do Mohammedans and also among Hindus in those parts of the country where Mohammedan influence has been strongly at work. But the most important cause of excessive female mortality is the prevalence of early marriages which subject girls to the risks of motherhood at an age when they have not yet reached full physical maturity. As the Census Superintendent, Baroda (1901) observes, numbers of child-wives 'march from the nuptial bed to the funeral pile. Nervous debility, consumption, and the uterine diseases create havoc among them.' The maternal mortality rate for India as a whole is 24·05 per mille as shown by Sir John Megaw who made an inquiry in 1933. According to the same authority, the rate is nearly 50 per mille in Bengal. 'In England great concern is expressed because the rate continues to be so high as 4·11 per 1000.' Another probable cause is that in India female life is held cheaper than in the west, not only by men but by the women themselves, and this results in a deliberate neglect of health in the case of females. There is also discriminative neglect in favour

[1] Wattal, *Population Problem in India*, p. 17. The disproportion of female to male children in India, however, has sometimes been regarded as a sign that female infanticide has not yet been completely stamped out. This practice is supposed to be prevalent, not only among the degraded races, but also to some extent amongst respected and reputable communities like the Jats, Khatris, Gujars, Rajputs, etc. See *Census of India* (1921), vol. I, appendix vi.

of male children during the earlier years. Again, women workers in field or factory are seldom in a position to enjoy the necessary period of rest before and after delivery, and the strain of overwork inevitably impairs their physique. The unskilful midwifery of the village *dai* is a further contributory cause. What is particularly alarming about the situation is the fact that the proportion of females to males shows a definite progressive diminution from census to census.

The deficiency of the females in the general population is further greatly accentuated in the population of the towns, in contrast with the exactly opposite conditions which prevail in western countries where females are largely in excess of males in the towns. This is accounted for by the migratory character of the factory hands, who seldom bring their families to the towns, and secondly, by the relatively smaller employment of women in urban industries. The number of women per thousand males in 1931 was only 489 in Calcutta and 554 in Bombay.

It need scarcely be pointed out that this shortage of females in the towns adversely affects the health, comfort and morals of the workers.

The percentage of female workers to the total number of females is 25 in India and is comparable with the percentage in some of the most advanced countries of the west. This is somewhat surprising and may be taken to indicate that the purdah affects only a negligible proportion of women. It also throws a sidelight on Indian poverty, because in India an improvement in earning capacity is generally followed by a withdrawal of the womenfolk from the ranks of workers. Prevalent ideas of respectability enjoin that the women of the household shall, if possible, not go out to work. The large proportion of women workers, therefore, indicates that very few people in the country can afford the luxury of idleness for their women. Their work is turned to account, although with reluctance, in order to add, however little, to the family income.[1]

[1] For census purposes, even a woman who is primarily occupied in domestic duties and gives only a fraction of her time to a remunerated occupation is counted as a worker. While it seems to be perfectly legitimate to ground the inference as regards poverty on the fact that a large number of women are compelled to seek employment outside their homes in spite of the existence of strong social prejudices operating against such a course, this does not affect the validity of the usual contention that the total *quantity* of female labour is very small in India relatively to western countries. Again, custom and prejudice keep a much larger number of occupations closed against women in India, and this involves a considerable waste of female labour and makes

§9. **Distribution according to age.**—The Census Report (1931) contains the following figures showing the age-distribution of 10,000 males and females of the Indian population by 10 yearly age groups for the five decades 1891-1931. The principal economic

Age Group	1931		1921		1911		1901		1891	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
0-10 ...	2,802	2,889	2,673	2,810	2,710	2,816	2,648	2,721	2,837	2,923
10-20 ...	2,086	2,062	2,087	1,896	2,013	1,823	2,130	1,917	1,974	1,758
20-30 ...	1,768	1,856	1,640	1,766	1,718	1,839	1,666	1,787	1,678	1,801
30-40 ...	1,431	1,351	1,461	1,398	1,451	1,391	1,457	1,408	1,455	1,401
40-50 ...	968	891	1,013	967	1,014	969	1,019	991	1,004	949
50-60 ...	561	543	619	606	609	607	614	621	590	596
60-70 ...	269	281	347	377	340	380	466	555	462	573
70 and over ...	115	125	160	180	145	175				
Mean Age ...	23·2	22·8	24·8	24·7	24·7	24·7	24·7	25·1	24·4	24·9

significance of the age-composition of a population is the proportion of workers (effective population) to the total population. The age-distribution of the population of every country can be exhibited in the form of a pyramid. The smaller age-groups, which represent the largest proportion of the population, will obviously form the base of the pyramid which will narrow down as the higher age-groups are reached, until it will finally taper to a point, because after a certain age there will be no persons living to record. The shape of the pyramid will differ according to the relative proportions between the different age-groups in the total population. In the case of India, the age pyramid

the size of the national dividend smaller than it need be. The number of women workers is large but, most of them being part-time and casual workers, the amount contributed by them to the total of paid labour is negligible in comparison with that of the male workers.

has the broadest base of all countries owing to the very high birth-rate. India has the largest proportion of children under ten. The pyramid also tapers towards a point more sharply than in the case of any other country, indicating the inferior longevity of the Indian population. There are relatively very few people in India who live beyond the age of 50.

The commonly accepted limits for the productive or the working population are between the ages of 15 and 60 or 65 in Europe. In India, on the other hand, the upper limit has necessarily to be smaller because old age and incapacity for work set in much more quickly than in Europe. The accepted age-limits in India, therefore, are 15-40. The effective or working population of India in this sense is only 40 per cent of the total population. In France it is 53 per cent and in England 60 per cent, taking for these two countries the limits of 15-60 for the productive population.[1] Any steps calculated to improve the standard of public health, and increase the longevity of the people would naturally increase the volume of the working population. The death-rate has shown a definite tendency to fall since 1920 probably owing to the reorganization of the Public Health Departments and their increased activity in the different provinces after the introduction of the Reforms.

It need hardly be pointed out that the age-distribution in the same country may vary from time to time. There may be, for example, changes in the normal birth- and death-rates. Again, war, famine, and epidemic diseases may alter the age-distribution. A war would reduce the proportion of the adult population. The incidence of famine and epidemics is different on the different age-groups. Famine affects children more severely than adults, whereas epidemics have the reverse effect. Over a sufficiently long period it is obvious that excessive mortality among children will be reflected in a smaller number of adults some fifteen years afterwards. Similarly, if a large number of adults are carried off by disease during the reproductive period of life, this will in the course of time result in a reduced birth-rate and consequently a smaller proportion of children. Owing to the heavy mortality caused by the influenza epidemic of 1918 in India, the proportion of the working population to the total population may be presumed to have become more than normally unfavourable. While all sections of the people suffered more or less, the mortality was probably heaviest among the adults.

The following table shows, in millions, the distribution of the population according to age and sex at the census of 1921.

Age	Total Population			Age	Total Population		
	Persons	Males	Females		Persons	Males	Females
0-5	39·65	19·48	20·17	40-45	19·58	10·07	9·51
5-10	46·74	23·84	22·90	45-50	11·64	6·34	5·30
10-15	36·74	20·17	16·57	50-55	13·74	7·03	6·71
15-20	26·14	13·65	12·49	55-60	5·57	2·99	2·58
20-25	26·06	12·56	13·50	60-65	8·88	4·31	4·57
25-30	27·59	14·02	13·57	65-70	2·51	1·30	1·21
30-35	26·13	13·37	12·76	70 and over	5·34	2·58	2·76
35-40	18·96	10·30	8·66				
				Age unspecified[1] ...	24[1]	24[1]	...
				Total	315·35	162·08	153·27

§10. **The Indian birth- and death-rate.**—The size of the Indian population is determined almost exclusively by the birth-rate and the death-rate, both emigration and immigration being negligible factors. As regards both birth-rate and death-rate, India occupies a position of unenviable pre-eminence among the civilized countries of the world. The annual birth- and death-rate are among the highest in the world, being 34·3 and 24·9 respectively. In the more progressive European countries the tendency towards a progressive diminution both of the birth-rate and the death-rate has been strongly in operation. For example, in England and Wales for 1891-5 the births and deaths per thousand were 30·5 and 18·7 respectively. The corresponding figures for 1932 were 15·3 and 12·0

In India no such striking diminution of the birth- and death-rate has occurred. On the contrary, during certain periods an actual increase in both is visible, as will be seen from the table on p. 58.[2]

§11. **Death-rate.**—A high and unchecked birth-rate is usually associated with a high death-rate. The high death-rate in India is in the last resort due to general poverty, which makes the people peculiarly non-resistant to diseases like malaria, plague and influenza. The low vitality of the Indian people explains the fact that at most ages the expectation of life is lower than in the European countries.

[1] Not in millions.

[2] The statistics for the years 1885 to 1920 have been taken from Brij Narain.

Period	Ratio of births per thousand	Ratio of deaths per thousand
1885-90	35·83	27·44
1891-1900	35·43	31·31
1901-10	38·18	33·94
1911-17	38·68	30·31
1918	35·35	62·46
1919	30·24	35·87
1920	32·98	30·84
Average of 1911-20	36·93	34·13
1921	32·20	30·59
1923	35·06	25·00
1926	34·77	26·76
1928	36·79	25·59
1930	35·99	26.85
1931	34·38	24·89
1932	33·7	21·6
1933	35·5	22·4
1934	33·7	24·9
1935	34·9	23·6

'The average expectation of a male in England is 55·62 years; it is only 26·91 in India, or less than half. In the case of females the figures are 26·56 for India and 59·58 for England. . . . For 1891 the English figure for male lives was 44·13 when the Indian figure was 25·54. In 1920-2, the English figure went up to 55·62, when even in 1931 the Indian figure, after having declined to 23·96 in 1901 and still further to 23·32 in 1911, was only 26·56. In other words, while the Englishman has added 11½ years to his life in 30 years the Indian has in a longer period of 40 years put on only one year.'[1] Out of every 100 persons born in India, 45 die before reaching the age of 5 as against 14 to 15 in the countries of western Europe.

The expectation of life in European countries generally has been showing a decided improvement owing to better conditions of life and greater control over the preventible causes of death; whereas in India, economically speaking, the country has been practically at a standstill, and the improvement noted in the case of European countries has failed to appear. In fact, it is possible to make out a plausible case to show that a positive deterioration has set in. The shortness of the average expectation of life in India implies that men who have gathered experience and wisdom are snatched away when their power to be of service to the community is at its highest.

The two outstanding features of the death-rate in India are the high infantile mortality and the high female mortality at reproductive ages. The infantile mortality is higher in India than in any other civilized country. About one-fifth of the children born die before they reach the age of one year, and the infant death-rate amounts to one-fifth of the total death-rate for all ages. Owing to the highly insanitary conditions prevailing in the bigger cities in India, infant mortality is especially heavy there; for instance, in Bombay it is 274 per thousand as against 66 in London. There was a time when in European countries infantile mortality was as high as in India today, but in the course of the present century a most remarkable decline has been achieved, as can be seen from the following table relating to England and Wales.

Period	Deaths under one year per thousand births	Period	Deaths under one year per thousand births
1850-5	156	1911-15	110
1870-5	153	1916	89
1891-5	151	1924	75
1896-1900	156	1925	75
1902-5	138	1926	70
1906-10	117	1932	60

The following figures for infant mortality in India afford a painful contrast.

Year	Deaths under one year per thousand births		Year	Deaths under one year per thousand births	
	Males	Females		Males	Females
1911	214	196	1918	274	260
1912	216	199	1919	228	220
1913	193	197	1920	201	188
1914	219	204	1922	183	166
1915	208	195	1925	181	167
1916	209	195	1928	181	164
1917	212	198	1931	188	170

This heavy rate of infant mortality shows no signs of appreciable abatement at all comparable to the decline that has taken place in western Europe. Part of it is attributable to the custom of early marriage, which impairs the vitality of the infant as well as that of the mother. Drugging the child with opium when the mother wants to be free for work and also the growing difficulty

of securing an adequate supply of good milk—factors which are present in an especially acute form in large towns though by no means altogether absent in the villages—are important contributory causes. Overtopping all these causes and largely explaining them is the influence of the grinding poverty of the masses. The second peculiarity in connexion with the Indian death-rate is the excessive mortality among women of child-bearing age. As we have already analysed the causes of this phenomenon there is no need for further comment on it.

§12. **Growth of population.**—The actual increase in the Indian population has been very slow from decade to decade when we consider the period of the last fifty years or so, for which census statistics are available, the reason being that although the birth-rate is high, the death-rate has almost kept pace with it. The survival rate, therefore, is lower than in Europe, where, although the birth-rate is much lower, the death-rate is lower still. Between 1872 and 1921 the population in India increased by only 20 per cent. The population was 315,156,396 in 1911 and increased to 318,942,480 which gives a percentage of 1·2. The widespread failure of the rains in 1918, together with the havoc wrought by the great influenza epidemic which 'wiped out in a few months practically the whole natural increase in the population for the previous seven years', was responsible for the exceptionally low rate of increase during 1911-21. The total number of deaths due to influenza has been estimated at 14 millions. The following table shows the irregular movement of the population from decade to decade.

Nominal Increase		Variation percentage since last census
Census of	Population in millions	
1872	206·16	...
1881	253·89	+ 23·2
1891	287·31	+ 13·2
1901	294·36	+ 2·5
1911	315·15	+ 7·1
1921	318·94	+ 1·2
1931	352·8	+ 10·6

The real increase, however, can be arrived at after making allowance for the increase of area and population enumerated at each census and for the fact that the methods of taking the census have become progressively more and more accurate. After making due allowance for these factors we arrive at the following result representing the real increase.[1]

Period	Increase due to inclusion of new areas (millions)	Increase due to improvement of method (millions)	Real increase of population (millions)	Total (millions)	Rate per cent of real increase
1872-81	33·0	12·0	3·0	48·0	1·5
1881-91	5·7	3·5	24·3	33·5	9·6
1891-1901	2·7	0·2	4·1	7·0	1·4
1901-11	1·8	...	18·7	20·5	6·4
1911-21	0·1	...	3·7	3·8	1·2
1921-31	0·0	...	34·0	34·0	10·6
Total ...	43·3	15·7	87·8	146·8	30·7

Whereas the percentage increase of population between 1870 and 1910 was about 20 in India, it was 58·2 in England and Wales, 53·2 in Denmark, and 45 in Europe as a whole excluding Russia. Including Russia the population of Europe increased from 305 millions to 448 millions, or by about 47 per cent.[2]

The periods showing an abnormally small rate of increase in India are marked by the appearance of special calamities like famines and plague, cutting off the natural increase to a very large extent. Thus there was a severe famine in south India during 1876-8, and during 1890-1900 plague and famine joined hands to check the increase.

The period of 1901 to 1911 is described as one ' of moderate agricultural prosperity ', and population would have increased very substantially had it not been for the appearance of plague and of malaria in an epidemic form which carried off large numbers in the Punjab and the United Provinces. The decade of 1881 to 1891 was the only period which escaped from any exceptional disaster. It has therefore been suggested that the rate of 9·6 per cent must be regarded as abnormal, and that some deductions must be made if we wish to arrive at the normal increase of the population. By normal increase we mean an increase that would result if conditions were neither exceptionally favourable nor exceptionally

[1] *Census of India* (1921), vol. I, p. 7 and *India in 1930-31*, p. 146.

[2] *Grundriss der Sozialökonomik* (1923), II, i, p. 79. 'Wirtschaft und Natu

unfavourable. The Census Commissioner for 1921 places 'the probable natural increment in India at the present stage of development, and apart from exceptional calamities, at between 7 and 8 per cent in the decade'.[1] This is probably an underestimate. The actual increase for the whole of India between 1921 and 1931 was as much as 10·6 per cent in spite of the influenza epidemic in 1918 which was held to have mainly affected the population at the reproducing age.

On the other hand, the decade prior to 1931 was exceptionally favourable for an increase in population, which actually reached 34 millions. There was no serious famine during the decade and the methods of dealing with epidemics like cholera, plague and *kala azar* have been steadily improving.[2] The next census, which is due in 1941, is expected to raise the figure for the total population of India (including Burma) to about 400 millions.[3]

§13. **Problem of over-population: controversy in Europe and India.**—In India there has been much controversy on the question whether unrestricted multiplication has not been one of the major causes of Indian poverty. The official view has been in favour of the theory that over-population is a potent cause of Indian poverty, while the politicians have generally opposed the theory because its acceptance seemed to exonerate the Government from all blame or responsibility for the undeniable poverty of the Indian people.

§14. **Meaning of over-population.**—Over-population may be regarded either as a state or as a tendency and it is best to relate it to the idea of an optimum population. This has been explained as follows by Cannan :—' At any given time, or which comes to the same thing, knowledge and circumstances remaining the same, there is what may be called a point of maximum return, when the amount of labour is such that both an increase and a decrease in it would diminish proportionate returns. . . . Just as there is a point of maximum return in each industry, so there must be in all industries taken together. If population is not large enough to bring all industry up to this point, returns will be less than they might be, and the remedy is increase of population; if, on the other hand, population is so great that the point has been passed, returns are again less than they might

[1] *Census of India* (1921), vol. I, p. 48.

[2] ' The improved treatment (with organic antimony compounds for *kala azar*) introduced during the decade 1921-31 . . . cures the disease in ten days or even less.'—*Census of India* (1931), vol. I, p. 7.

[3] Presidential Address by Mr. P. K. Wattal at the 2nd All-India Population and 1st Family Hygiene Conference (1938).

be, and the remedy is decrease of population'.[1] Over-population means a departure from the optimum in the direction of an excess of population.

Increased population means increased labour power, which generally results in an addition to the *total* wealth; but the significant question is whether this addition is proportionate to the increase of population, so that the share per head remains at least the same as before. It is true that with every mouth God sends a pair of hands. But the question is whether the fresh pair of hands will be able 'to pull their own whole weight'. When a given population shows signs of increasing in such a manner as to make us expect a diminution of income per head, we speak of a tendency to over-population. When we have reasons for expecting that if a certain diminution in existing numbers were to occur it would lead to an increase of income per head, we speak of a state of over-population.[2] It is not uncommon to have both the tendency and the state existing together, and, in the opinion of many people, this is the case in India today. Malthus was fundamentally right in his estimate of the power of human increase and in suggesting that, except under most unusually favourable circumstances, means of subsistence will not keep pace with the growth of population if human fecundity is realized to the full. It has been calculated, for example, that at the present average ratio of increase—which, be it remembered, is by no means the highest *possible* rate, severely restricted as it is by positive as well as preventive checks—a single pair would produce in 1,750 years descendants equal in number to the present population of the world. Such being the power of human fecundity, it is highly probable that, given full play, it would overtake any conceivable progress in the arts of wealth-production. If, therefore, the fact of unchecked procreation is established with reference to any old country, this must be regarded as presumptive evidence so strong as almost to amount to positive proof that the country in question is suffering from over-population. Symptoms of over-population are a high birth-rate and a high death-rate—especially infantile death-rate.

§15. **The case of India.**[3]—In the light of the above discussion we are now in a position to consider the question whether

[1] E. Cannan, *Wealth*, pp. 68-9.

[2] cf. P. S. Florence, *Over-Population*, p. 11.

[3] For an excellent discussion of the problem of over-population in India the reader is referred to the paper read by C. J. Hamilton before the Seventh Indian Economic Conference held in Bombay in 1924.

over-population can be predicated of India at the present time either as a state or a tendency or both.

The most important point in this connexion is to consider whether any of the preventive checks to the growth of population are in effective use in India. If we come to the conclusion that preventive checks do not exist or that their influence is negligible and that population is mainly restrained by the operation of the positive checks, we shall have made out a strong case for over-population as a present evil in this country.

§16. **Preventive checks.**—The various preventive checks on population[1] may be classified as follows: (i) Lower marriage (or union) rate due to postponement of marriage, or celibacy. (ii) Lower fertility per marriage. (*a*) Natural: lower fecundity. (*b*) Circumstantial: absence of husband, etc. (*c*) Deliberate: abstinence, 'self-control', use of contraceptives, deliberate abortion, etc. (iii) Certain social customs and habits: for example, prolonged lactation, hypergamy, etc. (iv) Infanticide. (v) Poverty, disease, etc.

We shall now discuss the question whether one or more of these checks are in use in India and whether their operation is effective in counteracting the natural tendency of human increase to outrun the means of subsistence.

§17. **Marriage rate in India.**—The first point to note in this connexion is the universal prevalence of the married state in India. Religion in the west frequently enjoins celibacy, but in India its weight is thrown into the scale in favour of matrimony. Every Hindu 'must marry and beget children—sons if you please—to perform his funeral rites lest his spirit should wander uneasily in the vacant places of the earth'.[2] In order to avoid social obloquy all girls must be married before puberty.[3] Amongst Mohammedans and Animists, though religious obligation is wanting, early marriage is equally common. The institution of the joint family further encourages it. The family resources being available for the support of the newly wedded couple for an indefinite length of time, prudential considerations such as those which often compel postponement of marriage in Europe have hardly any influence in India. On the contrary, economic considerations promote marriage among the masses instead of retarding it,

[1] cf. P. S. Florence, op. cit., p. 18.

[2] P. K. Wattal, op. cit., p. 23.

[3] 'If a high-class Hindu maiden is unmarried at puberty, her condition brings social obloquy on her family, and on strict reading of certain texts entails retrospective damnation on three generations of ancestors.'—H. Risley, *People of India*, p. 154.

because the wife is necessary as a household drudge and often helps the husband even in outdoor work. The children are also put to work of some kind at the earliest practicable age and begin to pay their way as soon as possible. They are not felt to be a burden, because the prevalent standard of life is the lowest compatible with mere existence and does not demand prolonged training for children to enable them to maintain the extremely low standard of life to which they are accustomed. The ultimate wastefulness to society of using up its young life too quickly is not commonly realized, and even if such a realization were more common than it is, extreme poverty would hinder parents from putting their children through a long course of training and equipping them more efficiently for the battle of life.

According to the census of 1931, out of the total population of 352,837,778 the numbers of married males and females respectively were 84,208,467 (47 per cent) and 83,607,223 (49 per cent); 86,338,001 (48 per cent) males and 59,698,043 (35 per cent) females were unmarried; the rest were widowed.[1]

Of all countries, India has the lowest proportion of unmarried for both sexes. Child marriages are common, the age of marriage being somewhat higher for boys than for girls.[2] In spite of provincial variations the marriage rate in India is extremely high compared with that in Europe, the figures for England and Wales being taken as representative of western Europe generally. 'Of the 48 per cent of the total male population which is unmarried, slightly more than three-fourths (77 per cent) is under the age of 15, while 91 per cent of the total female unmarried population is below that age. At the reproductive period 15-40, the proportion drops down to 5 per cent for the unmarried female population, whereas it is 36 per cent in England and Wales.'[3]

[1] In these figures, the proportion of married males appears higher than the proportion of married females, whereas previous censuses show a higher proportion of married females than of married males. Dr Hutton suggests that at the latest census a large number of married females (about one and a quarter million) were returned as unmarried for fear of prosecution under the Sarda Act which came into effect from 1 April 1930.

[2] The Child Marriage (Sarda) Act fixes the age of marriage for girls at 14. While the measure is welcome as a beginning, its effects from the point of view of numbers are of course entirely negligible. Unfortunately this is also a case of law being in advance of public opinion, and evasions of the Act are far too common. The position would be easier to tackle if the Indian States were to come into line with British India and pass similar legislation.

[3] P. K. Wattal, op. cit., p. 24.

The universality of marriage is offset, though to a very slight extent, by the fact that widow remarriage is rare among the Hindus, though the prejudice against it is gradually waning.

There has been in recent times a tendency in favour of postponing the age of marriage in the case of both males and females. But this is confined to the educated classes who are numerically insignificant; it has not yet touched the masses. Moreover, the tendency towards deferring marriage, in so far as it is seen at all, is more marked in the case of males than of females. Postponement of marriage, however, is far more effective from the point of view of restricting population if it applies to girls rather than to boys. From another point of view again it is a question whether postponement of the age of marriage, unless it is very considerable, will not in the net result tend to increase rather than diminish population. The baneful effects of early marriage on the physique of the married couple, especially of the wife, keep down the fertility, which will tend to increase with the increase in the age of marriage. Another evil associated with early marriage is pre-puberty intercourse. This practice is said to be more common than is generally recognized. By inflicting serious physical injuries on the girl-wife it causes diminished fertility. While the abolition of the custom of early marriage ought to be one of the most important items in any programme of social reform, we must not forget that its net effect might very well be a more rapid increase of population unless the average age of marriage, particularly in the case of women, is very considerably raised and unless other checks come into operation.

The upshot of the whole matter, then, is that the check to the growth of population due to abstention from marriage or its postponement is practically non-existent in India, and animal instinct fortified by semi-religious sanctions is allowed full play. It is, therefore, not surprising that the Indian birth-rate is one of the highest in the world.

§18. **Lower fertility:** (*a*) *Natural.*—But in spite of the immensely higher birth-rate, the effective increase of population in India is much lower than in European countries, the reason being the very high death-rate in India. It is sometimes stated, however, that part of this result is to be attributed to the inferior fecundity of Indians. The fertility in the case of married women of reproductive age in India is calculated at 160 per thousand as against 196 per thousand in England[1] and this is cited in support

[1] See Carr-Saunders, *The Population Problem*, p. 67.

of the theory that progress in civilization is attended with increase in fecundity.[1] It is necessary to distinguish carefully between fecundity and fertility. Fecundity is used in the sense of power of reproduction and fertility is taken to mean the actual degree of reproduction. The statement that Indian fecundity is low does not mean that a smaller number of children in proportion to the total population is born in India every year, for this is notoriously untrue, but that, other things being the same, an Indian woman during her reproductive period is capable of producing a smaller number of children than, say, an English woman. However, in England the power of reproduction is not realized fully because celibacy and postponement of marriage are far more common than in India. Hence the fact of a higher birth-rate in India is not incompatible with the theory that Indian fecundity is lower.

It is argued that this difference in fertility cannot be explained entirely by the prevalence of early marriages in India; for although it is no doubt one of the important causes reducing fertility, the widespread use of preventive checks in Europe must be granted to be far more effective in this sense, and the smaller fertility in India[2] must, therefore, be put down to lower natural fecundity of the Indian as compared with the European races. However, the theory which associates increase of fecundity with advance in civilization is of the nature of a mere hypothesis not yet sufficiently verified by unimpeachable evidence. It seems to run counter to the widely accepted notion that fecundity decreases with increase in intellectual development and material betterment.

[1] A good deal of confusion often results owing to failure to differentiate carefully between fecundity and fertility. When for example, it is said that fecundity is greater amongst the Mohammedans than amongst the Hindus, the actual reference is to the fact that the Mohammedans are increasing faster than the Hindus. From this alone the higher fecundity of the Mohammedans cannot be inferred. There are a number of other factors which afford a sufficient explanation of the higher rate of increase amongst the Mohammedans, such as the relative weakness of the custom of early marriage (which is injurious to health and therefore lessens fertility), the prevalence of widow remarriage, the absence of hypergamy, etc. The greater rate of increase of the Mohammedan population revealed by successive censuses may also be partly due to the conversions from Hinduism to Islam (not altogether completely offset by re-conversions to Hinduism, the Shuddhi movement notwithstanding) and further, to the fact that other religions like Christianity are able to effect a larger number of conversions from the caste-ridden Hindus than from the Mohammedans.

[2] We are, of course, comparing the number of children produced by a married woman in India with those produced by a married woman in Europe. It need scarcely be pointed out that the proportion of married women to the total population is far higher in this country than in Europe, accounting for the relatively higher birth-rate in India.

(*b*) *Circumstantial.*—Prolonged separation between husband and wife may occur sometimes; for example, owing to failure of the rains, the husband wanders away from his family and may be absent from his home for months together. But this phenomenon is so occasional that we need not stop to consider its effect in the direction of lowering fertility.

(*c*) *Deliberate.*—Moral abstinence in the Malthusian sense is certainly not practised to any appreciable extent and the same remark applies to the modern neo-Malthusian devices. There is reason to believe that they are gradually coming into use among the upper middle classes in the big cities and a wider spread of their use may be anticipated in future. But at present their influence in checking the birth-rate in India is practically nil.

Deliberate abortion is still practised to some extent, but the law very properly regards this practice as highly criminal and its influence, such as it happens to be at present, in preventing the maximum increase of population in India is rapidly on the wane.[1]

§19. **Social customs: prolonged lactation, etc.**—The habit of prolonged suckling is common in India and in popular opinion supported by medical testimony, it results in decreased conceptivity. In Europe, influenced by ideas of preservation of beauty, the mother sometimes does not feed the child at the breast at all; or if she does, the child is weaned much sooner than in India. According to medical authority, lactation prolonged beyond nine months or a year is harmful both to mother and child, which is another reason why it is avoided by the European mother. But the general prevalence of the practice in India must be recognized as an appreciable factor tending to restrain the growth of population.

We have already remarked above that voluntary abstention from intercourse in married life with a view to checking multiplication is almost entirely absent in India. There are, however, certain religious injunctions which result in compulsory abstention at certain periods; for example, Manu enjoins separation from the wife at new and full moon. Owing to various modern influences the faithful observance of such rules is becoming less and less common. But even otherwise, the rules do not require prolonged abstention and their practical effect is altogether negligible.

[1] Abortion, so far as it is resorted to, is used more for concealing crime and preventing illegitimate births than as a well-recognized method tolerated by any large section of public opinion to restrict legitimate births.

The custom of hypergamy is still prevalent in some parts of India, for example, in Eastern Bengal, and must to a certain extent check population. It forbids the marriage of a girl with a man of a social group equal or inferior to hers and forces her to marry a man belonging to a superior group. The number of bridegrooms belonging to the upper groups being limited, they become the objects of keen competition which leads to the evils of high dowries, wholesale polygamy, etc.[1]

§20. **Infanticide.**—In extreme cases the difficulty of disposing of a girl in marriage in the manner prescribed leads to female infanticide. The social and religious obligation to marry girls before puberty makes the birth of daughters generally unwelcome and is one of the causes of the neglect of female children, and the custom of hypergamy wherever it prevails makes matters worse. But actual female infanticide[2] as a regular custom is on the wane like deliberate abortion, and the combined force of law and public opinion may be expected before long to destroy even its vestiges.

§21. **Poverty and disease.**[3]—We have already alluded to the probable effects of poverty itself in limiting the birth-rate by impairing physical vigour. Poverty, however, is generally recognized as a cause of improvidence and recklessness in breeding, though it acts as a discouragement to *marriage* which is often deferred reluctantly because of the absence of means to meet the necessary expenses. As soon as the financial position is improved

[1] 'I know of two Kulins, one of whom married sixty wives and the other had upwards of a hundred; each of these men had a book in which he entered the names of the fathers of the wives married. At the commencement of the cold weather, he would start on his connubial tour with his memo. book, and after collecting money from each wife visited, according to her father's circumstances, return home at the beginning of the summer to spend the rest of the year in his village. . . . .'—Babu Abhaya Chandra Das, quoted by Risley, *People of India*, pp. 166-7. Kulinism does not at present prevail on such an outrageous scale, but it is not altogether extinct. Risley goes on to refer to 'a modern development of the principle of hypergamy which has arisen from the demand for graduate husbands in the marriage market of Bengal'.

[2] In the Punjab 'conditions are probably better than they were twenty years ago, but there are still Jats and Rajputs who would rather see their daughters dead than married beneath their station'.—M. L. Darling, *The Punjab Peasant in Prosperity and Debt*, second edition, p. 56.

[3] Poverty and disease are generally classed under positive checks, but here they have been included under preventive checks because we are considering their effects, not in cutting down actually existing numbers, but in checking further additions to existing numbers.

the very first opportunity is taken to perform the postponed ceremony.

Malarial fever, from which hardly any part of India is entirely free, is unfavourable to fertility, as women at the reproductive ages are particularly liable to it.

§22. **Conclusion.**—We have considered above the extent to which the different preventive checks—voluntary as well as involuntary—operate at the present time in India. But the high birth-rate indicates clearly that the combined effect of all these checks is small. Some of them, like infanticide and abortion, are on the way to extinction and others, like early marriage, hypergamy and prohibition of widow remarriage, will lose their force with the progress of social reform and general enlightenment. The removal or weakening of the preventive checks, unless it is balanced by the advent of new checks, will obviously accentuate the tendency of population to outrun the means of subsistence.

There is an inverse correlation between the positive and preventive checks; in the absence of prudential methods of equating population with means of subsistence, painful methods come into operation. It is hardly open to doubt that India is paying the penalty of unchecked procreation and allowing the inexorable law of nature to work its pitiless solution, 'so that the superfluous millions go down to fatten the tired earth which could not fatten them'. It is not denied that the high death-rate may be partly due to the inadequacy of public hygiene and the general ignorance of the laws of health, but even these are ultimately traceable to poverty. It is scarcely an over-statement to say that 90 per cent of the people of India are living constantly in sight of the hunger-line. This acute poverty is undoubtedly the principal cause of the high mortality among infants as well as adults. A large number of infants die because they are ill-nourished; and in the case of grown-ups, chronic underfeeding and consequent low vitality make them an easy prey to disease. The terribly heavy mortality during the influenza epidemic of 1918-19 was due to the low power of resistance of the Indian population, itself the result of poverty.

If new lives are being brought into existence without restraint and the available means do not permit of their being maintained, this is evidence of over-population: and this is broadly the position of things in India. A high death-rate largely attributable to poverty may be looked upon as the acid test of over-population. The absence of any effective preventive checks, taken along with the great power of human fecundity, makes it highly probable that India is over-populated and that taking into account the

present conditions and the possibilities of advance in the near future, it would be a better country for its people to live in, if they bred at a considerably slower rate.[1]

§23. **Over-population and national income.**—The calculations of national income made from time to time in this country seem to show a steady increase of the income per head. If the population is increasing and if at the same time national income is also increasing at least at the same rate, how can we talk of over-population? One way out of the difficulty is boldly to question the accuracy of the various estimates, hitherto attempted, of the national income in this country.[2] After all the estimates are all more or less conjectural owing to the absence of accurate data. Vincent Smith cannot be suspected of any bias against British rule, and yet the most that he can say is in effect that the lot of the people has improved in some respects while it has become worse in others, and that on a balance there is some slight advantage in favour of the present times as compared with the days of Akbar.[3] As stated by Moreland, 'there has been no great qualitative change'.[4] The improvement in the economic condition of the people is not so obvious a fact that he who runs may read it. Even he who is not in a hurry and takes time to scan the letters closely, as often as not reads degradation instead of improvement. The standard official retort to this is that for their persistent poverty the people themselves are to blame, because they breed much faster than can be good for them. This is, however, an explanation and not a refutation of the proposition that the condition of the people has not changed for the better, say, during the last 50 years.

Another way out of the difficulty is to admit the improvement in economic position but to hold, at the same time, that the improvement would have been much greater if the population had been smaller and if numbers had been kept down by deliberate restriction of births rather than by the operation of the various

[1] In spite of the validity of this general conclusion we believe that, in view of the vast extent of India and its endless variety of climates, races and natural resources, the study of the intricate problem of over-population would be more enlightening if undertaken on the smaller scales presented by the districts and provinces; also, owing to the caste system and other peculiarities of Indian society, there is an unusually large number of non-competing groups, and the examination of each separate group, caste or profession would give a more valuable insight into the nature and extent of over-population than the broad general survey which alone we have found possible to attempt here.

[2] See vol. II. ch. iv.

[3] Vincent Smith, *Akbar the Great Mogul*, pp. 394-414.

[4] W. H. Moreland, *India at the Death of Akbar*, p. 270.

positive checks. We are inclined to hold that this view is in consonance with the real facts of the case.

§24. **Positive and preventive checks.**—We must here warn the reader against supposing that it is a matter of indifference whether a given reduction of population is brought about by the preventive or the positive checks. What is required for the attainment of the highest standard of comfort is not merely the restriction of the population to the optimum number but also the retention of the productive efficiency to which the optimum number is related. Nature's methods are often clumsy; and quite apart from the immense human suffering which they entail, we must remember that although a great natural calamity may succeed in pruning off an excessively exuberant growth of population, it may leave the survivors demoralized and exhausted; and the consequent economic and social disorganization may be so serious that the second state of the society subjected to such an ordeal may be infinitely worse than the first, and with the decrease in numbers thus brought about may go an increase of misery and poverty. It is for this reason that from the economic point of view, preventive checks are to be preferred to positive checks as a remedy for the evils of over-population; in fact, we may say that positive checks seldom cure the disease; they are more apt to aggravate it.

The fact that population in India is increasing at a slower rate[1] than in western countries is sometimes put forward as a refutation of the theory that the country is overfull of human beings.[2] The actual small increase, however, does not necessarily point away from over-population. We must also prove that wealth his increased at least in the same proportion, and that the *per capita* income would have been lower with a smaller rate of increase of the population. Secondly, we must consider whether the population is being restrained from growing faster by preventive or by positive checks. We know that the latter have so far been in almost exclusive possession of the field in India, and this, as we have explained above, makes a slow increase

[1] See §12 above.

[2] Like the Census Commissioner (1931), however, most people would at present be impressed with the rapidity rather than the slowness of the increase in the Indian population. 'The actual figure of the increase (between 1921 and 1931) is little under thirty-four million, a figure approaching equality with that of the total population of France or Italy and appreciably greater than that of such important powers as Poland and Spain. The population now even exceeds the latest estimate of the population of China, so that India now heads the list of all the countries in the world in the number of her inhabitants.' Assuming the present rate of increase, India must expect to have a population of 700 millions at the end of the twentieth century!

or even a positive decrease of population quite consistent with the deterioration of the economic position of the people.

§25. **Other remedies than deliberate check of numbers.**—In advancing the view that India is over-populated we must not be supposed to hold that the country is not capable of accommodating larger numbers if and when its resources are properly developed. It may plausibly be argued that while economic development has already reached its meridian in the west, it is only near the cock-crowing or the morning star in India. Industrialization has scarcely yet begun, and the point of maximum returns in industries is so distant that it may, for practical purposes, be regarded as capable of indefinite approach. A similar consideration, it may be said, holds good of development of transport, shipping, etc. Even in agriculture, the possibilities especially of intensive development and irrigation are still far from being exhausted. Again, apart from increase in the production of wealth, a better distribution of wealth might enable a large population to be maintained at the same pitch of welfare. The population itself may be more evenly distributed; the surplus population in highly congested districts may be drafted to those parts which are too sparsely populated for proper development. Lastly, emigration to other countries may be resorted to for relieving congestion.

§26. **Limitations of these remedies.**—We must not, however, overestimate the possibilities of immediate relief in any of these directions. India has started late in the race of industrialization and her progress must be slow compared with that of western countries, owing to the presence of numerous obstacles. It is often said that the present economic backwardness of the country is largely due to Government indifference. How far the Government must bear the blame in this matter is a question with which we have no direct concern here. But assuming for argument's sake that the Government's attitude of indifference, or opposition, furnished much of the explanation for the exasperatingly slow progress of industries in India, we must take this attitude, so long as it exists, as one of the factors to be reckoned with. Even with the elimination of this factor by the early establishment of self-government, industrial development is bound to be slow owing to financial and other obstacles.

That serious hindrances exist is an undeniable fact, and although after we have allowed for them there may still be room for optimism, it will have to be a much more chastened optimism than that generally indulged in by those who are anxious to prove that India is not over-populated.

Further, even if we ignore the existing obstacles and assume the certainty of rapid industrial advance, it is unlikely that the growth of industries will require larger numbers of men than are already available. Given conditions under which there are practically no voluntary checks on the growth of the population, population may be expected to outstrip all possible demand for it. Nature's ruthless checks to population will not come into operation only if all additions to population as they occur are readily absorbed by the expanding economic resources. Such a phenomenon occurs sometimes, especially in newly settled countries, but even then lasts for only a limited period.[1] India, however, is not a new country nor are the opportunities, however optimistically viewed, comparable, for example, to those of England on the eve of the Industrial Revolution. The employment of the surplus population in industrial activity 'can only prove a permanent cure if the increase of the population be limited not only to the food producible but also to the saturation point of the demand for industrial labour'.

§27. **Scarcity of labour as an argument against over-population.**—One of the usual arguments against over-population rests on the alleged scarcity of labour felt both in agriculture and industry. This is met by pointing out that the impression of a scarcity of labour for agriculture is created by the fact that the demand for it is particularly intense during certain brief periods of the year, such as the sowing and harvesting time. It is forgotten that during the rest of the year labour is in a condition of enforced idleness. The relative scarcity during the busy agricultural season must always have been felt, though the feeling has become more vocal in recent times. Agricultural areas in the vicinity of towns have probably real grounds for complaining of a growing shortage of labour owing to the fact that part of the labour force attracted from the village into the towns is per-

[1] Another aspect of the matter is brought out in the following quotation: 'I am inclined to think that larger capital accumulations permitting the use of scientific inventions have been of chief importance (in bringing about increasing returns in large-scale manufacturing industries); but even if large numbers of men were shown to be necessary, the statistician should inquire whether internal and most of the external economies are not obtained through the large numbers employed in individual organizations, markets, or towns. For if this were the chief condition of increasing returns, it would be the increase in the *average* numbers employed per industrial establishment, organization or locality, not the increase in the mass of workers within a whole industry, that would offset diminishing return in agriculture. Increase in population might not imply, of and by itself, any increasing return in industry at all.'—P. S. Florence, op. cit., p. 15.

manently lost to it, or that all of it is not available just when it is needed for agricultural operations. This, however, does not apply to the many rural areas remote from the towns. The idea of a universal scarcity of agricultural labour is difficult to square with the commonly accepted theory that the pressure on the land is increasing and that more people are quartered on it than it can comfortably support.[1] The Agricultural Commission give it as their considered opinion that 'in no province, except possibly in Assam, is there any indication of a serious general shortage of labour'.[2] As regards the shortage of labour in industries, this again is more apparent than real. It is not that labour is not available, but that the enormous difficulties of housing in the cities, together with the insanitary conditions generally prevailing there, act as effective deterrents, and prevent much of the potential supply of labour from being tapped. Nor is there any proper organization in existence for overcoming the conservatism and the ignorance of the people, many of whom eke out a miserable existence from the soil though there may be a reasonable prospect of their bettering themselves by permanent employment in the towns. Again, a considerable portion of the demand for labour is for *skilled* labour. The remedy would seem to lie rather in providing the requisite facilities for training labour for modern industry. Lastly, demand always means demand at a price, and the price offered to the labourer for his labour may not be sufficiently attractive. Until recently prices were rising without wages rising proportionately. The well-known tendency of wages to lag behind prices is further helped in India by the power of custom, which is still not negligible, especially in rural areas. In the villages, the customary wages move slowly in response to prices, and even in the towns they are not high enough considering the rise in the cost of living and the special expensiveness of life in cities. It cannot be denied that both in agriculture and industry there is a considerable amount of maladjustment between the supply of and demand for labour, but it is open to grave doubt whether the remedy is a faster increase of population. An increase in the number of labourers in itself may compel them to accept

[1] 'The real difficulty is that to cultivate on anything like economic lines the number of individuals that can work on a given area of ground is limited; and though the food product may be ample for many more than that number, a large increase in the population must either lead to excessive subdivision of the areas cultivated, and so diminution in production on account of uneconomic holdings, or on the other hand, to a floating population which is not engaged in agriculture and which has nothing to exchange with the producers for the food which it requires.'—*Census of India* (1931), vol. I, p. 31.

[2] *Agricultural Commission Report*, par. 506.

employment under conditions of work and wages which are unwelcome and which they are on the whole in a position to refuse at present. The situation may become easier for the employer, but the labourer will suffer. A certain limited class of people may gain temporarily, but the nation as a whole will be worse off.

§28. **Agricultural development.**—The possibilities of agriculture, although great, are not unlimited and not altogether easy to realize.[1] There are still undeveloped tracts waiting to be put under the plough. But, for the most part, fertile lands have already been occupied and those that remain unoccupied are comparatively less fertile and, in any case, would ordinarily require an expenditure of capital not within the means of the average cultivator. The possibilities of intensive cultivation are limited by subdivision and fragmentation, the Indian peasant's indebtedness and lack of capital resources—defects which cannot be removed all at once. Again, the adoption of the most up-to-date methods in agriculture can come only gradually and, moreover, even with the new methods, we must expect that the law of diminishing returns will come into operation sooner or later, for experience so far does not warrant our confidently expecting a succession of epoch-making improvements in agriculture which will hold the tendency to diminishing returns at bay for an indefinite length of time.[2] The development of agriculture is bound up with irrigation and, since large portions of the country present insuperable difficulties for irrigation, they must be content to depend upon the vagaries of the monsoon, and cannot hope for any striking improvement in their agricultural position in the near future.

§29. **Better distribution of wealth.**—Some relief will no doubt come from a more rational system of the distribution of wealth.

[1] 'India, a predominantly agricultural country, with a density of 195 persons per square mile, is supporting a larger population per square mile than the highly industrialized continent of Europe, with a mean density of 127, or the United States of America, with a density of 41.'—P. K. Wattal, op. cit., p. 10.

[2] 'While there was in the past unanimity in regard to the prevalence of this law (of diminishing returns), latterly certain economists have pinned their faith to the belief that science, if it cannot already do so, will in the near future be able to surmount these difficulties, or in other words, that the chemist will evolve some process by which at a relatively small outlay, the soil will be forced to give almost uniform returns. If such were ever accomplished, then indeed the law would be a thing to ignore, but the last sixty years, though prolific in discoveries, have given no indication of the birth of any revolution in agricultural practice.'—J. A. Venn, *Foundations of Agricultural Economics*, p. 377, quoted by Hamilton.

But how precisely to bring about a more rational distribution of wealth without drying up its sources, is one of the toughest problems which modern civilized nations are called upon to solve, and no satisfactory solution is yet in sight. Besides, in India, a more equal distribution is not the principal desideratum, as excessively large incomes are very exceptional. What is more urgent is an increase in the total volume of wealth and in the production *per capita*.

§30. **Relief from inter-provincial migration.**[1]—As regards the possibilities of a more even distribution of population between the different provinces, apart from the exaggerated estimates about the capacity of tracts at present sparsely populated to maintain a larger population, the difficulty of shifting people from over-crowded areas to others in need of inhabitants is too great to be lightly set aside. The language, the ideas, the mode of living and the climate vary so much from province to province in India that any wholesale movement of the population between them cannot be expected. The natural love of home and familiar surroundings is further reinforced by the ignorance, conservatism and unenterprising character of the people. Admitting that there is considerable room for expansion in provinces like Assam, at the best they can absorb only a small portion of the surplus population on land in the belt stretching from the Madras Presidency, east and north through Bengal, Bihar and the United Provinces, which stands most in need of relief.[2]

§31. **Relief from emigration.**—To expect any appreciable relief from emigration to other countries would argue an inexcusable ignorance of recent developments , particularly in the direction of national self-sufficiency, and also in the policy of the British colonies on the question of the immigration of Indians. It is true that Indian labour has created new colonial values and made whole regions of the British Empire into paying assets, but this does not prevent Indians being now unwelcome everywhere. The attitude of the colonies together with the political helplessness of India makes it quite clear that Indians must work out their economic salvation mainly within the borders of their own country.

§32. **Population and food supply.**—In all questions relating to the problem of over-population in India the position of the food supply in the country generally figures in a prominent manner. It is quite true that, taking the world as a whole, there must be a balance between food and population: but there need be no such

[1] See §38 below. [2] *Agricultural Commission Report*, par. 506.

balance for any particular country. England, for example, does not produce all the food she requires but finds it more profitable to exchange the manufactured products of her highly skilled population for food drawn from other countries. India, however, does not depend on foreign countries for the supply of food-stuffs, and the variation in the amount of food raised in the country has an obvious bearing on the extent of the pressure of population on the means of subsistence. If we can prove that the food supply is increasing, at least in proportion to the increase of population, we may say that there is no over-population, at any rate in its extreme form. The statistical evidence on this matter, however, is contradictory in character. K. L. Datta in his *Prices Inquiry Report* tries to make out that during 1894-1912 the area under cultivation, and especially that devoted to food-stuffs, lagged behind the population. This conclusion was not accepted by the Government of India on the ground that Datta's data were largely conjectural and uncertain. They argued that the area under cultivation and the food supply had both kept pace with the population owing, e.g. to extended irrigation. Dubey, arguing in 1920, gives figures which he interprets as showing that there is a total deficit of nine to ten million tons of food or of about five million tons if we include the amount exported annually. This, while indicating a present shortage of supply and therefore a state of over-population, does not tell us whether the position is better or worse as compared with previous years. On the other hand, the complaint, accepted as well-grounded by many, that the pressure on the land is growing, lends itself to the interpretation that increase in the produce of the soil is less than proportionate to the increase in the population.

In his book, *Food Planning for Four Hundred Millions* (1938), Dr Radhakamal Mukerjee estimates for India a food deficiency for 12 per cent of the population in a year of normal harvests. Mr P. K. Wattal in his Presidential Address at the last All-India Population Conference (1938) shows that during the period 1913-14 to 1935-6, while population increased at a rate of nearly one per cent per annum, crop production showed an average rate of increase of 0·65 per cent per annum. This suggests that agricultural production in India has not kept pace with the growth of population.

Dr P. J. Thomas[1] approaches the problem from the wider standpoint of the relation between population and production.

[1] *Indian Journal of Economics*, Conference Number (April 1935), pp. 737-47.

He argues that between the biennial periods 1920-21 to 1921-2 and 1930-31 to 1931-2, while the increase of population was 10·4 per cent, agricultural production increased by about 16 per cent and industrial production by 51 per cent. Taking a longer period of 30 years (1900-1930) he arrives at a similar conclusion.[1] During these 30 years population increased by 19 per cent, but if we compare the first (1900-1—1904-5) and last (1925-6—1929-30) quinquennia, it is found that while population increased by 13·5 per cent, agricultural production increased by 29 per cent; and industrial production increased much more rapidly, viz. by 189 per cent. Thus whatever period we take, there is no indication that population has outstripped production. His statistical study, he claims, shows that production has been keeping pace with population and in some lines—e.g. mill industry, commercial crops, etc.—it has increased at a much more rapid pace than population. All this progress has been kept up during the world depression—that is a significant fact—and if the condition of the masses does not bear this out, it must be due to some inequities in distribution.

The main difficulty in arriving at any definite conclusion on this point is the lack of accurate and reliable statistics of production in India.[2] This applies particularly to the official estimates of crop outturn based on crop forecasts, which either under-estimate or over-estimate—Dr Thomas holds that it is generally the former—agricultural production. In any case, it will be seen that Dr Thomas has not separately calculated figures of food supply raised in relation to the growth of population. Indeed he admits that considering the limited scope for the expansion of rice cultivation, it is likely that India will have to depend increasingly on imported rice in future, though he considers that in the steady growth of industrial production there is a large compensating factor. Let us, however, grant that since according to Dr Thomas' figures, agricultural production has been increasing more than in proportion to population and since food-stuffs constitute the bulk of our agricultural production, the supply of food-stuffs as a whole is increasing faster than population. This means that India is not suffering from over-population in its crudest and most obvious form. Dr Thomas' figures, however, do not disprove (as he himself admits) the contention that the population of India is in excess of the optimum, and the impression formed in the course of our whole argument

[1] cf. D. G. Karve, *Poverty and Population in India*, pp. 110-13 (1936).

[2] See vol. II, ch. iv.

still lingers, namely that with a slower rate of population growth, the betterment in the condition of the people will be more pronounced and less open to doubt.

§33. **Increase in wealth an indirect but powerful remedy.**— The admission of over-population as a tendency and a fact does not imply that all efforts at economic improvement are useless. Such an inference is invalid and mischievous in the highest degree. Increase of wealth, such as may be expected from a more vigorous policy directed towards agricultural and industrial progress, may express itself in increase of numbers, but to some extent it may also result in raising the standard of living. A higher standard of living once attained generally increases the will and the ability to maintain it by voluntarily restricting population.[1] Such has been the course of development in the west and we may reasonably anticipate that similar causes will produce similar effects in India. A considerable improvement in the economic condition of the people would make them realize, as nothing else will in the same degree, the necessity of bringing the increase of numbers under 'the deliberate guidance of judicious foresight'.[2] The most promising solution of the problem of over-population, therefore, would be for the people and Government to strain every nerve to hasten the economic development of the country in every possible direction. If it is true that over-population is one of the causes of poverty, it is equally true that poverty, by inducing recklessness, intensifies the evil of over-population. If, therefore, the policy of the Government in the past can be shown in its positive and negative aspects to have retarded economic development, they cannot escape all blame for the poverty of the people by merely pointing to the fact that the people of the country do not understand the importance of deliberate restrictions on the growth of population. The only way in which the Government can escape blame is by showing single-minded devotion to the interests of the country and by sparing no effort to remedy the poverty of the people.

[1] Apart from voluntary restriction of the birth-rate anything that decreases the death-rate seems in some unexplained manner to lead to a decrease of the birth-rate also. Fertility also decreases with the increase of wealth and intellectual interests. Adoption of improved measures of public health, improvement in the standard of living, spread of education, progress in emancipation of women and their introduction to spheres of usefulness and activity other than matrimony and household duties—all these items of reform are not only desirable in themselves but also in relation to the question of preventing an unduly rapid growth of population. See *Census of India*, (1931), vol. I, p. 43.

[2] J. S. Mill.

§34. **Importance of deliberate restriction.**—At the same time, if the people themselves were made to see the necessity of checking an undue growth of numbers and making them bear a proper relation to the available resources so as to maintain a high average of well-being, this would be a welcome and highly desirable change. Those who talk of the immense unexploited resources of the country and suggest that their presence is a complete justification for not exercising any prudential self-restraint in the matter of propagation confuse the possible with the actual. After all there is wisdom in the popular adage which asks a man to cut his coat according to his cloth. The means 'in hand' or 'in sight' rather than remote possibilities of immensely increasing them should be taken as a guide to determine the suitable size of the population at any given time. No doubt the globe will support a very much larger population than at present if the dreams of scientists become everyday realities and the unlimited energy of the sun and the tides is effectively harnessed in the service of man; posterity may then smile at our anxiety about the population problem. It would nevertheless be foolish to act as if all this were an accomplished fact. The attitude of the sceptic who denies all possibility of future development is no doubt to be deprecated. But at the same time we must be on our guard against the all-too-confident dogmatist who forgets the difficulties in the way of development. Further, we must remember that the most rapid advance we can conceive would absorb only a small part of the increase in numbers which is arithmetically possible. If full vent is allowed to human fecundity it will inevitably bring into the arena all the evil forces such as wars, pestilences, famines, etc. embraced by the phrase 'positive checks'. Economic development must be regarded as a temporary relief and not as a permanent cure for the evils of over-population, and it requires at all stages to be reinforced in a greater or less degree by the practice of the 'prudential restraint which distinguishes rational human beings from rabbits'.

§35. **Limitation of families: pros and cons.**—Most people readily agree that every individual should try to limit his family according to his resources, so that his children may get at least as good a chance in life as he himself. Just as seeds should not be sown too thickly if the resulting plants are not to be poor in quality, so the children in a family should not be too numerous for each to be able to enjoy reasonable opportunities for self-development. High natality generally means low vitality and a high death-rate among infants. The labour expended in trying to bring up children that eventually die for lack of proper care

and sustenance, is so much energy wasted; their brief career causes much useless suffering to the parents as well as to the other children that do manage to survive. From the individual point of view it is advisable to restrain oneself from bringing children into existence until one can reasonably count on being able to maintain them. And what is good for the individual is also good for society as a whole, for if children are persistently produced by large sections of people without forethought of any kind the general standard of living will inevitably be lowered.[1] It is a matter of common observation that the misery and suffering in many families is directly traceable to their 'devasting torrent of children'. Caution and foresight may indeed be carried too far, as in France, but the opposite evil of recklessness is equally serious, and its consequences are writ large on the face of present-day Indian society.

The mention of France leads us to another favourite argument advanced against birth-control, namely, that limitation of population may be carried to such lengths as to be a menace from the military point of view.[2] France is the classical example of this, where the state is alarmed at the refusal of the population to grow, or to grow fast enough, and efforts are being made to induce the people to raise up larger families lest Germany, the traditional enemy, with her more prolific population should wipe out France in the next inevitable war. With reference to India, however, it is easy to see that she has nothing further to desire in the way of mere numbers. More than numerical strength, what we require for military efficiency is a high standard of physical health and intellectual alertness, discipline, organization, the most up-to-date equipment for defensive and offensive warfare and a strong unifying national consciousness.

§36. **Methods of limiting population.** (*a*) *Moral restraint.*—Even among those who admit the desirability of limiting births there is no unanimity as regards the best means for the purpose.

[1] Harold Cox, *The Problem of Population*, p. 118.

[2] However, as Cox points out, 'unrestricted multiplication is in itself one of the most powerful causes of war as it intensifies the struggle for existence between the different nations, though it is often advocated as an effective protection from unprovoked aggression. As soon as a population grows big its leaders say, "Our people are so numerous, we must fight for more space." As soon as war has taken place, the leaders invert the appeal and say, "We must breed more people in preparation for the next war." How is this horrible see-saw to end? It cannot end unless all the nations of the world will agree to recognize that, since the overgrowth of population is a necessary cause of war, a moral duty rests upon each nation to limit its numbers to avoid conflict with its neighbours.'—*The Problem of Population*, p. 35.

Some people would advocate moral restraint as the only safe remedy. But although there is a tendency to underestimate the extent to which moral restraint is actually employed by middle-class families in Europe, we must admit that it will never be adopted with sufficient generality by all classes of people to be of much use in keeping down the excessive growth of population. On the whole, we may say that preaching prolonged abstinence to married people as a cure for over-population is like suggesting the cutting out of the stomach as a cure for hunger. Both have about an equal chance of being adopted. Malthus himself fully recognized this and hence the pessimistic tone of his writings. Moreover, there appears to be a respectable body of medical opinion according to which continuous self-denial over long periods is on the whole a remedy worse than the disease, on account of its harmful reactions on the mind and body of the married couple.[1]

(*b*) *Contraceptives.*—The old methods of abortion, infanticide, etc. are rightly frowned upon by law and opinion and nobody would be so foolish as to suggest a reversion to them. Their abandonment marks a step forward in ethical standards and is a welcome sign of progress. The only alternative that remains is the use of contraceptives, and the heavy decline in birth-rates characteristic of most European countries today is undoubtedly due to the widespread use of artificial methods of birth-control.

The commencement of the fall in the birth-rate in western countries has synchronized in each of them in a striking manner with the beginning of birth-control propaganda. Thus in England the fall in the birth-rate coincides in a remarkable manner with the Bradlaugh trial in 1877, when Mrs Besant and Charles Bradlaugh were prosecuted for publishing a pamphlet advocating birth-control by artificial means. Their trial attracted tremendous public interest and incidentally spread birth-control information, of which apparently large numbers of people proceeded to make practical use.[2]

The question arises as to what ought to be our attitude towards neo-Malthusianism in India. We may brush aside the common objection that it is unnatural. So is the use of clothes and cooked food and medicines and countless other things associated with civilized life. We must, however, consider other more important objections, the commonest of which is that the spread of information about contraceptives will remove one of

[1] For a statement of the principal objections to 'moral continence' see Leonard Darwin, *What is Eugenics?*, p. 36.

[2] See P. S. Florence, op. cit., pp. 31-2.

the most powerful deterrents to sexual immorality. The rejoinder, that the morality which is merely due to fear of consequences is hardly worth having, is not convincing, for prevention of irregular relations, brought about by no matter what motives, is socially desirable.[1] It may be readily admitted that among those that are tempted, there are some who are prevented from falling by the fear of detection or of producing an illegitimate child. A large number of the cases of abortion in this country are, however, prompted by the idea of concealing a crime, and the dissemination of the knowledge of contraceptives may to some extent lead to their taking the place of abortion. However that may be, it would be pertinent to ask in connexion with this discussion, what would happen to civilization if society were to act consistently on the principle of discarding everything that is liable to be misused by a section of the people. While admitting the dangers attendant upon the spread of information regarding contraceptives, it may be possible to reduce the risk by the state taking steps against a promiscuous broadcasting of such information and making it available only to those who have morally and economically valid reasons for seeking it.[2]

Indiscriminate propaganda in favour of birth-control methods may conceivably result in an increase in sexual immorality. The question at issue, however, is whether it is not worth while taking all the risks, while attempting to minimize them by judicious state control of such propaganda, in order to avoid the more serious evil of over-population.

Another objection to birth-control by the use of contraceptives is based on the consideration that it is more likely to be practised by the more prosperous and intelligent sections of the population than by the poorer who, while most in need of it, are, owing to their very poverty, the most reckless and improvident, and among whom, moreover, women occupy a lower status and have to pass through the ordeal of child-bearing often against their will. The

[1] Cox argues that there is no ground for the fear that the knowledge of the means to prevent conception would necessarily increase prostitution or the number of irregular relationships. On the contrary, some of these irregular relationships are due to the fact that many people are prevented from entering into the holy state of matrimony by the fear of unwanted children. The knowledge of methods of preventing children would hasten marriages and to that extent reduce the evils of promiscuity. See *The Problem of Population*, pp. 134-8.

[2] In England, Dr Marie Stopes has established a clinic in London for giving private advice on contraceptives. There are also a few other organizations doing the same kind of work in the poorest quarters of London. See C. P. Blacker, *Birth-Control and the State*, p. 93.

result of this is that population increases at the wrong end of the social scale, and birth-control will, therefore, lead to a progressive deterioration in the quality of the people. This view does not necessarily imply that the poor man's children are likely to be inferior in respect of innate physical and mental endowment than those of the rich man. Their excessive number, however, does make it difficult to rear them so as to bring out their best qualities. Apart from poverty and the consequent spirit of recklessness, one of the reasons why the lower classes fail to profit by the new knowledge about birth-control is that very often they do not possess it, and the remedy for this would seem to be to make it more accessible to them. One of the objections to birth-control is that the comparatively harmless methods of securing it are beyond the means of the poorer classes, who therefore have recourse to admittedly injurious ways of controlling births; and that this is a matter for grave concern, since the evils that arise in this manner are far more serious than the evil of over-population. It may, however, be questioned whether any evil could well be more serious than the evil of over-population. It is also difficult to believe that the cost of bringing up a child properly could be lower than that involved in the use of birth-control devices. Again, the complaint is often heard in the west that the higher classes tend to carry control of births to socially harmful extremes, preferring a needlessly high, not to say a frivolous, standard of life, to the burden and the joy of bringing up even a moderate number of children, and it is suggested that every form of pressure and persuasion should be brought to bear on them to make them realize that it is morally incumbent on them to give to the state as many healthy, strong and well-educated citizens as possible. 'Our aim must be to facilitate birth-control when it is desirable on all grounds, whilst unsparingly condemning its use for merely selfish motives. A dual campaign both for and against birth-control is needed.'[1] In India, however, at the present moment all sections of people are prone to over-multiplication rather than the reverse, and an organized effort for inducing a deliberate restriction of population would seem to be necessary.

§37. **Birth-control an important question for India.**—The question of birth-control has not received the serious consideration it deserves in this country and superficial objections have too long held the field. We have tried to show that it is a question which is at least 'worthy of deliberation', and cannot be summarily

[1] Leonard Darwin, op. cit., p. 38.

dismissed by vague generalizations about the 'unlimited possibilities' of economic development open before the country and a persistent refusal to try to understand the very elements of the problem of over-population.

Birth-control practices will undoubtedly take long to establish themselves in India owing to the extreme poverty of the people and the consequent weakness of the prudential motive. There is also an overwhelming mass of ignorant prejudice to overcome. The opinion is, however, steadily growing that the policy of letting things alone is doomed to failure.[1]

§38. **Migration.**—*I. Movements of population within the country.*[2]—'Of all sorts of luggage,' as Adam Smith remarks, 'man is the most difficult to be transported'—an observation which is particularly applicable to India. According to the census report of 1931, of the total population enumerated by birth-place, 350½ million odd, less than one million were born elsewhere. The essentially 'home-loving character of the Indian people is the result of economic and social causes, and of the immobility of the agricultural population rooted to the ground, fenced in by caste, language and social customs and filled with an innate dread of change of any kind'. The social cause chiefly affecting the Hindus is the caste system, which makes the life of a man away from his social circle very uncomfortable. For example, he is often unable to marry, eat or drink with members of other groups, and prolonged absence may expose him to the suspicion of having broken caste rules and to social ostracism on his return.

The economic hindrance to migration is to be found in the fact that the people of India are mainly dependent on one single calling, namely agriculture. The possession of, or interest in, a piece of land makes people unwilling to give up a certain (though unsatisfactory) livelihood for the risks of pioneering

[1] 'Not only is artificial control advocated by a number of medical writers, but Indians can now boast of a Neo-Malthusian League with two Maharajas, three High Court Judges, and four or five men very prominent in public life as its sponsors. . . . It is also significant that the Government of India sanctioned the establishment of birth-control clinics in the four principal hospitals of the State.'—*India in 1930-31*, p. 153. One of the most significant of recent developments is the keen interest which women in India have begun to show in the question of birth-control. Resolutions in favour of birth-control have become a common feature of women's conferences. Interest in the birth-control movement has been considerably stimulated by the session of the All-India Population and Family Hygiene Conference held in Bombay (April 1937).

[2] See *Census of India* (1931), vol. I, ch. iii; *Census of India* (1921), vol. I, pp. 83-9; *Census of India* (1911), vol. I, ch. iii; *Census of India* (1901), vol. I, pp. 88-95; and *Agricultural Commission Report*, pp. 581-5.

elsewhere. There is also the debilitating effect of chronic diseases—such as malaria, hookworm, etc.—which militates against the display of initiative and energy on the part of the people. Again, most villagers are in the clutches of the money-lender, who presents every possible obstacle to his debtors leaving the village.

Lastly, it is supposed that the smaller the unit of population, the larger the proportion of persons born elsewhere. If this is true, a country like India containing nearly one-fifth of the world's inhabitants must be expected to show proportionately low figures of migration. In spite of the general immobility of the population, however, there are certain definite streams of migration within the country which may be briefly noticed.[1]

(i) *Assam.*—Assam is very sparsely populated, and the land available for cultivation being ample, the indigenous inhabitants find it unnecessary to work for hire. Labour for the tea gardens in the province has, therefore, to be obtained from elsewhere. The cultivable waste land on the Brahmaputra valley also attracts a considerable stream of immigrants from other provinces.

[1] The *Census Report* (1911) notes the various kinds of migration as follows :—

(i) *Casual,* or minor movements between neighbouring villages. 'The chief cause of these minor movements is the custom, almost universal amongst Hindus, whereby parents seek wives for their sons in a different village from their own, and the fact that in some parts a young wife returns to her parents for confinement and especially for the first one.' (ii) *Temporary,* due to the migration of coolies to meet the demand for labour on new canals and lines of railway, to journeys on business and in connexion with pilgrimages, marriage ceremonies and the like. (iii) *Periodic,* due to seasonal demand for labour; for example, the annual migration to the Sundarbans, Burma, and the wheat districts of Upper India at harvest time, and the extensive movement from Bihar and the United Provinces during the cold weather months for work on roads. (iv) *Semi-permanent,* where the inhabitants of one place earn their livelihood in another, but maintain their connexion with their old homes, where they leave their families and to which they ultimately return. For example, many labourers in mills and factories in the big cities, clerks in Government offices and domestic servants, and also the ubiquitous Marwari trader and money-lender. (v) *Permanent.* This type of migration is in the nature of colonization. It usually takes place when, owing to irrigation or improved communications or changed political conditions, new lands become available for occupation. Illustrations of this type of migration are extensive colonization of Lower from Upper Burma after the annexation of the latter tract and the rush from the congested districts of the Punjab to the canal colonies as soon as the irrigation works there were completed. (vi) The latest *Census Report* (1931) adds another form of migration and describes it as *Daily,* although it is admitted that in India generally the conditions, under which the residence of the worker and the place at which he works are so far apart as to form different census units, have hardly yet arisen to any great extent.

The tea-garden industry draws its foreign population from Bihar and Orissa, the Central Provinces, the United Provinces and Madras, while settlers in the Brahmaputra valley come principally from Eastern Bengal. A third movement of the Nepalis into Assam is mostly pastoral in character. The total volume of immigration into Assam from all sources is considerable, as can be seen from the fact that nearly a quarter of the population of the province is foreign or of foreign extraction. There is still a very large area of land in Assam available for cultivation. But the prevalence of *kala azar* and other diseases, the lack of satisfactory communications and low wages prevent a more rapid absorption from other districts than is actually taking place.

There have been changes and developments since 1921, particularly in respect of the volume of migration from provinces which previously supplied the tea-garden labour. Madras is the only province showing an increase in emigration to Assam. Recruitment from Bihar and Orissa which had fallen off rapidly after 1921 largely owing to a deliberate campaign against it by non-co-operators, began to revive as a result of the popularity of the *short-term* system of recruitment. On the other hand Assam is learning to rely more and more on local labour.

(ii) *Bengal.*—More than 60 per cent of the immigrants into Bengal come from Bihar and Orissa and the rest from the United Provinces (18 per cent), Nepal (5 per cent), Assam (4 per cent), the Central Provinces (3 per cent), etc. The most important currents of immigration are (*a*) from Bihar and Orissa and the eastern districts of the United Provinces into the industrial area around Calcutta; (*b*) from the Santal Parganas into the districts of Birbhum, Malda, Dinajpur and northern Bengal; (*c*) from Nepal and Chota Nagpur into the Darjeeling and Jalpaiguri tea gardens; and (*d*) from Assam into Tripura State.

The immigration into Bengal is due to the comparatively greater fertility of the soil, the relatively greater development of industries, especially round about Calcutta, and the aversion to manual occupation which is a particularly marked characteristic of the Bengali people. Not only the manual labourers, but also the police warders in jails, peons of zamindars, etc. are for the most part recruited from other provinces. The chief feature of the internal migration in Bengal is a movement of the population of the central belt, on the one hand, towards the industrial districts around Calcutta, and on the other hand, into northern Bengal and the Assam valley.

(iii) *Bombay and Sind.*—The noteworthy feature of the immigration into the Bombay Presidency is the growing absorption

of outsiders into the large industrial and commercial cities of Bombay, Karachi and Sholapur, coming from Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces and Rajputana, Hyderabad (Deccan) and Madras. To quote L. J. Sedgwick, the Bombay Census Superintendent (1921): 'There are two streams of immigrants which reach us, one from north-west India, represented by the huge area of Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces and Rajputana; and the other coming from the south-east from Hyderabad and Madras. . . . The stream from the north goes to swell the proletariat of Bombay and Karachi; and the Hyderabad stream goes to the mills at Sholapur. . . .' Bombay is more advanced industrially than Bengal. But although it is not so densely populated, its soil being much poorer, there is a very much larger supply of local labour available. A comparatively smaller portion of the demand has, therefore, to be met from outside the province.

The net immigration from north-western India is considerable. About a third of the immigrants come from the United Provinces, two-fifths from Rajputana and the rest from the Punjab, the North-West Frontier Province and Baluchistan (the immigration from Baluchistan being mainly into Sind). As regards internal migration in the province the principal feature is the influx of population into the industrial cities from all its other parts. The Deccan, being mainly an arid tract chronically subject to agricultural depression, is throwing out its superfluous numbers to the other parts of Bombay Presidency, and it contributes to Bombay city the highest quota of all the divisions.

II. Emigration.—Burma, now separated from British India, like Assam is thinly populated and possesses a large area of waste cultivable land. For the same reasons as the Assam tea gardens, the rice mills and oil mills of Burma have to draw their labour from outside, especially from Madras. Numerous coolies also cross over from Chittagong for the rice harvest in Akyab and for rice-milling, etc. in Rangoon. The total immigrant population of Burma is 707,000 persons, of whom 573,000 are Indians. Indian immigrants increased during the intercensal period 1911-21 by 16 per cent. The census of 1931 showed an increase of 21,000 immigrants on the 1921 figure. The non-permanent nature of this movement is shown by the small number of females as compared to males. Madras sends the largest quota of immigrants, after which come Bengal, the United Provinces and the Punjab. The Indian immigrant is now mostly engaged in urban industries and does the heavy manual work for which the Burman has no taste.

However, with the political separation of Burma with effect from 1 April 1937, the growing self-consciousness of the Burmese (exhibited from time to time in anti-Indian riots) and the increasing economic pressure due to the growth of the indigenous population, migration to Burma is becoming more and more difficult for the people in the congested areas of British India.

There are at present about 3 million Indians resident abroad. Nearly all of them are resident in other parts of the British Empire. Only about 1,000,000 have emigrated during 1921-31. The distribution among the different parts of the Empire is roughly as follows:—

Ceylon ...	... 779,000	Fiji Islands ...	... 75,000
British Malaya	... 624,000	Kenya ...	... 27,000
Burma ...	... 573,000	Tanganyika ...	... 23,000
Mauritius ...	... 269,000	Jamaica ...	... 17,000
South Africa	... 165,000	Zanzibar ...	... 15,000
Trinidad ...	... 139,000	Uganda ...	... 12,000
British Guiana	... 130,000		

The number of Indians living in foreign countries outside the Empire is very small, and is believed not to exceed 104,000 in all. Among the most important countries for Indian emigration at present are Malaya and Ceylon. The recruitment of Indian labour for Malaya was stopped in August 1930 on account of the fall in tin and rubber prices, and repatriation on a considerable scale took place in 1930 and 1931. In the case of Ceylon recruitment of Indian labour for rubber estates was stopped in 1930 and 11,000 Indians were repatriated in 1931, but otherwise emigration continued. Apparently, however, the absorption of Indian labour in that country has nearly reached saturation point.[1] Indian emigration has been broadly of two kinds. The first was that of unskilled labourers under indenture, as in the case of Fiji, Mauritius, Natal and the West Indies, or under some special system of recruitment such as was adopted in Ceylon and Malaya. The second is the spontaneous emigration of people belonging to the professional, commercial and artisan classes. The scope of the latter kind of emigration has been wider than that of the former and it has penetrated to places that never came under any system of assisted emigration. This applies, for example, to the self-governing dominions, with the exception of South Africa and certain crown colonies, especially of the East African territories.

[1] The table given above represents the position in 1931 after repatriations from Malaya and Ceylon had taken effect.

The majority of the emigrants work as agricultural labourers on plantations of rubber, tea, coffee, etc. Indentured labour emigration was stopped in March 1917, and as a result the volume of emigration has shrunk very considerably. The resolution of the Imperial Conference of 1921 reaffirmed the principle that each community of the British Commonwealth should enjoy complete control over the composition of its own population by restricting emigration from any of the other communities, and most of the countries within the Empire have exercised their right of regulating immigration so as to discourage, if not altogether exclude, Indian immigrants. The reasons may be political, racial, or purely economic; but the unpleasant fact must be faced that emigration as a remedy for relieving congestion at home is practically impossible so far as the Indian population is concerned.[1] The *Census Report* (1931) notes that in spite of a rapid and heavy increase in population during the decade, there had been even less relief by emigration than in previous periods.

Owing to the various restrictions described above, emigration outside the limits of India has recently been unimportant. The possibilities of emigration are confined to the tropical and sub-tropical parts of the British Empire. Apart from British Malaya, Burma, and Ceylon, which may be expected for some time to absorb at the most about 140,000 persons annually from India, there is a prospect of considerable emigration to British Guiana where there is still great scope for the expansion of cultivation. The present population in British Guiana is about 304,000, but the country is capable of supporting ten times that number and is peculiarly suited to being settled by Indians. Under the Emigration Act of 1922, a scheme of Indian emigration into the colony has been approved, but has not yet been brought into operation because the terms are held to be unremunerative by the planters. The Agricultural Commission strongly commend the scheme as worthy of further investigation 'for the possibility of doubling

[1] It is not necessary to enter into details in connexion with the various phases of the emigration policy of the Government of India. The numbers involved at the present moment are insignificant and the question cannot be regarded as in any sense vital from the point of view of easing economic conditions in this country. The Emigration Act of 1922 proclaimed *assisted* emigration of *unskilled* labour to be unlawful except for such countries and on such terms and conditions as might be specified by the Governor-General-in-Council. There is also a Standing Emigration Committee of the Indian Legislature to advise the Government on all major emigration questions such as the fixation of standard wages of unskilled emigration workmen, terms of colonization of Indian settlers, etc.

the Indian population is not to be lightly disregarded'. (*Report*, par. 510.)

§39. **Eugenics.**—The human being is the most important machine in the production of wealth, and whatever improves the physique, intellect and character of the people also adds to their economic strength and efficiency. The subject of heredity has been much studied in recent years in its bearing on the improvement of plants and animals of economic value, and important practical results have been achieved in this direction. The remark is often made that what man has been able to do for plants and domestic animals, he has never been able to do for himself. But the difficulty in studying heredity with reference to human beings and applying its laws so as to improve the race, has been that it is impossible within wide limits to experiment with human beings or to treat them like plants and animals in the matter of mating.

It is nevertheless of the utmost importance for the welfare of the race that its perpetuation should depend, as far as possible, on those individuals who are best suited to serve the needs of the community. This has become all the more urgent because the tendency of modern civilization is to eliminate some of those factors which make for the destruction of the physically and mentally unfit. Under primitive conditions the weaklings had small chance of surviving in the struggle for existence or of propagating their kind. Those who were exceptionally courageous and resourceful would for instance get more wives than the weaker members and would, therefore, be more prolific. In modern times, however, owing to improved sanitation and progress in medicine and surgery, together with the growth of the humanitarian spirit, natural selection has ceased to operate.[1] There is no effective ban on the physically unfit, the mentally unsound and the morally degenerate carrying in them the seeds of hereditary disease, marrying and perpetuating their stock. Owing to the difficulties connected with scientific observation and experiment, the science of eugenics has been advancing very slowly, and our knowledge of the laws of heredity in their application to the inheritance of human characters is still very meagre. All we can do at

[1] It must, however, be remarked that natural selection under primitive conditions did not necessarily bring about the survival of the best. As has been well said, natural selection often preferred muscle to brain and low cunning to artistic genius. Again, the advance in medicine and sanitation undoubtedly increases the economic efficiency of the community as a whole. All the same, the proposition is incontestable that, under modern conditions, many more unfit people are enabled to survive and breed than would have been possible under primitive conditions.

present is to draw certain deductions regarding human beings from the rules which the animal-breeder finds it profitable to observe. Any practical scheme of eugenics would have a positive and a negative aspect. That is, it would aim at encouraging the reproduction of the specially fit and discouraging or preventing the production of the specially unfit. In India, certain rules apparently of eugenic value are followed in arranging marriages. For example, marriage is prohibited within certain degrees of relationship. Again, the castes are divided into certain exogamous sections or *gotras*, the members of which are regarded as so closely related that they are not permitted to intermarry. It has been questioned, however, whether this particular taboo has any scientific basis.[1] On the other hand, there are certain practices in India which must cause the deterioration of the race. Constant inbreeding among the members of 'microscopic endogamous subcastes'[2] is one of these. On the whole, India stands as much in need of enlightenment on the laws of human heredity as any other country. It is indeed futile to hope that even with the fullest enlightenment spontaneous action will secure the propagation of the most desirable stocks. At the same time, even in the most advanced western states, legislative schemes of positive eugenics are at present out of the question, because they will be resented as unduly infringing on the liberty of the individual. Certain countries have however already embarked on tentative experiments in eugenic legislation. Thus in the United States of America, the State of Nebraska forbids the marriage of anyone suffering from venereal disease. The State of Connecticut forbids the marriage of epileptic or feeble-minded persons. Montana sterilizes its idiots and epileptics by an operation which leaves the sexual function undisturbed while destroying the power of reproduction. It has been suggested that sterilization may be resorted to in the case of hardened criminals and other undesirable types.[3] In most countries, however, in the present state of public opinion and sentiment, it is not possible to go very far in the direction of popular eugenic legislation. But the state may do something towards educating public opinion by spreading information and offering advice on this important subject.

§40. **Public health and sanitation.**—The importance of public health and sanitation in maintaining the economic efficiency of the

[1] S. V. Karandikar, in his *Hindu Exogamy*, pleads for a loosening of the extravagant and unmeaning exogamous restrictions which Hindu society has imposed upon itself.

[2] See Karandikar, op. cit., p. 288.

[3] See Blacker, op. cit., pp. 67-9.

people cannot be overrated. The prodigious mortality in India due to such scourges as plague and influenza, malaria, smallpox, relapsing fever, etc., is economically disastrous on account of the dislocation in the machinery of wealth production which it causes. In England, during the last 70 years, enormous strides have been taken in the improvement of public health, and as a result, typhus, cholera, scarlet fever, and diphtheria have been practically wiped out. In India, the listlessness, lassitude and apathy characteristic of the people are largely the result of diseases like hookworm and malaria, 'the sinister performers in the grim tragedy of the endemic diseases played out upon a stage upon which no curtain ever falls'.[1] These diseases seize and devitalize many more people than they actually kill, and it is impossible to overestimate the economic advantage that would accrue from stamping them out. Systematic and widespread instruction of the people in health and hygiene is necessary, and the Departments of Public Health need to be further strengthened. The initial expense would be heavy but it would be well worth while, as the results in higher economic efficiency, although not immediate, would be great and certain.[2]

§41. **Education.**—In order to develop the economic efficiency of a people to the fullest extent, general knowledge and intelligence as well as special training in particular vocations is necessary. In India, both as regards general and technical education, most of the work still remains to be done. But this is a topic to which we shall have to revert later on in connexion with agricultural and industrial progress.

§42. **Racial aptitudes.**—Economic progress is also a matter of innate racial capacity, and certain races have shown no aptitude for it. It is, however, a dangerous thing to indulge in facile generalizations about the superiority of some races and the inferiority of others. Many of these generalizations are no more than summaries of existing facts. Because the Indian people happen to be backward economically and culturally at the present time, some writers pretend that they are inherently incapable of scaling the heights of civilization attained by European nations.

[1] Lord Ronaldshay.

[2] 'Public expenditure on national health is like expenditure on a life-boat or a fire-engine; even more, it is like a long-term investment. It yields the interest with absolute certainty, a hundred-fold—but only in the course of years and sometimes in the course of generations. Sometimes we hear the idle question, "What is the use of all our expenditure on health?" It is often asked by persons who do not reflect that their welcome presence among us alive, alert, and competent is itself the answer.'—*Annual Report of the Chief Medical Officer of the Ministry of Health* (England), 1921.

It is thus, we imagine, that an Indian observer might have generalized about the inhabitants of the British Isles who were tattooed savages roaming about in the forests when the Indian himself could boast of a mighty civilization. If it had been suggested to him that the descendants of these savages were destined to rule over India, he would have greeted the suggestion with pardonable contempt and incredulity. The miracle has nevertheless happened, and it is now the turn of the Indian to prove his claim to be considered capable of civilization. The course of history is strewn with fatuous judgements on one people by another. Towards the end of the eighteenth century, western Europe looked upon the Russians as semi-savages, and D'Alembert and Diderot could not think it possible that they should ever be civilized up to the European standard. The negroes are still generally regarded as incapable of ever attaining equality with white races and, as regards Indians, the view has sometimes been expressed that, like all brown races, they are incapable of continuous progress, being subject to 'some strange fiat of arrest'[1] which condemns them to an eternal reproduction of ideas and to long periods of immobility succeeding brief intervals of advance. Such views stand condemned if only because they ignore the obvious fact that the Indian people do not constitute one single race but that various racial strains have entered into their composition. Further, it is a matter of common knowledge that it was the great civilization and wealth of India that attracted foreign adventurers to it. Even in their present fallen estate, competent observers have been able to discern elements of greatness in the people of India and have admitted that, given a fair chance, Indian brains are no whit inferior to European brains.[2] Nor is it true that they are averse to or incapable of applying them to the task of economic organization and advancement. There is therefore no need for the Indian people to allow themselves to be borne down by any overwhelming consciousness of hopeless and irremediable inferiority as regards aptitude for economic progress.

[1] Meredith Townsend, *Asia and Europe*, p. 9.

[2] In an address he delivered in Johannesburg on 26 August 1919, General Smuts used the following words: 'I do not look down on Indians. I look up to them. . . . There have been Indians who have been amongst the greatest men in the history of the world. There have been Indians who have been amongst the greatest leaders of the human race, whose shoes I am unworthy to untie.'

CHAPTER IV

SOCIAL AND RELIGIOUS INSTITUTIONS

§1. **Influence of social and religious institutions on economic activity.**—Social and religious institutions and ideals exercise a profound influence on economic activity, and it will be our task in this chapter to describe the institutional basis of economic life in India and consider how far the more important of these institutions help or hinder the economic progress of the people. That the religious and social background of economic life in India requires a special study need not be laboured. For it is evident that the various aspects of Indian economic life have received their peculiar shape and mould from the characteristic social and religious institutions of the land.[1]

§2. **The caste system.**—The caste system constitutes the most noteworthy feature of Indian society, and we may begin our discussion of it with the standard definition of caste.

A caste has been defined as a 'collection of families or groups of families bearing a common name which usually denotes or is associated with a specific occupation; claiming common descent from a mythical ancestor, human or divine; professing to follow the same calling; and regarded by those who are competent to give an opinion as forming a single homogeneous community. A caste is almost invariably endogamous in the sense that a member of the large circle denoted by the common name may not marry outside that circle; but within this circle there are usually a number of smaller circles, each of which is also endogamous. Thus, it is not enough to say that a Brahmin at the present day cannot marry any woman who is not a Brahmin; his wife must also belong to the same endogamous division of the Brahmin caste.'[2]

The caste system in India must be distinguished from the numerous social gradations that exist among all nations. These latter are not divided into so many watertight compartments, and

[1] 'The sociological life of the people has determined in India systems of land tenure, the organization of the village life . . . : and the joint family and the caste system have regulated from times immemorial the rights of the individual as a member of a family, as a member of society and as a member of the guild or trade to which he was attached by birth.'—H. S. Chatterji, *Indian Economics*, p. 80.

[2] *Imperial Gazetteer of India*, vol. I, p. 311.

there is no religious taboo to prevent the passage of an individual from one social stratum to another. There are also no restrictions as regards marriage, and everybody is at liberty to choose whatever profession or occupation he likes. Under the caste system, on the other hand, Hindu society is divided into an immense number of entirely separate groups, small and large, the conduct of whose members is restricted by an elaborate code of caste rules. They are prohibited from intermarrying and commonly also from inter-dining with members of the other groups, especially those supposed to be inferior in status. In India, 'birth determines irrevocably the whole course of a man's social and domestic relations and he must through life eat, drink, dress, marry and give in marriage in accordance with the usages into which he was born'.[1]

§3. **Three main types of castes.**—Castes are divided into three main types, the functional, the racial and the sectarian. The most important of these are the functional castes, representing the various occupations that were followed in earlier times before the introduction of machinery.[2] Instances of the functional castes are the Brahmin or the priestly caste, and the trading or Bania castes which include, among others, the Khatri of the Punjab, the Agarwal and Oswal of Rajputana. It would be tiresome to enumerate all the functional castes. They include artisans such as weavers, carpenters, potters and goldsmiths; village servants such as cowherds, barbers and washermen; and various other occupations such as astrologers, oil-pressers, cattle-breeders and musicians. The racial castes are numerous in all parts of India. In Bengal, we have the Rajbansi, Chandal, etc.; in the United Provinces and Bihar the Bhar, Chero, etc.; in Rajputana and the Punjab the Jat, Jujar and Meo; in Bombay the Koli and Mahar; and in Madras the Nayar, Paraiyan, etc. The sectarian castes

[1] *Imperial Gazetteer of India*, vol. I, p. 323. Dr G. S. Ghurye mentions the following salient features of the caste system in India: (1) Segmental Division of society, (2) Hierarchy, (3) Restrictions on feeding and social intercourse, (4) Civil and Religious disabilities and privileges of the different sections, (5) Lack of choice of occupation, and (6) Restrictions on marriage.—*Caste and Race in India*, pp. 2-18.

[2] 'Community of occupation can scarcely be regarded as the sole basis of the caste system. Because, as Sénart observes, if this were so, the institution would have shown less tendency towards sub-division and dislocation; the factor making for unification in the first instance would have maintained the cohesion. If the community of occupation had been the sole or even the principal basis of the caste system we should have had all persons following the same occupation constituting only one caste. But as we know this is not the case. For instance, all weavers even in the same region do not always belong to the same caste.'—Risley, op. cit., pp. 269-70.

are those that have originated from religious sects, such as the Lingayat caste in Bombay, founded by a religious leader who denied the supremacy of the Brahmins.[1]

§4. **Origin of the caste system.**—According to James Mill's theory, the original division of society into castes must have been the work of some inspired individual who foresaw the advantages of a systematic division of labour. He thought that the subordination of one caste to another was due to the superstitious terror felt by the weaker members of the community and to the designing lust for power characteristic of the priestly caste, which succeeded in securing for itself the position of the premier caste to which all the others owed veneration and respect. Next to calamities sent by Heaven, the ravages of war which the priestly class pretended to be able to avert are to be dreaded most, and so the military class occupied the next place of importance after Brahmins, and so on.[2]

According to Sénart's theory 'caste is the normal development of ancient Aryan institutions, which assumed this form in the struggle to adapt themselves to the conditions with which they came into contact in India'. In developing this proposition he relies greatly upon the general parallelism that may be traced between the social organization of the Hindus and that of the Greeks and Romans in the earlier stages of their national development, the difference being that the distinctions in India became rigid and stereotyped, while this did not happen in Europe.

'Distribution over a wide area, tending to multiply groups; contact with the aborigines encouraging pride of blood; the idea of ceremonial purity, leading to the employment of the indigenous races in occupations involving manual labour, while the higher pursuits were reserved for the Aryans; the influence of the doctrine of metempsychosis, which assigns to every man a definite status determined by the inexorable law of *karma*; the absence of any political power to draw the scattered groups together; and the authority which the Brahminical system gradually acquired—these seem to be the main factors of M. Sénart's theory of caste.'[3]

[1] See *Encyclopædia of Religion and Ethics*, vol. III, p. 231.

[2] See *Encyclopædia Britannica*, eleventh edition, article on Caste.

[3] Risley, op. cit., p. 267. In explanation of the recent development of the caste system Dr G. S. Ghurye observes that the lack of rigid unitary control of the state, the unwillingness of the rulers to enforce a uniform standard of law and custom, their readiness to recognize the varying customs of different groups as valid have helped the fissiparous tendency of groups and fostered the spirit of solidarity and community of feeling in every group. Dr Ghurye also thinks that 'the multiplicity of the groups and the thoroughness of the whole system are due to the habit of the Hindu mind to create

§5. **The rigidity of the caste system.**—The various theories of the origin of caste and its later evolution must all be pronounced more or less inadequate as they fail to explain fully what requires particular explanation, namely the unparalleled rigidity of the caste system in India—a rigidity which was further enhanced when the system crystallized in opposition to the successive waves of Mohammedan invasions between the twelfth and the eighteenth centuries and thus reacted in a most unexpected manner to the essentially democratic influences of Islam. There is reason to believe that in the early stages of its development the caste system was fluid in character, at least so far as the first three castes were concerned. How exactly this original fluidity was lost must for ever remain a question incapable of precise determination. It may be that the original taint of inferiority attaching to the Sudra caste, either because it represented a conquered race of aborigines (Dasyus) or for some other reason, acted as a leaven which in course of time permeated the whole social system. It is also possible that the great importance attached to the proper performance of ritual and sacrifice among the Aryans concentrated power into the hands of the group which specialized in the performance of religious functions, enabling it to use this power for its own social aggrandizement. It may also be that various other factors referred to by M. Sénart as noted above had their due share in bringing about the final result. There is difficulty in accepting the suggestion that the settled state of society in India favoured the growth of caste by ensuring the continuity of functions through several generations and thus fixing the principle of inheritance and heredity,[1] for such stationary conditions prevailed throughout Europe before the Industrial Revolution without bringing about a social organization comparable in its rigidity to the caste system. For a similar reason we are constrained to reject as inadequate the contention that the undeveloped state of communications together with the ignorance of the masses, by making social intercourse difficult confirmed the caste organization.[2] These explanations at best suggest how the movement towards rigidity, when once started, was helped forward. They do not tell us how it originated. On the whole, therefore, the question of the origin and development of the caste system must be given up as 'an insoluble and unprofitable conundrum'.

categories and to carry things to their logical end which characterize their literature, philosophy, and religious creeds.'—*Caste and Race in India*, pp. 147-8.

[1] See Wadia and Joshi, op. cit., p. 124.

[2] ibid., pp. 124-5.

§6. **Merits and achievements of the caste system.**—One of the animating principles which may be said to have once rationalized the caste system is that of division of labour, which makes for economic strength and efficiency. At one time or another, professions in most countries were hereditary in practice, if not in theory, and there were obvious advantages attaching to the hereditary system, under which the son naturally imbibed the secrets of the family occupation and acquired proficiency in it with the minimum of effort in the congenial atmosphere of home, and under the affectionate care of the father. This was especially important when there was no organized system of public instruction and when a high premium was placed on manual dexterity. The system gave the father help at a cheap rate and afforded the easiest introduction to life for the son, who inherited the custom and the reputation of his father as the most important part of his legacy. The value of transmitted skill in the crafts was very great, and the hereditary principle helped this transmission. So long as this principle was worked in a natural and rational manner it could not be open to any objection. This, however, ceased to be the case as soon as the adoption of a new profession became not merely unusual but wrong and punishable.

The functional castes have often been compared with the medieval guilds in Europe and have been regarded as beneficent agencies fostering the recognition of mutual bonds created by common pursuits. Like the old trade guilds of Europe, they served the purpose of mutual benefit societies for their members by training apprentices, by promoting good feeling among the members, by providing courts of arbitration to settle disputes, by regulating wages and profits of their members and by helping them occasionally in distress.[1] 'The caste organization is to the Hindu his club, his trade union, his benefit society, and his philanthropic society.'[2] It must, however, be noticed that the European guilds differed from the castes in certain important particulars. In the first place, the guilds were voluntary associations which the castes are not. Secondly, although in the guilds the sons of existing members enjoyed great advantages as apprentices, qualified strangers were admitted, at any rate before the guilds degenerated into close monopolistic corporations. Moreover, intermarriage was permitted and was purely a matter of social feeling. In India, the admission into a particular caste has been entirely a matter of heredity, and intermarriage is strictly

[1] See H. S. Chatterji. op. cit., p. 92

prohibited. Again, in the case of European guilds, 'the common occupation was a real tie, a source of strength in the long run against the nobles and kings, not a symbol of disunion and weakness like caste in India'. Some writers have held that 'like the guilds of the Middle Ages in Europe the castes may have developed and fostered art and industry' and that 'the system may have preserved the wonderful mechanical skill and dexterity of the artisan classes in the face of foreign competition'.[1] While there is undoubtedly some truth in this view, it is also quite possible that the lack of adaptability and general unprogressiveness which characterize the Indian crafts at the present day may be due to the trammels of the caste system, which must have tended to check natural advance.[2]

In defence of the caste system it may be granted that in the days of the Aryan invasion it probably helped the collaboration of races and co-operation of cultures.[3]

Probably it also enabled Hindu society to face the shocks of political invasion without itself suffering dissolution. Further, the caste system may be admitted to have led to the fundamental stability and contentment of Indian society. Till recently, career and occupation were settled in India entirely by the birth of a person. This saved him from the worry and the restlessness incident in modern society to the choice of an occupation. The occupation being fixed for a person at his birth, he was protected from 'the canker of social jealousy and unfulfilled aspirations'.

§7. **Caste system indefensible in its present form.**—All that can be said in favour of the caste system, however, applies only to the time when it had not assumed its modern chaotic aspect. In its present development it deserves only unqualified denunciation. It is one of the greatest drags on progress in every direction which the perverted ingenuity of man has devised for his undoing.

[1] See Wadia and Joshi, op. cit., p. 126.

[2] 'A guild may expand and develop; it gives free play to artistic inspiration; and it was the union of the guilds that gave birth to the free cities of the Middle Ages. A caste is an organism of a lower type; it grows by fission, and each step in its growth detracts from its power to advance or even to preserve the art which it professes to practise.'—Risley, op. cit., p. 270.

[3] 'The system of caste is in reality neither Aryan nor Dravidian but was introduced to meet the needs of the time when the different racial types had to live together in amity. The only way of conserving the culture of a race which ran the great risk of being absorbed by the superstitions of the large numbers of native inhabitants was to pin down rigidly by iron bonds the existing differences of culture and race. Unfortunately, this device to prevent the social organization from decay and death ultimately prevented it from growing.'—S. Radhakrishnan, *Indian Philosophy*, vol. I, pp. 112-13.

Whatever its initial merits it has at present degenerated into a vast engine of oppression and intolerance and a malignant force making for social and political disunity and weakness.[1] If it is fair to describe Indian nationality at the present moment as a crazy quilt of patches with no warm sense of unity binding its different parts, this is to no small extent due to the operation of the caste system. In India the caste system has prevented the evolution of a strong nationality, which has been promoted elsewhere by a process of unrestricted crossing between the different races inhabiting a common territory. It is probably the greatest political handicap under which the Indian people are labouring at present and it has often been a source of political weakness in the past. For example, there is much force in Professor Jadunath Sarkar's contention that the downfall of the Maratha empire was largely due to the unhealthy development of the caste spirit. It is impossible for the Indian people to realize their economic destiny to the full without political emancipation, and the caste system undoubtedly acts as a formidable obstacle to the attainment of political swaraj.

§8. **Endogamy and racial degeneration.**—One of the points urged in favour of the caste system is that it tends to preserve the purity of certain superior racial stocks and that the Hindus are not the only people who have adopted elaborate devices to maintain this purity. But nowhere else is to be found the strict adherence to the principle of endogamy peculiar to the Indian caste system, which leads to constant inbreeding and ultimately to the deterioration of the superior stocks. Moreover, while in some castes there is a great excess of males and in others a great excess of females, the caste system prevents the attainment of sexual parity, as the deficiency in one caste cannot be remedied by the superabundance in another. This is in some measure responsible for the social evil of heavy dowries and the persistence, in certain parts like the Punjab, of the practice of infanticide.

§9. **Caste prevents correspondence between aptitude and function.**—One of the most serious disadvantages of the caste

[1] 'The population of a district or a town is a collection of different nationalities, almost different species, of mankind that will not eat or drink or intermarry with one another. It is hardly too much to say that by the caste system the inhabitants of India are differentiated into 2,000 species of mankind, which in the physical relations of life have as little in common as the inmates of a zoological garden.'—Bampfylde Fuller, *The Empire of India.* This is rather a heightened way of putting the matter, but there is no doubt that the extraordinary heterogeneity of the Indian population is mainly due to the caste system.

system is that it prevents that close correspondence between inborn capacity and industrial function which is such a fundamental element in economic progress and welfare. 'The moment you divide your men into watertight compartments on the mere accident of birth irrespective of their temperament and qualifications and at the same time refuse them their birthright to develop their natural capacities and faculties to the highest possible limit, you deny your nation all the advantages that otherwise would have added to the store of national wealth and well-being. We do not know how much harm is being done to the economic activity of the people, by putting men in the wrong places, denying as it does equal opportunities to all.'[1]

§10. **Immobility of capital and labour.**—Another great drawback is that the caste system prevents free mobility of capital and labour. Mobility of labour is hindered by making difficult a change of occupations or of place. As under the old system of handicrafts the artisan uses his own capital, immobility of labour necessarily implies immobility of capital as well. Furthermore, the system leads to the formation of rigid non-competitive groups, leading to the overcrowding of certain occupations and an undue advantage being given to others that lie strongly entrenched behind the caste walls artificially protecting them from external competition.

§11. **Caste a hindrance to large-scale enterprise.**—The caste system impedes the progress of large-scale enterprise in various ways. In the first place, there is a lack of speedy adjustment between demand for and supply of a particular kind of labour. In the second place, the system militates against the minute subdivision of labour characteristic of modern large-scale production. Besides, owing to the caste system it is difficult to bring together intellect, manual labour and capital, which are often isolated from each other, forming separate castes.[2] Then again, consumption becomes localized and sectarian, as every caste distinguishes itself from every other in its mode of living by many differences of food, apparel, utensils, etc. A very large variety of commodities has, therefore, to be produced, but each single commodity on a small scale.[3] The result is that though the country is large, the

[1] S. V. Ketkar, *Indian Economics.*

[2] The failure of early joint-stock banking in India has been attributed, *inter alia*, to the fact that one of the helps to success under conditions prevailing in India was often lacking, namely that a bank should consist, if possible, of men of the same caste to ensure harmonious working.

[3] This contention, it must be admitted, loses much of its force when, as in the case of some castes, the membership runs into millions.

scale of production tends to be small, making economies of large-scale production difficult of realization. Another minor point is that improvement in the economic conditions of the socially lower classes is not always reflected in a better standard of life, there being no chance of the lower classes being admitted into the fold of the higher classes and thus by force of example adopting the superior standard of the latter.

§12. **Caste and dignity of labour.**—The caste system produces among the higher castes a disinclination towards certain occupations and forms of labour normally followed by the lower castes, and thus often prevents them from improving their economic position and intensifies the evil resulting from the overcrowding of certain so-called genteel professions. It is true that in Europe people have no illusions about the dignity of labour, the tendency being not towards an apotheosis of work but rather towards its reduction and more even distribution. At the same time, everybody feels entirely at liberty to follow what occupation he likes in order to advance his material welfare and, on the whole, no form of honest labour is regarded as degrading in itself and there is no such thing as a man losing his caste and incurring social obloquy because he chooses to follow some other than the ancestral occupation. This promotes mobility of labour and capital and makes for economic strength. Another loss entailed by the caste system comes from the existence of caste prejudices against the use of certain methods of improvement in agricultural and industrial production. The objection to the use of bone, fish and night-soil as manure for agricultural land entertained by many castes is an instance in point.

§13. **Caste antagonistic to principle of equality.**—The caste system is a negation of the beneficial principle of equality and injures the higher as well as the lower castes. It breeds in the former a false and distorted sense of superiority, and in the latter a mental attitude fatal to the development of self-respect. An extreme example of this is offered by the depressed or the untouchable classes, who are subjected to unheard-of humiliation and to many disabilities not only social but also economic. The unfortunate victim of this system 'is constantly a loser in ordinary commercial operations through his inability to enter a shop or even to pass through streets where shopkeepers dwell. Social ostracism so degrading, persisting through immemorial centuries, has naturally constituted a most serious obstacle to manliness, independence and capacity towards self-help.'[1]

[1] *Moral and Material Progress Report* (1923).

§14. **Influence of western civilization on caste.**—The influence of western thought and the introduction of so much of the modern machinery of civilization (e.g. railways) is tending in some measure to break down the barriers of caste. Owing to the linking up of the village with the outside world and the growth of trade and modern industry, an increasing number of people have begun to find it advantageous to give up their old traditional occupations and seek employment in the new mills, mines and workshops. Members of the higher castes are being driven by the stress of economic circumstances to follow professions hitherto assigned exclusively to classes lower in the social scale. Many Brahmins, for instance, are setting up as tailors, traders, shopkeepers, etc. Vocation is, therefore, no longer a sure index of caste. The exigencies of railway travel again have led to the relaxation of certain taboos on food, drink and personal contact—a process helped by western education with its levelling tendencies.[1]

Western education and culture, university and college life where the low caste man rubs shoulders with the high caste man, the growth of large towns, the influence of the ruling race, the development of a spirit of scepticism, are all undermining the spirit of caste exclusion. While reducing among the higher classes the inclination to insist on their privileges, they are making the lower classes less disposed to admit without question the superior status of the higher castes. Again, there is now only one law applicable

[1] '. . . the rules about the diet and contact with other castes rest upon a metaphysical theory of ceremonial pollution which admits of many exceptions. Ever since the time of Manu it has been recognized that the devout traveller, when in danger of starvation, must pocket his caste scruples and satisfy his hunger as best he can. In modern times, and especially since the introduction of railways, this comfortable doctrine has been developed and elaborated by Brahminical casuistry. It has long been held, for example, that sweetmeats, a generic and elastic term, which includes all the promiscuous messes sold on the railway platforms, may be taken from almost anybody. Nice inquiries about the caste of itinerant vendors of sweetstuffs cannot be prosecuted from the window of a third class carriage during the short stoppage, and a modern proverb sums up the position in the practical query, "You have eaten the food he gave you, why ask about his caste?" On the same principle the wise man finds it convenient to forget that ice was once water, that soda water, before it found its way into a cunningly contrived bottle, owned the same humble origin and did not necessarily come straight from the Ganges; that certain essences and extracts used for medical purposes bear an ascertainable relation to beef, and that imported biscuits must have passed in their making through the hands of all sorts of casteless folk. Nor is he so indiscreet as to inquire at how many paces' distance his neighbour can convey pollution, when he must in any case rub shoulders with him in the railway carriage for twelve hours on end.'—Risley, op. cit., pp. 279-80.

without distinction to high and low, and the State no longer encourages the pretensions of the higer classes, nor does it favour their admission to the superior posts in Government service.[1] On the contrary, appointments are now preferably given to the lower castes and a sort of inverted caste system is being introduced. The lower castes are becoming more self-conscious and alive to the necessity of removing their old disabilities by concerted communal action. This tendency has manifested itself even in the lowest of the low castes like the Mahars, who are now making organized efforts to assert their rights. The Hindu-Moslem tension, again, is making even conservative Hindus more amenable to the influence of ideas of social reform and social equality. The very existence of the Hindus as a community, it is felt, depends upon their putting their house in order, which means, among other things, that the caste system must go or at any rate must be altered beyond recognition. Various Hindu political leaders have started a crusade against the caste system and Mahatma Gandhi has initiated a movement particularly directed towards the removal of the curse of untouchability.[2]

§15. **Vitality of the caste system.**—In spite of all this, however, it would be a mistake to suppose that the caste system is moribund. Unfortunately, it still holds sway in practically unabated strength. The hold of caste is so strong on the Indian mind that it has even affected communities like the Mohammedans whose religion places such strong emphasis on the complete equality among the followers of Islam. Recent events seem to have intensified some of the evils of the caste system. More especially the new reforms have assuredly tended to increase the bitterness and ill-feeling between the various communities by leading to a scramble for political power. We have referred above to the general awakening among the lower castes, and although this is a welcome development in many ways, in practice it is often seen that devotion to one's own caste means a fanatical hatred of the superior castes, and much energy is thus being wasted in feeding fat the ancient grudge against the higher castes.

[1] Regarding the varying attitude of the British Government towards the caste system and the influence of British administration generally, see G. S. Ghurye, op. cit., pp. 158-64.

[2] Readers will remember the sensation caused by Dr Ambedkar when in 1936 he announced his intention to leave the Hindu fold along with his followers and embrace any other faith promising equality of treatment to Harijan converts, and the determined attacks delivered from the most unexpected quarters on the citadel of orthodox caste-ridden Hinduism which made it possible for an enlightened depressed-class Hindu to entertain the thought of desertion.

The new rights conferred on the people by the reforms are not infrequently misused to foster narrow sectional interests to the neglect of the wider national interests; and the various castes with their improved organization and strengthened self-consciousness are made to serve as a ready-made system of standing political caucuses. While the different castes are giving free vent to their grievances against the castes higher up, they are generally not prepared to treat on terms of perfect equality the castes lower than themselves in the social scale. Like many levellers they wish to level *down* as far as themselves, but they cannot bear levelling *up* to themselves. Brahminism is, indeed, everywhere on the defensive, but the spirit of Brahminism still persists and has permeated the lower castes.

§16. **Remedy for the evils of the caste system.**—When one thinks of the manifold evils of the caste system, one is tempted to sigh for some powerful, benevolent despot who would shatter to bits the present social structure and refashion it on more sensible lines. But there is no prospect of a despot appearing, and it is doubtful whether any despot would ever command the colossal power that would be required for putting through the Herculean task of demolishing the caste system. A social revolution as a destroyer of the Indian caste system would have to be on a vast scale—much vaster, for example, than the French Revolution, and possess far greater transforming energy. But a revolution of this character is scarcely possible. There is no single caste sufficiently powerful to lead it, and there is no single enemy to fight. Every caste would be opposed to every caste above it. It would be a case of a war waged by a non-existent army against an enemy who is nowhere because he is everywhere. We must thus come to the prosaic and commonplace conclusion that it is necessary to wait for the progress of education and the spread of general enlightenment gradually to disintegrate the caste system and make it innocuous. We may add that the enlightenment must spread especially to the female sex, whose ignorance and conservatism make them so tenacious of the old restrictions and observances. Similarly, it is of the greatest importance that it should penetrate into the villages where, in a predominantly rural country like India, the most serious opposition to reform will have to be met.[1]

§17. **The joint family system.**—Another characteristic feature of Hindu society is the joint and undivided family. In the west,

[1] For an interesting discussion of the various methods of abolishing the caste system in India the reader is referred to G. S. Ghurye, *Caste and Race in India*, pp. 182-8.

the family generally consists of wife, husband and the minor children. In India, however, there may be living together at any given time perhaps three generations with several collaterals, constituting a single household. An undivided Hindu family is ordinarily joint, not only as regards property, but also as regards food and worship. The institution of the joint family is the basis of Hindu law as regards marriage, adoption, maintenance, and especially inheritance and succession.

§18. **The origin of the joint family.**—The origin of the joint family is generally attributed by sociologists to the advance of civilization from the pastoral to the agricultural and industrial stages of economic development. 'Where the hunting and root-grubbing stage was supplanted by developed agriculture, the labour of man in tilling the soil, constructing the house and maintaining the patrimony became of signal importance. The male is now the chief factor in the economic process, and we accordingly find the patriarchal family.'[1] The economic causes are reinforced by a strong sense of kinship and a religion emphasizing ancestor-worship, and the institution thus becomes a complex socio-economic organization designed to secure the spiritual and economic welfare of the large family groups of which society comes to be composed. The joint family patriarchal organization of India, which became practically universal throughout the country after the Aryan occupation, bears a close resemblance to that of the ancient Greeks and Romans, *patria potestas* having its counterpart in India in the supreme authority with which the eldest male member of the family is invested in the conduct of all the affairs of the family. He may be regarded as a sort of trustee administering the property of the family and regulating its affairs for the general material and spiritual welfare of its members, and he is empowered to take any course of action calculated to achieve this end. The women of the household have a separate female head with corresponding authority in matters of internal domestic economy, and often not without considerable influence in the regulation of the external affairs of the family as well, though these constitute the special charge of the senior male member. The earnings of every member are thrown into the common stock, from which they are drawn as required by the head of the family to meet the needs of all. Everyone earns according to his capacity and receives according to his need. Thus the joint family organization may be regarded as the nearest approach to the ideal of a socialistic community.

[1] Seligman, op. cit., ch. vi.

Apart from kinship, religion and social tradition, economic conditions of life and labour helped the joint family to maintain its cohesion and solidarity for long centuries. Difficulties of communication and travel compelled all the members of the family to live together and to carry on jointly the hereditary family occupation in agriculture, industry or trade.[1] Such a state of things naturally prevented the individual member from going abroad and carving out for himself a different and independent career. Nor was there much scope for the employment of differential ability, which is the essential characteristic of the present complex economic organization.

§ 19. **Merits of the joint family system.**—Several points may be urged in favour of the joint family system. In the first place, it teaches men to labour without selfishness and suffers none to lack. To every one is guaranteed at least a bare subsistence, which is the very first condition of economic progress. Children who may happen to be orphans are properly cared for and not turned adrift into the world before they are in a position to face its troubles. Similarly, the joint family affords a safe and respectable asylum to unfortunate widows, for whom an escape by re-marriage from their helpless condition is not ordinarily available. It also makes superfluous state provision in the shape of old-age pensions, poor relief and the like for the aged and the poor; the infirm, in spite of their disability, are made to fit into the household economy, being assigned work suited to their strength and capacity. More generally, we may say that the joint family secures the advantages of a simple division of labour to some extent, by giving each member such work as is suited to him. In the village, the womenfolk and the children of the cultivators' and artisans' families help the adult males in their occupations—a consideration of some importance during the busy seasons of the year, when there is practically no labour to be had on hire.

In the field of consumption, much saving is effected by preventing reduplication of household equipment and establishment, and thus a small income is made to go a long way, and comparatively large families can be maintained without much effort. So long as a joint family keeps together, the most economical use of its assets is possible, and evils such as excessive sub-division and fragmentation of land are avoided.

Over and above these economic advantages, the joint family at its best fosters the virtues of self-discipline, sacrifice, obedience and reverence.

[1] Bhatnagar, *Basis of Indian Economy*.

§20. **Defects.**—However, certain inherent defects of the joint family system are being brought into relief by the altered circumstances of today. One of the main defects is the absence of a correspondence between reward and effort—which, we may note in passing, has been advanced as an effective argument against most forms of socialism. Human nature being what it is, the best stimulus to strenuous endeavour is the certainty of being able to reap the whole fruit of one's effort. This stimulus is generally wanting in the joint family. For it happens only too frequently that the certainty of being looked after, whether one works or idles away one's time, breeds drones in the family, lacking in the sense of self-respect and responsibility.

As the very root-idea of the joint family is the subordination of the individual to corporate ends, necessitating the minute regulation by the family head of the conduct of every member, the environment is uncongenial to the development of individuality, initiative and enterprise among those whose duty is simply to receive orders and obey them. The head of the family is the only exception to this. But even in his case the sense of responsibility to the family often keeps him from the bold acceptance of risks so necessary for economic progress today. Further, the earnings of individual members being spread thinly over the whole family, the accumulation of capital and, therefore, large-scale enterprise are discouraged. The development of family affection has its beautiful side but it encourages stay-at-home habits making for immobility of labour.

§21. **Modern disintegrating influences.**—Modern conditions on the whole being unfavourable to the maintenance of the joint family system, its defects are being forced into prominence and the system is generally giving away to the various forces which are at present being brought to bear upon it. In the first place, the development of communications and transport have opened new opportunities for individual initiative, and the more enterprising members of the family are impelled to leave the family fold and carve out an independent career for themselves. In the second place, the loss or decline of old family occupations has, in many cases, made it impossible for the family to keep together and has forced dispersal on it. The subtle influence of western individualism has not failed to make an inroad on the solidarity of the joint family. The markedly individualistic bias of the British civil law and procedure is further hastening the break-up of the joint family. The intensification of the struggle for existence, coupled with the growth of the individualistic

spirit, is making the joint family more or less an anachronism. The familiar picture of domestic bliss and contentment generally associated with the joint family of old has ceased to represent the facts of the case. The spirit of give-and-take has given way to uncompromising assertiveness, with the result that discontent and petty squabbles are the order of the day in many families run on a joint basis.

While on the whole we welcome the gradual dissolution of the joint family system, we must not be understood to favour a blatant individualism which is entirely self-centred and feels no call of conscience to stretch out the hand of helpfulness to the weak and the needy among one's relations. The problem is to steer clear of the complete suppression of individuality on the one hand and, on the other hand, of the complete suppression of the spirit of mutual sympathy and helpfulness. The need for self-sacrifice will always remain, but it ought to be voluntary instead of obligatory.

§ 22. **Laws of inheritance and succession.**—After the discussion of the joint family we pass on by a process of natural transition to the consideration of the laws of inheritance and succession, which are largely governed by the institution of the joint family. As Seligman observes, 'the institution of private property lies at the basis of modern economic life,' and it has been the product of a long evolution in which three main stages may be distinguished. The first stage is that of group or communal property. The second stage is that of inalienable and joint family property. The third stage is that of individual private property. In India, we may be said to be still in the second stage, though the transition to the third has already commenced. The presumption of Hindu law is still in favour of undivided family property unless there is a regular partition.[1]

[1] 'In England, ownership as a rule is single, independent, and unrestricted. It may be joint, but the presumption will be to the contrary. It may be restricted, but only in special circumstances and under special provision. In India on the contrary, joint ownership is the rule, and will be presumed to exist in each individual case, until the contrary is proved. If an individual holds property severally, it will in the new generation relapse into a state of joint tenancy. Absolute unrestricted ownership, such as enables the owner to do anything he likes with his property, is the exception. The father is restricted by the son, the brother by his brothers, the woman by her successor. If property is free in the hands of its acquirer, it will resume its fetters in the hands of his heir. Individual property is the rule in the west. Corporate property is the rule in the east. And yet, although the difference between the two systems can only be expressed in terms of direct antithesis, it is pretty certain that both had a common origin. In India, the past and the present are continuous. In England, they are separated by a wide gulf. Of

§23. **The Mitakshara and the Dayabhaga systems.**—Originally so far as there was any notion of ownership of family property, it was in the nature of what we in these days call corporate ownership. The ownership was vested in the family as a whole and did not belong to the individual members of the family in the sense that partnership property belongs to partners. The head of the family was only the uncontrolled manager of the property. The question of the distinction between ownership and managership did not arise so long as alienation was not permitted. But when the question of alienation did arise in course of time, conflicting theories were propounded by each of the two leading commentaries on Hindu law, Mitakshara and Dayabhaga.[1] According to the Mitakshara school, the sons are joint owners of the family property along with the father even in his lifetime. According to the Dayabhaga school, they become owners only when he dies. In either case the father is the uncontrolled manager. The difference is only with regard to ownership. Under the Dayabhaga system, the father is the sole owner during his lifetime. Under the Mitakshara, the father and the sons together are owners, not as individuals but as a corporation. This difference has led to different principles of partition and inheritance. If any member of a joint Hindu family desires a partition he can demand it, as there is no compulsion on the members of a Hindu family to live in common. In the Dayabhaga system, however, there can be partition only as between brothers and descendants of brothers, but not between a father and his sons, because the latter are not owners. Under the Mitakshara system, there can be a partition even between father and sons, as the ownership is jointly vested in them and in the event of a partition the sons can always insist on their rights being respected.[2]

the bridge by which they were formerly connected, a few planks . . . are all that now remain.'—J. D. Mayne, *Treatise on Hindu Law and Usage*, p. 305.

[1] There are two systems of inheritance in India, namely, the Mitakshara and the Dayabhaga. The latter prevails in Bengal and the former in other parts of India. 'The difference between the two systems is due to the fact that under the Mitakshara school consanguinity is the governing principle for determining the right of inheritance, whereas, under the Dayabhaga system its place is taken by the doctrine of religious efficiency which means the capacity of the successor to benefit the persons.'—D. F. Mulla, *Principles of Hindu Law*, p. 16.

[2] In the case of Indian States and in some zamindari estates no partition is allowed, the throne or the property descending to the eldest male member. It is only in these exceptional cases that the law of primogeniture prevails.

§24. **Inheritance under the two systems.**—We pass now to the law of inheritance, meaning by 'inheritance' the transfer of ownership which occurs at, and in consequence of, death.[1] In a Mitakshara joint family, there can be no inheritance, as the death of a member makes no change in ownership, and property remains undivided unless partition is insisted upon. As Mayne points out, property under Mitakshara, so long as the family chooses to remain joint, devolves upon the members of the family for the time being by survivorship and not by succession. Even under the Dayabhaga, however, no perceptible change in the affairs of the family is occasioned by a death not followed by actual partition. It is only when a partition takes place that the question of tracing the succession arises. In a Dayabhaga family there is a case of inheritance whenever a member dies, the share of that member descending to his heir.

It must not be supposed, however, that all property in India is joint property. Separate property may be acquired, though it is not always easy to determine in what circumstances it is separate. But in the case of separate property there is true inheritance, for which legal provision is necessary.

§25. **Economic effects of the laws of inheritance and succession.**—The result of partition and inheritance under both the schools is a widespread distribution of property, all sons having an equal share, and widows and daughters also having a limited interest in the joint property. The general principle is that the male descendants of a common ancestor through males have a greater claim than the others. In effect, if not in theory, the Mohammedan laws of inheritance and succession bear a close analogy to the Hindu law. Among the Mohammedans, though there is no presumption of jointness, the joint family itself is not uncommon, though under the Mohammedan law the owner of the property—whether ancestral or self-acquired—has full control over it during his lifetime only. It devolves by succession on even a larger variety of heirs than under Hindu law. The rules of distribution of property under the Mohammedan law depend, not on consanguinity only, but also on certain equitable considerations, by which the rules based on consanguinity are modified. As in Hindu law, there is no right of primogeniture, and male heirs are generally preferred to female.

In defence of the Indian laws of inheritance and succession it may be urged that the absence of primogeniture is a homage

[1] Partition is, of course, independent of death, though as a general rule it takes place at the death of the father or manager.

paid to the principle of equality and distributive justice. Their tendency is to prevent great differences of wealth from arising and to promote the growth of a substantial middle class. In respect of their operation on the division of land they tend to ensure—unless carried too far—a stable rural society consisting of independent and self-respecting peasant proprietors, who are regarded even in the west as the backbone of a healthy agricultural organization, with which the welfare of the country is closely linked. From the standpoint of industrial progress, the fact that every one gets something to start with is an advantage. The smallness of the patrimony which is the general result of an equal distribution of the property among the claimants, is in itself a stimulus to further effort for supplementing it in order that the accustomed standard of comfort may be maintained.[1]

There are, however, important considerations which tell against the laws of inheritance prevalent in India. In the first place, they have the effect of discouraging large-scale enterprise by preventing the accumulation of large capital resources. Saving is difficult when the share of each individual is small, as it often is when property is equally divided. This evil, however, can be mitigated by the development of joint-stock organization of industry on the basis of limited liability which enables even small savings to be utilized for large-scale enterprises.

Another serious evil flowing from the unrestricted operation of these laws in India relates to the excessive sub-division and fragmentation of land, resulting in uneconomic holdings and encouraging the litigation which plays such a sinister role in aggravating the poverty of the peasantry.

§26. **Is Indian spirituality responsible for India's economic backwardness?**—We now propose to embark on the controversy as to whether the unprogressive character of Indian society and its general economic backwardness can be attributed to Indian spirituality.[2] It is often alleged that in India 'religion bids a man turn his back upon all material advantage, and if he is a Hindu, regard everything as a mere manifestation of religion'; and further that the characteristic of Indian civilization is an

[1] See P. Banerjea, *A Study of Indian Economics*, p. 48.

[2] When we talk of 'Indian spirituality' and 'Indian religion' in this context, we refer to 'Hindu spirituality' and 'Hindu religion'. Reference to Mohammedanism is excluded, because in the first place, Hinduism is the predominant faith in India and, secondly, because Mohammedanism is generally recognized to be more assertive and less other-worldly in its outlook and stands less in need of defence than Hinduism.

abiding sense of the infinite, whereas economic progress implies preoccupation with the finite and the material side of life. We have to consider, in the first place, whether an other-worldly attitude is enjoined by Indian religion and philosophy in a sense in which this is not true of other religions and other philosophies; and secondly, we have to consider how far the road to economic progress in India is barred by the dominance of the ascetic ideal which is supposed to be held up before the masses by Indian spirituality.

§27. **Appeal to history.**—In this connexion we may, at the outset, appeal to historical evidence against the contention that Indian spirituality has fostered a pessimistic attitude and a universal indifference to the material side of life. If the Indian mind had been exclusively taken up by thoughts of the other world, as has been frequently asserted, the Indian people would not have figured in history as great empire-builders, conquerors, and daring colonizers.[1] Their remarkable achievements in all these directions have not been disputed. The interests of Indians were by no means limited to religion and philosophy, though they made these spheres peculiarly their own. The theory that the Indian mind has always been preoccupied with religious and metaphysical speculation to the exclusion of all other interests, is inconsistent with its admitted achievements in the sphere of the positive sciences. It is well known that the ancient Indians laid the foundations of mathematical and mechanical knowledge. 'They measured the land, mapped out the heavens, traced the course of the sun and the planets through the zodiacal belt, analysed the constitution of matter and studied the nature of birds and beasts, plants and seeds.' The invention of algebra and its application to astronomy and geometry is due to the Hindus as also are the numerical symbols now current everywhere in Europe. Again, the world-wide fame achieved by the products of the old Indian handicrafts bear testimony to the fact that Indian spirituality did not paralyse economic activity in the past. It is true that Indians did not invent any great mechanical appliances, and Radhakrishnan makes 'a kind heaven which gave them the great watercourses and abundant supplies of food' responsible for this. Although this theory is too simple to be accepted as a complete explanation, we believe that there are sufficient grounds for rejecting the alternative hypothesis, either of an inherent defect of the Indian intellect, or of greater

[1] See Kalé, op. cit., vol. I, ch. iii.

preoccupation of the Indian mind with matters of the spirit than with mundane matters. It must be further remembered that the mechanical inventions after all belong to comparatively recent times. Till the eighteenth century at least India could challenge comparison with the leading nations of the west as regards progress in the arts of material civilization. The fact that since then stagnation has set in cannot reasonably be attributed to the influence of Indian spirituality. As we will see later on, there have been many other influences at work which offer a much more adequate and convincing explanation of this phenomenon.

§28. **Influence of religious belief on economic activity generally exaggerated.**—Turning to present-day conditions, we find that it is exactly those people and communities like the Marwaris, Jains, and Bhatias among the Hindus, and the Khojas, Memons and Bohras amongst the Mohammedans, who may be supposed to be most amenable to the influence of orthodox religion, that have taken a prominent part in the new industrial life of the country and have shown a remarkable adaptability to western industrialism.[1] Profession of the Hindu or Mohammedan religion is, therefore, obviously not incompatible with a successful pursuit of material ends. Even supposing that the drift of religion in India, as it is generally understood at present, is antagonistic to all forms of secular activity, its influence, so far as an average believer is concerned, is capable of being effectively counteracted when conditions are favourable to material advance and when there is no inherent incapacity for taking full advantage of them. The various communities like the Jains and Bhatias referred to above have certainly been helped by their long traditions of business activity and enterprise dating even from pre-British days. No religion, however unworldly its character, is able to overcome permanently the natural impulse of man to improve his economic condition. The economic motive is at least as powerful as the religious motive and more continuous in its operation, and this is true of the east as well as of the west. It is only when the general economic outlook is hopeless, when, for example, the administration is so oppressive that it discourages every effort of creative activity, that the average man seeks the consolation of a religion preaching quietism and fatalistic resignation and uses it as a kind of anodyne which steeps his senses into forgetfulness of the evils by which he is surrounded and which he must endure because he is unable to cure them. When opportunities for ameliorating his earthly condition by positive

[1] See Kalé, op. cit., vol. I, p. 45.

effort present themselves, adherence to a philosophy of inaction and to a religion which would turn people away from purposeful material activity tends to become purely formal. Religion and life lose contact with each other, and, while paying lip-service to the formal texts of religion, people come to regulate their life according to entirely different standards. Or, in the alternative, the profession of a religion reduces itself to the performance of some fixed ritual, and the scrupulous observance of certain forms and ceremonies, which need not in any way hinder the ardent pursuit of wealth. Side by side with these incongruities, which occur because the traditionally accepted belief comes to be out of harmony with changed conditions, religion itself gradually undergoes a fresh rational synthesis and gathers into itself new conceptions which serve to bridge the gulf between belief and conduct. There is a new adjustment of emphasis, so that worldly activity ceases to be regarded as inherently futile or sinful. The tendency is to preach energetic endeavour in the world instead of an ascetic withdrawal from it, and to deny that there need be any sharp separation between the secular and the spiritual activity. The pursuit of material ends is recognized to be not necessarily incompatible with dreams of spiritual destiny, so that the two motives may be so interwoven in the life of an individual as to form a single strand of purpose. The modern Christian world no longer takes in a literal sense the Biblical view that a rich man by reason of his riches is in a parlous state so far as his spiritual destiny is concerned.[1] Christian divines of the present day, for instance, would be ready to allow that a business man of the type of Cadbury has as good a chance of securing a place in heaven as anyone else. For material wealth in itself is not an evil. If honestly come by, it means that the person earning it has performed some valuable service which the community thinks it worth while paying for. Both acquisition and expenditure of money can be essentially altruistic in purpose and in result.

§29. **Fatalism a heritage from unsettled political conditions in the past.**—We are strongly inclined to the view that the fatalism or other-worldliness which is regarded as the characteristic of the Indian outlook on life and as a serious hindrance to the material progress of the people is largely attributable to the conditions of political anarchy which prevailed in the country

[1] 'How hardly shall they that have riches enter into the kingdom of God! . . . It is easier for a camel to go through the eye of a needle, than for a rich man to enter the kingdom of God.' *The Bible*, Mark x. 24.

immediately before the advent of the British and which rendered impossible the normal functioning of the economic motive. When the governments were more the robbers than the protectors of the people—and this was the description to which most of the governments existing in the country answered in the chaotic times immediately preceding the establishment of British rule—when people stood to lose in a moment the fruits of years of industry by the rapacity of a chance invader or oppressive ruler, the incentive to the production and accumulation of wealth was bound to be very weak. It is natural that hope and ambition faded from the outlook of the people under these conditions, and fatalism took possession of their minds.

§30. **Process of reinterpretation of religion to harmonize it with changed conditions.**—With the establishment of peace, and under the influence of western ideas and western science, a re-interpretation of religion on lines familiar in the west is already taking place, and purposeful action is being preached more than passive endurance.[1] In other words, the religious outlook of a people at any given time is more commonly the result rather than the cause of their economic condition. As the economic condition becomes more favourable it is bound to give rise to a more hopeful attitude, and fatalistic doctrines are sure to recede into the background. It is a mistake to regard the Hindu religion as a permanent obstacle in the path of economic progress, because this religion is not something stereotyped and fixed for ever, but is visibly changing in its content as well as emphasis so as to keep pace with the advance of ideas and with the promise of improved material conditions.[2] The plastic conservatism of Indian civilization and culture is the secret of its survival in

[1] As examples of this process of reinterpretation going on in India we cull the following passages from Radhakrishnan, *Indian Philosophy*, vol. I:

'Attempts to gain solitary salvation embodying the view that one's soul is more precious than all the world's souls put together are not the expression of any genuine modesty of spirit. The *Upanishads* require us to work, but disinterestedly' (p. 215). 'The false asceticism which regards life as a dream and the world as an illusion . . . is foreign to the prevailing tone of the *Upanishads*. A healthy joy in the life of the world pervades the atmosphere. . . . A philosophy of resignation, an ascetic code of ethics, and a temper of languid world-weariness are an insult to the creator of the universe, a sin against ourselves, and the world has a claim on us. The *Upanishads* believe in God, and so believe in the world as well' (p. 210).

[2] 'There has been no such thing as a uniform stationary unalterable Hinduism whether in point of belief or practice. Hinduism is a movement, not a position; a process, not a result; a growing tradition, not a fixed revelation.'—S. Radhakrishnan, *The Hindu View of Life*, p. 129.

spite of the many and powerful onslaughts on it in the course of centuries, and there is no reason to suppose that it will fail to display its wonted adaptability under the present circumstances. The process of reading new meanings into old texts, of pouring new wine into old bottles, is in fact easier in the case of the Hindu religion than perhaps in that of any other religion. Unfriendly critics have said that the Hindu religion is amorphous and incapable of being pinned down to any definite set of doctrines and, therefore, 'unassailable and elusive as the air invulnerable'. But this is precisely also part of its strength and endows it with a wonderful capacity for adapting itself to varying conditions. Thus it comes about that, accused of inducing apathy and indifference to worldly affairs, it finds no difficulty in proving that, properly understood, it is not open to this accusation; that it only asks its devotees to renounce selfish endeavour but not all interest; that they are not asked to get rid of the world but rather to get right with it. The main thesis of Tilak's monumental work, *Gita Rahasya*, is that the *Bhagavadgita*, the one book which can claim to be the gospel of the Hindus, distinctly prefers a life of action to that of renunciation, and in preaching action without attachment seeks to effect a reconciliation between the spiritual and material aspects of life. It has been often asserted that the characteristic doctrine of Hinduism, namely that of *karma*, is the root-cause of Indian pessimism since it suggests that asceticism and renunciation provide the only escape from the eternal round of births and re-births. This doctrine, however, is capable of an entirely different interpretation and, far from being a deterrent, it can be made out to be a most powerful incentive to action, because it makes man and not fate the architect of his fortune.

It is interesting to note that certain characteristic doctrines of Mohammedanism are undergoing a similar process of revision and adaptation. For instance, according to popular belief, a Mohammedan must neither pay nor accept interest (*riba*). Hence it is seriously debated whether a true Moslem may lawfully become a member of a co-operative society which charges interest. It is also well known that interest amounting to lakhs of rupees remains unclaimed by Mohammedan depositors at the Post Office Savings Bank. Owing to the obvious inconvenience of this taboo under present conditions attempts are being made to interpret the relevant verses of the *Koran* to make them prohibit only usury and not every form of interest.[1]

[1] See M. L. Darling, *Rusticus Loquitur*, pp. 367-8.

§31. **Causes other than religion for Indian pessimism.**—It is thus necessary to discover causes other than the tendency of Indian religion and philosophy for an adequate explanation of the pessimism and submissive sadness noted by many observers as characteristic of Indian mentality. We have already spoken about the depressing influence of long centuries of foreign domination and misrule in India. We must add further the visitations of nature to the devastations of man in our list of causes. The climate of India, especially in those parts which are excessively damp and hot, has an enervating influence on the human frame, which on that account becomes peculiarly liable to diseases rampant in the tropics, such as malaria, plague and hookworm. Some of these diseases, like hookworm, even when not fatal, lead to a general lowering of vitality and to a feeling of chronic apathy—a condition under which a buoyant hopeful outlook on life becomes impossible.[1] There is thus a physiological basis for pessimism which must not be overlooked. Again, we must consider the influence of calamities like famines, to which an agricultural country like India dependent upon a freakish monsoon is necessarily exposed and which in the past could not be tackled by anything like the present effective machinery of famine insurance and relief. This utter helplessness in the face of such a recurrent calamity must have encouraged an attitude of hopelessness and a fatalistic spirit of resignation among the people. The twin tragedies of disease and famine enacted so frequently on the Indian stage go a long way to explain the brooding melancholy of the people. Another possible explanation may lie in the numerous disabilities inflicted in a caste-ridden society, particularly on the lower castes, shutting out large masses of the people from any prospect of social and economic amelioration and condemning them without hope of release to the fate of helots.

Even in western Europe, the permeation of the masses with a spirit of hopefulness and acquisitiveness is a comparatively recent phenomenon. Before the modern scientific era, great natural calamities like famines and visitations of epidemics like plague and cholera were looked upon as indications of the wrath of Heaven, against which it was useless for weak mortals to struggle, and the so-called oriental fatalism at one time coloured the views of the masses in Europe also. If this attitude of helplessness and resignation has largely disappeared in Europe, it is because with the help of science in its protean manifestations—in the progress of medicine, in the development of communications,

[1] See Ronaldshay, *India, A Bird's-Eye View*, ch. xxii.

etc., man has come to have the feeling of growing mastery over nature and, from the vantage point of triumphs already gained, regards every evil to which he is at present subject as remediable by persistent human effort. A similar change in outlook has already commenced in India and we have no doubt that with the spread of general education and enlightenment, with the progress of practical science and the steady pursuit of a policy of national economic development, the existing causes of Indian pessimism will be removed and it will cease to be regarded as one of the principal hindrances to economic development.

CHAPTER V

ECONOMIC TRANSITION IN INDIA

§1. **Industrial Revolution in England.**—In this chapter we propose to take a survey of the fundamental changes in the economic structure and organization which have transformed conditions of life and labour in this country during the last hundred years or so. The forces in operation have been (partly) those summed up in the phrase 'Industrial Revolution'. In order to understand the nature of these forces it will be helpful to trace briefly the course of the Industrial Revolution in England.

The Industrial Revolution in England, although catastrophic in one sense, was, in another, the outcome of forces which had been in operation for nearly two hundred years before they came to a head and acquired a sufficient momentum about the middle of the eighteenth century to cause those spectacular changes with which the name 'Industrial Revolution' is particularly associated. There were many reasons why England was the most likely theatre for the Industrial Revolution to make its first appearance. The commercial revolution of the sixteenth and seventeenth centuries caused by the discovery of America and the all-sea route to India was a necessary preliminary to the later Industrial Revolution, because it transformed the scale and nature of international commerce and opened world-wide markets to absorb the enormous output of commodities due to the mechanical inventions of the Industrial Revolution. The theory of commercial monopoly characteristic of the mercantilist policy of the countries of western Europe had led to a series of wars of economic nationalism in the seventeenth and eighteenth centuries, and while England had emerged triumphant from them as a strong naval and commercial power, England's rivals had come out with crippled resources and industries. This added enormously to her competitive strength. The Industrial Revolution in England, again, synchronized with the firm establishment of British power in India, and the opening of the large markets of India acted as a powerful fillip to the new Lancashire cotton industry. Various other factors had favoured the progress of the new movement in England; for example, her insular position making her immune from the ravages of war within her borders; the establishment of internal free trade; the supremacy of the common law avoiding in a large measure the evils of feudalism and class discontent; the establishment of

a parliamentary form of government dominated by a landed aristocracy with a strong industrial and commercial bent; the healthy mistrust of state regulation engendered by the memories of the Stuart despotism; a policy of religious toleration which welcomed the immigration of skilled foreign artisans; and the opportune development of banking and credit. The stagnation in religion and politics, central and local, in eighteenth-century England further helped the concentration of attention on industry and stimulated mechanical inventions, into the service of which were pressed the ardour and imagination already fired by the discoveries of physical science and the revival of mathematics.[1]

§2. **Four main features of the Industrial Revolution in England.**—The English Industrial Revolution had four main features, revolution (i) in agriculture, (ii) in transport, (iii) in industry and (iv) in economic thought and policy—all acting and reacting on one another. The change began in agriculture in response to the demand for more food for the growing population of England, and the wasteful medieval methods of the common-field husbandry were replaced by a new system of land tenure and a much more efficient agriculture. The advance in agricultural science and the exigencies of a scientific husbandry led to the second Enclosure Movement which caused the disappearance of the yeomanry and the emergence of a class of landless labourers and a class of capitalist tenant-farmers employing them. Thus arose the present triple division of the big landlord, the capitalist farmer, and the landless agricultural labourer. In the sphere of transport and industry the Revolution manifested itself in improved means of communication—turnpike roads and navigable canals; in the introduction of a variety of inventions in the coal, iron and textile industries (notably the spinning jenny, the power-loom and the steam-engine); and in the establishment of the factory system, which involved production on a large scale and the supplanting of human labour by machinery. About 1825 started another revolution in transport methods and communications which in the fulness of time brought the railway, the steamship and the telegraph. Starting with the textiles, coal-mining and iron, the Industrial Revolution gradually spread to other manufactures, and its progress was facilitated by the organization of joint-stock companies with limited liability and the extension of credit and banking.

In sympathy with these changes, economic thought from the time of Adam Smith onwards took a new direction based on the

[1] J. L. and B. Hammond, *The Rise of Modern Industry*, pp. 64-5.

principle of natural liberty and individual enterprise as opposed to the old system of detailed state regulation of the economic life of the nation, against which Adam Smith's *Wealth of Nations* was in great part a well-reasoned and powerful protest. The new economic school adopted *laissez-faire* as its motto and was responsible for the wholesale repeal of the old regulative statutes in regard to wages, apprenticeship, etc., which removed all obstacles in the way of capitalistic enterprise and free competition and greatly hastened the pace of the Industrial Revolution. Incidentally, we may point out that the extreme *laissez-faire* policy, while it accelerated the progress of the Industrial Revolution, aggravated the evils of the period of transition inseparable from any revolutionary change and postponed the redress of many social and economic grievances which had arisen mainly from the Industrial Revolution.

§3. **Results of the Industrial Revolution.**—The results of the Industrial Revolution were striking. There was an immense increase in the production of wealth, a vast extension of internal and external trade and a tremendous movement of population from the south to the north of England along with rapid increase in the total numbers. And there were fundamental changes in the social and economic organization of the country, with the balance of social and political power turned in favour of the capitalist classes to the detriment of the working classes in both agriculture and industry. Domestic industry was supplanted by the large-scale factory with its thousands of 'hands', connected with the capitalist by no other bond than the cash nexus which took the place of the old human relations between master and workmen. The concentration of capital and instruments of production in the hands of a small moneyed class led to a divorce between the working and owning classes, and split society into two camps at war with each other. The insecure and precarious life of the labourer living under an ever-present threat of unemployment, the frequent strikes and lock-outs throwing society out of gear, and the dislocation of the economic equilibrium owing to recurring crises came to be the features of the new industrial order, and the country was faced with new and complex social, political and economic problems.

§4. **Morison's classification: the old type and the new type of countries.**[1]—We have now to see how far these changes had their counterpart in India, and we shall begin our discussion of the economic transition in India with Morison's division of the

[1] See T. Morison, *Economic Transition in India*, pp. 1-3.

countries of the world into two broad categories, namely, (i) those belonging to the old economic order that have not yet passed through their industrial revolution, and (ii) those belonging to the new economic type that have accomplished their industrial revolution. The first type of countries may be illustrated by Egypt, some countries of eastern Europe, and India, in which the old organization of industries still remains practically unaffected by new changes. The second type of countries may be illustrated by England, France, Germany and the United States, where the old organization has been completely replaced by new methods of production and distribution. This is, however, only a rough classification, for there is no sharp line of demarcation between the two categories. Most of the countries in the first category are showing a tendency to pass into the second, and in some of them the change is already plainly visible. For our present purpose, India and England may be taken as representing the two economic types contrasted. India still for the most part belongs to the old economic type, though the signs are already set in favour of her transition to the second type. England may be said to have completed her industrial revolution, which has influenced conditions of life and labour there perhaps more profoundly than anywhere else. The old industrial organization was the result of certain physical conditions which at one time or another prevailed practically in every country in the world, and wherever they existed, the economic type produced by them was more or less uniform.

§5. **Characteristics of the old order.**—The characteristics of the first type of countries, that is, those belonging to the old economic order, are as follows: (i) The predominance of custom and status over competition and contract. (ii) The isolation of small groups of the population, as in the villages, and their economic self-sufficiency primarily due to defective transport and communication. (iii) The preponderance of agriculture over other occupations, resulting in an uneven distribution of the population between the various occupations and the consequent predominance of the rural over the urban population. (iv) Simple and imperfect division of labour owing to the narrow size of the market. (v) Small-scale industry of the handicraft and cottage type carried on independently by the artisan himself, and hence the smallness of the capital engaged in industry and the absence of the middleman manager or entrepreneur. (vi) Absence of money economy and prevalence of barter or direct exchange of goods against goods. (vii) Undeveloped credit and prevalence of usury.

§6. **Characteristics of the new order.**—In contrast to these are the following characteristics of the second type of countries, that is, those belonging to the new economic order; (i) Freedom of contract and free play of competition. (ii) Close interdependence between the different parts of the industrial world made possible by highly developed transport and communications. (iii) A comparatively even distribution of the population among the various occupations, with agriculture occupying a relatively unimportant position, and the consequent predominance of the urban over the rural population. (iv) A more complex and perfect division of labour facilitated by the wide and growing extent of the market and the large and increasing use of machinery. (v) Industry organized on a large scale, requiring the use of huge capital resources and directed by a few expert entrepreneurs; concentration of labour in large factories and manufacturing centres and the disappearance of personal relations between the workmen and the capitalist. (vi) Displacement of barter by money economy. (vii) Development of credit and banking, and absence of usury.

India, at the present time, is in a state of economic transition and exhibits, in varying degrees, characteristics appertaining to both types of countries. She may be said to be marching in uneven stages through the centuries; for, while some parts are economically speaking medieval, if not primitive, others have definitely entered the modern stadium and display that full development of economic conditions found in the most advanced countries of western Europe. The trend of development, however, is towards a growing predominance of the second type described above.

§7. **The old economic organization: the village.**—In order to understand the nature of the change that has been wrought in India it is necessary to describe in some detail the old economic organization as it existed before the new forces were let loose upon it.

The first important feature of the old economic order in India is the division of the country into villages where the large majority of the people lived and continue to live today. The isolated and self-sufficient village was the unit of the old Indian economy, and 'it is to the village that we must go to study the conditions in which men live and work who are still under the old dispensation.[1]

§8. **How the village arose and why it persists.**—Various hypotheses have been suggested in explanation of the particular

[1] T. Morison, op. cit., p. 34.

mode of settlement known as the village. The difficult task of clearing the jungle for cultivation may have compelled what was originally a nomadic tribe or clan to stick to one spot for purposes of effective co-operation. A second influential factor may have been the supply of water. If water was not freely available everywhere within a given area, those parts where it was abundant would naturally be chosen for concentration. Another factor cementing this concentration must have been the need for securing protection from hostile tribes and the wild beasts of the jungle. The Indian village community is by no means without parallel in other parts of the world—the medieval manor in England, the German mark and the Russian mir are obvious parallels—but the enduring quality of the village organization in India and its persistence in the face of numerous political vicissitudes have often been noted as peculiarly Indian characteristics, especially by foreign observers, and glowing descriptions have been given of the Arcadian simplicity and happiness supposed to have ruled supreme in the old Indian village communities.[1]

The idea, however, that the village was able to live its own life entirely unaffected by wars and revolutions outside must be accepted with much reservation and qualification.[2] When—as, for example, during the eighteenth century—the whole country was a theatre of constant warfare and brigandage, it is unthinkable that the villages should have been allowed to pursue the even tenor of their life entirely undisturbed. As a general rule, they were forced to rely on themselves for defence against aggression. Occasionally, we may suppose, they succeeded in warding off the attacks, but often the enemy was too powerful, and successful resistance was impossible. Rapine and plunder, exaction and extortion must have rudely disturbed their economy from time to time, and recovery must often have been a slow and painful process. It is difficult to believe that the villages could have lived their normal peaceful life unruffled by the commotion of wars and revolutions round about them. The political chaos that came to prevail in the country with the break-up of the Mogul Empire could not have failed to carry its baneful influence into the

[1] The reader will recall the following oft-quoted passage from Sir Charles Metcalfe's Minute of 1830: 'The village communities are little republics having nearly everything they want within themselves; and almost independent of foreign relations. They seem to last where nothing else lasts. This union of the village communities, each one forming a separate little state in itself . . . is in a high degree conducive to their happiness, and to the enjoyment of a great portion of freedom and independence.'

[2] cf. A. S. Altekar, *A History of Village Communities in Western India*, pp. 105-6.

villages, and subject their economic life to severe and repeated shocks. The fact that village organization remained practically unaltered for centuries must be attributed rather to certain persistent factors, such as lack of communications and the consequent absence of an effectively centralized system of administration, than to any inherent virtue in the Indian village making for its survival.

§9. **The typical Indian village.**—The typical Indian village is an aggregate of cultivated holdings with or without some waste area attached to it, and usually it has a central site where the dwelling houses are congregated together, with the lands of the village spreading round about the central site in a series of concentric circles. In some cases, small homesteads and farm buildings are found separately located on the holdings, though for better security and other reasons it is usual for the cultivator to stay in his house in the village dwelling area. The village often boasts of a grove and some kind of public office where the village officers keep their books and dispose of their business.[1]

§10. **Village organization: (1) Agriculturists.**—Turning to the village organization, we may leave aside for the time being the difference between the two principal forms of village constitution in India, namely, the ryotwari or severalty, and the joint village, and attempt here only a generalized description indicating the features common to both. Each village is an entirely self-sufficient economic unit containing within its bounds all the labour, capital and skill necessary for the agricultural and industrial activities in it. The inhabitants of the village may be divided into three groups: (i) the agriculturists, (ii) the village officers, and (iii) the village artisans and menials. The agriculturists themselves may be divided into the landowning and the tenant classes constituting together the most important section of the village community. The actual cultivators, whether proprietors or tenants, cultivate mostly small open fields (reminiscent of the common-fields without enclosures of the English village before the agricultural revolution) with such labour as they themselves, assisted by their families, can supply, and only occasionally with hired labour. They provide the small capital that they need from their own savings or from the village landlord, or more commonly the village moneylender. They undertake the risks of cultivation, are themselves the managers, organizers and experts of their petty farms, and personally carry whatever produce they can spare to the nearest market, exchanging

[1] See R. Baden-Powell, *Land Revenue and Tenure in British India*, p. 66.

it for salt and other small necessaries and luxuries not available within the village itself.[1]

§11. **(2) The village officers.**—Each village has its own officers and in fact the village was and to this day remains the unit of administration in India. Among the village officers we must first mention the headman or the patel who is a person of great importance in ryotwari villages. He is a hereditary officer responsible for the peace and order of the village and the collection of revenue, and often discharges petty magisterial duties. He holds a plot of land—called 'watan' land—by way of remuneration for his services. Then there is the village accountant or scribe styled the patwari or kulkarni who keeps the village records and accounts. There is also a watchman or choukidar who has to report crime, arrest offenders and help the police. Lastly, there is the village messenger. These village dignitaries, sometimes called the 'alutes', may be distinguished from the 'balutes' or the village servants—artisans and menials—who constitute the third group of village residents. Most villages had, in the old days, their panchayats or bodies of village elders which served as cheap and efficient arbitration courts of justice and otherwise held the village community together.

§12. **(3) The village artisans.**—Almost every village possessed, in the old days, its complement of artisans such as a carpenter, a blacksmith, a potter, a barber-surgeon, a cobbler, a washerman, a goldsmith, a petty shopkeeper, an oilman, etc. The village had also its holy man, were he astrologer, priest or fakir. In larger villages there may be a weaver, and there is practically in every village a moneylender, who often combines the functions of moneylender and wholesale grain-dealer. The artisans are the servants of the village and are hereditary in character, being rarely paid by the job. They are given houses in the village and look after the needs of all the villagers who only provide, or pay for, the materials employed. Their labour is rewarded by regular annual remuneration of service land or an allowance in grain paid at the harvest.[2] Those artisans, however, whose services are only occasionally required, such as the weaver, are paid by the job. It is only for such things as the supply of a sugar-press or cart that a regular village servant like the carpenter receives extra payment. Thus in the words of the *Census Report* of 1901, 'the peculiar feature of Indian rural life is the way in which each village is provided with a complete

[1] See T. Morison, op. cit., ch. ii; also Banerjea, op. cit., ch. vi.

[2] See R. Baden-Powell, op. cit., p. 69, and L. C. A. Knowles, *Economic Development of the Overseas British Empire*, pp. 435-6.

equipment of artisans and menials, so that, until the recent introduction of western commodities such as machine-made cloth, kerosene oil, umbrellas, and the like, it was almost self-supporting and independent excepting in the matter of salt and a few other luxuries purchased at the village fair or brought in by the lamans or caravans'.[1]

§13. **Self-sufficiency and isolation of the village.**—Prior to the construction of roads and railways the villager had scarcely any contact with the outside world except for the occasional visits of the grain or cloth merchant, who carried the surplus of one village to make good the deficiency of another, or the very occasional journey to some big centre of trade for selling the products of his craftsmanship. The self-sufficiency of the village was forced upon it by its being cut off from contact with the outside world. As Morison remarks, 'when water carriage is impossible and wheeled traffic slow and untrustworthy, exchanges are confined to those things which can be carried by men and pack animals'. In the India of the early nineteenth century there were only a few natural waterways like the Ganges and the Indus, and road transport was defective and almost as bad as in the England of the early eighteenth century described by Arthur Young. Proper roads hardly existed, except a few such as those constructed by the Moguls, and where they did exist, their condition was often highly unsatisfactory and they were infested by highwaymen and robbers. The East India Company did little to improve the roads, being concerned more with dividends than with administration. Internal trade therefore remained undeveloped. Being thus almost completely isolated from the rest of the world, the village was compelled to make its own standing arrangements for satisfying all its requirements, and it did this by attracting the requisite staff of artisans by offering them homes and regular remuneration. In normal times, the village did not suffer owing to lack of communications, because its organization took account of this disability and was designed to overcome it. In times of famine, however, lack of transport facilities prevented the distribution of corn from regions of plenty to those of scarcity, causing acute distress in the latter. This is the obvious explanation of the most astonishing variations of prices even in adjoining villages, which were so near and yet so far for lack of transport. The village grain-stores, however, insured the people against scarcity provided it was of moderate duration. As the market for the goods turned out by the village

[1] See D. R. Gadgil, op. cit., p. 10.

artisans was narrow it prevented any but the most imperfect division of labour. The advantages of specialization had largely to be forgone and there was a great waste of time and skill, with the result that the condition of rural industry was very backward.[1] The praise that is usually showered on the exquisite products of Indian craftsmanship belongs of right to the urban industries of the old days, and not to the industries that were carried on in the village.

§14. **Absence of money, etc.**—Another feature of village life that needs to be emphasized is that until recently the use of money was rare, whether for effecting exchanges or remunerating services. In fact, the need for money is rarely felt in a self-sufficing community which has only a few exchanges to make with the outside world.[2] Agriculture being the most important industry of the village, grain was the standard of value and was used by the villagers in their exchanges with each other. Grain was universally desired and its bulkiness did not matter as the exchanges took place mainly within the village itself. Land was the only thing which was desired as keenly as grain and, its possession being regarded as the hall-mark of superior status in the village, it was used to remunerate services, especially of the more important servants of the village like the patel.[3] The rate at which these payments were made was determined by a minute and complicated but well-understood set of village customs. Custom rather than competition was the principal regulator of this as well as other economic relations in the village.[4]

Immobility of labour and the conservatism of the village people were even more pronounced characteristics in the old days than now, though there was a stronger sense of unity and solidarity, the weakening of which is one of the most disquieting features of the present situation.

The above description of the village system must not of course be taken as an entirely faithful picture of conditions

[1] See D. R. Gadgil, op. cit., p. 13.

[2] The scarcity of money, however, must have been felt as an inconvenience to the extent to which payment of land revenue in cash was insisted upon by the Government. The peasant would then have to sell part of his produce and in this matter his position was, if possible, weaker than under present conditions. Transport being difficult and dangerous, merchants probably required a much wider margin between their buying and selling prices and as the export trade in raw materials had not yet developed the peasant was, on the whole, even less advantageously situated than now in obtaining the best possible price for his goods.

[3] See T. Morison, op. cit., p. 45.

[4] See §§ 15-18 below.

actually prevalent today. The village, like so much else in the old economic organization of the country, has undergone a considerable change—and in some respects a fundamental change—in response to the new factors which have made their appearance during the last hundred years or so. The old organization is, however, still far from being completely superseded by an entirely new one, and through all the change and adaptation that has taken place it is still possible to discern clearly the lineaments of the old village system in its pure form. The village in transition will form the subject of more detailed discussion later in the chapter.

§15. **Custom and status.**—We have already referred to Ranade's opinion that in India 'there is neither the desire nor the aptitude for free and unlimited competition except within certain narrow grooves. Custom and state regulation are far more powerful than competition, and status is more decisive in its influence than contract'.[1] Custom and status were fostered by the stationary character of the Indian civilization, the conservative instincts of the people and more especially by natural economy or barter. Dr Cunningham connects barter with custom and money with competition. 'So long as barter prevails there are likely to be customary payments of rent, wages and taxes; but as money is introduced there may be frequent changes of these payments and they come to be settled by competition.'

Our study of the Indian caste system and joint family has already given us an idea of the power of these institutions in determining an individual's career in life and the whole course of his social and domestic relations. So long as these institutions were not appreciably affected by modern influences, the individual was not a free agent and had no freedom of contract in the matter of choosing his occupation, his standard of living, his residence, etc. Birth in a particular caste and family fixed his status in society, for good or for ill, from which there was no escape. The individual was compelled to reconcile himself to the position in which he was placed by the accident of birth.

Historically, custom has played a very important part in determining economic relations of all kinds, and it reigned supreme in Europe before the Industrial Revolution under the manorial and the guild systems. It is only in comparatively recent times that competition has replaced custom. In much the same way, custom rather than competition determined rent, wages and prices under the old economic order in India. Custom may be regarded

[1] See p. 5.

as mere convention based on the force of habit, and its essential idea is resistance to change of any kind for no other reason than that it is change. Even under the so-called regime of custom, however, the silent force of competition masked as changed custom is plainly visible. Custom cannot for long remain out of conformity with competition, for as Morison remarks, 'competition is only another name for that struggle for existence which runs through all animate nature. . . . As a matter of fact, the antagonism between competition and custom is often exaggerated; it will generally be found that in practice they do not produce very dissimilar results. When they diverge, custom is usually altered to bring it into harmony with the practical requirements of the case'.[1] The antithesis between custom and competition is based on the degree and ease of adaptation to changing conditions. What is really meant is that under custom change is difficult and is attended with much greater friction than under competition. It is not implied that under custom change does not take place at all. Where mobility of labour and capital is perfect, competition will prevail, whereas custom will be predominant in the absence of this mobility. In connexion with the influence of custom, Mill points out that it is often the powerful protector of the weak against the strong and their sole protector where there are no laws or government. On the other hand, custom very often means habitual suppression of the weak in favour of the strong, as in the case of the guild and the caste or under the feudal system. It tends to repress the individual and to subordinate him to the community in a greater degree than is desirable.

§16. **Custom and rent.**—We may now go on to notice the influence of custom on the various economic relations in the old days.

The rents paid by the cultivators to the landlord were largely customary, varying little from generation to generation. There were also certain special circumstances which even under competition would have made for the immobility of rents. For instance, in the old days in India, owing to its relative abundance, it was land that ran after tenants rather than the tenants after the land as has been the case in more recent times; the explanation of this state of affairs being, at least partially, the fact that the tenant was not always certain, owing to conditions of political insecurity, of being able to reap the legitimate fruit of his labour in cultivating the land. Moreover, the tenants came

[1] T. Morison, op. cit., p. 54.

in handy to the landlord as his retainers under conditions of perennial warfare. It was precisely because of the prevalent conditions of insecurity, however, that the tenants could not drive a hard bargain with the landlord who was their natural protector and in whose strength and prosperity lay their safety.[1] These circumstances established an equitable and mutually profitable relationship between landlord and tenant. When, however, peace was established, the landlord did not fail to raise the customary rents, the change being none the less real for being concealed by the ingenious plan of levying extra cesses instead of raising the rent as such.

§17. **Custom and wages.**—As regards wages, to the very small extent to which hired labour was employed at all for the cultivation of land, there were certain recognized customs which regulated the remuneration of labour, the usual plan being that the labourer was supplied with board and lodging in the house of his employer or received fixed payments in kind. The labourer was engaged for a long period, generally by the year. We have already seen that the remuneration of the rural artisans for services rendered to the village community took the form of certain customary payments in the shape of annual grain allowances received from every cultivator at the threshing floor. The plan on the whole worked well from the point of view of both the parties concerned. The payments were elastic, as they varied with the nature of the harvest from year to year and, being payments in kind, the modern complication of a disparity between real and nominal wages due to changes in the purchasing power of money did not arise.

§18. **Custom and prices.**—Payments in money for goods purchased were the exception rather than the rule. In so far, however, as they did occur, in normal years custom was sufficiently powerful to regulate them; it could not well be otherwise in an environment where practically all transactions in the village came under the influence of custom. But in abnormal years, custom was overborne by competition, so that prices soared enormously high in years of scarcity and came down like a rocket in years of plenty. There were no moderating influences operating from outside on these local fluctuations, as the village had practically no access to the outside markets on account of defective transport. There could obviously be no such thing as a uniform level of competitive prices for the whole country in the absence of wide, well-organized and sensitive markets, and

[1] Cf. Martin Leake, *The Foundations of Indian Agriculture*, p. 130.

we have already had occasion to remark that there were often astonishing variations in prices even in adjoining villages.

§19. **Towns under the old economic order.**[1]—It is probable that about 10 per cent of the population in India lived in towns at the beginning of the last century and that this proportion was higher than in some countries of Europe, for example France or Russia. It must also be remembered that the industrial population in India was then largely distributed in villages also and it has been suggested that about 40 per cent of the population was dependent upon rural and urban industries and 60 per cent on agriculture.

The origin and prosperity of most of the old Indian towns may be traced to the three following reasons. (i) They were places of pilgrimage or sacred places of some sort like Allahabad, Benares, Gaya, Nasik, Puri; or (ii) they were the seats of a court or the capital of a province like Delhi, Lucknow, Lahore, Poona, Tanjore, Arcot; or (iii) they were commercial depots, owing their existence to their favourable position along trade routes, such as Mirzapur, Bangalore, Hubli, etc.

Of these, the sacred places and capital towns were more important than the commercial towns. In the holy towns, such as Benares, there prospered brass, copperware and bell-metal industries turning out sacred utensils and vessels for which there was a steady demand from the pilgrims. The court towns also were by no means negligible. They were numerous and arose not only in connexion with the imperial courts, but also with those of petty chieftains or nabobs. Their prosperity obviously depended upon that of the patronizing court, and they decayed with its removal or collapse, as in the case of the old Deccan capitals now in ruins, such as Deogiri, Paithan, Bijapur and Vijayanagar. In this class of towns, luxury industries predominated; for example, fine textiles, embroideries, gold and silver work, ivory and many other artistic handicrafts which then had attained the pinnacle of their glory and called forth the admiration of all lovers of art. The trading towns owed their importance to their advantageous position along trade routes and rose from their humble origin as cross-road villages. However, since the internal as also the external trade of India during this period was not very large, the importance of this class of towns was restricted; but their position was more stable than that of those dependent upon the prosperity of courts.

The main features of town life even then were naturally different from those of life in the village communities. They had

[1] For our account of towns we have largely drawn on D. R. Gadgil, op. cit.

larger populations, which depended on the imported supplies of corn from the neighbouring villages. They displayed a greater variety of trades and occupations, and possessed a better organization of industry and wider markets. They were characterized by a greater frequency of cash payments and enjoyed larger freedom in consumption and more efficient organization of credit. From very early times the collection of goods and their subsequent distribution by sale had reached a high degree of development in India. The use of indigenous credit instruments such as *hundis* or bills of exchange drawn by one banker or trader upon another, implied a considerable organization for trade purposes, and we know that money was thus transferred with facility from one account to another all over India. The great commercial houses of course dealt not only in money but also in wares; for instance, in Mirzapur and Benares there were dealers who collected goods and distributed them over a very considerable area.

§20. **Indian industries in the past.**—It is sometimes said that India has never been an industrial country and that nature has destined her to be an agricultural country. Now, if by this statement it is meant that agriculture has always been an important industry in India, this need not be disputed. Further, if it is meant that India has not been an industrial country in the modern sense of the term, this also may be conceded, though it is necessary to observe that even England and the other highly industrialized countries of today were, until recently, in the same position as India at the present time. If it is, however, implied that there were never any considerable industries in India apart from agriculture, it is easy to disprove such a statement by an appeal to her past history.[1] As the Industrial Commission (1918) observe: 'At a time when the west of Europe, the birthplace of the modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the west made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations.'[2] 'The skill of the Indians,' says Professor Weber, 'in the production of delicate woven fabrics, in the mixing of colours, the working of metals and precious stones and in all manner of technical arts has from very early times enjoyed a world-wide celebrity.'[3] Egyptian mummies dating from 2000 B.C.

[1] See the works of Romesh Chandra Dutt on the economic history of India.
[2] *Industrial Commission Report*, p. 1.
[3] ibid., Minute of Dissent, p. 295.

have been found wrapped in Indian muslin of the finest quality. Rome consumed Indian manufactures on a large scale and the Dacca muslins were known to the Greeks as the Gangetika. The iron industry also had attained a high level of progress as shown by the famous cast-iron pillar near Delhi. Thus industry 'not only supplied all local wants but also enabled India to export its finished products to foreign countries'.[1] India was likewise famous for her silk manufactures, her woollen shawls, boxes of sandalwood and cutlery. Many a foreign traveller has paid glowing tributes to her flourishing arts and industries. The successive waves of foreign conquest which commenced from the eleventh century must have greatly hampered the development of Indian industries for some time. The return of stable conditions, however, especially under Akbar, seems to have fully revived them. Indian cotton goods as well as silk goods were then exported in substantial quantities to Persia, Syria and Arabia. It was this trade and prosperity that attracted the European traders to India. Their rivalry to secure a footing in India at that time was occasioned not by the raw materials of the country but by the value and variety of her manufactures and crafts. It was the fine linens and calicoes, the jewels and the embroideries, woollen and silk manufactures, that supplied the basis for the lucrative trade of the East India Company.[2]

The urban industry of India at the beginning of the last century consisted chiefly of handicrafts producing fine textiles and other luxury goods for the aristocracy. It was far better organized than rural industry and was the first to be exposed to the full blast of foreign competition. The chief industry was, of course, the textile handicrafts, and among them the cotton industry was easily the first and was to be found all over India. As R. C. Dutt observes, 'weaving was the national industry of the people and spinning was the pursuit of millions of women'. The more important centres of the cotton industry were Dacca, Lucknow, Ahmedabad, Nagpur and Madura. The most famous woollen products were the Kashmir shawls—not, however, confined to Kashmir, but also produced in several towns of the Punjab. Then there were the metal industries turning out brass, copper and bell-metal wares, the chief centres for which were Benares, Nasik, Poona, Ahmedabad, Vizagapatam and Tanjore; these industries were, however, spread all over India. Arms and shields were manufactured in the Punjab and Sind. The towns of Rajputana

[1] Ranade, *Essays on Indian Economics*, p. 171.

[2] See Malaviya's Minute of Dissent, *Industrial Commission Report*, pp. 296-7.

specialized in all kinds of artistic works like enamelled jewellery, stone carving, etc. There were also other crafts like gold and silver thread, marble work, sandalwood work, glass and ornamental rings, tanning and leather works, paper-making and perfumery.[1] The shipbuilding industry was a hundred years ago in a sufficiently prosperous condition to excite the jealousy of English shipping interests and was favoured by the differential advantage enjoyed by India of large supplies of good timber, which was an important consideration before the days of iron-built steamships.

The urban handicrafts were organized into trade guilds upon a caste basis pursuing hereditary occupations. These guilds served as mutual help societies, governed membership conditions and quality of work. There was a good deal of division of labour and some degree of localization of industry as illustrated above, though every important city had its full equipment of the different handicrafts. Thus the urban industry was better organized than the rural non-agricultural industry. As in the case of handicrafts everywhere, the independent craftsman was not a big capitalist. He generally worked to order, the materials being usually provided by his customers. The artisan, living as he did under the domestic system of industry, was able without effort to learn the secrets of his occupation from his father and enjoyed the advantage of an assured position owing to the system of hereditary family trades. There can be no question that the position of the artisan was more prosperous than at present, on account of the assured demand for his wares. However, it is easy to paint too rosy a picture of his economic position. For example, the weaver was not generally able to reap the whole benefit from the keen demand for his wares. A good deal of this benefit was intercepted by the middleman employer who advanced money to the weaver and had often the ability, as he sometimes had the will, to exploit him.

§21. **Causes of the decay of Indian industries and progressive ruralization.**—The decline of the handicrafts, though in some cases it began as early as the end of the eighteenth century, became very marked about the middle of the nineteenth century and it can be attributed to the following causes:

(i) *The disappearance of the indigenous courts.*—The disapperance of the patronage of the courts and of the nobility meant the cessation of the main demand for the products of the handicrafts and hence their decline. For instance, the prosperity of the cotton and silk manufactures of Bengal had largely depended

[1] See D. R. Gadgil, op. cit., pp. 36-8.

on the existence of the great Mogul Empire with courts at Agra, Delhi and Lahore; and with the break-up of that Empire, which commenced after the death of Aurangzeb, the Bengal manufactures naturally began to dwindle.[1] The disappearance of the patronage of the courts and of the nobility was considerably accelerated by the extension of British power and hastened the decay of the industries that depended upon it, for example at Lucknow and Tanjore.

(ii) *The operation of adverse foreign influences.*[2]—The introduction of British rule indirectly weakened the power of the guilds and other bodies which regulated the trade and supervised the quality of the materials used. The disarming of the population and the establishment of peace unfavourably reacted on industries turning out arms and weapons. The European official, the foreign tourist and the newly educated professional class of Indians were the natural successors of the people whose patronage had kept up the handicrafts. Although the European in India naturally preferred goods imported from Europe, there was nevertheless a certain amount of European demand for these handicrafts, which helped to arrest their decay. But the introduction of new forms and patterns to suit the European taste and the increasing demand for cheap goods prejudicially affected the quality and workmanship of Indian handicrafts. The educated professional class as a whole turned its back on the indigenous crafts, being influenced by the standards of the ruling race, and took more kindly to the consumption of imported goods in preference to indigenous goods. Thus, the gap caused by the disappearance of the old patronage of the courts was only partially filled up under the new order of things.

(iii) *The policy of the East India Company and the British Parliament.*—The commercial instincts of the East India Company led it at first to encourage Indian industries, by financing them and otherwise, as its export trade was largely drawn from them. But this policy met with determined opposition from vested interests in England which made use of their influence in Parliament so that the Company should concentrate on the export from India of raw materials necessary for the English manufactures.[3] The opposition in England to the East India Company's trade between England and India was, at the end of the seventeenth century, also occasioned by the drain of specie to India which that trade involved. In the first half of the eighteenth century, England

[1] See Moreland, *From Akbar to Aurangzeb.*

[2] See D. R. Gadgil, op. cit., pp. 43-5.

[3] *Industrial Commission Report*, p. 75.

used the tariff against India with the double purpose of protecting her woollen and silk manufactures and of raising additional money to meet the cost of the continental wars. From 1700 to 1824 the use of dyed Indian calicoes was prohibited in England by law which, however, left untouched plain muslins and calicoes, and also all kinds of silk and cotton goods meant for re-export to the Continent. As R. C. Dutt observes: 'India in the eighteenth century was a great manufacturing as well as a great agricultural country, and the Indian hand-looms supplied the markets of Asia and Europe. It is unfortunately true that the East India Company and the British Parliament, following the selfish commercial policy of a hundred years ago, discouraged Indian manufactures in the early years of British rule in order to encourage the rising manufactures of England. Their fixed policy, pursued during the last decade of the eighteenth century and the first decades of the nineteenth, was to make India subservient to the industries of Great Britain, and to make the Indian people grow raw produce only, in order to supply material for the looms and manufactories of Great Britain. This policy was pursued with unwavering resolution and fatal success; orders were sent out to force Indian artisans to work in the Company's factories; commercial residents were legally vested with extensive powers over villages and communities of Indian weavers; prohibitive tariffs excluded Indian silks and cotton goods from England; English goods were admitted in India free of duty or on payment of a nominal duty.'[1] Duties ranging from 30 to 80 per cent, and in some cases prohibition of Indian imports, could not have failed to injure Indian exports to England to some extent.[2] What was more serious was the competition of English goods in India and the world markets.[3] 'Had not such heavy duties and the prohibitory decrees existed, the mills of Paisley and Manchester would have been stopped in their outset and would have scarcely been set in motion, even by the power of steam. They were created by the sacrifice of Indian manufactures. . . . The British manufacturer employed the arm of political injustice to keep down a competitor with whom he could not have contended

[1] R. C. Dutt, *Economic History of India under Early British Rule*, pp. vii-viii.

[2] In explaining the decline of the Indian cotton industry, however, the influence of protectionist measures taken in England to keep out Indian goods is generally exaggerated. The English market was only a tiny bit of the great export market for Indian cotton goods 'which ranged from Japan and China to the Spice Islands—Burma, Pegu, Persia, Arabia, West Africa and Europe outside England'.—L. C. A. Knowles, op. cit., p. 310.

[3] See C. J. Hamilton, *Trade Relations between England and India*, p. 163.

on equal terms.'[1] England was now producing cotton goods for which India afforded an excellent market, and did not scruple to use her political power for the purpose of exploiting this market. 'The British Government was not likely to treat a distant community that had come under its power more unselfishly than it had treated the British colonies in America.'[2] The prohibitive duties which England had levied against Indian goods imported for home consumption were removed only about the middle of the nineteenth century when, however, the unrestricted competition of British manufactures in the Indian and outside markets had already crippled the indigenous industries of India.

(iv) *Competition of machine-made goods.*—By far the most important reason for the depression of Indian textile and other manufactures of this period was the Industrial Revolution in England. In any case, the Indian domestic and cottage handicrafts could not possibly have withstood foreign competition, which derived its strength from the formidable industrial organization with its gigantic machinery, large-scale production, complex division of labour and improved transport and communications. 'The invention of the power-loom in Europe', as Dutt writes, 'completed the decline of Indian industries.' The shipbuilding industry of India followed suit and Indian ships were displaced by the British mercantile marine, partly as a result of the adverse policy of the Court of Directors towards Indian shipping adopted in response to agitation in England. The same story may be recounted of other Indian industries such as iron-smelting and glass and paper manufactures. The revolution in transport in India caused by the rapid construction of roads and, especially, railways, since the time of Lord Dalhousie, opened out many parts of the country to imported goods even in the remote interior, and thus intensified the force of competition.[3] Roads, telegraphs, railways, the construction of the Suez Canal, the drop in steamer freights, especially after 1830, reduction of the transport costs for the export of English manufactures—all these added to the difficulties and hastened the ruin of the Indian artisan.[4] The construction of railways in India was too rapid to allow the

[1] It has been urged that England's manufactures would have developed even without protection against Indian goods owing to the overwhelming advantage of machinery. But H. H. Wilson's point as quoted above is, that if England had felt as much concerned about India's interests as about her own, she would not have forced a policy of free trade on India while adopting protection for herself.

[2] J. L. and B. Hammond, op. cit., p. 185.

[3] See vol. II, ch. v.

[4] See A. Chatterton, *Industrial Evolution in India*, p. 20.

artisans to adapt themselves to the new circumstances and find for themselves other profitable channels of employment. Being taken unawares and left to their own resources, the artisans abandoned their traditional occupations in their thousands in favour of agriculture, thus increasing the pressure on land. If the railway construction had been slower and the change had been more gradual, greater powers of resistance might have been shown by the Indian industries, the resort to agriculture might not have been so wholesale in character, alternative avenues of employment would have been sought out and utilized in a greater measure, and the hardships attendant on the transitional period would have been minimized. The revolution produced, however, was too sudden to permit any such adjustment.[1]

(v) *The laissez-faire policy of the Indian Government.*— The Government not only did not lend a helping hand to the struggling handicrafts but sometimes went out of their way to give direct assistance to English manufacturers in exploiting the Indian market. The railways carried the products of English manufacturers everywhere in the country, replacing home-made by foreign goods and encouraging the export of raw materials. The foreign trade of the country expanded at the sacrifice of the domestic trade and an unhealthy and one-sided development of the country's resources was the consequence. As Ranade says: 'The great Indian dependency of England has during this (nineteenth) century come to supply the place of the old colonies. This dependency has come to be regarded as a plantation, growing raw produce to be shipped by the British agents in British ships, to be worked into manufactured articles by British skill and capital, and to be re-exported to this dependency by British merchants to their corresponding British firms in India and elsewhere. The development of the steam-power and mechanical skill joined with increased facilities of communication, have but lent strength to this tendency of the times, and as one result of the change, the gradual ruralization of this great dependency, and the rapid decadence of native manufacturing trade became distinctly marked.'[2] The Indian consumer may have gained somewhat by cheaper foreign goods, but the concentration of labour displaced from the indigenous handicrafts on agriculture has, it may be contended, increased the cost of famine relief and hence the burden on the consumer in his capacity as taxpayer.

§22. **Industrial Revolution in England and in India: a contrast.** —It is true that in England also the transition from the old to the

[1] See A. Loveday, *Indian Famines*, p. 107.

[2] op. cit., pp. 106-7.

new order of things established by the Industrial Revolution was attended by much dislocation and involved considerable suffering to handicraftsmen. It is also true that the Government of England showed an equal indifference to the fate of the displaced weavers and other artisans, and state action so far as it was positive, was intended to smooth the way for the new capitalist manufacturers and not to minimize the suffering of the handicraftsmen. But in England, the displaced labour was quickly absorbed by the new manufactures after a brief period of sharp agony; instead of increased ruralization there was a tremendous movement towards increased urbanization, and the demand for labour on the part of the new industries was so immense that the countryside was practically depopulated in order to meet it; and as a result of the Industrial Revolution, England entered on an era of unexampled prosperity and power. In all these respects the change in India was followed by altogether different results. The Industrial Revolution in India was the result of forces generated outside, and the machine-made goods with which the artisans had to compete were for a long time those that were turned out not in Indian but in European factories.[1] The disengaged industrial population had perforce to fall back on the land failing new large-scale industries in the country itself, and the rural character of the country became accentuated. The artisan in his new role of cultivator found himself economically in a decidedly worse plight than before, whereas in England his confrere often strengthened his financial position by profitable employment in the new factories. As to the effect of the economic transition on the country as a whole, in spite of the advance in agriculture, irrigation and transport, it is still a debatable question whether during the last hundred years or so the national dividend has increased to an appreciable extent.[2]

The growing ruralization of the country referred to above is strikingly reflected in the census statistics relating to the percentage of people dependent on agriculture. As early as 1880, the Famine Commission of that year found that the numbers who turned to the soil for subsistence were far in excess of those needed for its thorough cultivation, and this tendency has since been gathering additional momentum. The pressure on the land has increased in all the provinces (in the Punjab perhaps, the

[1] In India the economic revolution affected transport almost exclusively and its most important outcome was a vast increase of internal and foreign trade. It was not accompanied by any considerable change in the methods of production whether in agriculture or in industry.

[2] See vol. II, ch. iv.

position has not changed much). Taking India as a whole, the census of 1891 returned the percentage of the agricultural to the total population as 61. In 1901, it rose to 65·2; in 1911, to 69·8; and in 1921, to 70·9. Even if we ignore the census of 1891 on the ground of changes in classification since that date, the subsequent censuses leave us in no doubt as regards the movement from industry to agriculture. The apparent decline in the percentage of the agricultural population (workers) to 65·6 per cent in 1931 has already been commented upon.[1] It is true that the census statistics cannot be taken as absolutely reliable as they cannot distinguish clearly between subsidiary and main occupations, and a great many of the cottage industries are carried on as occupations subsidiary to agriculture.[2] But this element of inaccuracy being equally present in all the censuses, the figures at the different censuses may be safely used for comparative purposes.

Large-scale industry on modern lines has, however, already made a start, and the Government being committed to a policy of rapid industrialization, the progress in this respect ought to be more satisfactory hereafter, remedying the excessive ruralization which filled Ranade with misgiving and alarm. Greater development of the manufacturing industries in the country itself would obviously increase the difficulty of the artisans' position, and one of the questions which we will have to examine at a later stage will be, whether cottage industries are doomed to extinction or whether their continued existence and prosperity are compatible with industrialization in the modern sense of the term.

§23. **The village in transition.**—The organization of the village community and its economic life described already are undergoing a transformation as a result of the new forces called into existence by administrative centralization, the growth of individualism due to the impact of western civilization, and the revolution in transport and communications.

(i) *Administrative centralization.*—'The Indian villages formerly possessed a large degree of local autonomy, since the native dynasties and their local representatives did not, as a rule, concern themselves with the individual cultivators, but regarded the village as a whole or some large landowner as responsible for the payment of Government revenues and the maintenance of local order. This local autonomy has now disappeared owing to the establishment of local civil and criminal courts, the present revenue and police organization, and the operation of the indi-

[1] See ch. iii, §6 *ante*.

[2] D. R. Gadgil, op. cit., p. 321.

vidual rayatwari system which is extending even in northern India.'[1] This British policy of administrative centralization, which was adopted in opposition to the recommendations of Elphinstone in Bombay and Munro in Madras, who were anxious to preserve the village community in health and vigour, paralysed the incentives to village autonomy, and the brand new creations such as the district and taluka boards have proved very indifferent substitutes for the restricted, but more effective self-government of the village.

Effective administrative centralization postulates, firstly, the establishment of a strong stable Government, and secondly, easy communication and transport. Both these conditions were wanting in the pre-British period. Most of the ruling dynasties were preoccupied with the more serious problem of self-preservation and of necessity followed the line of least resistance, interfering as little as possible with the village administration. And even the most powerful Government must, in any case, have found the task of a day-to-day interference in village affairs impossible of performance, owing to the purely physical difficulties of communication and the inacessibility of the villages to the officers of the Central Government. In these circumstances, the policy of decentralization had perforce to be adopted and the autonomy of the village followed as the natural result of these conditions. With the present altered situation, the restoration of village autonomy must come as the result of a deliberate surrender of power on the part of the Central Government. The rehabilitation of the village can, however, never mean a return in all respects to the old dispensation. The village could never again be economically self-sufficient and almost completely isolated as of old; nor should we desire such a fate for it.

(ii) *Growth of individualism.*—Another factor which has contributed to the disintegration of the village community has been the growth of individualism. In modern times, individual legal rights have grown in all directions and have strengthened the position of the individual at the cost of corporate life. Such a tendency has manifested itself in India, and is one of the strongest present-day forces making for the disruption of the old fabric of Indian society based on corporate, rather than individual rights. Corporate feeling in the Indian village has thus been considerably weakened, although it is not altogether dead yet. The village has still sufficient vitality to be regarded as the primary unit of administration, and the old village dignitaries such as

[1] *Report of the Decentralisation Commission* (1909).

the headman and the accountant are indispensable links between the village and the Central Government. Moreover, the prospect of the revival of village self-government and corporate life has been brightened by the influence of the co-operative movement and the realization on the part of the Government of the value and importance of the village panchayats. The Montagu-Chelmsford Report gave the needed impulse to a movement which had already received the blessings of the Decentralization Commission of 1909. It is not easy to pour new wine into old bottles without cracking them, and the task of reviving village self-government is one bristling with difficulties relating to finance, personnel and the unfortunate break of over a hundred years in the tradition of village self-government. In spite of the great difficulties, however, the ideal of village autonomy is worth pursuing, and the obstacles in its path will vanish in the course of time with the economic betterment of rural India, the spread of education and general enlightenment of the people. It is essential, however, that the idea of village self-government should be pursued as part of a comprehensive scheme of rural reconstruction.

(iii) *Revolution in transport.*—Lastly, the revolution in transport effected by the construction of a network of railways and roads, since the middle of the nineteenth century, has broken down the isolation of the village and brought vital changes in its train.

§24. **Features of the village in transition.**—(i) The most important feature is the destruction of the self-sufficing character of the village. The village now imports from outside cloth, kerosene oil, aluminium ware, sugar, tea, matches, umbrellas, scissors, bangles, mirrors, drugs, sewing machines, etc. This increasing dependence of the village on the outside world has been largely helped by the changes in the standard of living due to western influences. The village has also begun to grow for the outside market and its increasing dependence on exchange with the outside world has initiated an economic revolution of a far-reaching character.

(ii) The nature of the famine calamity has also been transformed along with the break-up of the isolation of the village. The possibility of importing food from areas of plenty to make good the deficiency of local harvests has substituted famines of money for those of food as well as of money; and famine no longer stands for acute suffering from hunger on the part of large masses of the people, but merely involves scarcity prices and a temporary dislocation of employment and of agricultural operations. Similarly, the opposite fear of agricultural ruin by

plenty and low prices in years of bumper harvests is lessened on account of the extension of the size of the internal and international markets. At the same time, the old village grain-stores have practically disappeared, because the village can now draw upon a much larger grain-store co-extensive with the whole country.

(iii) Another striking change relates to the introduction of money economy. The growing frequency of exchanges with the outside world, which stands in marked contrast with its rarity in the old days, and the rise in agricultural prices are bringing money into the village, as also the remittances of those who go out of the village for employment. This increasing supply of money has led to its adoption as a normal medium of exchange, and payments in grain are now infrequent. Indeed, the substitution of money for barter, as we have seen, is a familiar index of the transition from the old to the new economy and marks a stage in the advance of civilization. Land revenue and other taxes, rents, interest on loans and wages are now largely paid in cash. Customary payments in grain for the services rendered by village artisans have not yet been completely supplanted, but they are much less important now than in the old days. Cash payments are also needed for commodities imported by the village.

(iv) The village population is no longer stable and immobile, thanks to the railway and the economic necessity of supplementing rural income by earnings in towns. There is no longer the old fixity of occupations and there is a certain weakening of the influence of caste and status. The numbers actually employed in factories, mines and the great public works may at any time be negligible in proportion to the total population, but owing to constant substitution, the numbers affected by modern influences are far greater. The break-down of the isolation of the village is especially striking in the case of those villages which are within easy reach of big urban centres.

§25. **Transition in village occupations—I. Transition in agriculture.**—We may now proceed to study briefly the transition in village occupations, beginning with agriculture, the premier industry of the village, and passing on to the transition in the village crafts.

There has been no fundamental change in the organization of the agricultural industry. Cultivation on a small scale by small farmers working with their own capital and labour is still the normal arrangement. If anything, the growing ruralization of the country and the increased subdivision of land have considerably increased the number of small cultivators. Similarly, the old

immemorial agricultural methods and technique still remain largely unaffected, the success of the Agricultural and Co-operative Departments in introducing improved methods and implements being so far very limited in character.

The transition in Indian agriculture has four important aspects, namely, (i) commercialization of agriculture, (ii) dispossession of the ryots and the transfer of land from them to non-agriculturist money-lenders, (iii) increasing subdivision and fragmentation of holdings, and (iv) scarcity of rural labour.[1]

(i) The commercialization of agriculture has been due mainly to improved transport and better communications. The opening of the Suez Canal in 1869 in particular helped to establish wider and worldwide markets for agricultural products.

The opening of the world markets and the consequent commercialization of Indian agriculture were factors forced into prominence in the sixties of the last century owing to the American Civil War. The American cotton supplies being cut off by that war, Lancashire had to fall back on other sources like Egypt and India. The Lancashire demand led to a cotton boom which for a time put large profits into the pockets of the cotton grower and the exporter. Further, the opening of extensive tracts for cultivation owing to the initiation of large irrigation works in the Punjab, the United Provinces and elsewhere has given an impetus to the substitution of commercial for subsistence husbandry. Apart from transport and irrigation but connected with these, another factor responsible for the commercialization of agriculture has been the increasing use of money in the village and cash payments of taxes, rent, interest and wages. The necessity of cash payments is compelling the cultivator to sell a part of his produce, in many cases a very large part, immediately after the harvest, and he has often to buy back his own crop from the money-lender at prices higher than those at which he sells.

This new phase of agricultural production has in a certain measure led to the specialization of different regions in particular crops; for example, Bengal specializes in jute; Bombay and Berar in cotton; the Central Provinces in oil-seeds; the Punjab in wheat, and so on. It has also led to an extension of the area under industrial and non-food crops like cotton, jute and oil-seeds. Further, there has arisen a special class of middlemen, wholesale dealers and exporters, for moving crops such as cotton, jute, wheat, etc. quickly to the ports and to inland distributing centres. In our chapter on Agriculture we shall see how far this commer-

[1] For a fuller treatment of the question see D. R. Gadgil, op. cit., ch. xi.

cialization of agriculture has really benefited the producer and the country as a whole and what improvement in the marketing of agricultural produce is necessary.

(ii) The dispossession of the old peasants by the money-lender is one of the results of rural indebtedness which has been stimulated by the growth of individual rights in land, freedom of transfer, rise in land values, facile credit and the highly complicated civil law and procedure. We shall discuss elsewhere the primary and secondary causes of agrarian indebtedness along with the various measures taken by the Government to check the alienation of land in favour of the non-agricultural classes.

(iii) The increasing subdivision and fractionalization of holdings, so highly detrimental to improved agriculture, has been due to the growing pressure of the population on land operating through the laws of inheritance and succession.[1]

(iv) The scarcity of agricultural labour of which complaints have become common in many villages is particularly felt at harvest time when the extra labour of the small cultivator and his family is not available; and it has been attributed to an increase in the area under cultivation, the growth of city industry and the tendency on the part of substantial farmers, who have especially benefited from a rise in prices, not to work their fields themselves but employ hired labour.[2]

II. Transition in the village crafts.—We may now turn to examine the change in the position of the rural artisan. On the whole, the change here has not been revolutionary. 'The carpenter, the blacksmith, the washerman, the barber-surgeon, the potter, etc. still exist as village servants with recognized duties and remuneration,' receiving their customary dues. But customary duties now play a less important part than they did in the past and the village artisan of today is more ready to migrate in search of better earnings elsewhere. Easy and cheap transport, by facilitating imports from abroad, has made it all the less necessary for the village to provide for the satisfaction of all its needs locally. The continuous presence of all the artisans in the village is, therefore, no longer required. Payment of the artisan by the job rather than for the year is becoming more common, though the transition in this as in other respects is yet incomplete. The same factor is also responsible for the partial concentration of certain artisans like the weaver and the goldsmith in the larger towns and villages. The village artisan has been also adversely hit by the competition of the mass production of the factories, foreign and Indian, and

[1] See ch. vii.

[2] See G. Keatinge, *Progress of Agriculture in Western India*, pp. 144-6.

some village industries have already collapsed as a result of this unequal competition.

The various village artisans have been, however, affected in different ways by the transition. Hand-spinning, as in the case of the English industrial revolution, has been the worst sufferer, and the old spinning wheel in every cottage has now been for the most part silenced. The village dyer has also suffered on account of the import of aniline dyes and the use of dyed mill-made yarn. The weaver has suffered, not only because of the competition of machine-made goods with which the Indian market was flooded, but also to some extent because foreign Asiatic markets such as Java and Persia, which had been previously supplied from India, now came to be supplied from England. Hand-weaving, however, is by no means extinct in India. It is computed that there are still about two to three million hand-looms at work in India and about six million hand-loom weavers, and that their annual gross earnings must amount approximately to 50 crores of rupees.[1] The increasing use of iron ploughs, crushers and other improved implements has prejudicially affected the position of the blacksmith and the carpenter, as the growing use of enamelled ware, and of copper and brass utensils has rendered the potter largely superfluous. The lot of the village tanner has become hard on account of the rise in world-prices of raw hides and skins, which are annually exported in large quantities from India, and the increasing imports of ready-made tanned hides. The village oilman has also been hit hard by the increasing use of kerosene oil in the village, export of oil-seeds and the growth of an oil-pressing industry in towns. Where the village industry has suffered a setback and depression, there has been a tendency for the displaced artisan to join the ranks of the day-labourers in the village itself or to migrate to towns in search of better employment. As a general rule, the artisans have given up their hereditary occupation only when forced to do so, though in some cases they have foreseen the ruin that was overtaking them and abandoned their occupation without waiting for their position to become absolutely desperate.

As regards those artisans who still continue to ply their ancestral crafts, there has been little change in their condition, except that some of them have adapted their trade in some measure to the changed conditions of production. For example the weaver now mostly uses mill-made yarn, and in some cases the fly-shuttle, as in Madras; the smith imports ready-made iron and tin

[1] See *Industrial Commission Report*, par. 256, and M. C. Matheson, *Indian Industry*, appendix iv.

sheets; the carpenter makes use of improved implements; and the tailor uses the sewing-machine.

It is thus obvious that not all the artisans in the village have been equally affected. Those that have been able to concentrate in the larger villages or to migrate to towns have improved their position—for example the carpenter and the blacksmith, for whom there is a growing demand in the engineering workshop, building and furniture industries in the towns. Those, however, that could not leave the village and had no other alternative suffered and have had to take to ordinary agricultural labour.

The foregoing survey of the transition in the village handicrafts shows that rural industry is on the whole decaying. Large numbers of artisans have degenerated into mere wage-earners. A fortunate few have improved their position by migrating to towns. Some have become farmers, while those that have had to stick to their hereditary position are generally in a desperate plight and they are the first to flock to the public relief works in times of famine and distress.

§26. **Transition from status and custom to contract and competition.**—We have already discussed, in the chapter on Social and Religious Institutions, the extent to which status, as regulated by the caste and the joint family system, still operates in India, and it has been shown there that Indian society is in a condition of flux and transition, and is gradually assuming a new character. Custom, for example, as a regulator of wages, rent and prices is being steadily supplanted by competition, more particularly in urban areas. The spread of western civilization, the introduction and the extension of money economy and the development of communications are rapidly weakening the force of custom, and competition is becoming the predominant force everywhere. It is true that even in the most advanced communities the force of competition is to some extent mitigated by that of custom. But though not entirely absent, the influence of custom is negligible in western Europe. In India, it is more powerful, though it is important to note that the drift of events is unmistakably towards the supersession of custom by competition and in general towards a gradual approximation to western conditions.

(i) *Competition and rent.*—The growth of population, the ruralization of the country, the practical absence of other outlets, the high prices of commercial crops like jute, cotton, wheat, oil-seeds, etc., the traditional sentiment in favour of land, and the establishment of peace and order together with the introduction

[1] For a more detailed account of the transition in the village handicrafts see D. R. Gadgil, op. cit., pp. 183-98.

of cash rents, have all extended the range of competition in determining rent. In some cases, the tendency towards rack-renting the tenants on the part of landlords has had to be checked by the passing of Tenancy Acts, as in Bengal, Madras, the United Provinces, the Central Provinces, etc., so as to secure for the tenants the enjoyment of rights already conferred upon them by custom, and to prevent arbitrary increases in rent or eviction. As regards house rent in towns, it is now practically a competitive rent, though occasionally it may be controlled by legislation in big cities like Bombay.

(ii) *Competition and wages.*—At the present time in India, especially in the towns, wages may be regarded as governed more by competition than by custom, although competition even in this sphere is not so powerful a force as in western countries. The response of wages to changes in demand and supply is not so quick as in the west, and so the wage level, while it varies in different parts of the country, is comparatively stable. Competition now affects the rate of wages in villages also as a result of various forces, such as the increased demand for labour in towns, the greater mobility of labour due to better means of transport, and the introduction of cash wages. The customary remuneration of the village artisan, as has already been shown, is becoming less important, especially in the case of such artisans as the village blacksmith and the carpenter who can easily find employment in the towns. The wages of farm labourers are also largely governed by competition, particularly where there is a scarcity of agricultural labour. The nearest approach to purely competitive wages is attained in the towns under the influence of an ever-increasing demand for labour.

(iii) *Competition and prices.*—Prices in rural areas are being increasingly determined by competition as regulated by the relations between demand and supply. In consequence of improved communications, changes in prices in one part of the country nowadays quickly affect those in other parts, and the linking up of the country with the world's markets has considerably enlarged the scope of competition in determining prices. It is obvious, however, that prices in rural areas are bound to be more sluggish than in urban areas owing to the greater conservatism and ignorance of the rural population.

§27. **Transition in industries.**—We have already described transition in the indigenous industries of the country, the causes of their decline and the progressive ruralization of the country.

The industrial position of India, as Ranade points out, had sunk lowest towards the middle of the seventies of the last

century,[1] but from that time onwards there has been very gradual but almost uninterrupted progress in large-scale industry. 'To those who look forward with hope to an industrial revolution in India, the bright side of the picture is not to be sought in the village at all but those manufacturing centres which have sprung into life in recent years and in which industry is organized on a completely modern basis. It is to Bombay, Cawnpore and the banks of the Hooghly that we must go to find labour concentrated together and working under expert supervision. It is in such cities that capital has been freely spent on the erection of mills and costly machinery, that the economies of large-scale production have been secured, and that Indian captains of industry have arisen.'[2] The new form of industry was first established in the plantation industries such as those represented by the tea, coffee, indigo and jute estates, which were and have remained to this day in the hands of European planters.[3] This new development was favoured by the removal of restrictions on European settlement and enterprise in India by the Charter Act of 1833, and also by the abolition of slavery in the West Indies, which deprived the West Indies planter of the advantage of cheap labour.[4] British business men were not slow to perceive the scope which the rich and varied supply of raw materials and the huge extent of the local market offered to manufactures on modern lines, and thus justified the prescience of Lord Dalhousie who foresaw the development. The flow of British capital and enterprise into India became especially pronounced after the middle of the last century.

The example of European business men evoked a corresponding enthusiasm among the commercial classes of India, more especially in Bombay, which had the honour of giving a lead in this matter to other parts of India and winning for itself the position of the industrial capital of India. Though the progress of large-scale industries has been slow, its definite establishment in the country may be regarded as a partial set-off to the movement towards ruralization which Ranade deplored so much.

[1] 'Things were as bad as they could be about 1870-5; since then the tide has turned, and India has shown signs of revival which marks its first step in the transition from a purely agricultural country into a partly manufacturing and trading country.'—op. cit., p. 119.

[2] Morison, op. cit., pp. 170-1.

[3] For a very comprehensive account of the various Plantation Industries see D. H. Buchanan, *The Development of Capitalist Enterprise in India*, chaps. iii and iv.

[4] See Knowles, *Economic Development of the Overseas Empire*, p. 306.

Towards the middle of the last century, the factory industry was introduced into India and the first outposts of the industrial revolution were planted in the country. Then were established two of the most important of India's present-day industries in Bombay and Bengal respectively. The cotton mill industry has from the first been financed and managed by Indian capital and enterprise, while the jute industry has been dominated by European capital and enterprise. The industrial revolution spread to the mining industries, and then to various other industries such as cotton gins and presses, coal, manganese, gold and mica, steel and iron, rice-husking and -grinding mills, oil mills, etc. Progress was at first very slow and confined to only a few places in the country, and it was only towards the end of the last century that factory industry began to develop all over the country. In the first decade of the present century, especially under the influence of the enthusiasm created by the swadeshi movement, many mineral and some miscellaneous industries came into prominence. These later years also witnessed the spread in India of the use of small machines and small engines and generally a tendency to make an increased use of mechanical appliances was in evidence everywhere.[1] The War gave a temporary stimulus to Indian manufactures, particularly to the cotton and jute mill, steel, iron and leather industries. The recent extension of large-scale industry referable to the policy of 'discriminate protection' will receive detailed notice in our discussion of the tariff policy of India.

Two depressing features of this transition in Indian industries must be noticed. One is that the movement has been very slow and uneven, and the other is that much of it has been directed by foreign capital which consequently occupies a dominant position in Indian industry and absorbs a large portion of India's newly created wealth. The invasion of foreign capital and enterprise, while it has stimulated industrial development, has resulted in many cases in the premature exploitation of such of the country's resources as are not subject to the process of natural growth and recovery, and has created powerful vested interests often in sharp antagonism with the national point of view in political and economic matters. Among the causes which explain the slowness and the uneven character of our industrial development, the most prominent are the inadequacy and shyness of Indian capital (which sought investment in money-lending, land or commerce instead of the new type of manufactures); inadequate banking facilities; uneven distribution of natural resources such

[1] For further historical details see Gadgil, op. cit., chaps. iv, vi and viii.

as coal, the prevailing ignorance about them, and their comparatively undeveloped condition; lack of technical education; the relative inefficiency of our labour, skilled and unskilled; the dearth of skilled labour and of captains of industry; the undeveloped condition of such basic industries as steel and iron; and finally the apathy of the Government and their failure to put forth special effort to speed up development. The present policy of protection marks a welcome departure from the attitude of indifference to industrial progress which has long characterized British policy in India.

§28. **Two tests of industrial progress.**—In order to ascertain the extent of the industrial progress made, and of the economic transition effected by India, two tests have been suggested, namely, (i) the statistics of foreign trade, and (ii) the growth of towns.

(i) Statistics of foreign trade bearing particularly on the proportion of manufactured goods in the imports and exports may first be discussed. As Morison observes, 'both exports and imports have increased largely with the growth of the country's wealth and population, but the export of manufactured articles has increased more largely than the export of raw materials, thus showing the local development of industries. In the import trade, the tendency is, as we should desire it to be, in the opposite direction ; the import of raw materials has increased to a greater degree than that of manufactured goods,' thus showing that the country has been importing raw materials in large quantities to be manufactured in this country. Between 1879 and 1892, as Ranade himself pointed out, the export of manufactured or partly manufactured goods rose to Rs. 16·42 crores, showing an increase of 211 per cent. The rise in the export of raw produce from 59·6 to 85·6 crores was not relatively so high, being only 43 per cent. On the other hand, manufactured imports rose from 25·9 to 36·2 crores or by 39 per cent, while the imports of raw produce almost doubled themselves from 13·75 to 26·38 crores or 91 per cent. And on the strength of these figures, Ranade came to the conclusion that the reverse movement to 'the collapse of domestic industries and the gradual rustication of our occupations' had made a promising beginning.[1] Continuing the analysis on the same lines from 1892 to 1907, Professor Kalé has been able to show that 'the import of manufactured goods rose during this period by 93 per cent and of raw materials by 127 per cent, while the export of manufactured goods rose by 139 per cent and

of raw materials by only 57 per cent. The proportion of the imports of manufactured goods to total imports which stood at 65 per cent in 1879 and 57 per cent in 1892, dropped to 53 per cent in 1907, and, in the same way, the proportion of manufactured exports which was only 8 per cent in 1879 and 16 per cent in 1892 rose to 22 in 1907,'[1] and it may be pointed out here that under the stimulus given by the War, this proportion rose to 36 per cent in 1919.

The accuracy of these statistics has, however, been impugned by some critics like J. M. Keynes, who contend that 'the figures for the imports of manufactures in the official statistics are misleading and do not mean what they apparently imply', because this heading excludes, among other items, all imports of machinery and of metals and metal manufactures. Similarly, the calculations regarding the growth of imports of raw materials are misleading. On the export side, half-finished manufactured articles such as cotton yarn and tanned hides swell the total figure for exports of manufactures and give an exaggerated impression of the growth of industries and the pace at which it is proceeding. We shall revert to this topic in our survey of the main features of India's foreign trade. Here it is sufficient to say that the trade returns leave us in no doubt that the tendency towards industrial development is itself unquestionable and is growing with the passage of time. Indeed, there are some who, like Dr Gilbert Slater, are alarmed at the present rate of progress which, they believe, threatens to be too fast for social and economic stability and tends to outpace the adoption of measures to prevent the evils of modern industrialism. This view, however, is not generally held, the predominant feeling being in favour of more rapid industrialization; for even today, about three-fourths of India's imports consist of manufactured articles, while raw materials including food-stuffs bear about the same proportion to her total exports.[2]

(ii) We shall now proceed to discuss the second test which has been suggested, namely, the growth of towns.[3] The small number of towns and the insignificant proportion of the urban to the total population may be taken as an index of the industrial

[1] See Pillai, *Economic Conditions in India*, p. 31.

[2] In 1936-7 the proportion of imported manufactured goods to total imports was 73·9 per cent as compared with 76·6 per cent in the pre-War period. Conversely, in the same year the proportion of manufactured goods exported from India was 27·1 per cent of India's total exports as compared with 23·1 per cent in the pre-War period (*Review of the Trade of India*, 1936-7, Tables 4 and 5).

[3] See D. R. Gadgil, op. cit., ch. x.

backwardness of the country. A statement has already been given showing the steadiness of the ratio of the urban population in India.[1] Over a long period the proportion of the urban to the total population has remained more or less unaltered and the urban population has grown only slightly more quickly than the total population of the country. In England, on the other hand, the development of new industries brought about a rapid urbanization of the population, of which 78 per cent live in towns. From the point of view of the urbanization test, therefore, India has a tremendous amount of lee-way to make up.

§29. **Modern forces influencing the growth of towns.**—We shall now consider the different forces acting on the growth of towns in modern India.

(i) Railways and navigation have brought into existence new commercial centres and have increased the importance of some of the old ones. In fact, one of the earliest results of British rule was the growth of the great mercantile centres, and we may say that the British have played the role of town-builders in India. Bombay, Karachi, Madras, Calcutta, Delhi, Lahore, Hubli and Bangalore serve as illustrations of the new commercial towns.

(ii) The growth of new industries in the west has meant the crowding of vast masses of population into mammoth towns and cities—a phenomenon not without its counterpart in India. The leading industries of the country have contributed to the conversion of villages into towns and towns into cities. Bombay, Ahmedabad, Sholapur and Hubli with their cotton mills, and Cawnpore with its woollen mills and leather factories are all creations of the new industrial era and owe their size and a substantial part of their importance to their respective staple industries. The rapid development of Jamshedpur since 1911, as a result of the expansion of the Tata steel and iron enterprise, is one of the romances of industrial achievement in India. The influence of industrial development on the growth of towns, has not, however, been so powerful in India as in western countries. This is shown by the fact that out of the existing 34 Indian cities, containing more than a lakh of people, not less than 22 owe their importance, partly at any rate, to other than manufacturing or commercial activities, and also by the fact, brought out by the census of 1911, that only 30 per cent of the inhabitants of these cities were occupied in industrial pursuits.

(iii) Famines are among the causes which deplete the countryside and increase the volume of the urban population. It may

[1] See. p. 51.

happen that part of this addition is permanently absorbed by the occupations in towns, though most of it is certainly lost owing to people returning to their villages after the advent of the rains.

(iv) The rise of a class of landless labourers in the villages is the result of famines and the dispossession of the old peasant proprietors, and the transformation of the artisans into wage-earners. The existence of this class promotes urbanization to some extent, for the landless labourer is often ready to migrate to the towns if he can find employment there.

(v) The attractions of urban life have led wealthy landlords and other persons of substance to settle in towns. This incidentally encourages absentee landlordism.

(vi) Administrative centralization has increased the urban importance of the taluka town in comparison with the village, of the district headquarters in comparison with the taluka towns; and similarly in the case of divisional headquarters, and provincial, imperial and state capitals.

(vii) Facilities for secondary and higher education are practically confined to the bigger towns, and parents often choose them as residences with a view to the education of their children.

§30. **Influences making for the decline of towns.**—Side by side with this increasing urbanization must be noticed the tendency of the older towns to be depopulated.

(i) Changes in regional values and diversion of trade routes have in many cases brought about the decline of towns which previously owed their prosperity to the command of river and road traffic, and are now superseded owing to railway extension e.g. Mirzapur on the Ganges, Patna, Saugor, etc. The railway engineer cannot always contrive that the railway line should pass by the old urban centres, so that being left severely alone away from the main line, some of them have naturally dwindled in importance.

(ii) The decay of urban handicrafts, following the disappearance of the old courts and the rise of the European competition, has brought about a decrease in the population in old Indian towns like Dacca, Murshidabad, and Tanjore. Even sacred towns like Gaya and Benares are losing their importance and population as a result of the fall in the demand, on the part of the pilgrims, for the products of the old industries of these towns.

(iii) Diseases like plague and cholera periodically turn urban areas into charnel houses and drive the population away to the open country. This movement is, however, only temporary in

character and is reversed with the restoration of normal conditions of health in the towns.

Taking into account the two opposite tendencies of the growth and decline of towns we reach the conclusion that they have so far just balanced each other, though in recent years the tendency to urbanization is slightly gaining the upper hand. This stands in marked contrast with what happened in England during the period of the Industrial Revolution. There the towns in the south decayed in a short time, but their loss was nothing in comparison with the rapid rise of vastly more populous urban centres in the north.

§31. **'Sudden transition from local to international economy.'**— Professors Wadia and Joshi characterize the evolution, which we have described under the heading of Economic Transition, as a 'sudden transition from local to international economy'.[1] What is apparently meant to be conveyed by this is that the village became suddenly linked with the outside world; that international trade developed much faster than internal trade and that, as it was entirely uncontrolled and unregulated, it led to a one-sided, and on the whole injurious, development of the economic life of the country with the scales tipped heavily in favour of agriculture and against industry; that this development was a part of the general exploitation of the undeveloped tracts of the African and Asiatic continents at the hands of the leading powers of Europe; and that in permitting it the Government of the country paid no attention to true national interests. If it is thought necessary or useful to put some short descriptive label to all this, it should perhaps be '*sudden transition from self-sufficiency to international exchange*', because the term 'international economy' implies that there is a 'world will' which 'ranks above national wills and in which they find expression'. At present, however, such a world will does not exist, and 'international relations are not regulated in accordance with an ideal of the human race, but according to the wills of the nations concerned'.[2] The nation is still the economic unit and we cannot talk of international economy until 'the national standpoint is transformed by universal or international considerations'.[3] In a truly international economy the sacrifice of any particular nation would be acquiesced in by the nation concerned and not imposed upon it by guile or force employed by some other nation. Also, the ultimate justification of such a sacrifice would invariably be the consideration that it

[1] Wadia and Joshi, op. cit., pp. 158-60.

[2] J. Grunzel, *Economic Protectionism*, pp. 3-4.

[3] See Seligman, op. cit., pp. 81-2.

would be to the eventual benefit not only of the world state in general but also of the individual state itself called upon to make a temporary sacrifice.

While we object to the phrase 'international economy', however, we are in general agreement with the view that the economic transition in India has been accompanied by many regrettable features. Though the change that has come about as a result of this transition is not wholly bad, it has brought along with it some unquestionable evil, such as the excessively one-sided nature of India's foreign trade, the rapid decline of her indigenous industries, the undue preponderance of foreign capital in her economic life, the excessive pressure on the land, etc. Indeed the development of a true national economy is, of all things, the most vitally important at the present juncture for the economic uplift of the country (it being understood that a national economy is not necessarily committed to the goal of self-sufficiency or to any particular policy whether of protection or of free trade, but chooses its course, whatever it may be, with the sole object of promoting national welfare).

§32. **Is industrialization desirable for India?**—The movement towards industrialization has already made a fair start in India. And while the general trend of opinion is in favour of accelerating it, there are some who would, if they had their own way, nip it in the bud as being fraught with sinister possibilities for the country. Part of the opposition to industrialization comes from those who look with horror on all machinery because they believe that it inevitably degrades human life and work, and makes both mechanical and joyless. They yearn for a simple and primitive system of industry, under which there would be more air and sunshine, more elbow-room and greater freedom than can ever be possible under a regime of machinery. There is, however, generally a poetic vagueness and lack of actuality and substance about these visions of an ideally simple economic life, and we know as a matter of fact that they have never been actually realized anywhere at any time. We know, on the contrary, that manual labour can be very dull and heavy and brutalizing, and that man has improved his economic position and turned the earth into a more and more comfortable and desirable place of habitation for himself in the measure in which he has increased his mastery over nature, and this is essentially what the replacement of human and animal labour by machinery means.

Some people, while admitting the necessity of supplementing the labour of men and animals up to a certain limit, would draw

a line beyond which they would not allow the domination of man over nature to go. They would stop, for example, at the windmill or the water-mill, or a simple wooden plough, or a *charka* or spinning wheel, but they have no satisfactory answer to the question as to why these beginnings of human mastery over nature should not be followed up by a more complete domination.

The introduction of machinery and large-scale production of the modern type is no doubt apt to bring very serious evils in its train, such as overcrowding and the ruthless exploitation of the weak by the strong, and to compel large numbers of workers to lead cramped, squalid and distressful lives amidst unspeakably ugly and unhealthy surroundings. It is, however, not true that the only way of avoiding these evils is to dispense with modern methods of large-scale production. As western experience shows, it is possible very greatly to mitigate these evils by suitable state action and legislation. And it is significant that, although in the west there is profound discontent against the present economic organization, nobody of any consequence has proposed the abolition of machinery altogether. The discontent is directed more against the manner in which the wealth that is produced is distributed, than against the employment of machinery and the system of large-scale production.

We must indeed take care not to emphasize unduly the material side of life. But it is clearly necessary, in the case of a poor country like India, that the wealth *per capita* should be increased and her teeming millions lifted above the cares and worries of mere existence, in order that any kind of higher life should be possible for them.[1] And this cannot be done without the help of up-to-date methods of production. Moreover, it must be remembered that India can no longer remain isolated even if she wishes to, and she can only survive the onslaughts of foreign competition by forging the weapons of modern industrialism. The case for machinery has been well put by F. S. Marvin as follows: 'A machine is something which extends man's physical powers in dealing with nature, enables him to put more brains into longer and defter fingers and indefinitely strengthened muscles. Any one who opposes this in principle, opposes the upward march of our species, nor can he draw even an intelligible line and say, so far it was right for man to strengthen himself but no further. Is it to be at the motor-plough or at the first simplest stick for scratching the ground, at the steel mechanical

[1] For an excellent discussion of the proper attitude with regard to material progress in India, see M. L. Darling, *Rusticus Loquitur*, pp. 374 ff.

reaper or the stone man's flint axe? There is no difference except of perfection and power. The real objections are to something quite different, the industrial town, the factory system and what is called "wage-slavery". But these are social arrangements modifiable at will, and in no necessary way bound up with our extended power over nature.'

Opponents of industrialism in India have sometimes taken a different line. They have urged that if industries are to be fostered in India, this will have to be at the expense of agriculture, the premier industry of India. This argument will be examined in our chapter on Industries. In the meanwhile we will content ourselves with the statement that industrial development, far from being antagonistic to agricultural development in this country, will have the most beneficial influence on it.

Lastly, it may be pointed out that the conviction about the necessity and desirability of rapid industrialization is growing apace in India, and those who set themselves in opposition to this tendency will find that they are engaged in a futile endeavour. They have no more chance of success in their attempt to stay the advance of the oncoming tide of industrialism than the excellent Mrs Partington had in her unequal contest with the Atlantic which she so valiantly tried to push away with her mop.

CHAPTER VI

AGRICULTURE: PRODUCTION AND EXPORT

§1. **The place of agriculture in Indian economics.**—The most striking characteristic of the economic life in India is the overwhelming preponderance of agriculture over other occupations, the great mass of human life and effort, represented by three out of every four persons in the country, being devoted to agriculture. Agricultural production provides practically all the food-grains consumed in the country, and yields large quantities of raw materials like cotton, jute, oil-seeds, etc., for the principal manufacturing industries. And yet a study of the present position of Indian agriculture must lead everyone to endorse the gloomy words of Dr Clouston, Agricultural Adviser to the Government of India, when he said: 'In India we have our depressed classes; we have, too, our depressed industries, and agriculture, unfortunately, is one of them.'[1] Judged by whatever standard—the size and the constitution of the holding, the implements and the fertilizers in use, the system of rotation of crops, the quality of the seeds, the position with regard to irrigation facilities and other land improvements, marketing organization, animal husbandry, subsidiary rural occupations, etc.,—our agriculture is in an extremely backward condition. This is shown by our excessively low outturn per acre, which at best is often only one-third or one-fourth of what is obtained in other lands, and which dwindles to nothing during times of drought and famine.[2]

§2. **The need for agricultural development.**—The need for agricultural improvement is imperative from many points of view. It will lead to an improvement in the economic condition of the masses and raise their standard of living. It will ensure an adequate food supply for the population of the country. The reactions of improved agriculture on industry are no less important. The increased purchasing power of the rural masses will provide a large home market for absorbing the products of the home manufactures. Improvement in agriculture will necessarily imply a growing mechanization of its processes and may

[1] *Agricultural Commission Report*, Minutes of Evidence, vol. I, evidence by the officers of the Government of India.

[2] ibid., p. 14.

be expected to bring into existence large manufacturing establishments to produce agricultural tools and machinery.[1]

We may, however, make two things clear here. In the first place, as already pointed out, the plea for improved agriculture does not mean that nature has destined India to be an exclusively agricultural country. In our opinion she is so situated that she can have a prosperous manufacturing industry as well as a thriving agriculture. In the second place, we must appreciate the fact that our agricultural problems cannot be solved in an isolated fashion without reference to our industrial problems, and we would do well to remember how, during the period of the Industrial Revolution in England, agriculture and industry were transformed side by side, progress in one helping progress in the other. The present congestion in Indian agriculture and the ruralization of the country are evils which cannot be overcome simply by a system of improved agriculture. A simultaneous development in industry is also necessary to relieve the pressure on land and to ensure a steady flow of capital from the cities and manufactures for investment in land.

The present Indian awakening may be regarded as a phase of the worldwide interest in agriculture which has been in evidence since the War of 1914-18. Perhaps in the pre-War days, there was a general tendency to forget the supreme importance of agriculture. But the experience of the War put an end to this indifference by exposing the dangers of dependence of foreign supplies in the matter of food and raw materials. Agriculture has again come into its own as a premier national key industry and much is being talked and written about its rehabilitation and advance in practically every country, not excluding England itself, the classic land of manufacturing industry.

§3. **Statistics of area under different crops in British India.**[2]

TABLE I

	Acres (millions) 1901-2	Percentage of net area according to village papers	Acres (millions) 1936-7	Percentage of net area according to village papers
Net area by professional survey	552·92	...	679·62	...
Net area according to village papers[3]	553·7	...	679·14	...
Area under forest ...	66·36	12·0	89·17	13·1
Not available for cultivation ...	137·96	24·9	155·00	22·8

[1] See *Industrial Commission Report*, p. 22.

[2] *Agricultural Statistics for British India, 1936-7* (Provisional) pp. 2-3.

[3] Includes 0·14 million acres for which details are not available.

	Acres (millions) 1901-2	Percentage of net area according to village papers	Acres (millions) 1936-7	Percentage of net area according to village papers
Cultivable waste other than fallow	107·52	19·4	154·26	22·7
Fallow land	42·15	7·6	48·64	7·2
Net area sown with crops ...	199·71	36·1	231·93	34·2
Total sown area (includes areas sown more than once)	220·35	...	267·58	...
Area irrigated	32·58	...	51·68	...

	Acres (millions) 1901-2	Percentage of total sown area	Acres (millions) 1936-7	Percentage of total sown area
Area under food-grains—				
Rice	70·07	31·8	81·68	30·5
Wheat	18·61	8·4	25·25	9·4
Barley	6·22	2·8	6·53	2·4
Jowar	21·82	9·8	24·01	9·0
Bajra	13·20	5·9	11·45	4·3
Ragi	3·75	1·7	3·59	1·3
Maize	6·20	2·8	5·95	2·2
Gram	9·78	4·4	15·80	6·0
Other grains and pulses ...	27·35	12·4	29·78	11·1
Total food-grains ...	177·00	80·0	204·04	76·2
Area under other food crops (including vegetables, fruits, condiments and spices, miscellaneous food crops, etc.) ...	8·03	3·7	8·18	3·1
Sugar	2·60	1·3	4·47	1·7
Total food crops ...	**187·63**	**85·0**	**216·69**	**81·00**
Area under oil-seeds—				
Linseed	2·27	1·0	2·34	0·9
Sesamum (*til*)	3·75	1·7	3·73	1·4
Rape and Mustard ...	2·88	1·3	3·32	1·2
Groundnut	...	...	5·52	2·1
Coconut	...	...	0·66	0·2
Castor	...	...	0·42	0·1
Other oil-seeds	3·07	1·4	1·81	0·7
Total oil-seeds ...	11·97	5·4	17·79	6·6
Area under fibres—				
Cotton	10·30	4·7	15·36	5·7
Jute	2·28	1·0	2·54	0·9
Other fibres	0·56	0·2	0·76	0·3
Total fibres ...	13·14	5·9	18·66	6·9

	Acres (millions) 1901-2	Percentage of total sown area	Acres (millions) 1936-7	Percentage of total sown area
Area under other non-food crops—				
Indigo	0·79	0·4	0·04	·020
Opium .. .	0·61	0·3	0·01	·004
Coffee	0·12	0·05	0·10	0·038
Tea	0·49	0·3	0·80	0·30
Tobacco	0·95	0·45	1·15	0·44
Fodder crops	2·94	1·4	10·79	4·12
Tobacco	1·71	0·8	1·51	0·57
Total non-food crops ...	**32·72**	**15·0**	**50·85**	**19·00**
Total sown area ...	220·35	...	267·58[1]	100·00
(includes area sown more than once)	20·64	...	35·65	...

§4. **Estimated yield and area of principal crops (includes also crops in certain Indian states).**[2]

TABLE II

		Area (millions of acres) Average 1900-01 to 1904-5	Yield (millions) Average 1900-01 to 1904-5	Area (millions of acres) 1936-7	Yield (millions) 1936-7
Rice ...	tons	50·07	21·55	84·42	33·20
Wheat ...	,,	25·52	7·68	33·24	9·82
Jowar ...	,,	(*a*)	(*a*)	36·19	7·05
Bajra ...	,,	(*a*)	(*a*)	15·27	2·41
Gram ...	,,	(*a*)	(*a*)	17·96	4·20
Sugar-cane ...	,,	2·26	2·05	4·43	6·73
Tea ...	lb.	0·52	201·39	0·83	395·18
Cotton ...	(bales 400 lb.)	16·65	3·20	25·15	6·26
Jute ...	(,,)	2·33	7·04	2·89	9·61
Linseed ...	tons	3·55	0·42	3·59	0·42
Rape and Mustard	,,	5·60	1·01	5·82	0·98
Sesamum ...	,,	4·90	0·46	5·57	0·48
Castor seed ...	,,	(*a*)	(*a*)	1·40	0·13
Groundnut ...	,,	0·43	0·06 (1901-2)	7·28	2·81
Indigo ...	cwt.	(*a*)	0·11 (1901-2)	0·04	0·007
Coffee ...	lb.	(*a*)	15·57 (1901-2)	0·19 (1935-6)	41·17 (1935-6)
Rubber ...	,,	(*a*)	(*a*)	0·23	60·06

§5. **Scope for intensive and extensive cultivation.**—From Table I it would appear that 35·9 per cent (including area under forest) of the total area is not available for cultivation, that only

[1] Includes 0·04 million acres for which details are not available.

[2] *Estimates of Area and Yield of Principal Crops in India* (1936-7), pp. 8 and 26-32. Figures for 1936-7 are provisional.

(*a*) Not available.

34·2 per cent of the total area is actually sown, and that putting together the current fallow and the cutivable waste about 30 per cent of the total area is available for extending cultivation in India. The area available in different provinces (British Indian) for extending cultivation may be seen from Table III below, which shows in millions of acres the area cultivated and uncultivated in 1936-7 in each province.[1]

TABLE III

Province	Net area according to village papers	Cultivated		Uncultivated		Forests
		Net area actually sown	Current fallows	Cultivable waste other than fallow	Not available for cultivation	
Madras ...	80.08	31·71	9·49	10·79	15·72	12·37
Bombay ...	48·71	28·15	5·59	0·88	5·68	8·41
Sind ...	30·17	4·75	5·11	5·74	13·71	0·72
Bengal ...	49·25	24·47	4·69	5·95	9·69	4·45
U.P. ...	67·97	36·17	2·60	10·04	9·88	9·28
Punjab ...	60·17	27·90	3·22	14·12	12·96	1·97
Burma ...	167·52	18·17	3·80	62·07	61·47	22·01
Bihar ...	44·32	19·92	6·54	5·13	6·29	6·44
Orissa ...	20·61	6·49	1·70	3·61	6·17	2·64
C.P. and Berar ...	63·11	24·59	3·75	13·99	4·91	15·87
Assam ...	35·49	6·61	1·35	18·76	4·58	4·19
N.-W.F.P. ...	8·58	2·32	0·41	2·81	2·68	0·36
Ajmer-Merwara ...	1·77	0·32	0·22	0·29	0·84	0·10
Coorg ...	1·02	0·14	0·17	0·01	0·33	0·37
Delhi ...	0·37	0·21	0·01	0·06	0·09	...
Total ...	679·14[2]	231·93	48·64	154·26	155·00	89·17

There is apparently considerable scope for further cultivation, especially in Burma (which is no longer part of British India), Assam, Sind, the Punjab and the Central Provinces. But on a close examination of the question, the conclusion is forced on us that the prospects of extensive cultivation are on the whole very limited in India. In the older provinces like Bengal, the United Provinces, Madras and Bombay, cultivation has naturally followed the line of least resistance, and the better kinds of land have already been brought under the plough, and for the greater part inferior soils alone remain to be broken up for cultivation. In the majority of cases this can only be done provided adequate

[1] *Agricultural Statistics for British India 1936-7* (Provisional), p. 4.

[2] Includes 0·14 million acres for which details are not available.

irrigational facilities are forthcoming. A similar situation is gradually developing in the newer provinces like the Punjab, the Central Provinces, Assam and Sind, where, though the superior lands have not yet been fully occupied, several difficulties have to be faced. The problem of extending cultivation in the Punjab and Sind is primarily one of irrigation, which no doubt is easier there than, for instance, in the Bombay Deccan and the Central Provinces, but which must all the same reckon with very definite financial and physical limitations. In Assam, apart from its unhealthy climate, the principal obstacles are uncongenial conditions of labour and the consequent difficulty of recruiting the required labour supply. In Burma, the growth of a strong provincial feeling with its watchword of 'Burma for the Burmese' militated against rapid extension of cultivation even before its separation from British India from 1 April 1937. Thus no very striking extension of cultivation can be expected even in those provinces where there is a large area of cultivable waste. This conclusion is borne out by the following figures, which show that in more recent years progress made by the net area sown with crops in British India has been very slow and gradual; indeed there has been in some years a slight decline.

Year	Net area sown (*millions of acres*)
1892-3	195·91
1901-2	199·71
1910-11	223·06
1921-2	223·18
1927-8	223·86
1930-1	229·12
1932-3	228·08
1933-4	232·25
1934-5	226·98
1935-6	227·87
1936-7	231·93

A more hopeful solution of the Indian agricultural problem lies in the direction of intensive cultivation. As an illustration of the possibilities of intensive cultivation we might cite the instance of Japan, where a population of 56,000,000 is supported on a cultivated area of 17,000,000 acres, which comes to about one-third of an acre per head as against India's five-sixths of an acre.[1] In India, we have scarcely yet made a serious beginning in intensive cultivation on modern scientific lines in spite of the

[1] See M. Visvesvaraya, *Reconstructing India*, p. 174.

fact that methods of extensive cultivation are highly inappropriate owing to the large size of the agricultural population and the prevalence of small holdings.

§6. **Relative importance of crops.**—Crop-production holds far and away the most important place among the agricultural products of India. 'The people are largely vegetarian, while seeds and fibres are the most important articles of export. The Indian cultivator is a grower of crops, his live stock are mere aids in cultivation and in the feeding of his family. The country does not export meat, wool or dairy products.'[1] The areas under the different crops show the varied character of agricultural production in India—which enables the country to be self-sufficing in respect of its food supply and a large variety of raw materials—and the relative importance of the different crops. Food crops preponderate largely and account for 81·4 per cent of the total sown area, and the non-food crops account for 18·6 per cent, though the area under the non-food crops like cotton, jute, oil-seeds etc., tended to increase faster than that under food crops when the position of world prices justified this. Among the food crops, rice stands easily first; then come wheat, jowar, gram and bajra. Among the non-food crops, fibres (cotton, jute and others) are an important group and account for 7 per cent of the total sown area. Cotton is by far the most important of the fibres. Oil-seeds constitute another equally important group of non-food crops and account for 6 per cent of the total sown area.

§7. **A survey of the principal crops of India.[2]—I. Food crops.**—(i) *Rice.*—Rice is the leading crop of India as it is the staple food of most of the people of the country, and it occupies about 30 per cent of the whole cutivated sown area, the total area devoted to its cultivation being 84·42 million acres yielding 33·19 million tons in 1936-7. India's contribution to the world production of rice is about 40 per cent, and she is the largest exporter of rice in the world, though her average exports seldom exceed 7 to 8 per cent of her total production. Rice is grown extensively in India, especially in the wet and moist regions.

[1] A. Howard, *Crop-Production in India*, p. 61.

[2] For this survey we have consulted—

(i) *Review of Agricultural Operations in India* (Annual).
(ii) *Estimates of Area and Yield of the Principal Crops in India* (Annual).
(iii) *The Crop Atlas of India* (1925).
(iv) Cotton, *Handbook of Commercial Information* (3rd edn., 1937).
(v) Howard, *Crop-Production in India.*
(vi) *Agricultural Commission Report* (1928).
(vii) *Review of the Trade of India* (Annual).

The following figures illustrate the extent of its cultivation in the different provinces: Bengal, 21·99 million acres; Bihar 9·95; Orissa 5·26; Burma 12·69; Madras 9·89; the United Provinces 6·08; the Central Provinces 5·62; Assam 5·44; and Bombay 1·70. Rice is the staple food of the eastern provinces and Burma. Although Burma carries only about 15 per cent of the total acreage under rice she has practically the monopoly of the export trade in rice and also makes good any shortage in the supply for local consumption in India, because the ratio of acreage under rice to population is so high that the exportable surplus is far larger than that of Bengal, Bihar or Madras, which grow more rice but have to meet a much higher internal demand. In 1936-7 the Burma trade represented 84 per cent of the total exports, Bengal and Madras contributing 6 and 5 per cent respectively. Burmese exports are relatively increasing, while the proportion of Indian exports proper is declining. India exported 2,326,000 tons of rice worth 31·50 crores of rupees in 1929-30. The world trade depression and the catastrophic fall in the price of rice has had very adverse reactions on the export of rice from India. The quantity exported declined to 1,410 thousand tons and value to Rs. 10·83 crores in 1935-6. There was some improvement in 1936-7 when the quantity exported rose to 1,466 thousand tons and value to Rs. 11·63 crores. Exports from India and Burma formed only 4 per cent of the total production. The contraction in the demand for Indian rice in foreign markets has been very partially counteracted by the preference enjoyed by Indian rice in the United Kingdom. In recent years imports of rice in India from Siam, French Indo-China and Japan showed a phenomenal increase. These imports (received mostly in Madras) consisted of broken rice, the by-product of the milling industry, which greatly depressed local prices. As a result of the imposition of a protective duty of 12 as. per maund on broken rice (in April 1935) effective till the end of March 1938, imports of rice, chiefly from Siam, steadily declined from 283,000 tons in 1934-5 to 18,000 tons in 1936-7. Imports of paddy, mostly from French Indo-China, also fell from 120,000 tons to 68,000 tons.

Rice is a winter crop, being mainly harvested in December and January. There are different varieties of paddy grown in different parts of India depending upon local conditions and knowledge. It is probably due to the magnitude and complexity of the subject that little progress has so far been made with this crop by the Agricultural Departments.[1] In recent years,

[1] Mackenna, *Indian Agriculture*, p. 46.

however, better results have attended the research work on rice under the auspices of the Imperial Council of Agricultural Research, which has constituted a standing committee on rice on the lines recommended by the Crop Planning Conference, 1934.

(ii) *Wheat.*—Wheat stands next to rice in acreage, covering as it does about 10 per cent of the total cultivated area. Wheat is a rabi crop in India and is sown from October to December and harvested from March to May. It is the staple food of the people in the Punjab, the United Provinces and the North-West Frontier Province. Elsewhere it is grown mainly for export. The total area under wheat in India was 33·24 million acres in 1936-7. The principal wheat-producing provinces in India are the Punjab (9·38 million acres), the United Provinces (7·48), the Central Provinces and Berar (3·14), Central India States (1·91), Bombay (1·65), Sind, (0·93), and Bihar (1·13). The United Provinces and the Punjab account for nearly two-thirds of the total area and three-fourths of the total yield. 'India produces about one-tenth of the world's wheat. The five principal countries exporting wheat in pre-War times were the United States, Russia, Canada, the Argentine Republic and India, in that order. As regards production, India occupies the third place' (Cotton). During the War there was a considerable extension in the area under wheat in India, from 28·47 million to 35·48 million acres, on account of the purchases made by the Government. The export trade in wheat had been growing since the opening of the Suez Canal in 1870. The exports of wheat, however, fluctuate considerably according to the nature of seasons in India and abroad. In years of famine the local price is generally so high that the volume of export falls to a very low figure. The average export for five years before the War was 1,308,000 tons valued at Rs. 13·96 crores, or 14 per cent of the total wheat production. Since then, especially in the post-War years, the exports of wheat have fallen considerably. For some years India has been able to put only insignificant quantities of wheat on the world market. In 1935-6 the exports amounted only to about 9,600 tons valued at Rs. 9·5 lakhs as compared with 20,200 tons in 1931-2 valued at 15 lakhs and the average of 237,000 tons valued at 3·7 crores for the first post-War quinquennium. Owing to favourable price parity there were appreciable exports of wheat from India in 1936-7, when the quantity exported amounted to 231,500 tons valued at Rs. 209·5 lakhs. The uneconomic expansion of cultivation since the War (under shelter of subsidies and import barriers) in both the exporting and importing countries is the crux of the international wheat problem. In the face of keen competition and

lower values, India has in recent years not only been forced to hold aloof from the international markets, but in the interest of her growers to impose a duty on imports of wheat and wheat flour at cheap rates from other countries. The duty, which stood at Rs. 2 per cwt. in March 1931 (under the Wheat Import Duty Act) was, in April 1935, reduced to Re. 1-8, and in April 1936 to Re. 1, as the margin between the prices of Indian wheat and of Australian wheat imported into India had narrowed down. In 1936-7 the imports of wheat were insignificant, amounting only to 100 tons as against 18,300 tons in 1933-4. The import duty, owing to improved prices, lapsed on 31 March 1937. The balance of wheat available for internal consumption is in the neighbourhood of 9·5 million tons and the estimates of consumption have shown no significant changes in recent years.

Wheat cultivation has received a considerable stimulus from improved transport and irrigation, especially in the case of the new canal colonies in the Punjab. At one time Indian wheat had the reputation of being dirty, but this was not due so much to careless threshing or handling as to deliberate adulteration to conform to the practice of the English grain trade. Since 1907, there has been a considerable improvement in this respect. The introduction of the Pusa 12 variety by the Agricultural Department has improved the quality of the grain, which, however, must be further raised and kept up to enable Indian wheat to obtain the same prices as Canadian and American wheat in the world markets.

(iii) *Barley.*—This is chiefly grown in the United Provinces (4·06 million acres) and Bihar (1·27). There is only a small export of barley because the internal demand is very great. In 1936-7 exports amounted to 10,000 tons valued at Rs. 6·4 lakhs. Barley is used as food both for man and cattle.

(iv) *Millets: Jowar and Bajra.*—There are two varieties of Indian millet, jowar and bajra, and they constitute an important group of food crops for the masses in Madras, Bombay (Deccan), and the adjoining districts of Hyderabad. They supply also valuable fodder for cattle. They do not need as thorough a cultivation as wheat and are rarely manured. There is a large area under them, 36·19 million acres under jowar, and 15·27 millions under bajra in 1936-7, in the whole of India. The principal jowar-growing areas are Hyderabad (Deccan), 9·25 million acres; Bombay 9·10; Madras 5·12; the Central Provinces and Berar 4·66; and the United Provinces 2·12. So also bajra is extensively grown: in Bombay 2·31 million acres; Madras 2·77; the Punjab 2·85; and the United Provinces 2·05. Bajra is a kharif crop while jowar is

a kharif as well as a rabi crop. There is no considerable export of either of the millets. In 1936-7, 7,000 tons of jowar and bajra valued at Rs. 7·55 lakhs were exported from India as compared with 15,000 tons valued at Rs. 25·13 lakhs in 1929-30.

(v) *Pulses.*—These are extensively grown throughout India and figure prominently in the dietary of the people. They are chiefly grown in the United Provinces, the Punjab, Bombay, the Central Provinces, Bengal, etc. Gram is easily the leading pulse in India, and in 1936-7, no less than 17·96 million acres were under it, the United Provinces (6·44) being the most important area in this respect. Exports of pulses are comparatively limited on account of the large internal demand. In 1936-7, 137,000 tons valued at Rs. 116 lakhs were exported.

(vi) *Other food crops.*—These include fruit and vegetables, condiments and spices and miscellaneous food crops, accounting for a total area of 8·31 million acres in British India in 1935-6. Fruits and vegetables, including root crops, accounted for 4·76 million acres. India grows a variety of fruits such as mangoes, apples, oranges, plums, peaches, apricots and pears. The dearness of fruit owing to shortage of supply and the general poverty of the masses have prevented any considerable development of the fruit industry. There is a large variety of vegetables grown in India, potatoes, onions, brinjals, cabbages, cauliflowers, turnips, tomatoes, etc. A considerable extension of area under fruit and vegetables is possible with suitable irrigation facilities, especially in areas adjoining the larger cities. On the whole the Agricultural Departments have not yet been able to fulfil the expectations of a new era of abundant supply of fruit and vegetables. Very notable success has, however, been achieved in the Peshawar valley, and now that four other provinces have horticulturists on their agricultural staffs, we may expect more systematic attention being given to fruit culture. The larger urban centres constitute the principal market for the commercial fruit grower. But the difficulties of transport at present make it impossible for him to profit by their demand. Development of transport facilities, careful picking and packing, provision of cold storage facilities are obvious reforms that are indicated.[1] Condiments and spices accounted for 1·64 million acres in 1935-6 in British India. Spices are chiefly grown in the extreme south of India, though certain varieties are cultivated everywhere. Pepper (in Malabar, Travancore, South Kanara, Coorg and to some extent in Bengal, etc.); chillies (chiefly in Madras, eastern and northern Bengal, some

[1] *Review of Agricultural Operations in India* (1927-8), p. 4; ibid. (1928-9), pp. 65-7; and *Agricultural Commission Report*, pars. 515-19.

districts in Burma and Bombay); ginger (Malabar coast, Surat and Thana districts of Bombay and a few districts of Bengal and the United Provinces); cardamom (in the humid forests of western and southern India, Madras, Travancore, Mysore, Coorg and Bombay—chiefly the Kanara district); betel-nut (southern India and Burma); cinnamon (Western Ghats in southern India); and cloves (mainly in the foot-hills of the Western Ghats in the Madras Presidency) are the chief among the spices of India. There is some export trade in them which amounted to 216,000 cwt. valued at 55·41 lakhs of rupees in 1936-7.

(vii) *Sugar.*—India was probably the original home of sugar-cane and the area under cane is larger than in any other country in the world. But the average yield per acre is so low and the demand from a population that is largely vegetarian is so great that the country until recently tended to depend more and more upon imports of cheap foreign sugar. For instance, we imported 1,012,000 tons of sugar of all sorts valued at 15·77 crores of rupees in 1929-30. It is stated by the Indian Sugar Committee that India's outturn of actual sugar per acre is less than one-third that of Cuba, one-sixth of Java and one-seventh of Hawaii. The imports of Austrian and German beet-sugar were gradually replaced—thanks to the countervailing import duties on bounty-fed German sugar imposed in 1903—by growing imports of cane-sugar from Java and Mauritius. This foreign competition hit Indian sugar-cane hard and, in the years preceding the War, there was some decline in the area under cultivation. The ground lost was regained to some extent by 1918-19 under the stimulus of the War-time rise in values. The area under cane remained very steady over a series of years, the average during the 20 years ending with 1930-1 being 2,840,000 acres. The total area under sugar-cane was 2·78 million acres in 1930-1. Owing to the phenomenal expansion of the sugar industry under the stimulus of protection, the area under sugar-cane in 1936-7 increased to 4,435,000 acres. The chief cane-growing provinces are: the United Provinces 2·47 million acres, Punjab 0·55, Bihar 0·46, Orissa 0·31, Madras 0·12, Bombay 0·08 and Assam 0·40 in 1936-7. Thus northern India has a predominant interest in the crop. Though the area in southern India is small, the cane grown there is much thicker and finer than in northern India. In India, the manufacture of white sugar before the recent astounding growth of the sugar industry was not common. The juice is boiled down without removing the molasses and the product called *gur* or *gul* is consumed as such. Sugar-cane is now crushed by iron crushers which have largely replaced the old wooden ones. White sugar is manufactured at

a number of factories especially in the United Provinces, Bihar and Orissa. Bombay has also recently made a beginning in this direction. Prior to 1932-3 there were only 31 cane factories in operation. Thanks to the grant of protection in 1931-2 (see below), the number of sugar factories in operation rose to 146 in 1936-7. In addition there were also 9 *gur* refineries in existence during 1936-7. The production of sugar from cane and *gur* increased from 99,088 tons in 1928-9 to 151,650 tons in 1930-1, 370,283 tons in 1932-3, 617,218 tons in 1934-5 and to 1,104,800 tons (estimated) in 1936-7. This is exclusive of the outturn of *khandsari*[1] factories, which amounted to 100,000 tons in 1936-7. It has been estimated by the Sugar Technologist to the Imperial Council of Agricultural Research that the quantity of sugar available for consumption in India was 1,150,000 tons in 1937-8 as against 895,280 in 1932-3. Imports of sugar into British India fell sharply from 201,000 tons valued at Rs. 191 lakhs in 1935-6 to 23,000 tons valued at Rs. 24 lakhs in 1936-7. India has thus become almost fully self-sufficient in respect of her sugar needs. Besides tariff protection, low prices of land, material and machinery owing to the world economic depression have contributed to the phenomenal growth of the Indian sugar industry. It is now the second largest industry, next in importance to only the cotton textile industry, and gives employment to over 100,000 workers.[2]

The Indian refined sugar industry was not, however, prosperous until the grant of protection. This was due to several handicaps such as the competition of foreign sugar, low yield per acre of sugar-cane, absence of up-to-date methods of extracting juice, poor yield of molasses, difficulty of getting a sufficiently large supply of cane from near the factory and the heavy capital charges of the undertakings. The fall in sugar prices during post-War years, in spite of the tariff increases applied from time to time in India, also increased the difficulties of the industry. This fall was brought about mainly by overproduction of sugar, as compared with effective demand, caused by War conditions which stimulated intensive cane production in Cuba and elsewhere in the West Indies, and was aggravated by the tariff arrangements in various countries, by which the sugar producer in India was adversely affected. The European beet-sugar industry had also been vigorously revived since the War under the stimulus of heavy subsidies and high tariff barriers and had been dumping its output in the world market.

[1] The *khandsari* factories follow the indigenous process, called the *bel* process, of manufacturing white sugar.

[2] *The Indian Year Book* (1938-9), p. 773.

The Government took up the question as far back as 1901-2, and since then sugar-cane has been subjected to a systematic study with a view to improving its quality and supply. A cane-breeding station was started at Coimbatore in Madras. A Sugar Committee appointed by the Government of India in 1919 investigated into the possibility of organizing and developing the sugar industry in India. In 1930 the question of granting protection to the sugar industry was referred to the Tariff Board by the Government of India on the representations made by the newly established Imperial Council of Agricultural Research.[1] The Tariff Board, in their report published in March 1931, recommended the grant of protection to the industry, being satisfied that the conditions laid down in this behalf by the Indian Fiscal Commission were fulfilled in the case of the sugar industry. They expressed the view that in the national interest the area under sugar-cane should not be allowed to diminish and that a fresh outlet should be provided for cane by encouraging the expansion of the white sugar industry. Unless steps were taken to develop this industry, they apprehended a disastrous slump in the *gur* market which would seriously affect the agricultural classes.[2] The Board, while disapproving of the grant of bounties on administrative grounds, proposed a protective duty of Rs. 7-4 per cwt. for the first seven years and a duty of Rs. 6-4 per cwt. for the next eight years, thus ensuring protection to the industry for a period of fifteen years. The immediate increase of the duty of Re. 1-4 per cwt. was made in the Budget for 1931-2 as a provisional measure of securing additional revenue, pending consideration of the Tariff Board's recommendations. This was done in April 1932 when the Central Legislature passed the Sugar Industry Protection Act (1932). The protective duty (Rs. 7-4 per cwt.) was in the first instance to have effect up to 31 March 1938, but could be enhanced, if necessary, during the currency of the Act. This has acted as a big stimulus to the industry which has since expanded rapidly, and, as previously remarked, India has now almost become self-sufficient in respect of its sugar. It was unfortunate, however, that an excise duty had to be levied on factory-made sugar in India[3] in April 1934 in order to meet

[1] See ch. xi.

[2] *Report of the Tariff Board on the Sugar Industry*, ch. iv, especially pars. 43, 45-6.

[3] Including the revenue surcharge of 25 per cent (Re. 1-13 per cwt.), imposed in September 1931, the total import duty amounted to Rs. 9-10 per cwt. till 31 March 1934. The Sugar (Excise Duty) Act 1934, imposed, with effect from 1 April 1934, on (i) *khandsari* sugar and (ii) all other sugar except palmyra sugar, produced in a factory in British India, an excise duty

the gap in the central revenues, caused, among other factors, by reduced imports of sugar; and also to check too rapid a growth of the industry under the artificial stimulus of the revenue surcharge of 25 per cent on the protective duty imposed in September 1931. At the same time, the Sugar-Cane Act, which was passed by the central legislature, enables Provincial Governments to apply schemes for enforcing a minimum price for cane to be paid by the factory to the grower. The Government of India also promised to set aside an amount equivalent to 1 anna per cwt., representing about Rs. 7 lakhs, as a fund to be distributed among the provinces where white sugar is produced for the purpose of assisting the organization and operation of co-operative societies among the cane growers so as to help them in securing fair prices, or for other similar purposes.

An inquiry was conducted by the Tariff Board in 1937 for determining the extent of the protection to be conferred on the sugar industry for the remainder of the period of protection, i.e. up to 31 March 1946. Its Report, which was submitted to the Government of India in December 1937, has not so far (August 1938) been released for publication.

With a view to avert unrestrained internal competition and to check a precipitate fall in prices, a Sugar Syndicate was brought into existence comprising over 90 mills in the year 1937. The Governments of the United Provinces and Bihar have passed Sugar Factory Control Acts under which every mill has to obtain a licence from the Government for working sugar factories. All mills in these provinces have to join the Indian Sugar Syndicate and to sell their sugar through it.

The Tariff Board (1931) considered it vital to the success of their scheme of protection that the agricultural and scientific aspects of the industry must be kept in prominence. They therefore recommended an annual grant of Rs. 10 lakhs to the Imperial Council of Agricultural Research for the purpose of research in connexion with sugar-cane.[1] It is necessary to bear in mind that

of (i) 10 as. per cwt. and (ii) Re. 1-5 per cwt. respectively. The protective duty was enhanced to Rs. 7-12 but the surcharge was reduced to Re. 1-5. i.e. equivalent to the new excise duty. From February 1937, the protective duty was decreased to Rs. 7-4 per cwt. and a surcharge was imposed at the rate of Rs. 2-0-0 per cwt., equivalent to the increased excise duty of Rs. 2 per cwt. on the internal production from the same date. See also the chapter on Finance, vol. II, for further particulars regarding the origin of the duty and the criticisms to which it has been subjected.

[1] See *Report of the Tariff Board* (Sugar Industry), 1931, par. 105. In his recent (1936) work, *Indian Tariff: Policy with special reference to Sugar Protection*, pp. 135-6, Mr B. N. Adarkar writes: 'The (sugar) industry has

raw *gur* is produced (7,100,000 tons) and consumed in India on a large scale (4,454,000 tons in 1936-7), and hence attention must be given to the indigenous industry of *gur*-making as well as to the production of cheap white sugar. The Agricultural Departments and especially the Imperial Cane-breeding Station at Coimbatore are concentrating their efforts on the increase of outturn by introducing improved varieties of cane. The Central Sugar Research Institute at Cawnpore has recently undertaken research on problems of sugar technology. The area under improved varieties of cane in all the provinces was estimated at 3,071,000 acres in 1935-6 compared with 1,845,788 acres in 1932-3.

It is hardly necessary to add that there is only a negligible export of raw sugar, for the Indian population in Ceylon, the Straits Settlements and Fiji. Under the International Sugar Convention of 1937, the export of refined sugar by sea has been banned (by the Government of India) to any country except Burma for a period of five years. This decision has caused much dissatisfaction in the country in view of the rapid expansion of its sugar industry which for its further growth now needs export markets.

II. Non-food crops.—(i) *Coffee.*—The origin of the coffee industry in India is obscure. It is commonly believed that it was introduced into India in the sixteenth century by Baba Budan returning from his pilgrimage to Mecca. It is, however, only from 1830 that the systematic cultivation of coffee dates. A large area was put under coffee in Mysore, Coorg and the Nilgiris. The industry reached its zenith in 1862. After this date decline set in owing to the appearance of the destructive beetle. Latterly also the import of cheaper Brazilian coffee in the European markets has adversely affected Indian cultivation, which has gone down. In some of the coffee-growing areas, coffee has been replaced by tea. In 1935-6 the area under coffee in the whole of India was 188,000 acres, the principal regions being the Mysore State 103,000, Madras 43,300, Coorg 38,700, Cochin 2,000, and Travancore 1,000. In 1936-7, 211,000 cwt. were exported from British India, valued at 84 lakhs of rupees as compared with 293,000 cwt. valued at 192 lakhs in 1930-1. The principal markets for Indian coffee as usual were the United Kingdom and France. In order to help the Indian coffee industry in its present difficulties

now reached a stage in which a more liberal expenditure on research by Government and industrialists on its agricultural and manufacturing side is likely to be of much greater benefit than the continuance of protection at its present level.'

the Assembly passed the Indian Coffee Cess Act in September 1935. The fund raised by the cess—eight annas per cwt.—is to be administered by the Indian Coffee Cess Committee and is to be applied not only to propaganda but also to the improvement of marketing, agricultural and technological research and any other ways of promoting the industry.

(ii) *Tea.*—Perhaps with the single exception of China, India is the largest tea producer in the world. During the latter half of the eighteenth century, Chinese tea formed an important and lucrative branch of the export trade of the East India Company. Towards the end of the century a suggestion was made to develop an alternative source of supply in India. It was, however, only in 1834 that the matter was taken up seriously at the instance of Lord William Bentinck. Government plantations growing Chinese seed were established in Assam, the existence of the indigenous plant in Assam being yet unknown. In 1852 it was finally established that Indian tea could compete with Chinese tea in the London market. With the rapid progress of the industry, Government connexion with it ceased in 1865 and it has since been financed and managed by European business firms. The tea industry has enjoyed a long spell of prosperity with growing internal consumption and foreign exports. In 1936, the area under tea was 834,000 acres, of which Assam contributed 430,800, Bengal 203,100, Madras 77,700, the Punjab (Kangra) 9,600, the United Provinces 6,500 and Travancore 77,700, and the total yield was 395·18 million lb. 'Every garden of any importance has its own factories, where tea is prepared for the market, as it is essential that the various processes should be carried through immediately after the leaf has been plucked. The better organized factories are elaborately equipped with highly specialized plant and are under the supervision of expert tea makers.' There is a very large export trade in tea, especially with the United Kingdom, which took 85·6 per cent of the total Indian exports in 1936-7 which represented 77 per cent of the total production, leaving the balance for domestic consumption. In 1929-30, 376·63 million lb. valued at Rs. 26·00 crores was exported. The exports have declined owing to diminished purchasing power of consumers and restrictions on foreign trade. On the whole, however, the tea industry has not been depressed to the same extent as most other industries owing to the adoption of the international scheme for the regulation of exports of tea adopted in May 1933. The export quota for 1936-7 allotted to India was fixed at 309 million lb. as compared with 311 million lb. in 1935-6 and 330 million lb. in 1934-5. Exports abroad in

1936-7 amounted to 302 million lb. as against nearly 313 million lb. in the preceding year, the value, however, showing an increase from Rs. 19·82 crores to Rs. 20·04 crores. Tea is thus an important staple export. Its consumption in India is also rapidly growing, thanks to the activities of the Indian Tea Association, to which the proceeds of a small cess levied since 1903 on Indian tea exported from India at the request of the industry, are handed over. The rate of the cess was increased from 8 as. per 100 lb. to 12 as. per 100 lb. in April 1935. The Association utilizes part of the money to push forward the sale of Indian tea in foreign markets, e.g. in the U.S.A.

(iii) *Oil-seeds.*—India grows a variety of oil-seeds, such as linseed, sesamum, rape and mustard, groundnut, coconut, castor, cotton seed, *mowra*, niger, coriander, cummin, *ajwan* and *kardi*. They accounted for a total area of 15·66 million acres in British India in 1935-6. A large quantity is exported annually. Oil-seeds occupied the fourth place among Indian exports of all kinds during 1936-7. As compared with the pre-War average (1,453,000 tons valued at Rs. 24·37 crores) the exports of the various kinds of oil-seeds show a marked decline. For example, the total exports of oil-seeds of all kinds were 673,000 tons (valued at Rs. 10·29 crores) in 1935-6. Besides the trade depression, the regulation or restriction of imports into European countries, especially Germany, France and Italy, has meant curtailed demand for Indian oil-seeds. There was some improvement in 1933-4 and again in 1936-7, due partially to the increased exports of Indian linseed which enjoyed a particularly favourable position owing to the shortage of the Argentine crop and the 10 per cent (Ottawa) preference obtaining in the United Kingdom market. In 1936-7 the total exports of oil-seeds showed a welcome increase of 72 per cent in quantity and 79 per cent in value and amounted to 1,155,000 tons valued at Rs. 18·44 crores. Despite growing internal consumption, all the principal varieties with the exception of castor recorded increases in exports. The oil-seed crushing industry of the United Kingdom experienced a satisfactory year and placed greater reliance on Empire sources. More favourable prices also helped larger exports. The proportion to total production of oil-seeds exported varies considerably with the different seeds. Linseed is grown largely for export. The export of rape and mustard, and sesamum declined from the pre-War average of 23 per cent and 25 per cent to 4 per cent and 3 per cent respectively in 1936-7. The export of groundnut, which was 35 per cent of the total production in the pre-War average for five years, after declining to 12 per cent during the War, again

increased to 27 per cent in 1929-30. There was, however, a very striking absolute increase in the quantity exported, from 212,000 tons valued at Rs. 3·52 crores in the pre-War years to 714,000 tons valued at Rs. 16·39 crores. The exports declined to 413,000 tons valued at Rs. 6·65 crores in 1935-6. There was a revival in 1936-7 when the exports advanced to 739,000 tons valued at Rs. 12·29 crores. The reduction in the French import duty helped larger purchases by France, which is normally the best customer of Indian groundnuts. Exports represented 26 per cent of the total production in 1936-7. Thus groundnut is today the leading crop among the oil-seeds group.

It is felt that India does not yet make the best use of her oil-seed resources, though attempts have been made to develop a local oil-crushing industry.[1] In the west, vegetable oil is today put to many uses; for example, in America cotton seed is crushed, the oil used for edible purposes, and the cake as manure or cattle food, whereas in India a large proportion of cotton seed is exported. The export trade in oil-seeds, which is mainly with the Continental countries, has been considerably affected by the forces generated by the War. Apart from the collapse of the European demand, the War brought about a change in the conditions of the oil-seeds trade. By stimulating the development of refining processes it increased considerably the interchangeability of oils; for example, palm and rapeseed oils were thus added to the category of edible oils. It also developed many other sources of oil-seeds. This has, to some extent, adversely affected India's favourable position in the pre-War period. Indian linseed has now to meet the competition of Argentinian linseed, the area under which has been steadily increasing for the last 20 years, unaffected by the War. As pointed out above, however, since 1933 Indian linseed has enjoyed a 10 per cent preference in the United Kingdom market. In sesamum, the Chinese competition, and in groundnut the West African, have now to be reckoned with by Indian exporters. Other vegetable products grown in China, South America and West Africa are also being exploited to produce oils. Lastly, rape and mustard have been displaced to some extent by groundnut.[2]

We will now give a few details about the principal oil-seeds grown in India:

(*a*) Linseed is cultivated for its seed and not for its fibre. The bulk of the seed and the resultant oil and cake are exported.

[1] See vol. II, ch. ii.

[2] See *Encyclopædia Britannica*, thirteenth edition, article on Oils and Fats; and D. R. Gadgil, op. cit., pp. 232-4.

The total area (including Indian States) under linseed was 3·59 million acres in 1936-7 (the Central Provinces 1·13, Bihar and Orissa 0·63, the United Provinces 0·89,[1] Bombay 0·10 and Bengal 0·13). In 1936-7, 296,000 tons valued at Rs. 4·36 crores were exported as compared with 165,000 tons valued at Rs. 2·21 crores in 1935-6.

(*b*) Sesamum, variously known as *til* or *jinjily*, is grown practically in all the provinces, especially Burma 1·47 million acres, Madras 0·80, the Central Provinces 0·43, Bombay 0·13, Bombay States 0·39, Hyderabad (Deccan) 0·55, the United Provinces 1·06,[2] the Punjab 0·9 and Bengal 0·18. The total area was 5·57 millions in 1936-7. About 50 per cent of the world's supply is provided by the British Empire, and India contributes half of this. Exports have experienced a serious fall in recent years, and amounted to only 1,300 tons valued at Rs. 2¾ lakhs in 1935-6. There was some improvement in 1936-7, when exports rose to 14,000 tons valued at Rs. 27 lakhs.

(*c*) Rape and mustard together accounted for 5·82 million acres in 1936-7 (including 2·50 million acres of mixed crop in the United Provinces), the principal area being the United Provinces 2·77 (including mixed crop). Other sources are: Bihar 0·53, Bengal 0·74, Punjab 0·95, Assam 0·40. In the pre-War period about 20 per cent of the total production was exported. Now the proportion has fallen to less than 10 per cent, being 8 per cent in 1933-4 and 4 per cent in 1934-5. In the latter year exports totalled only 369,000 tons valued at Rs. 42 lakhs.

(*d*) Groundnut, one of the most important of our oil-seeds, has shown striking expansion in recent years. The total area of 7·28 million acres in 1936-7, as compared with 1·40 million acres in 1918-19, was mainly distributed as follows: Madras 3·49 millions, Bombay 0·87, Bombay States 0·88; Burma 0·73 and Hyderabad 0·95. The crop is assuming an economic importance of the first magnitude in some of the provinces and is competing even with cotton. There was a considerable decline in exports and area about the end of the last century on account of marked deterioration of the indigenous varieties. The successful introduction of disease-resisting exotic varieties from Senegal and Mozambique, however, led to recovery and steady expansion after 1901. There was, however, a set-back owing to the recent trade depression. Since 1936-7 there has been some recovery as mentioned above. About three-fourths of the crop is retained

[1] Includes 0·60 million acres of mixed crop.
[2] Includes 0·77 million acres of mixed crop.

for home consumption, the remainder being exported. The export figures have already been given above. The department of Agriculture has succeeded in increasing the yield of groundnut even on light soils, on which it has been found to grow well.

(iv) *Fibres.*—These constitute an important group of crops, accounting for 7 per cent of the area cultivated in British India in 1936-7 as compared with 5·9 per cent in 1901-2.

(*a*) Cotton is the premier fibre crop of India. The statistics in regard to it are striking. In 1925-6 the area under cultivation was 18·18 million acres, and in 1936-7, 15·23 million acres in British India alone, and 28·40 and 25·15 millions respectively if the area in the principal Indian States is included. The yield of the crop in the same years was 6·21 and 6·26 million bales of 400 lb. each respectively. There is a large export trade in raw cotton, more than 60 per cent of the crop being sent out. Indeed, cotton is the first article of the export trade of India, and there was a striking increase in the value of the exports during the years preceding the trade depression. In 1915-16, 440,000 tons valued at 24·97 crores of rupees was exported. In 1925-6, 740,000 tons valued at 95 crores, a record figure, was exported. Since then owing to various factors, such as the trade depression, the financial crisis in Japan, increased consumption by Indian cotton mills, higher parity of Indian cotton as compared with the American cotton for some years, and large cotton crops in the U. S. A. in certain years, exports of cotton have declined both in quantity and value. The year 1932-3 witnessed the lowest figures (in the post-War period), viz. 368,000 tons valued at Rs. 20·37 crores. A certain recovery is in evidence since 1933-4. The boycott of Indian cotton by Japan for about six months during 1934 as an act of reprisal against India's decision to abrogate the Trade Convention of 1904 with Japan, for a time unsettled the cotton market in Bombay. The boycott was withdrawn early in January 1934 following the new Indo-Japanese Trade Agreement under which the quantity of imports of piece-goods into India from Japan was linked with the quantity of Japan's purchases of Indian cotton. Thus in lieu of a basic allotment of 325 million yards of Japanese cotton piece-goods exported to India, Japan was bound to buy 1 million bales of raw cotton from India. The Agreement was renewed in 1937, the basic import quota of cloth being reduced to 283 million yards owing to the separation of Burma from India with effect from 1 April 1937.[1] The exports of Indian cotton in 1936-7

[1] For further details regarding the Indo-Japan Trade Agreements of 1934 and 1937, see vol. II, ch. xiii.

totalled 762,000 tons valued at Rs. 441·41 crores as compared with 606,000 tons valued at Rs. 33·75 crores in 1935-6. Japan was as usual the best customer, taking 57·2 per cent of the exports. Owing to the activities of the Lancashire Indian Cotton Committee the exports to the United Kingdom steadily advanced from 342,000 bales in 1933-4 to 601,000 bales in 1936-7. The continent is also an important buyer for Indian cotton. In the year 1937-8 Japan considerably reduced her purchases of Indian cotton owing to the exchange difficulties caused by the Sino-Japanese War.

The area under cotton has increased considerably in certain tracts at the cost of food crops. The average of the years 1895-1900 was 13·86 million acres, while 28·40 million acres was returned as being under cotton in 1925-6. In 1936-7 the estimated area under cotton was 25,148,000 acres. The principal cotton provinces of India are Bombay 3·56 million acres; Bombay States, 2·35; the Central Provinces and Berar 3·97, Hyderabad 3·08, the Punjab 2·91, Central India States 1·41, and Madras 2·51 in 1936-7. So far as the area under cotton and total outturn go, India stands next to the United States of America. Indian cotton is for the most part short staple, the lint being short and coarse in fibre as compared with that of American and Egyptian cotton. It was therefore unsuited until recent years to the manufacture of cloth of higher counts such as is turned out by the Lancashire mills. The yield of cotton per acre in India is, however, low, being between 75 and 100 lb. of lint cotton, as compared with 180 lb. in the United States and 300 to 400 lb. in Egypt. The Agricultural Department—which was indeed started originally on the initiative of Lancashire—has for some years directed its efforts towards the improvement of the quality and the increase of the yield per acre of the indigenous varieties. It has also tried to introduce exotics—especially long staple cotton—and to produce hybrids. Conditions in many parts of India are not favourable to the cultivation of the exotic varieties, and greater attention has therefore to be paid to the improvement of the indigenous varieties. Egyptian and upland American cottons have been introduced in Sind, the latter with most prospect of success. The completion of the Sukkur Barrage irrigation project is expected to increase the area under such cottons. Another notable achievement is the introduction of the Cambodia cotton into Madras since 1904. In Bombay, the Punjab and the United Provinces also American cotton has been introduced. There has been a great improvement during recent years in the production of medium staple cotton and prospects of further

improvement are bright, though one danger is that, owing to the low prices secured for this cotton, the growers may revert to the short staple Indian cotton for which the demand is constant, though not capable of any great expansion. Recent tests conducted in Lancashire have proved that certain types of Indian cotton like the best Punjab-American, Madras-Cambodia and a Surat variety can be used for spinning yarns of higher count. More Indian cotton is now consumed by the Lancashire mills than before, owing to the efforts of the Lancashire Indian Cotton Committee since its establishment in 1932. India's share in the total takings of cotton by Lancashire from all parts of the world, has gone up from just over 4 per cent to 14·2 per cent. The Bombay-Lancashire Textile Agreement (commonly known as the Mody-Lees Pact) of 1933 was intended to popularize and promote the use of Indian raw cotton in the United Kingdom.[1] In the recent (May 1938) abortive textile talks at Simla between the Lancashire Delegation and the non-official advisers to the Government of India during negotiations for the renewal of the Indo-British (Ottawa) Trade Agreement, the question of purchase of Indian cotton by Lancashire in return for a certain assured market for her cloth in India loomed large.

The War brought into the foreground the question of making the British Empire self-supporting in respect of its cotton supply. This, among other reasons, led the Government of India to appoint the Indian Cotton Committee, in September 1917, to examine the possibilities of increasing the supply of long staple cotton in India, to suggest improvements in the existing methods of ginning and marketing, and to make recommendations in regard to the prevention of adulteration, damping and mixing, etc. The report of the Committee, which was issued in April 1919, was divided into two parts, agricultural and commercial. The Committee, desiring to secure an adequate price to the grower, especially of pure or superior varieties of cotton, made a number of helpful recommendations in favour of open markets on the Berar model to ensure full knowledge on the part of the purchaser in regard to the stuff he was buying, the extension of co-operative sale societies, licensing of cotton ginning and pressing factories and restrictions on transport of cotton to prevent the malpractices of adulteration, mixing and damping. The improvement of the cotton trade by the organization of a Central East India Cotton Trade Association in Bombay was also recommended. Lastly, the establishment of a permanent Central Cotton

[1] See vol. II, ch. xiii.

Committee to ensure closer touch between the Agricultural Department and the cotton trade was suggested. The Committee, consisting of 20 official and non-official members, it was suggested, should be an advisory body which should be consulted by the Government on any proposed legislation and the working of the licensing system. The Committee would carry out authoritative valuations of new varieties of cotton and spinning tests. After some delay, action was taken on the proposals of the Committee. The East India Cotton Trade Association was formed in 1922. The Central Cotton Committee held its first meeting in 1921 in Bombay. The Committee promoted a Cotton Transport Act (1923) to prevent the adulteration of cotton, which, having been applied in the first instance to Bombay where it met with encouraging success, was extended to Madras. A Cotton Ginning and Pressing Factories Act—a corollary to the Transport Act—was enacted in 1925. The Indian Central Cotton Committee has established a technological laboratory in Bombay to carry out spinning tests, etc. In co-operation with the Central India States, the Committee has started experimental work on cotton through the agency of the Institute of Plant Industry at Indore. Special research schemes in various provinces are also being promoted by the Committee. Its activities are financed out of the proceeds of a small cess of two annas per bale on all cotton used in mills in British India and exported from India. In Bombay, a Cotton Markets Act has been passed (1927), and the necessary rules under the Act have already been issued by the Government of Bombay. The Act has been put into force in three cotton centres in the Presidency. Similar Acts have been passed in the Central Provinces (the Central Provinces Cotton Market Act) and Madras (the Madras Commercial Crops Market Act). The only comment that we need make here relates to the necessity of devising measures for the use of the improved varieties of cotton in the country itself with a view to lessening our dependence upon foreign cloth. We are also dependent on foreign cotton for the manufacture of cloth of superior quality in our mills.

(*b*) Jute is the next most important Indian fibre after cotton. India enjoys a monopoly as the world's sole producer of jute. Its cultivation is restricted to the Ganges-Brahmaputra delta in Bengal, the province of Assam with the adjoining Indian State of Cooch Bihar, Bihar, and Orissa. The soil here is enriched by alluvial deposits brought by river inundation and is thus suited to grow this exhausting crop without any expenditure on manure. In 1937 the total area under jute was estimated at 2,861,000 acres as compared with 3,492,000 acres in 1930.

Although the present acreage is much less than some years ago, owing to the severe slump in prices and the depression in the jute manufacturing industry, a vigorous campaign is in progress in order to improve the position. The Bengal Government announced on 20 September 1934 a scheme of voluntary restriction of the 1935 crop, in order to assist the recovery of the price of raw jute. Bengal accounts for the bulk of the area under jute (2,161,000 acres in 1937), the other jute-growing provinces being Bihar (445,000), Orissa (15,000) and Assam (198,000). The Indian States of Cooch Bihar and Tripura had 42,000 and 8,000 acres under jute respectively. In 1927-8 over 33 per cent of the total area under the crop was under the cultivation of high yielding and disease-resisting strains of the two main species cultivated. The introduction of jute cultivation in the Ganjar tract of the United Provinces has proved a success. The area under jute and the yield of fibre have largely increased during the past 50 years. The export aspect of the crop is only second in importance to that of cotton. In 1928-9, 898,000 tons of raw jute valued at Rs. 32·35 crores and jute manufactures valued at Rs. 56·90 crores were exported. The corresponding figures for 1932-3 were only 563,000 tons valued at Rs. 9·73 crores. The decline was due to acute depression in the jute industry both in India and in the consuming countries. Since then there has been some recovery in the quantity of raw jute exported, which increased to 771,000 tons in 1935-6 valued at Rs. 13·71 crores. In 1936-7 exports of raw jute were the highest since 1928-9, being 821,000 tons valued at Rs. 14·77 crores, and accounted for 7·53 per cent of the total value of exports in that year. There are today restrictions on the free entry of jute or jute goods in some foreign markets (e.g. in Germany) which may affect the Indian export trade.

Germany and the United Kingdom are the principal customers for India's raw jute, other importing countries being Spain, France, Japan, China, the United States, Italy, and Belgium. The export of raw jute commenced as early as 1795, but the quantity was small to begin with. The demand on the part of the Dundee power-looms had come to be considerable by 1832. The hand-loom industry in Bengal had, however, still sufficient vitality up to 1850 to ensure an excess of exports of manufactured jute goods over those of the raw material. The cutting off of the United Kingdom from the supplies of Russian flax during the Crimean War led to the exploitation of jute as a commercial fibre of the first importance and resulted in increased exports of raw jute, which totalled nearly 900,000 tons in 1908-9, the two principal customers being the United Kingdom and Germany.

During the War exports declined considerably though there was recovery afterwards until the depression of 1929-33. The progress of the jute manufacturing industry will be traced elsewhere. It may be pointed out here, however, that the jute industry had shown uninterrupted progress until it was caught up in the present trade depression. In pre-War years Indian manufactures of jute increased faster than the exports of raw jute, a tendency further stimulated by the War and post-War years. The search for a substitute for jute has not met with any marked success. With a view to preventing any possible loss of markets, the Indian Central Jute Committee, which commenced their work at the end of 1936, decided to start a technological laboratory under expert management and to conduct continuous research work on jute and jute products.

(v) *Indigo.*—Indigo has had a highly chequered history which goes back almost to the beginning of the Christian era. 'Originally the industry in western India was in Portuguese hands, but about 1778, the East India Company revived it in Bengal and gave it direct encouragement for the next 20 years, and when about 1837 the industry migrated to Tirhoot and the United Provinces, India recovered the foremost place among the indigo-producing countries of the world from which she had been temporarily ousted by the West Indies. India's position remained unassailed . . . . until German laboratories found themselves in 1897 at last in a position to produce indigo (indigo had actually been synthesized nearly 30 years earlier) on a commercial scale. The fate which had already overtaken the *madder* and the lac-dye industries thereupon threatened the factories of Bihar.'[1] The Indian exports were seriously affected. Until 1907-8, indigo represented more than half the value of dyeing and tanning materials exported, but in 1913-14 this percentage had fallen to one-fifth. The area under cultivation fell from 1,688,901 acres in 1896-7 to 172,600 acres in 1913-14 and the exports from 169,523 cwt. to 10,939 cwt. The natural indigo industry received a temporary stimulus from the War, which closed the markets of the world to the synthetic substitutes and raised the price of indigo. There was a partial recovery made by the area under cultivation which rose to 700,000 acres in 1916-17 and by the exports which rose to 41,932 cwt. in 1915-16. However, there has again been a set-back since the close of the War and the exports, which are no longer of importance, amounted to only

[1] See Cotton, op. cit., p. 264.

478 cwt. valued at Rs. 0·77 lakhs in 1936-7. Opinions differ regarding the prospects of the industry, which do not seem to be bright, and the future of the industry is uncertain. Salvation lies only in cheaper production both as regards cultivation and manufacture. In 1915 the Delhi Conference considered the question of assisting the industry from three points of view—agricultural, research and commercial. In 1918, an indigo cess was levied on exported indigo, the proceeds of the duty to be expended by the Government of India on scientific research work in connexion with the cultivation and manufacture of indigo. Investigations are being conducted at the Pusa Research Institute by the Indigo Research Chemist to the Government of India.

The total reported area under indigo cultivation in 1936-7 was only 43,000 acres, the principal contributors being Madras, the United Provinces, Bihar, Punjab and Bengal. Bihar is the most important from the point of view of foreign trade and it is here that the dye is systematically extracted and marked under European supervision. The bulk of the indigo produced in Bihar factories is exported from Calcutta, chiefly to Greece, the United Kingdom, Egypt, Yugoslavia, Japan and Aden.

(vi) *Opium.*—The area under opium has declined progressively as a result of the Government policy of stopping all exports to China under the agreement of 1907 with that country and eventually (by 1935) with all other countries, and of controlled internal consumption. In British India there has been a striking decline from 614,879 acres in 1906-7 to 9,988 acres in 1935-6. The cultivation of the poppy is carried on under a system of Government licenses and is now practically confined to the United Provinces (7,888 acres), the Punjab contributing 2,100 acres. Only 644 chests or 825 cwt. of opium were exported in 1934-5 as compared with 2,823 chests or 3,524 cwt. in the preceding year and the average of 51,000 cwt. in the pre-War quinquennium (valued at Rs. 9·97 crores).[1] There has been no export of opium on private account since 1935-6. India has thus made a big sacrifice of revenue derived from the export of opium, in order to carry out her obligations under international agreements.

(vii) *Tobacco.*—The tobacco crop is believed to have been introduced into India by the Portuguese early in the seventeenth century. Since the days of the East India Company, the

[1] See also vol. II, ch. xi.

Government directed their efforts towards improving the indigenous methods of curing and manufacturing and towards providing a better quality of leaf. There are three principal centres of the tobacco industry, eastern and northern Bengal, southern India and Lower Burma. In 1935-6, the total area reported under tobacco was 1,357,000 acres, the leading contributors being Madras, Bengal, Bihar, Orissa, Bombay, Burma, the United Provinces, and the Punjab. The bulk of the tobacco grown in India is consumed locally, but there is an export trade of considerable value in unmanufactured tobacco, chiefly from Madras and Rangoon. In 1936-7, 28·5 million lb. of tobacco valued at 87·76 lakhs of rupees was exported. As regards manufactured tobacco, the value of the imports has always exceeded that of the exports and the difference has recently been accentuated by the increased consumption of cigarettes. In 1929-30, India imported 5·3 million lb. of cigarettes valued at Rs. 213 lakhs, and 4·8 million lb. of tobacco valued at Rs. 57 lakhs. Imports of cigarettes had steadily declined to 593,000 lb. in 1933-4. Since then, as a result of the revision of duties, they have again registered an increase, being 919,000 lb. valued at Rs. 32 lakhs in 1936-7. Imports of unmanufactured tobacco on the other hand dwindled down to 1·9 million lb. valued at Rs. 33·46 lakhs in 1935-6, but recovered to 3·3 million lb. valued at Rs. 49·23 lakhs in 1936-7. The increased home demand has encouraged the opening of a number of factories for the manufacture of cigarettes in India. Indian leaf tobacco makes an excellent filler but is generally unsuitable for wrappers. The deficiency is met by a considerable import of leaf from Sumatra and Java. The botanical section of the Agricultural Research Institute has directed its attention to the question of improving the quality of Indian tobaccos, especially in the direction of hybridization of new kinds, and of the production of a tobacco of the colour, flavour and texture of that commonly called Virginian. The heavier import duties levied on tobacco are also calculated to stimulate the cultivation and consumption of Indian tobacco.[1]

(viii) *Fodder crops.*—The area in British India under these crops has increased from 2·94 million acres in 1901-2 to 10·79 million acres in 1935-6, the principal areas being the Punjab (5·07), Bombay (2·59), and the United Provinces (1·48). In spite of this

[1] See vol. II, ch. xi, for particulars regarding the revised tobacoo duties introduced by the Finance Act of 1934 which gave some additional advantage to cigarettes produced from Indian-grown tobacco.

TABLE I[1]

	Quantity (figures in thousands)					Value (Rs. 1,000)				
	Pre-War average	War average	Post-War average	1929-30	1936-7	Pre-War average	War average	Post-War average	1929-30	1936-7
Grain, pulse and flour										
Rice (in the husk) ...	tons 42	32	35	28	8	27,18	20,09	31,36	22,20	4,51
Rice (not in the husk) ...	" 2,398	1,685	1,462	2,298	1,458	25,66,55	18,88,25	24,33,66	31,28,42	11,58,44
Wheat ...	" 1,308	807	237	13	232	13,96,86	10,33,41	3,66,61	21,24	2,09,59
Wheat flour ...	" 55	57	56	51	24	86,99	1,13,20	1,50,26	1,07,18	32,48
Pulses ...	" 159	129	141	97	137	1,29,81	1,88,52	2,02,78	1,63,78	1,16,24
Barley ...	" 227	198	40	6	10	1,93,16	2,21,73	46,56	6,72	6,41
Jowar and bajra ...	" 41	41	11	15	7	37,60	44,15	17,39	25,13	7,55
Other sorts ...	,, 181	192	27	2	2	1,42,96	2,32,45	34,03	4,49	3,35
Total food-stuffs ...	tons 4,411	3,141	2,009	2,510	1,878	45,81,11	37,41,80	32,82,65	34,79,42	15,38,57
Tea ...	lb. 266,497	322,691	321,169	376,634	301,869	13,06,78	17,54,57	20,92,42	26,00,64	20,03,81

[1] *Review of the Trade of India* (1929-30 and 1936-7).

TABLE II [1]

		Quantity (1,000 tons)					Value (Rs. 1,000)				
		Pre-War average	War average	Post-War average	1929-30	1936-7	Pre-War average	War average	Post-War average	1929-30	1936-7
Fibres											
Cotton (raw)	... ...	430	391	521	727	762	33,27,83	33,63,19	64,73,89	65,07,70	44,40,99
Jute (raw)	... ...	764	464	554	807	821	22,20,24	12,80,28	19,52,77	27,17,38	14,77,10
Total fibres	... ...	1,194	855	1,075	1,534	1,583	55,48,07	46,43,47	84,26,66	92,25,08	59,18,09
Oil-seeds											
Essential	...	10	8	9	4	10	20,57	24,16	35,88	15,68	21,05
Non-essential : Linseed	...	379	270	251	248	296	7,98,90	4,94,94	7,57,72	5,72,37	4,36,44
Groundnut	...	212	119	195	714	739	3,52,57	1,91,17	5,61,97	16,38,86	12,28,57
Rapeseed	...	273	91	206	44	38	4,14,69	1,43,01	5,07,37	92,08	53,68
Sesamum	...	119	33	28	11	14	2,48,15	67,35	1,02,73	27,18	27,15
Castor	...	114	89	48	106	43	1,66,43	1,57,55	1,14,54	2,14,96	62,98
Copra	...	31	16	7	...	...	1,10,43	60,73	28,84	68	15
Cotton	...	240	69	155	58	9	1,79,98	50,25	1,88,05	54,87	5,02
Mustard	...	4	3	2	3	3	10,08	9,16	9,75	7,62	4,79
Mowra	...	29	3	8	...	...	42,53	3,04	12,79	63	...
Poppy	...	33	5	6	...	...	69,41	9,58	20,97	71	14
Other sorts	...	9	2	8	7	4	23,23	6,48	13,03	21,12	6,96
Total	...	1,453	708	923	11,95	11,56	24,36,97	12,17,42	23,53,64	26,46,76	18,46,93

[1] *Review of the Trade of India* (1929-30 and 1936-7).

increase we may say that the area devoted to fodder crops is insignificant in view of the large number of cattle that must be maintained in a state of efficiency in an agricultural country like India. The Agricultural Department has of late years given much attention to the question both of growing and storing fodder. The successful introduction of the famous Egyptian clover, as soil renovator, in Sind, Bihar, the Central Provinces and North-West Frontier Province, and the cultivation of berseem at Pusa may be regarded as creditable achievements of the Agricultural Department in this connexion.[1]

(ix) *Rubber.*—Rubber, for which the uses today are legion, is grown mainly in southern India (Madras, Coorg, and the States of Mysore, Travancore and Cochin) and Burma. The total area under rubber in 1936 was 228,200 acres and the yield 60 million lb. as compared with only 6·4 million lb. in 1932, when the general slump in the rubber market was most acute. Most of the rubber grown is exported. 28·9 million lb. valued at Rs. 104 lakhs was exported in 1936-7. The exports before 1910 were small, the industry being in an infant stage. Even today India's share in the world's production is only about 3 per cent. Since June 1934 an international scheme for the regulation of production and exports of rubber has been in operation. It has helped to lift the market from the extremely depressed state which prevailed before its introduction. The value of the imports of rubber manufactures (tyres, tubes, etc.) in 1936-7 amounted to Rs. 211 lakhs. An event of outstanding importance is the establishment (1936) near Calcutta, of a large factory for the manufacture of tyres and other rubber goods. With the development of local production it is possible that the imports of rubber manufactures will tend to decline in future.

§8. **Exports of agricultural products.**—In the foregoing survey of the principal crops of India, something has been said about their export aspect. It is, however, now necessary to treat the whole subject of the exports of agricultural products separately. As a preliminary to the discussion of this question some statistics of exports of food-stuffs and raw materials may be given. The two tables (pp. 191-2) show the quantity and value of exports of (I) food-stuffs and (II) principal other crops in 1936-7.

[1] See *Review of Agricultural Operations in India* (1928-9), pp. 67-70.

Table III below shows the percentage of exports of certain principal crops to the total production.[1]

TABLE III

	Pre-War average	War average	Post-War average	1925-6	1927-8	1930-1	1936-7
Rice	9	5	5	8	8	7	4
Wheat	14	9	3	3	4	2	2
Tea	96	89	95	90	91 (in 1926-7)	91	77
Cotton (raw) ...	56	51	61	69	46	75	68
Jute (raw) ...	51	31	48	46	49	31	53
Linseed	73	63	59	77	63	68	71
Rape and mustard ...	23	8	19	13	8	4	4
Sesamum ...	25	8	6	10	2	0·2	3
Groundnuts ...	35	12	19	24	24	19	26
Indigo	40	44	27	7	17	7	(*a*)

(*a*) Not available.

Table IV below (giving the percentage proportion to the total value of all exports of merchandise) shows the comparative importance of the principal food-stuffs and other agricultural products in the export trade in 1936-7.[2]

TABLE IV

Cotton (raw)	23·03	Oil-cakes	1·16
Jute (raw)	7·53	Spices	0·28
Grain, pulse and flour ...	7·84	Tobacco	0·47
Tea	10·22	Coffee	0·43
Seeds	9·42	Fruits and vegetables ...	0·87

§9. **Restrictions on the export of food-stuffs.**—Rice, as seen in Table I above, is by far the most important among the food-grains exported, and accounted for 78 per cent of the total quantity of food-grains and flour exported in 1936-7 as compared with 93·3 per cent in 1933-4. The position of wheat (which was until recently the second chief food-grain exported) in the export trade has already been discussed and we have seen that the exports have recently sunk very low. When therefore we discuss the question of the export of food-stuffs, the main reference at present is to rice.[3] Is the export of food-stuffs and

[1] *Review of the Trade of India* (1936-7), p. 244.

[2] The total value of all exports from British India in 1936-7 was Rs. 1,96,12,46. See *Review of the Trade of India* (1936-7), p. 84.

[3] In 1936-7 there was, as already stated, a partial revival of wheat exports from India. Pulses, barley, jowar, bajra and maize are the other food-grains exported, but the aggregate quantity exported is comparatively small.

raw materials a matter for congratulation or for alarm? There are those who hold that this export is a sign of increasing prosperity. It shows that the country is profiting by advantageous world prices and is sending out the surplus that remains after meeting the need of the home population, and is importing, by way of payment for its exports, cheap manufactured articles which cannot be produced profitably within the country itself. According to this view, the exports represent 'a true surplus, that is to say, a margin which India can relinquish during periods of good harvest and a reserve on which she can draw for her own local-requirements in times of scarcity'.[1]

The other view is that the export of food-stuffs and raw materials is not a true surplus in the sense that it represents a balance that remains after the needs of the country have been fully met, and that it is advisable, in the true interests of the country, to prohibit or to restrict this export by heavy duties. It is criminal, so it is argued, to allow an export of the country's food-stuffs when large sections of the people are living on the verge of starvation, and to look on complacently while a drain to foreign countries of valuable raw materials, which are badly wanted for the development of the indigenous manufactures, is going on unchecked.

In connexion with this controversy, we must emphasize a simple truth which is often forgotten, namely, that it is inadmissible to infer, from the mere fact of export to foreign countries, that the wants of the people in the exporting country in respect of the commodities exported must have been fully satisfied. The phrase 'true surplus' generally employed in this connexion is unfortunate because it suggests that there is such a thing as a 'false surplus'. Strictly speaking, all surpluses that are exported have the same scientific character; they are due to the fact that there is no demand for them in the country of origin at the ruling prices. By demand, as every tyro in economics knows, we understand not merely the desire to possess a thing, but such desire backed by adequate purchasing power. If the United States exports wheat, this is not because every individual American has all the food he can consume; similarly, in India, the export of food-stuffs does not mean that nobody in the country has any use for the food that is exported. The only difference between India and the United States is that relatively to the latter country, the former has a very much larger proportion of people whose demand for food is ineffective. It is a difference in degree,

[1] *Economic Resources of the Empire*, edited by T. Worswick, p. 145.

not in kind. When therefore the Fiscal Commission sapiently remark with regard to the export of rice and wheat from India that 'at existing prices the efficient demand of India is satisfied, and there remains a surplus available for export,'[1] they are saying something which is perfectly true but also perfectly useless. At 'existing prices' whether high or low, 'efficient demand' is always satisfied. But in spite of the satisfaction of 'the efficient demand' for food, millions of people in a country may be underfed, and that is patently the case in India.

There are two methods (which clearly are not mutually exclusive) of remedying this state of affairs. One is to depress the prices of food-stuffs so as to bring them within the reach of the low purchasing power of the masses; and the other is to raise their purchasing power so as to make their demand effective at current prices.

One of the ways suggested for bringing down prices of food-stuffs is to prevent their export abroad. The question is, would prohibition of export or the imposition of heavy export duties give us the desired level of low prices, and if so, whether any injurious reactions on the economic life of the country would be set up by thus artificially lowering them?

It has been argued by those who oppose any deliberate attempt to bring down the prices of food-grains by such means that it would naturally lead to the substitution for them of non-food crops like cotton, jute, oil-seeds, etc., unless these also come under the policy of restriction; and thus an attempt to cheapen the food supply of the country would merely result in diminished production of food-grains and the situation, from the point of view of feeding the population adequately, would be worse than before.

We need not dispute that prohibition or heavy export duties will, other things remaining the same, necessarily result in a certain shrinkage in the total production of food-stuffs. If the supply is very elastic, it is possible that the effect of this reduction will be to make the amount available in the country less than before. On the other hand, it is quite consistent with the admission that the supply would be curtailed to some extent to hold, nevertheless, that there might remain a larger quantity of food available for the home market. Suppose the quantity of rice exported amounts to 3 million tons annually out of a total production of 30 million tons, which leaves 27 million tons for home consumption. Now, if prices fall and the supply of rice

[1] *Fiscal Commission Report*, p. 155.

is extremely elastic, the total production may go down to less than 27 million tons; but it is by no means certain that it may not go down to, say, only 28 million tons, so that the supply available for the home market will be 1 million tons more than before. We cannot dogmatically lay down the proposition that prohibition will necessarily result in a smaller quantity remaining in the country than before. It may not be feasible for a good many cultivators to turn their lands on to the cultivation of the non-food crops. And in spite of falling profits, the cultivator may go on producing more or less the same quantity as before. Everyone who has the least acquaintance with the actual condition of the agriculturist in India will realize how difficult it is for him to abandon the narrow groove in which he may be moving and quickly respond to altered circumstances. It is therefore not improbable that the food supply in the country may increase as the result of the policy of prohibition.

Another argument in favour of unrestricted export referred to by the Fiscal Commission is that the export market puts the country in command of a surplus, the existence of which is important in periods of local failures of the crops, which recur from time to time in India. This surplus is grown because the export abroad provides a profitable outlet for it and it will disappear if the outlet is closed.[1] The question of adequate famine relief, however, does not depend, in any great measure, on the availability of a surplus exported abroad in normal years. The retention in the country of the normally exported surplus to meet special contingencies, although it may bring some relief, will not make a great difference in the situation, because the quantity of the exportable surplus is insignificant relatively to the total food requirements of the country. Also, simultaneous failure of rains throughout the country is a comparatively rare phenomenon in India, and the problem presented by times of scarcity is one of quickly transferring supplies from regions of comparative plenty to regions of relative scarcity, and it has been the well-justified boast of the Government that the highly efficient system of famine relief and insurance elaborated by them has in recent times worked most admirably. It cannot therefore be urged that any such supplementary assistance in the task of famine relief as may be afforded by the possibility of diverting the exportable surplus to famine relief is in any sense urgently required.

[1] See *Fiscal Commission Report*, p. 115; and K. L. Datta, *Inquiry into Rise of Prices in India*, p. 98.

While therefore we do not agree with these usual arguments in favour of unhindered exports of food-stuffs, we are nevertheless not convinced that a policy of restriction would be desirable. We have already hinted above that the exports represent relatively an insignificant proportion of the total production, so that even if they are wholly retained in the country, the impression that will be made on the prices of food-stuffs in general will be very slight, and what is more important, this slight gain will be at the expense of the cultivators, whose loss by a policy of prohibition in the case of wheat alone has been calculated at 16 crores of rupees.[1] Another minor point that is made by the Fiscal Commission is that agricultural improvements will be prejudicially affected by the policy under discussion. High prices benefit the more prosperous cultivators more than any other class, and it is to this class, possessed as it is of the requisite capital and intelligence, that we must look for the introduction of improvements; and lower prices, by reducing the prosperity of this class would make them less capable of undertaking this valuable work. This argument, although it is easy to overrate it, must be admitted to be sound so far as it goes. The only satisfactory method of cheapening food-grains is to make agriculture more efficient and stimulate the production of food-grains; though we must add that the problem at present is that of securing a rise and not a fall of prices. As to the question of increasing the purchasing power of the masses so as to enable them to obtain the means of commanding a sufficiency of food, it will always remain a worthy goal of public policy.

Although we are not in favour of restriction of the export of food-stuffs in normal times, we recognize that abnormal conditions might arise necessitating temporary resort to heavy export duties. There may be a very serious local failure, or there may be an exceptionally strong demand for Indian produce owing to shortage elsewhere, as was the case during the War, and prices may threaten to rise to heights which it is unsafe to reach. In spite of considerable administrative and other difficulties involved in Government interference—difficulties abundantly illustrated by the control measures during the War—it may be necessary for the Government to take such action, not only with a view to relieving the situation, but also because public opinion may demand the adoption of emergency measures. It is true that a rise in Indian prices owing to local shortage will automatically

[1] *Fiscal Commission Report*, p. 114: see, however, p. 171 above.

diminish the exports to world markets, but before this has occurred to the required extent, a considerable amount of export may have already taken place, and if the idea is to retain this for home consumption and to prevent a sharp rise in prices, the Government will have to act as soon as they scent danger instead of waiting for the automatic remedy to come into action.[1]

§10. **Restrictions on the export of raw materials.**—With regard to the export of raw materials it is not necessary to recapitulate the points raised in connexion with the interpretation of the term 'true surplus'.

Several arguments have been put forward against the free export of the raw materials of industry derived from agriculture. In the first place, it is argued that the high prices secured for the export of such commercial non-food crops as cotton, jute and oil-seeds have led to the substitution of non-food for food crops and the utilization of the best lands for the cultivation of such crops, food-grains being relegated to the inferior soils.[2] The total area, however, occupied by commercial crops at the expense of food-grains is very small compared with the total area under the latter.[3]

It is no doubt true that the area under non-food crops is slowly gaining at the expense of the area under food crops, but the disparity between them as regards total production is at present overwhelmingly in favour of food crops, and the contingency of the food supply seriously contracting owing to the encroachment of commercial crops is so remote that there is no immediate cause for anxiety. We do not think that the time has yet arrived for taking any special measures in the interests of the conservation of the nation's food resources, particularly by the drastic method of checking the production and the export of the commercial crops. We must not lose sight of the fact that the production of commercial crops brings substantial profits to the cultivators engaged in it, and there is no strong reason at the present moment for interfering with the cultivator's freedom in the matter of growing such crops as appear most remunerative to him.

[1] 'The policy that has been followed of prohibiting exports in times of scarcity (for example in 1918 and 1920) is advantageous, as even when internal prices rise, exports at present are not adequately checked, owing to the fact that the producers are financially tied to dealers and dealers to exporters.'—V. Anstey, op. cit., p. 71.

[2] See K. L. Datta, op. cit., pp. 64-6.

[3] See tables above, pp. 164-7.

Another objection to the free export of raw materials is that by such a policy the price of important raw materials of manufacturing industry such as cotton, jute and oil-seeds is made too high for Indian industrialists to be able to hold their own against foreign competitors. If these exports are restricted, the Indian manufacturer will benefit by cheap raw materials—an advantage not available to the foreign manufacturer. While we admit the necessity of extending protection to the nascent industries of the country, we are doubtful of the efficacy, for this purpose, of artificially lowering the prices of raw materials, which after all contribute a very small proportion to the total value of the manufactured products. The necessary protection is much more effectively given by a system of bounties and protective import duties.

A third argument is that the continuous cultivation of the land under heavy crops like cotton, jute, etc., results in the progressive exhaustion of the soil. In this connexion it is alleged that the large export of oil-seeds and oil-cakes is particularly objectionable. The soil is subjected to a process of steady deterioration as it does not get back what is taken away from it. Protective export duties on oil-seeds and heavy export duties on oil-cakes, bone and fish manures have been advocated, in order to put a stop to the alleged process of soil exhaustion. Incidentally we may remark that the duty on oil-seeds is also supported on the ground that it will promote the growth of the local oil-crushing industry. As regards soil exhaustion, whether it is actually taking place is a matter of dispute.[1] But even supposing that it is not taking place, there can be no question that the soil will benefit by the application of more manure than is given to it in the present circumstances. From this point of view, a moderate export duty on oil-seeds and oil-cakes may be advocated, and part of the proceeds from the duty may be set aside to finance propaganda necessary in order to ensure increasing application of such manures, which may be expected to fall in price to some extent and come within easier reach of the cultivator's resources, without at the same time inflicting serious economic injury on the grower of oil-seeds. The Agricultural Commission uphold the view of the Fiscal Commission that neither an export tax on oil-seeds or oil-cakes nor the total prohibition of such export can be justified.[2] They have argued that the export duty will fall on

[1] See §12 below.

[2] The export duty was, however, advocated by the Board of Agriculture in 1919 and by the majority of the Taxation Inquiry Committee.

the producers, as India is by no means the chief producer of the world's oil-seeds, and that it will hurt the agriculturist as grower more than it will benefit him as consumer of oil-seeds and oil-cakes. In the judgement of the Commission, the only method by which the advantages of supply of combined nitrogen available in the large crops of oil-seeds grown in India can be secured is by the natural development of the oil-crushing industry, and though this is a difficult matter owing to inadequate demand for oil in India and the existence of severe European competition in outside markets, it would be worth while carefully investigating the possibilities of the industry in India.[1]

§11. **Low yield and its causes.**—Although agriculture is practically the only national industry in India, it is conducted under highly unsatisfactory conditions, and the average yield per acre of the different crops is consequently very much lower than in countries where agriculture is better organized. The following tables showing (i) the average yield per acre of the principal crops in India in 1918-19, 1923-4 and 1936-7 and (ii) the yield per acre in 1922 in India and other countries, are intended to illustrate this fact.[2]

TABLE I

Crop	1918-19 (lb)	1923-4 (lb)	1936-7 (lb)	Crop	1918-19 (lb)	1923-4 (lb)	1936-7 (lb)
Rice (cleaned) ...	701	798	881	Linseed ...	265	278	261
Wheat ...	707	694	662	Rape and mustard ...	351	416	376
Sugar-cane (raw sugar)	1,897	2,544	3,397	Sesamum ...	174	192	193
Tea ...	561	528	474 (1936)	Groundnut (nuts in shell) ...	997	867	864
Cotton (ginned) ...	76	87	100	Castor seed	—	207 (1924-5)	204
Jute ...	1,195 (1918)	1,164 (1924)	1,201 (1937)				
Coffee ...	183 1919-20)	139	219 (1935-6)	Rubber ...	115 (1919)	121 (1924)	263

[1] *Agricultural Commission Report*, par. 87.

[2] See *Estimates of Area and Yield of the Principal Crops in India* (1936-7), pp. 9-11 and United States Department of Agriculture's *Agricultural Year Book* (1923).

TABLE II

Country	Wheat (bushels 60 lb)	Corn (bushels 56 lb)	Barley (bushels 48 lb)	Rice (lb)	Cotton (lb)	Tobacco (lb)
Canada ...	17·8	43·4	27·6	...	...	...
United States ...	13·9	28·3	24·9	1,090	141·0	735·6
England ...	31·2	...	31·0	...	...	...
Denmark ...	39·0	...	45·6	...	...	...
France ...	18·6	16·0	23·9	...	...	1,426·1
Italy ...	14·1	20·2	14·3	2,151	...	917·9
Germany ...	20·5	...	25·7	...	...	2,639·2 (1921)
Egypt ...	24·1	36·3	30·1	1,456 (1921)	299·0 352·0 (1923-4)	...
India ...	13·0	15·6	19·8	911	98·0	...
Japan ...	22·5	27·7 (1921)	31·7	2,477	...	...
Australia ...	11·2	25·7	21·3 (1921)	...	...	...

Referring to the low productivity of Indian agriculture Sir M. Visvesvaraya writes: 'On the normal pre-War basis, the average production of British India, including irrigated crops, cannot be more than twenty-five rupees per acre; in Japan it cannot be less than a hundred and fifty.'[1]

One of the obvious causes of low productivity in India is the uncertain character of the rainfall. Apart from shortage and abnormal distribution of rainfall there are other causes, such as floods, hailstorms, frosts and other vagaries of the climate, which have an injurious effect on the crops. Irrigation supplies a partial corrective to deficiency of rainfall, but the effect of the other calamities mentioned above cannot altogether be offset by human contrivance. Much damage is also caused by wild animals, rats, locusts and other pests, and the various Agricultural Departments have addressed themselves with some success to the task of devising and popularizing remedies against them.

Inefficient tillage and the under-equipment of the agriculturist further account for the low yield. The problems arising in this connexion, as also the excessive subdivision and fragmentation of land leading to wasteful husbandry, will be discussed later on.

§ 12. **Is the soil progressively deteriorating in India?**—It has been asserted that in recent years the average yield per acre of food-grains in India has diminished and is diminishing . Assuming this to be so, however, it cannot be regarded as conclusive evidence

[1] op. cit., p. 174.

of soil deterioration. It may well be due to the tendency of relegating the production of food-grains to inferior soils and reserving the better kinds of soil for the cultivation of commercial crops such as cotton, jute, oil-seeds, etc. The very general belief that the average yield per acre, not only of food but other crops as well, has diminished owing to progressive exhaustion of the soil, may be partly due to the fact that with the increase in the demand for agricultural produce cultivation has been extended so as to bring under cultivation the poorer lands. This would naturally diminish the average yield per acre. The cultivator's judgement in this matter is likely to be vitiated by his memory of times when only the better classes of land were under cultivation. Density of population may also lead to a diminution in the number of periodical fallows and consequent increase in weeds and in the area cultivated in relation to available supplies of manure, resulting in soil deterioration.[1]

Apart from these considerations, the weight of expert authority seems to be against the theory that in recent times the soil in India has been losing its power more and more with every year that passes. Dr Clouston, in his written Memorandum to the Agricultural Commission, says: 'Most Indian soils must have reached their maximum state of impoverishment hundreds of years ago and will not get any poorer even if cropped without manures for hundreds of years more. An average crop uses up about 20 pounds of nitrogen per acre, but the loss is made up annually, for the soil gets nitrogen from the air and from the decay of root matter left in the soil after the crop is harvested, with the result that most soils are not getting any poorer in nitrogen. . . . It was definitely proved at Rothamsted, the premier agricultural research station in the world, that the unmanured soil there did not reach its maximum state of impoverishment till after being cropped continuously with wheat for a period of 40 years, since when the yield from year to year has remained almost stationary, despite the fact that no manure has ever been applied to the field. We may take it therefore that, with the exception of the limited area in this country, the soils of which are deficient in phosphates, our old cultivated land has long since reached its maximum state of impoverishment; that increased yields now depend upon the rainfall, standard of tillage and manure applied; that only new land or lands deficient in phosphates are being impoverished by cultivation.'[2] Dr Voelcker held that in the case of Indian lands

[1] *Agricultural Commission Report*, par. 77.
[2] *Minutes of Evidence*, vol. I, part i, p. 32.

generally, owing to exports of seeds, cotton and other products, the soil constituents that are removed are not returned to the soil, which consequently is suffering continuous exhaustion. Even he, however, qualified this view by calling attention to the fact that a large proportion of the crops annually grown in India and also of the trees and shrubs and even the weeds, are leguminous in character and may thus derive their nitrogen from the atmosphere.[1] K. L. Datta after weighing all the available evidence comes to the conclusion that 'there is no statistical evidence to show that any change has taken place in the fertility of agricultural land in any part of India, either during the period under inquiry (1890-1912) or even during a much longer period'.[2]

Fortunately, it is not necessary for us to make up our minds on this highly technical matter. The most important fact from our point of view is the actual low productivity of the soil in India. It is universally recognized that it is highly important to improve the productivity of land in India, and further that proper care of the soil and the application of adequate quantities of manure are the only means of improving the yield. It is cold comfort to be assured that a balance has been established, and that the soil cannot be deteriorating because the maximum state of impoverishment must have been reached long ago. For this after all means that things are already so bad that they cannot possibly get worse now, and the case for bestirring ourselves in order to rectify the situation remains as strong as ever. In this connexion the Agricultural Commission emphasize the importance of research work on soils and soil conditions, and recommend an increase of research workers in the Agricultural Departments and the appointment of specialist officers, especially in the direction of bacteriological, physical and biological research.[3]

[1] See Datta, op. cit., p. 17.
[2] ibid., p. 68.
[3] *Agricultural Commission Report*, par. 78.

CHAPTER VII

AGRICULTURE: LAND AND ITS PROBLEMS

In this chapter the principal problems relating to land will be discussed under the headings of (i) Subdivision and Fragmentation; (ii) Permanent Improvements; and (iii) Irrigation.[1]

Subdivision and Fragmentation

§1. **The idea of an optimum holding.**—One of the many causes responsible for the backwardness of agriculture in India and the impoverishment of the ryot is the endless subdivision and fragmentation of land. As in manufactures so in agriculture, there is a certain scale of production which gives the best result from the point of view of the producer. After a certain point, any further decrease in the scale of production makes the relation between cost and yield less and less favourable until profit disappears altogether. There is, indeed, also a point beyond which it is not profitable to *increase* the size of a holding, but throughout the discussion on which we are about to embark, this possibility will be ignored as being of no practical importance in India.

§2. **Unit of cultivation and unit of ownership.**—When we talk of a suitable size for a holding, what we are really thinking of is the unit of cultivation and not necessarily the amount of land held in ownership, though the two tend to coincide in the ryotwari tracts in India. As Mill points out, 'it does not follow, because landed property is minutely divided, that farms will be so. As large properties are perfectly compatible with small farms, so are small properties with farms of an adequate size; and a subdivision of occupancy is not an inevitable consequence of even undue multiplication among peasant proprietors,' provided, that is, that the patrimony is not divided. Or, as Nicholson puts it, 'large estates do not necessarily imply cultivation on a large scale, nor does a wider system of ownership necessarily imply small cultivation. The great estate may be let out in small farms, and a large farmer may rent land from several owners'.[2]

If a cultivator's own holding is too small for economic cultivation, he may rectify this by taking on lease additional land

[1] The treatment of the important subject of Land Tenure has been relegated to a separate chapter (ch. xii).

[2] *Principles of Political Economy*, vol. I, p. 149.

from other people.[1] This does happen to some extent in India and we must make an allowance for it in interpreting the statistics relating to the size of holdings and its economic effects. We must further allow for cases of joint cultivation. We are not entitled to assume straightaway, without further inquiry, that every bit of land separately owned is also separately cultivated. Though such an assumption may be generally true, it is not invariably so.

Another phenomenon with which subdivision of land is, in almost every case, associated in India, is that of fragmentation of land. Not only is the size of the holding too small but it is scattered in a number of tiny parcels situated at inconvenient distances one from another.

The Agricultural Commission consider the problem of subdivision and fragmentation under the following four headings: (i) the subdivision of holdings of right-holders; (ii) the subdivision of holdings of cultivators; (iii) the fragmentation of holdings of right-holders; and (iv) the fragmentation of holdings of cultivators. The term 'right-holders' is used to denote those who possess some permanent hereditary right in land, whether as owners, occupancy tenants or *patta* holders; while the term 'cultivators' is used to denote all who cultivate land in any of the above capacities, whether as owners, *patta* holders, occupancy tenants or tenants-at-will, or lessees; but not as hired labourers.[2] In our treatment of the subject we have found it convenient to assume what is broadly true, namely, that subdivision and fragmentation of right-holders' holdings tends to be reflected in a corresponding subdivision and fragmentation of cultivation: and what will cure the one will, to a considerable extent, cure the other.

§3. **Evils of subdivision and fragmentation.**—The cultivation of an unduly small holding entails waste in a variety of ways. It may not task to its full strength even such poor equipment as the ordinary cultivator possesses, namely, a pair of bullocks and a plough. The plots are sometimes so small that it is scarcely possible to turn the bullocks round while ploughing. The cost of maintaining the bullocks and the cultivator himself remains the same; it does not diminish because the holding is smaller than can be adequately cultivated with the help of the standing equipment. The yield, on the other hand, is bound to be less. More generally speaking, all fixed costs come to bear a larger proportion

[1] The economic benefit to the cultivator would obviously be smaller in the case of the leased lands than in the case of land that is owned, because rent is higher than assessment.

[2] *Agricultural Commission Report*, par. 118.

to the value of the product with every diminution, after a certain point, of the size of the holding. Even as regards costs that are variable, some of them do not vary exactly in proportion to the variation in the size of the plot. For example, the cost per acre of fencing increases with the diminution in the area enclosed. When a piece of land is too small, it may not be worth while incurring the expenditure for fencing against stray cattle. And the inability to protect the fields by proper fences will impose on all farmers a uniform system of cultivation. No new system of cultivation or of rotation of crops is possible because of the liability of crops to be damaged by cattle straying from the neighbouring fallow fields. If fencing is prohibitive, engaging watchmen would generally be even more so. Such a position must be disheartening in the extreme to the enterprising farmer with ideas. Another disadvantage attendant on a multiplication of small fields is the great waste of area which it involves. A great many more hedges, paths, etc., are required, and the total area wasted in this manner is very considerable. The smaller the number of individual fields, the greater will be the saving in the area available for cultivation. Again, there may be plenty of subsoil water in a field but advantage cannot be taken of this fact, because digging a well would mean wholly disproportionate expenditure considering the extremely small size of the field. It may be worth while sinking a well if it commands, say, four or five acres of land, but not so if the land is only about an acre or less. The employment of labour-saving devices such as tractors, threshers, winnowers, etc., is impossible for the small holder unless there is some form of co-operation or union of efforts and resources—which, however, is not easily achieved. All the disadvantages springing from an unduly small holding are obviously intensified in the holding, which, in addition to being small, is also badly assembled. Speaking about fragmentation Dr Mann says: 'It has, in fact, all the evils of very small holdings in that it prevents the use of machinery and labour-saving methods; and, on the other hand, of large holdings in that it hinders the adoption of really intensive cultivation by hand labour which is the great advantage of the small holder.'[1] Difficulties in connexion with putting up fences, protection from the invasion of weeds from the neighbouring fields, protection from stray cattle and from the depredations of thieves are common to excessive subdivision and fragmentation.

There are, however, certain additional drawbacks peculiar to fragmentation. It involves a greater expenditure of capital and

[1] *Land and Labour in a Deccan Village*, vol. I, p. 48.

labour and a smaller return than if the same area is in one compact block. It is calculated that expenditure of cultivation increases by 5·3 per cent for every 500 metres of distance for manual labour and ploughing; from 20 per cent to 35 per cent for transport of manure; and from 15 to 32 per cent for transport of crops. It is obvious that fragmentation adds to expenditure in all these ways. Further, it impedes cultivation, entails great waste of time and waste of labour and cattle-power in going from the village site to the fields and from one field to another. It evidently makes it impossible for the cultivator to stay on his holding in the interests of efficient cultivation. Very often, in order to save time, the cultivator tries to find a short cut through other people's fields. This, together with the disputes about boundaries and rights of way, is a fruitful source of litigation and endless quarrels among village folk. If the cultivator had all his land in one compact block, he would keep his cattle on the farm instead of taking them to the village site, and this would mean a very great saving of manure. As it is, manure has to be carried to the field from the village dunghill and consequently much of it is wasted. When land is excessively fragmented, irrigation often becomes impracticable, although sufficient water may be available. Water cannot be supplied so as to reach all the little parcels into which an individual holding may be cut up, and besides this there is the difficulty of taking the water by channels which will have to run through other people's fields. It is well known that difficulties with regard to the channel along which water is to be taken as well as with regard to its distribution lead to much bickering and bad blood.

The combined result of subdivision and fragmentation is sometimes to drive the land entirely out of cultivation. Dr Mann sums up the evils as follows: 'This destroys enterprise, results in an enormous wastage of labour, leads to a very large loss of land owing to boundaries, makes it impossible to cultivate holdings as intensively as would otherwise be possible, and prevents the possibility of introducing outsiders, with more money, as tenant farmers or as purchasers of a good agricultural property.'[1]

§4. **Case for fragmentation and subdivision.**—It must not be supposed that all cases of fragmentation are undesirable. The lack of a holding in one compact block may, indeed, be due to perfectly sound economic considerations. The holding of land in different soil areas may be necessary as affording a certain amount of insurance against the vagaries of the seasons. 'In many parts of India we find that two or more staple crops are grown in

dispersed fields in different soil areas, so that, while a deficiency or an irregular distribution of rainfall may destroy one crop, there may be favourable returns from other fields. Indeed, the elaborate system of crop rotation which distinguishes Indian from western farming has been possible chiefly because the holdings are dispersed.'[1] On account of the variety of crops also there is occupation for the cultivator for more days in the year than may be possible on a compact homogeneous block. It is easy to multiply instances of scattered holdings governed by considerations of economic advantage. In the Konkan, for instance, the cultivation of rice lands necessitates the possession of a certain amount of *warkas* land, and therefore both these must go together. Similarly, above the Ghats, especially on the riverside, it is absolutely necessary for the cultivator to possess at least a small strip of *mali* or alluvial land. It supplies him with fodder for his cattle and is useful in other ways. Any scheme of consolidation therefore must take these facts into account if it is to be successful.[2]

Similarly, up to a point, subdivision can be defended as leading to a widespread distribution of property in land and the creation of a large class of peasant proprietors strongly attached to their land, recognized on all hands as conducive to economic and social stability. This is a consideration which must be borne in mind in framing schemes for the enlargement of the present holdings in India. Large estates and capitalistic farming on the lines of the English model would not be suitable to Indian conditions. Small-scale farming and a strong class of peasant proprietors are the ideals to be aimed at.

When, however, we decry subdivision and fragmentation, we have in mind instances where justifications and extenuating circumstances such as these are altogether absent and the evils have reached an intolerable stage.

§5. **Extent of the evil in India.**—*I. Subdivision of holdings of right-holders.*—Let us now try to realize the extent of the evil which is to be found practically in all parts of India.[3] In the

[1] *Indian Journal of Economics* (April 1927), Radhakamal Mukerji's article on Fractionalization.

[2] See B. V. Jadhav's speech in the Bombay Legislative Council, 10 October 1927.

[3] In connexion with the evil of fractionalization, statistics of the acreage per head of population are sometimes given. If we divide the total sown area in British India by the total population we get a quotient of a little over 1·4 acres per head. This indicates the intensity of the pressure of the population on the soil, but is not directly relevant to the problem of subdivision and fragmentation. It shows that too many people depend on land, but it is not directly informative as to the extent to which the land is fractionalized.

thickly populated area of Bihar and Orissa, the tenant holding averages less than half an acre though the average per cultivator is 3·1 acres. In Bengal, the cultivated area amounts to scarcely 3·1 acres per cultivator. The very rights which the cultivator has in his land and which have been secured for him by special tenancy legislation make the cultivator stick like a limpet to his petty holding and prevent him from going in search of work in industrial centres except in the last extremity. In Assam, the size of an average holding is no more than 3 acres, while in the United Provinces it is only 2·5 acres. A special inquiry into 2,397 villages in the Punjab disclosed that 17·9 per cent of the 'owner' holdings were under 1 acre; a further 25·5 per cent were between 1 and 3 acres; 14·9 per cent between 4 and 5 acres, and a further 18 per cent between 5 and 10 acres. The holdings under 1 acre were the subject of special inquiry, and it was found that a large number were agricultural holdings. In Madras and Bombay, the average area of the holding is small, and many of the holdings are less than 2 or 3 acres, so that effective cultivation is impossible. The proportion of holdings under 1 acre is high. In Bombay, Sir Chunilal Mehta showed, in his speech on the Bombay Small Holdings Bill[1] how in all Divisions, holdings are increasing faster than the area occupied and how this tendency is particularly noticeable in holdings of 5 acres and less. According to Dr Mann, the average size of the holding in the village of Pimpla Soudagar in the Poona District appears to have been as much as 40 acres in 1771; in 1818, it had come down to 17½ acres; from 1820 it long remained stable at 14 acres but by 1915 was reduced to 7 acres. 'It is evident,' says Dr Mann, 'that in the last 60 or 70 years the character of land holdings has altogether changed. In the pre-British days, and the early days of the British rule, the holdings were usually of a fair size, most frequently more than 9 or 10 acres, while individual holdings of less than 2 acres were hardly known. Now, the number of holdings is more than doubled and 81 per cent of these holdings are under 10 acres in size while no less than 60 per cent are less than 5 acres.'[2]

II. Subdivision of cultivation.—Subdivision of cultivation is even more pronounced, mere cultivators being more numerous than right-holders. A large number of people resort to agriculture for bare subsistence in the absence of any other means of livelihood. In the Punjab, 22·5 per cent of the cultivators cultivate 1 acre or less; a further 15·4 per cent cultivate between 1 and 2·5 acres; 17·9 per cent between 2·5 and 5 acres; and 20·5

[1] 8 October 1927. [2] op. cit, p. 46.

between 5 and 10 acres. In the *Census Report* of 1921, the number of cultivated acres per cultivator is given as follows:

Bombay	12·2	Madras	4·9
Punjab	9·2	Bengal	3·1
Central Provinces and Berar	8·5	Bihar and Orissa	3·1
Burma	5·6	Assam	3·0
		United Provinces	2·5

III. Fragmentation of holdings of right-holders.—Fragmentation is a normal accompaniment of division of property according to the laws of inheritance, so that very few of the holdings are in one compact block. For example, in the Bombay Presidency proper there are about three to four plots per holding. In the village of Pimpla Soudagar, Dr Mann found that 156 owners had between them no less than 729 plots of which 463 were less than 1 acre, and 211 were less than a quarter of an acre. In Ratnagiri, the size of individual plots is sometimes as small as 0·00625 of an acre, or 30¼ square yards; in the Punjab, fields have been found over a mile long and but a few yards wide, while areas have been brought to notice where fragmentation has been carried so far as effectively to prevent all attempts at cultivation.

IV. Fragmentation of cultivation.—Fragmentation of cultivation is a far more serious and more extensive evil than fragmentation of holdings and is carried to greater extremes. In Pimpla Soudagar Dr Mann found that 62 per cent of the cultivators' plots were below 1 acre and in Jategaon the percentage was 31. Ramlal Bhalla found that in the village of Bairampur in the Punjab, 34·5 per cent of the cultivators had over 25 fragments each. This is typical of a widely prevalent situation.[1]

§6. **Causes of subdivision and fragmentation.**—Various causes have been put forward to account for the evil of excessive subdivision and fragmentation. One of these is the growth of the spirit of individualism which is responsible for the break-up of the joint family system. Joint cultivation is no longer as common as it used to be. The insistence on partition by metes and bounds, and separate cultivation, are much more frequent than in the old days. This spirit of individualism has been further assisted by the emphasis which English judges administering law in India have placed on private property and individual rights. Again, there are those who consider that the Hindu and Mohammedan laws of inheritance and succession and the customs associated with them are the *causa causans* of subdivision and fragmentation. It is easy to see how the size of the family holding

[1] See *Agricultural Commission Report*, pars. 119-22.

would diminish with every division of the ancestral property. Subdivision, however, is also normally accompanied by fragmentation, because each sharer insists on obtaining a fractional share of each kind of land in every plot instead of being satisfied with one compact block.[1] The aim in such a system of partition is to ensure perfect equality of the shares. The same idea underlies the open-field system in medieval Europe under which strips were intermixed and scattered in order to divide equitably the good and bad, the well- and ill-situated fields. But in India, this apparently equitable mode of division is carried to an extreme and is often vitiated by motives, not of equalizing advantages, but those rooted in jealousy and suspicion.[2]

As against the theory that the laws of inheritance and succession are primarily responsible for the evil, it has been argued that these laws have been in existence for hundreds of years, but that the evil which they are supposed to have caused is comparatively modern.[3] It must, however, be admitted that in the absence of these laws the evils we are discussing would not have manifested themselves on the present scale. The laws permit any one of the co-sharers to separate out his share if he chooses to do so. The desire to seek partition may be due to other causes but, given the will, the laws showed the way. We have already referred to the growth of the individualistic spirit as one of the causes why the tendency to insist on a partition is stronger today than it used to be. But this tendency finds actual expression through the laws of inheritance and succession. Instead of saying that these laws are the causes of subdivision and fragmentation, it would perhaps be more accurate to call them the instruments or the means by which continuous subdivision is effected. There is no compulsion to make use of the means, but it lies ready to hand whenever it is desired to put it into operation. It is true that in the old days it was not so frequently requisitioned as at present, but it is not true to say that the operation of these

[1] The result of this custom is that each plot is *subdivided* into as many plots as there are heirs, so that the number of fragmented holdings increases and is equal to the number of co-sharers.

[2] 'What are the reasons for the increase of fragmentation, generation after generation, even without any material increase of the population? The reason is chiefly the terrible jealousy . . . among the brothers in almost every agricultural family. Each one will abate no chance to take advantage of the others. They will go so far as to fight over the partition of honey on the branch of a tree: they have even been known to fight over the partition of the shade of a tree, not its fruits nor its branches.'—F. G. H. Anderson's speech, Bombay Legislative Council debates on the Small Holdings Bill, 10 October 1927.

[3] Wadia and Joshi, op. cit., p. 244.

laws 'in the past did not lead to subdivision of holdings'.[1] We must rather say that their operation was rarely allowed, the joint family being the rule; whenever it was allowed, it inevitably led to subdivision.

Increase of population since the establishment of British rule is advanced as another cause. Increase of population would mean an increase in the number of heirs. But this in itself would not cause subdivision, unless there were other causes impelling the heirs to seek an out-and-out partition and break the joint-family tradition in the way that was not common in the old days. So long as there was a good deal of unoccupied land, as for example in the Canal Colonies in the Punjab, this enabled the additional numbers to be provided for without subdividing land already occupied.[2] But when practically all the land that could be easily brought under the plough was occupied, the position became different and the only escape from subdivision was in joint cultivation which, as we have already hinted, became less and less common.[3]

The decline of the handicrafts due to the competition of machine-made goods is also regarded as one of the major causes. It is worth while, in order to clear our ideas on the subject, to try to understand the precise *modus operandi* of this alleged cause.

As we have seen, the artisans attached to the village usually possessed some land in the village. Those of them whose position steadily deteriorated owing to the competition of machine-made goods fell back on their land as the only resource. The family holding having become the sole means of support, its importance rose in the eyes of those who had a claim on it. The system of sharing the product of joint cultivation among the co-heirs according to the need of each probably began to appear unfair to those whose needs were smaller and who therefore absorbed a smaller share of the total product. The feeling of jealousy engendered in this manner possibly militated against the maintenance of the plan of common cultivation, and subdivision resulted.

[1] Wadia and Joshi, op. cit., p. 244.

[2] What we have in mind here is the subdivision of land already occupied and the average area held by each right-holder. The intrusion of new petty holders (for example money-lenders) in a village may reduce its average size of holding without affecting the position of ancestral holdings.—See *Agricultural Commission Report*, par. 119.

[3] The dissolution of the joint family, according to Anderson, has become especially marked since 1886, owing to the operation of the Income Tax Act.—See Bombay Legislative Council debates on the Small Holdings Bill.

The land that may have been affected in this manner, however, must obviously have been negligible in amount.

As regards the artisans in the towns, they did not as a rule possess any land. When, owing to competition of machine-made goods, they lost their vocation, they became landless labourers. This may be looked upon as a cause of the increase of pressure on land but could not have had any direct influence on the division of the land. It is possible that some of the urban artisans migrated to the villages and bought or occupied a small piece of land which was uneconomic from the very beginning or became so in due course owing to the operation of the law of inheritance. It is, however, improbable that the artisans, who were driven to the land because their original occupation had ceased to be remunerative, should have ordinarily commanded sufficient savings or credit to enable them to purchase land. In any case, unless the land so acquired was a slice out of an originally larger piece of land, the position so far as subdivision was concerned would remain the same as before. If, on the other hand, new land was occupied, this would add to the original number of holdings; it would not accentuate the subdivision of holdings that already existed. On the whole therefore we may hazard the statement that while the decline of the handicrafts resulted for the most part in an increase of landless labourers, its influence in the direction of increasing subdivision and fragmentation of holdings was not very great. In so far, however, as the handicraftsmen were turned into tenants, their demand for cultivable land must have resulted in greater subdivision and fragmentation of *cultivation.*

It is nevertheless possible to establish a causal connexion between the failure of industry to expand in proportion to the increase of population on the one hand, and extreme subdivision and fragmentation of holdings on the other. If the increase of population in recent times had been accompanied by a commensurate development of manufacturing industries, the superfluous population on the land would have been absorbed by it. If the family became too numerous to be maintained comfortably on its holding, some of the members would have moved to the industrial centres, leaving the rest to cultivate the family holding and enjoy the fruits of their labour. The legal right on the family land of those who left the village would remain. But if the employment in industries gave them the means of a decent existence, there would be a readiness on their part to forgo their claims on the income from the family land in favour of those who remained on it. Unfortunately, such a development failed to take place; population increased and the increase instead of flowing into industries

flooded back on the land, and owing to the loosening of the bonds of the joint family and the development of separatist tendencies, resort to the law of inheritance became more and more the rule. Thus, paradoxically enough, with the increase in the pressure of economic disability, people adopted a course of action which resulted in adding to, instead of lessening, their embarrassment. Land was now the only resource. One would have thought that there was all the more reason, therefore, to make the most profitable use of it. But instead of treating it with the utmost care and consideration, it was cut up and mutilated in a most reckless and suicidal manner.

To sum up, then, we may say that increase in population, lack of a corresponding expansion of industry, the dissolution of the joint family and the growth of the individualistic spirit—all these assisted by the laws of inheritance and succession—must be regarded as the main causes of excessive subdivision and fragmentation of holdings.

When the evil reaches an intolerable stage certain automatic remedies may come into effect. For instance, the excessively small holding may be either sold or let out by the owner. But such instances are not sufficiently common and do not affect the main problem to any appreciable extent. We must therefore recognize its existence in a serious form as established and proceed to discuss the possible remedies.

§7. **The problem in foreign countries.**—The problem is by no means peculiar to India. Other countries have also had to face it and they have done so in a variety of ways. The experience of countries like France, Switzerland, Belgium, Germany, Denmark and Japan has proved that voluntary agreements among the peasant-proprietors are not equal to the task of securing compact and reasonably-sized holdings and that therefore remedial legislation is necessary. Such legislation has been adopted in most of the countries concerned and has involved the following principles: (i) compulsory expropriation of existing holders; (ii) compulsory reconstitution of holdings at the instance of a certain fraction of landholders or in some cases without it; (iii) subsequent indivisibility of reconstituted holdings; (iv) exemption of the holding from seizure for debts; (v) prevention of the reconstituted holding from being combined with other holdings.[1]

§8. **What is an economic holding?**—In India, attempts have been made in recent times to tackle the problem both on a voluntary basis as well as by the method of legal compulsion. Whatever the basis adopted, one of the questions that has always to be

[1] G. Keatinge, *Rural Economy in the Bombay Deccan*, pp. 52-3.

faced is the meaning of the term 'economic holding'. Several definitions have been suggested. Keatinge understands by an economic holding, 'a holding which allows a man a chance of producing sufficient to support himself and his family in reasonable comfort after paying his necessary expenses,' and he goes on to remark that, 'in the Deccan, an ideal economic holding would consist of (say) forty or fifty acres of fair land in one block with at least one good irrigation well, and a house situated on the holding. The desirable area would vary greatly in different parts according to circumstances. A gardener in the Surat district with three acres of good garden land can support a family in comfort, while in the dry part of the Deccan with poor soil thirty acres might not suffice. Between the ideal economic holding and the obviously uneconomic holding there are many gradations; but it would not be difficult to fix a standard for any tract.'[1] Dr Mann defines an economic holding as 'one which will provide an average family at the minimum standard of life considered satisfactory'.[2] Stanley Jevons, with reference to conditions in the United Provinces, desiderates a size of about thirty acres for a model holding. His objective is to ensure to the farmer not only a 'reasonable', much less only a 'minimum' standard, but a 'high standard' of living.

Before we pursue the question further, we might as well point out that the definition of an economic holding will vary according to a number of factors; for instance, whether we are thinking of gross returns or net returns, whether the capital available is ample or strictly limited, etc. It would further depend on the nature of the methods of agricultural production, on whether cultivation is extensive or intensive, on the quality of the soil, on the presence or absence of irrigational facilities, on the crops raised, and so on.

This being understood, let us try to attach a precise connotation to the term 'economic holding'. Taking the case of an average family, we might say that the amount of land which would give the most profitable employment to the capital and labour that it commands would be the ideal holding. All kinds of factors have to be weighed, not excluding the possibility of employing the available capital and labour or a part of it in employment other than agriculture, the distribution of the capital and labour between agriculture and other occupations being determined on the principle of equimarginal returns. The object aimed at here would be the highest possible net return to every unit of capital and labour engaged in agriculture.

But some of the assumptions ordinarily made cannot be realized

[1] op. cit., pp. 52-3.

[2] op. cit., vol. II, p. 43.

under actual conditions in India, especially as the assumption that labour is perfectly mobile as between agriculture and other occupations either within or without the village is not valid owing to the absence of rural industries and the inadequate development of manufacturing industry in urban areas. So far as Indian conditions are concerned, we have to assume that the labour which an average cultivator's family commands is practically not transferable to activities other than agriculture and that it is unconditionally available for agriculture alone.

The idea of an economic holding will perhaps be more easily grasped if we take a numerical example.

Let us take an average family consisting of 5 members and, as our unit of labour, the labour that such a family can supply.[1] Similarly, let us define as our minimum unit of capital, a pair of bullocks and a plough. These assumptions square well with prevalent conditions in India. Let us now suppose that this family possesses a holding of 5 acres on which a gross income of Rs. 150 can be obtained with the available labour and capital. Deduct from this the cost of maintaining the pair of bullocks, say, Rs. 40, and other costs amounting to, say, Rs. 20. This leaves the family with a net income of Rs. 150 − 60 = 90.[2] Let us assume that a plough and a pair of bullocks together with the labour supplied by our average family can satisfactorily cultivate 20 acres. If therefore the family possesses a holding of 20 instead of 5 acres the result will be as follows: gross yield = Rs. 600; cost of maintaining the pair of bullocks = Rs. 40 as before; other costs about Rs. 80, that is, four times as much as before (though the likelihood is that the increase in the other costs will be less than exactly proportionate to the increase in the acreage). This leaves us with a net income of Rs. 600 − 120 = 480.

Let us assume that there are four such families A, B, C and D, each possessing 5 acres of land and each cultivating its holding separately. Each spends Rs. 60 (Rs. 40 for bullocks and Rs. 20 for other expenses) and gets Rs. 150 gross income and Rs. 90 net income.

Supposing they agree to cultivate jointly the whole area of 20 acres, which they own between them, they will then be able to dispense with three pairs of bullocks and will save Rs. 120 in the aggregate on that account. Assuming the same labour, that is, the labour of only one family, is applied as before, the result

[1] 'The unit of economic life in India is the family and not the individual.'—Jack, *Economic Life of a Bengal District*, p. 8.

[2] These figures are, of course, purely illustrative, but the substitution of any other figures will not affect the argument in any way.

will now be Rs. 600 gross income, out of which we deduct Rs. 40 for the bullocks and Rs. 80. for other expenses, which gives a net income of Rs. 480, and the share of each family is Rs. 120 instead of Rs. 90 when each cultivated its holding of 5 acres separately. Every family thus increases its income, although labour employed in the aggregate is now only one-fourth of what it was before, because according to our hypothesis 20 acres are required to occupy fully the labour supplied by one family.

The question, however, arises as to what is to be done with the extra labour that is available. It cannot find alternative employment in other occupations, because *ex hypothesi* there are none such. The choice is between agricultural work or no work. In these circumstances, some of the extra labour may as well be employed on the land, so long as it results in *some* increase of the product, though the increase may not be proportionate to the addition of the labour units. Let us suppose that the employment of the surplus labour increases the gross yield by Rs. 200. The position now is: (gross income Rs. 800) − (expenses Rs. 120) = Rs. 680 net income.

Let us now exhibit these cases in their order of merit:—

L stands for one unit of labour (that is one average family).

C stands for one unit of capital (that is a plough and a pair of bullocks).

Case I. 1L + 1C + 20 acres; net income = Rs. 480; income per head of the family = $\frac{480}{5}$ = Rs. 96.

Case II. 4L + 1C + 20 acres; net income = Rs. 680; income per head = Rs. $\frac{680}{20}$ = Rs. 34.

Case III. 4L + 4C + 20 acres; net income = Rs. 360; income per head = Rs. $\frac{360}{20}$ = Rs. 18.

The best result is thus reached if a holding of 20 acres is combined with one unit of labour and one unit of capital. This is our economic holding. Any arrangement by which the ratios between land, labour and capital differ from those in the ideal holding thus defined will result in uneconomic holdings and reduce the income per head of the producers. The uneconomic holdings will be more and more economic in the measure in which the ratios are altered in the direction of the proportions in the ideal holding. Case I gives the best results from the point of view of the producers, provided the surplus labour of three families can be turned to some remunerative occupation other than agriculture. But if conditions are such that all the families depend exclusively on the 20 acres of land, Case II gives the best arrangement, because in Case I, the total net income available for the four families is Rs. 480, whereas it is Rs. 680 in Case II. Nevertheless,

this does not alter the fact that Case I gives the ideal proportions between land, labour and capital, so that given 4L, the best combination would have been 4L+4C+80 acres. But as we have only 20 acres available, we have to adopt the next best arrangement as in Case II, which incidentally brings out the fact that joint cultivation, to some extent, remedies the evil of excessive pressure on land.

It will be noticed that this method of envisaging the problem of defining an economic holding is less open to objection than that implied in some of the current definitions which we have given above. The expressions 'reasonable comfort', 'minimum standard' as well as a 'high standard' are all vague and ambiguous. If, on the other hand, we say that the end to be achieved is so to arrange the relation between land, labour and capital that it will lead to the greatest possible advantage to the producers, we get out of this difficulty. The greatest economic advantage may enable the cultivator to maintain a very high standard of life or may fall short of what is deemed to be required even for a minimum standard. For example, the income per head of Rs. 96 in Case I above is not, it may be contended, enough for a decent standard of comfort. But all the same, it is the highest attainable. It is possible that in spite of the best combination that we are able to achieve between land, labour and capital, the result may not be wholly satisfactory. For this other remedies must be adopted, such as more efficient methods of production, better marketing facilities, etc. The creation of economic holdings is intended to ameliorate the ryot's position only in so far as it can be ameliorated by one particular method, namely, by putting him in possession of a reasonable-sized holding; it does not promise to create a new heaven and a new earth for him. It is not a complete solution of the problem of the ryot. It is only one of the many lines along which that problem must be attacked.[1]

[1] There are some people, however, who hold that the evil of excessively small holdings is imaginary, and that the holdings are uneconomic, not in the sense that they are too small, but in the sense that they are too big for the cultivator to look after adequately. The capital he commands and his general equipment are so poor that enlarging his holdings would be to increase his difficulties. If this is so, the obvious remedy would be to suggest measures for reducing the size of the average holding still further, but it has not occurred to anyone yet to recommend this. The fact is that the present inadequacy of equipment and the poverty it connotes are themselves partly the effects of excessively small holdings. Enlarging them is to improve their productive value, though, side by side with this urgently-needed reform, every possible remedy must be adopted to remove the disability imposed by the inadequacy of the capital available to the ordinary cultivator.

§9. **Remedial measures.**—Let us now proceed to notice the remedial measures hitherto adopted or proposed for coping with the evil of subdivision and fragmentation in India. Under the auspices of the Co-operative Department interesting experiments in consolidation of scattered holdings by the formation of co-operative societies on the basis of persuasion and propaganda have been made in the Punjab since the work first began in 1920-1. About 7,91,358 (out of the whole cultivated area of about 30 million) acres were thus redistributed by the end of July 1937. The pace of consolidation is increasing and is expected to be further accelerated owing to the Consolidation of Holdings Act passed in November 1936, allowing compulsion to be applied to a small and stubborn minority.[1] The effect of consolidation of holdings, so far as it has been achieved, has been wholly beneficial. Land has become more productive; areas formerly uncultivated owing to excessive fragmentation have been brought under the plough; litigation and quarrels have decreased and a keener desire for improvement is in evidence. The province of the Punjab, however, is in some respects exceptionally well suited to such co-operative activity resulting in consolidation on a voluntary basis. For one thing, its villages are more homogeneous as regards land as well as population. Secondly, lands in the canal colonies being newly brought under cultivation, consolidation is more easy to effect in their case. Thirdly, consolidation is also facilitated by the comparative simplicity of tenure.[2] Even under the best of conditions, however, the pace of the movement for consolidation is bound to be slow, and further, there is no guarantee that in the future the work of consolidation will not be undone. The Punjab experiment, again, addresses itself only to the problem of fragmentation and does not aim at checking subdivision.

Permissive legislation has been tried in India and found wanting. Baroda introduced such legislation a few years ago, but, as Sir Manubhai Mehta admitted in his presidential address before the Bombay Provincial Co-operative Conference (1926), the law has remained a dead letter on the statute book. The plan of voluntary action has failed even in the advanced countries of the west, which have been obliged to introduce compulsory legislation.

[1] *Report of the Registrar on the working of Co-operative Societies in the Punjab for the year ending 31 July 1937.*

[2] The Agricultural Commission, however, are definitely of the opinion that the work being done in the Punjab should not be regarded as unsuited for adoption in other provinces without a very careful and persistent inquiry into the local difficulties.

In the Punjab canal colonies, subdivision has been checked by restrictions on alienation, and in the case of certain grants, by the limitation of succession to a single heir. This has not, however, served to prevent *subdivision of cultivation.*

The Egyptian custom has been suggested for Mohammedans, whereby, although land is normally divided among the heirs, it is actually left in the hands of one to cultivate on behalf of the whole number, or may be handed to trustees to manage for all. Joint farming of the inheritance without partition has been advocated for the Hindus.

Mere refusal on the part of the Government to recognize uneconomic holdings is not enough as is seen by the experience of Bombay. The framers of the Joint Report, on which the Bombay ryotwari system is based, apprehended the evil of subdivision and were responsible for the inclusion in the Land Revenue Code of section 98, according to which no survey number was to be of less extent than certain minima fixed from time to time for several classes of land. But this provision was ineffective in preventing the partition of land beyond the minima prescribed and the holding of it as separate plots. The law courts recognized such divisions and therefore section 98 had to be repealed, and at present the Record of Rights recognizes the minutest subdivision.

In November 1916 Keatinge, then Director of Agriculture, Bombay, submitted a draft bill to enable such landholders as wished to do so, to institute permanent economic holdings not subject to future partition on any account and to enable the executive Government to secure the same results in respect of unoccupied Government land. The bill, however, had to be shelved, being adversely criticized by several revenue and judicial officers to whom it was sent for opinion, the principal objections being that a vast mass of petty impartible holdings would be created in defiance of the social system of Hindus and Mohammedans alike, and that there would arise a landless proletariat which would be particularly dangerous in a country where the industries are so little developed that they cannot absorb the surplus agricultural population.[1]

In the Central Provinces an officer has been placed on special duty to carry out the work of consolidation. The provincial Legislative Council has also passed a Consolidation of Holdings Act (1928) which was to be applied to begin with in the Chhattisgarh Division only. The Act gives power to not less

[1] *Agricultural Commission Report*, par. 123.

than half the permanent right-holders, holding not less than two-thirds of the occupied area in a village, to combine in a scheme of consolidation, which, when confirmed becomes binding on all the permanent right-holders in the village and on their successors. The Central Banking Enquiry Committee were able to note that in a little over three years, during which the Act had been in operation, 502 villages had come forward to secure the benefit of the Act; 174 villages had been dealt with; in all 156,500 acres of land parcelled out into thousands of small holdings had been consolidated at a comparatively small expense to the Government.[1] A similar Act, as pointed out above, was passed for the Punjab in November 1936.

§10. **The Bombay Small Holdings Bill of 1927.**—In October 1927 the Small Holdings Bill was introduced in the Bombay Legislative Council by the Hon. Sir Chunilal Mehta. The first part of the bill proposed the creation of machinery for laying down, according to local conditions, a standard unit, being the minimum extent that can be cultivated profitably as a separate plot. All existing plots below this standard were to be declared fragments. The bill aimed at stopping further subdivision of old fragments and creation of new ones and promoting consolidation of holdings. Existing fragments, although they might be cultivated by owners, could not be transferred to another so as to cause further fragmentation. Alienation of fragments was not to be permitted unless it led to consolidation. In the case of new fragments coming into existence after the standard unit had been determined, all transfers of land were to be necessarily in favour of neighbouring owners and lessees of land. While no one was to be prevented from coming into possession of a new fragment, it was not to be cultivated unless it was combined with a contiguous plot or plots so that the total area so cultivated was equal to or exceeded the standard unit.

The second part aimed at consolidation of existing fragments for purposes of more profitable cultivation. It provided for the preparation of a scheme, on the application of the collector, for any village or area, provided not less than two-thirds of the holders of plots, and owners of not less than one-half of the land affected, consented to the making of the scheme. The scheme was to be administered through a special consolidation officer helped by three representatives of the village concerned.

§11. **Controversy regarding the bill.**—The bill involved a certain amount of compulsion. But in the words of Stanley

[1] See *Report of the Central Banking Enquiry Committee* (1931), par. 71.

Jevons 'it is a peculiar and most important sociological fact that the laws and customs regulating ownership and use of land have a stronger tendency to persist than any other characteristic of society and therefore are difficult to alter by any other extraneous action than the *force majeure* of the law'.[1]

Another criticism was that the bill contravened the law of inheritance and the principles on which Indian family life is based. To this it might have been replied that there was no interference with the law of inheritance because the bill allowed separation of interests, although not actual physical subdivision for cultivation of landed property after a certain point. The bill may be said to have tried 'to alter the method of partition rather than the law on which partition is based'. In any case, the law is after all man-made and if it is seen to be mischievous in its tendency the only sensible thing to do is to alter it.

The criticism, however, which was most frequently heard was that the bill would involve extensive expropriation and the creation of a large landless proletariat. This was based on the assumption that the standard holding would be fixed at a figure very much higher than the present average holding of a cultivator. The bill, however, contemplated the creation of 'profitable holdings' and not of 'economic holdings'. The standard unit was defined as the minimum necessary for profitable cultivation and not for an economic holding. The profitable holding contemplated would be very much lower than, for example, the economic holding as we have defined it. It seemed likely that where an economic holding would mean, say, 20 acres, the standard unit was to be fixed at something like three or four acres. This being so, a very small number of people would actually have had to part with their land as a result of this particular piece of legislation.

Assuming that the standard unit had been fixed at a very moderate figure, many of those who would have had to part with land under the new law by way of lease or sale, were likely to be people whose holdings were so small that they could not possibly live by them alone and who therefore were not whole-time agriculturists. The little fields they possessed were a source of loss in so far as they prevented proper attention being devoted to the occupation which was their principal source of livelihood. The holder, in these circumstances, would be better off if he sublet, and while enjoying some profit from the land he would still

[1] Quoted by Sir Chunilal Mehta, Bombay Legislative Council debates,

own, he would not waste time and incur loss by cultivating in person.[1]

The critics of the bill also lost sight of the probability that it would have acted as a deterrent to reckless subdivision, and thus the question of expropriation would not have arisen in many cases. People would to some extent be stopped from seeking partition if, as a result of the partition, the family holding was going to be divided into fragments below the minima fixed, to which certain legal disabilities were proposed to be attached. Attempts to cultivate the holdings jointly even after partition would be more common, the product being divided, though not the land.

The bill was referred to a select committee which reported in May 1928, introducing certain minor amendments to make it more acceptable. But owing to determined opposition in the Council and outside it had to be postponed indefinitely. The opposition was inspired by the mistaken notion that the bill would lead to expropriation on a large scale. In order to dispel this notion Mr B. V. Jadhav suggested, in his minute of dissent to the select committee's report, the desirability of defining the standard unit in the bill itself. He proposed that the standard for *bagait* land should be 10 gunthas (¼ acre), for *tari* (rice land) 5 gunthas, for *mali* (land on river banks) 5 gunthas and for *jirayat* (dry crop) land 40 gunthas.[2] Although these units would perhaps not have suited local conditions everywhere, the suggestion was sound that some definite assurance was needed to allay popular suspicion. If a well-planned and vigorous campaign had been carried on by the advocates of the bill to enlighten the public with regard to its true nature, it would probably have received greater support. As it was, it had to be withdrawn without ever receiving a fair hearing.

In conclusion we may note the Agricultural Commission's warning that, in tackling the problem of subdivision and fragmentation, great caution and the utmost possible consideration of the opinions and prejudices of the people affected are necessary. An element of compulsion may be inevitable, but compulsion should not be regarded as dispensing with the need for the most scrupulous attention to the wishes of the people. It should be reserved till the latest possible stage of a proposed scheme for consolidation and might be applied to secure for the majority the advantages which an obstinate minority might otherwise withhold. The state should undertake propaganda work, and difficulties should not be allowed to become an excuse for inactivity.

[1] F. G. H. Anderson's pamphlet on the Bombay Small Holdings Bill.

[2] See *Report of the Select Committee on Bill No. XVI of 1927*, p. 6.

State action in favour of consolidation should be taken in a gradual manner where it is introduced under a permissive Act. Special areas should be selected for notification under a permissive Act and full inquiry should be made into the opinions of the right-holders before any measure of compulsion is introduced.[1]

We have implicitly admitted above that any legislative measure, however modest, will necessarily lead to a certain amount of dispossession, if designed to remedy the present excessive subdivision and fragmentation, and although we have held that the lot of those who are thus compelled to part with their land will generally be better than before, for reasons already given as well as because larger holdings would mean more prosperous agriculture and greater employment for labour, it would nevertheless be advisable to take special measures in order that the dispossessed holders should be rapidly and comfortably absorbed in profitable employment. For this reason, improved agriculture should be promoted; colonization schemes, wherever practicable, should be started; rural industries as closely associated with agriculture as possible should be developed; and the pace of industrial development should be quickened.

Permanent Improvements

§12. **Absence of permanent improvements and its consequences.**—One of the most striking contrasts between western and Indian farming is that in India there is an almost entire absence of permanent improvements on the land. Speaking about conditions in the Bombay Deccan, which hold good, more or less, of other parts of India as well, Keatinge observes: 'In the western portion some careful and laborious terracing has been done on the hillsides by the smaller owners. Here and there a favoured tract will be supplied with irrigation wells, and some farm buildings may be seen in the fields; but over the greater portion the landscape owes nothing to the hand of man—the fields lie unwatered, unfenced and unembanked, without shelter for man or beast.'[2] The absence of proper fencing puts the crop at the mercy of wild boars, stray cattle and poachers, not to speak of the numerous boundary disputes to which it gives rise and the labour it involves in connexion with herding cattle and watching crops. The freely blowing winds cause not a little damage to crops like cotton in the absence of wind-breaks. Although efforts, on an individual as well as a co-operative basis, to provide proper fencing have been made, much work yet remains to

[1] *Agricultural Commission Report*, par. 127.
[2] op. cit., p. 107.

be done in this connexion. Field embankments are further conspicuous by their absence. The consequence is soil erosion and scouring of the land, leading to much preventible loss to the agriculturist. The soil, again, is very rarely graded and levelled properly so as to secure uniform absorption of water. Nor is there any satisfactory system of drainage. This leads to water-logging, and if at all an outlet for the excess of water is provided, it is allowed to run over other peoples' land and damage it. In this manner, for instance, 'thousands of acres of valuable land on the left bank of the Jumna have been damaged by the formation of a network of ravines; and villages which were at one time surrounded by fertile fields now lie in a network of useless gullies.'[1] A proper control of surface drainage will cure all these evils, increase the yield of crops and by raising the spring level maintain the wells in action throughout the year.[2]

The provision of field embankments on the required scale as well as efficient fencing arrangements are, normally speaking, beyond the capacity of the individual cultivator, and the problem requires resort to joint schemes of land improvement for its solution. It is also essential that the Government should lend a helping hand by a freer grant of takkavi loans and by making available technical guidance through the appointment of special trained assistants to help such activity. Some of the Provincial Governments have recently made a fresh departure in appointing special embankment officers. The absence of farm buildings is another serious defect because it makes supervision difficult and entails an unnecessary waste of time and labour for both men and cattle. Cattle cannot be properly housed and the system of housing them along with men in the houses on the village site is highly unsatisfactory. The loss of manure in the process of carrying it from the village site to the fields must be immense. There are, however, difficulties in connexion with the provision of suitable farm buildings which it will take time to surmount. One difficulty is that living in a farm-house on his holding would deprive the cultivator of the protection and security which he enjoys at present by living along with other cultivators on the village site. The need for mutual security was very much greater before the establishment of the Pax Britannica, but even now it is an important consideration; secondly, the attachment to the ancestral village dwelling comes in the way of the villager transplanting himself to a new house on the farm; thirdly, the expense of the change

[1] See Dr Clouston's Memorandum, *Agricultural Commission Report*, Minutes of Evidence, vol. I, p. 12.

[2] See Howard, op. cit., p. 14.

of residence would be a consideration; fourthly, the average holding is normally so scattered that the cultivator has not one but several fractional farms; and lastly, whereas by living on the village site the cultivator can take advantage of the public wells for obtaining water for drinking purposes, he would have to dig a private well of his own, if he shifted to a farm-house on his holdings. All these difficulties, however, must be got over, having regard to the great benefit to be derived from each cultivator staying on his holding.

Irrigation

§13. **Necessity and importance.**[1]—There are many reasons why our agriculture cannot afford to depend exclusively on rainfall and why it is necessary to provide the agriculturist with suitable irrigation facilities. There are many parts like Sind, Rajputana and the south-west Punjab which are practically rainless, so that cultivation is impossible except by artificial irrigation. Secondly, where the rainfall is not so very deficient, it is precarious and ill-distributed, as in the uplands of the Deccan which are exposed to chronic drought. Thirdly, some crops like rice and sugar-cane require a regular and sufficient water supply, which is not provided by the rainfall except in the most favoured regions. Fourthly, the intensive cultivation of land under the pressure of an increasing population has made second or winter crops necessary, and these require artificial irrigation in the absence of the winter rains. Lastly, there is the general consideration that nearly 80 per cent of the population are dependent upon agriculture, and their well-being must necessarily be affected by the adequacy or otherwise of such an important requisite as irrigation. Irrigation has been practised in India from time immemorial, especially in the form of wells and tanks, and the true British contribution to the irrigation system consists in the large irrigation works constructed for the purpose of utilizing the surplus water of large rivers.

The advantages of irrigation are numerous, the principal ones being an increase in the yield of crops, the successful introduction of a stable agriculture in arid and precarious tracts, protection from and insurance against famines and scarcity, larger railway profits in agricultural provinces like the Punjab and direct financial gain to the state.

§14. **Classification of irrigation works.**—*I. General classification.*—There are three main kinds of irrigation works in India:

[1] See *Triennial Review of Irrigation, 1927-30* and also Harris, *Irrigation in India*, pp. 1-4.

(i) wells, (ii) tanks, and (iii) canals. The canals are again of three types, namely, (*a*) inundation canals, (*b*) perennial canals, and (*c*) storage works.[1]

(i) *Wells.*—Well-irrigation is, and will always be, a vital factor in Indian irrigation, about 25 per cent of the irrigated area being accounted for by wells. There are about two and a half million wells in various parts of the country, irrigating about thirteen and a half million acres of land (including Indian States) and representing a capital outlay of about Rs. 100 crores. This form of irrigation possesses a high degree of utility and is more efficient than canal irrigation. Wells are mostly private works, though their construction is encouraged by the Government, who advance takkavi loans for the purpose and exempt the improved land from any extra assessment. The utility of wells has been considerably increased by subartesian bores and the installation of small power-pumps of a standardized pattern. These improvements are especially promoted by the engineering section of the Agricultural Department. There is plenty of scope in all the provinces for the extension of well-irrigation. Small co-operative societies for sinking and working wells would be valuable agencies where the individual holdings are very small. The Agricultural Commission, while not in favour of the United Provinces plan of subsidizing tube wells, recommend Government assistance in their construction by the provision of technical advice, grant of takkavi loans and by placing boring equipment and skilled labour at the disposal of the landholder, on payment of a moderate fee.[2]

(ii) *Tanks.*—Tanks have been a characteristic feature of Indian agricultural economy since very early times. They are, however, practically unknown in the Punjab and Sind. They are most highly developed in Madras, where there are over 35,000 petty irrigation works serving between 2·5 million and 3 million acres of land. Many old village tanks have, however, been silted up and are out of repair. A more vigorous effort on the part both of the Government and people is necessary to make the most of this ancient form of irrigation, especially in tracts where canal irrigation is impossible or unsuitable.

(iii) *Canals.*—This is now the most important form of irrigation in India and the one specially encouraged by the Government. A distinction may be drawn between canals dependent throughout the year upon the natural supply of water

[1] Other systems of irrigation in use in India are lift irrigation from rivers and temporary dams for holding up flood-water. See *India in 1930-1*, p. 229.

[2] *Agricultural Commission Report*, pars. 274, 280.

from the rivers on which they draw and those provided with artificial storage. The first type has been developed mainly in the regions traversed by the Himalayan rivers which flow throughout the year, the snow on the mountains serving as an inexhaustible reservoir during the dry months of the year. The same is the case in Madras to some extent, where the cold weather rains are heavier than in Bombay. The second type of canal has been adopted for the Madras Presidency, the Deccan, the Central Provinces and Bundelkhand. The rivers in peninsular India, while flowing in torrents in the monsoon, shrivel up during the dry months of the year and therefore artificial storage is a necessity.

The first type of canal may again be subdivided into two classes, (*a*) the inundation and (*b*) the perennial canals.

(*a*) The inundation canals are drawn directly from the river without the use of any barrage. They do not obtain water until the river is flooded and reaches a certain level, the supply of water in the canal fluctuating with the natural flood level in the river. The lands in Sind and the Punjab are irrigated by such canals drawn from the Indus and the Sutlej respectively. In Sind, most of the canals are inundation canals. Being dependent on the natural flood level they receive a scanty supply when the level is low, while with fairly high and prolonged floods they permit of widespread cultivation. Irrigation is thus confined to the period from June to September, and during the latter portion of the year no cultivation is possible without the use of wells. The Sukkur Barrage in Sind, which was opened in January 1932, is the greatest work of its kind in the world. It seeks to remedy the above-mentioned defect by constructing a barrage across the Indus, by means of which it will be possible to maintain the water in the canals above it at a sufficiently high level to provide flow irrigation all the year round. Similar steps are being taken in the Punjab, the main reason for the delay in undertaking such works being their heavy cost.

(*b*) Perennial canals are, as indicated above, constructed by putting some form of barrage across a river which flows throughout the year and diverting its water by means of a canal to the country to be irrigated. They are thus independent of the natural level of water in the river. Within this class fall the great perennial systems of the United Provinces and the Punjab. Some of the inundation canals in Sind and the Punjab are being transformed into perennial canals.

Storage works canals are constructed by building a dam across a valley to store the rain-water during the monsoon. The

water so held is distributed to the neighbouring lands by means of the canals drawn from the storage. The expedient of storing the rain-water during the monsoon has been practised in India from very old times. Such works have been constructed in the Deccan, the Central Provinces and Bundelkhand.

II. Classification of Government irrigation works.—For the purpose of indicating the source from which the funds for the construction of Government irrigation works are provided they were classified until 1921 as follows: (i) productive, (ii) protective, and (iii) minor.

(i) *Productive works.*—These were expected to yield within ten years of their completion a net revenue sufficient to cover the annual interest charges on the capital investment. These works are found mostly in northern India and Madras. The average area irrigated by productive works during the three years 1930-3 was 22,009,295 acres and the capital outlay at the end of 1935-6 was Rs. 108·86 crores. The largest increase in the area irrigated by Government irrigation works has been in the class of productive works, which irrigated an area of 4·5 million acres in 1878-9, as compared with 23,505,657 acres in 1929-30. In the year 1935-6 the area declined to 22,725,580 acres.

(ii) *Protective works.*—These were not expected to be directly remunerative but rather intended to ensure protection against famines in precarious tracts like the Deccan. Such works diminish the necessity for periodical expenditure on the relief of the population in times of famine. The cost of these works is a charge on the current revenues of the Government and is generally met from the annual grants set aside for famine relief and insurance. Though not directly remunerative and in fact often resulting in loss, protective irrigation works may be economical in the long run as they ensure the economic stability of precarious tracts. The average area irrigated by unproductive works during the three years 1930-3 was 4,455,437 acres. In the year 1935-6 the area irrigated amounted to 3,899,831 and the capital outlay at the end of the year was Rs. 44·31 crores.

(iii) *Minor irrigation works.*—This was a miscellaneous class consisting of works, especially tanks, belonging mostly to the pre-British period, which the British Government have taken over and improved, and including only a few small works belonging to the British period. The minor works were further distinguished according as capital and revenue accounts were or were not kept and they were all financed from current revenues. Loans were permitted only in the case of productive irrigation works.

Since 1921, this old classification has been altered and it is now possible to finance any work of public utility from loan funds. The classes of protective and minor works have been abolished and all irrigation works whether major or minor, for which capital accounts are kept, have been re-classified under two main heads, (i) Productive and (ii) Unproductive, without reference to the source whence the funds for their construction are provided. A third class embraces areas irrigated by non-capital works.

§15. **Extent, growth and revenue.**—The total gross area irrigated from all sources in British India amounted to 55·57 million acres in 1936-7 as against 46 million acres in 1927-8. Deducting the area irrigated at both harvests, the net area irrigated was 51·7 million acres in 1936-7 as compared to 43·2 millions in 1927-8. Of the area under irrigation in 1936-7, 28 million acres were irrigated by canals, 6 million by tanks, 12 million by wells and 6 million by other sources. Of the gross area irrigated, rice occupied 19 million acres, wheat 10 million, barley, jowar, bajra and maize together 6 million, other cereals and pulses 7 million, sugar-cane 3, and other food crops 2 million acres. Cotton occupied about 4 million and other non-food crops 5 million acres.[1] There has been during the last 60 years a steady growth in the area irrigated by Government works. From 10·5 million acres in 1878-9 the area annually irrigated rose to 19·25 million acres at the beginning of the century and to 28·1 million acres in 1919-20, the record year up to that date. This record was, however, surpassed in the year 1922-3, when the total area irrigated by Government irrigation works in British India amounted to 28·33 million acres (a figure nearly reached in 1926-7 when it was 28·2 million acres)[2] and again in 1929-30 when the total area irrigated by Government works of all classes amounted to 31·64 million acres, or 12·7 per cent of the entire cropped area of the country. The area irrigated by Government irrigation works in 1935-6 was over 30 million acres representing nearly 13 per cent of the sown area. The main increase has been, as stated above, in the class of productive works which irrigated 4·5 million acres in 1878-9, 10·5 million acres in 1900-1, 19·15 million acres in 1927-8, 23·50 million acres in 1929-30 and 22·73 million acres in 1935-6. The total length of main and branch line canals and distributaries in operation amounted to about 75,381 miles in 1935-6 as against

[1] *Agricultural Statistics* (*Provisional*) (1936-7), p. 1.

[2] See Harris, op. cit., pp. 8-9; and *Indian Year Book* (1935), pp. 318-20 and *India in 1933-4*, p. 99.

39,142 miles in 1900-1. In the same year the estimated value of the crops supplied with water from Government irrigation works was Rs. 102·75 crores. The annual value of wheat exported from the Punjab has increased from 1 million to 6 millions sterling. The total capital outlay on irrigation and navigation works, including works under construction, at the end of the year 1935-6 amounted to Rs. 153·18 crores as against Rs. 42·2 crores in 1900-1. The gross revenue was Rs. 13·78 crores and the working expenses Rs. 5·0 crores, giving a net return on capital of 5·71 per cent. This is a satisfactory result, as Rs. 44·31 crores of the total have been spent on unproductive works, most of which return less than 1 per cent. The return from individual irrigation works shows a large variation. Some of the Deccan irrigation works hardly yield about 1 to 2 per cent, while productive works in the Punjab yield handsome dividends (14·25 per cent in 1935-6) on the capital outlay, in Madras 7·44 per cent, Bihar and Orissa 6·72, and in the United Provinces 6·30 per cent. In considering these figures it must be remembered that the capital invested includes considerable expenditure upon several works which are either only recently completed or still under construction and contribute little or nothing in the way of revenue.[1] The charges for water are levied in different ways in the various provinces. For instance, in Sind the ordinary land revenue assessment includes also the charge for water, nine-tenths of this assessment being regarded as due to the canals. In others, as in parts of Madras and Bombay, different rates of land revenue are assessed according to whether the land is irrigated or not, and the assessment upon irrigated land includes also the charge for water. These methods may, however, be regarded as exceptional. Over the greater part of India water is paid for separately, the area actually irrigated is measured and a rate is charged per acre according to the crop grown. The rates charged vary considerably with the crop grown and are different in each province and often upon the several canals in the same province. Thus in the Punjab they vary from Rs. 7-8 to Rs. 12 per acre for sugar-cane, from Rs. 4 to Rs. 7-8 per acre for rice, from Rs. 3-4 to Rs. 5-4 per acre for wheat, from Rs. 3 to Rs. 4-4 per acre for cotton and from Rs. 2 to Rs. 3-4 per acre for millets and pulses.[2]

The importance of the part which irrigation plays in the rural economy of the different provinces varies greatly from province

[1] See *India in 1933-4*, p. 99, and *Indian Year Book* (1938-9), p. 344.
[2] *Indian Year Book* (1938-9), p. 343.

to province as will be seen from the table below.[1] It will be

Province	Percentage of area irrigated to area sown	Province	Percentage of area irrigated to area sown
Assam ...	5·7	C. P. and Berar ...	4·2
Bengal ...	6·2	Madras ...	29·7
Bihar and Orissa ...	17·4	N.-W.F. Province ...	34·4
Bombay { proper ...	3·9	Punjab ...	44·1
Bombay { Sind ...	73·7	United Provinces ...	22·0
Burma ...	8·4	Minor administrations ...	19·3

Total average for British India 19·4.

seen that the more advanced provinces in this respect are Sind, the Punjab, the North-West Frontier Province, Madras, the United Provinces and Bihar and Orissa. Bombay proper and the Central Provinces, both of which are in need of irrigational facilities, are poorly developed and we must speed up future progress to ensure certainty of harvests in these regions of precarious rainfall. Bengal, Burma and Assam are in the same category, but their need is much less owing to more favourable rainfall.

§16. **The irrigation policy of the Government.**—The British Government inherited from its predecessors some of the the present irrigation works, such as a few inundation canals in upper India, storage works, and tanks, especially in the Madras Presidency. In the early British period, however, these works were neglected, with the result that some of them were ruined. But by the middle of the last century, there was a change in the policy of the Government, who began to repair and revive the old works. Progress was, however, retarded by the unsuccessful experiment of entrusting the work to private guaranteed companies. The Government subsequently adopted a new policy and undertook the construction and maintenance of productive irrigation works themselves, raising necessary loans for the purpose. Under this policy, some of the greatest works were constructed in the United Provinces and the Punjab. A brief description of the canal colonies in the Punjab is given at the end of this chapter.

[1] The figures are the averages of the five years 1921-2 to 1925-6 (see *India in 1928-9*, p. 110). The area irrigated from all sources in British India in 1935-6 was largest in the Punjab (15·02 million acres). The United Provinces came next (10·77 million acres), followed by Madras (8·62 million acres, Bihar (4·48 million acres), Orissa (5·18 million acres), Sind (4·14 million acres), Bengal (1·60 million acres) and Bombay (1·06 million acres). *Statistical Abstract for British India* 1935-6, Table No. 198.

The progress of irrigation as a whole was, however, very slow. In the meanwhile, a further important change occurred in the policy of the Government, consisting of a clear recognition on their part of their duty to construct protective irrigation works in famine tracts, and steps were accordingly taken in that direction in the Deccan and elsewhere.[1] But on account of their heavy cost and the irregular demand for water on the part of cultivators, together with the occasional failure of the monsoon, these works did not pay their way, with the result that the Government began to concentrate on the more remunerative works connected with the rivers in the Punjab. The famines that visited the country towards the end of the last century and affected the Deccan with particular severity led to the appointment of the Irrigation Commission of 1901 by Lord Curzon's Government. That body held that railway construction, which was recommended as a measure of famine protection side by side with protective irrigation works by the Famine Commission of 1880, had played its part in the policy of famine insurance, and it was now important to develop the supply of food. They maintained that the field for the construction of remunerative works was limited to the Punjab, Sind and parts of Madras, all of which are not so vulnerable to famine. They recommended, however, that these works should be increased as fast as possible, because they would be profitable to the state and would increase the total food supply of the country. For the protection of famine areas, they recommended the construction of protective irrigation works which, though not directly paying, would dispense with the large expenditure on famine relief which would otherwise be necessary. For the Bombay Deccan especially, they recommended the construction of canals fed from storage lakes in the Ghats. They also recommended the Kistna and Tungabhadra projects. The total cost of these projects was expected to be 44 crores of rupees effecting an addition of six and a half million acres to the irrigated area. The subsequent irrigation policy of the Government has been based upon these recommendations and presents a contrast to the earlier policy of concentration on railways, to the detriment of irrigation, which called forth the adverse criticism of

[1] After the famine of 1877-8, it was decided to set apart Rs. 150 lakhs every year as the Famine Relief and Insurance Fund. A portion of this grant was spent upon the construction of protective works. In 1910 the Secretary of State sanctioned the provision of an annual subsidy of Rs. 25 lakhs for this purpose in addition to Rs. 75 lakhs from the Famine Relief Fund. The full allotment of Rs. 100 lakhs was, however, never worked up to even before the War made retrenchment necessary.

men like the late R. C. Dutt. A large number of new works were undertaken and the capital outlay has since been more than doubled on productive and protective irrigation works, while the area irrigated by them has increased by over 70 per cent.

Irrigation became a provincial subject under the Reforms of 1919 and greater financial powers and larger initiative were conferred on the Provincial Governments. The sanction of the Government of India and of the Secretary of State is required only in the case of works estimated to cost over 50 lakhs of rupees. Moreover, the use of loan funds is no longer restricted to productive works. Money is also available from the Provincial Famine Insurance Grant when it is not required for actual famine relief.

The Agricultural Commission strongly commend the Bombay Government's step in the appointment of a special inquiry officer in 1925 to investigate the natural resources for the protection of the lands from famine and they advise other provinces to follow suit. Co-operative irrigation societies should be formed and assisted to carry out and maintain such works. The construction, preservation and improvement of minor irrigation works have not hitherto received the attention they deserve.[1] With the advent of popular Congress Ministries in the provinces in 1937 new activity as regards these irrigation works is in evidence.

Since 1922, remarkable activity in regard to irrigation works has been displayed and several important works have been completed or are under construction, their cost being over 500 million rupees, and the area to be brought under irrigation or under improved watering being about 12 million acres, which means a total area thrice as large as in the year 1902-3. The new major works of exceptional importance are the Sutlej Valley Works in the Punjab (which reached completion by the end of 1932-3 and entailed a cost of Rs. 21·12 crores till the end of the year) estimated to irrigate over 5 million acres; the Sukkur (Lloyd) Barrage and Canals in Sind (which were opened early in 1932 and entailed a cost of Rs. 20·08 crores to the end of March 1935) estimated to irrigate about 5½ million acres; and the Cauvery Reservoir and Mettur Project in Madras (which was inaugurated in August 1934) estimated to cost about Rs. 7·37 crores and to command a new area of over 3 million acres and add 150,000 tons of rice to the food supply of the country. The last scheme also provides for hydro-electric power for industrial purposes. The potentialities of Mettur as

[1] *Agricultural Commission Report*, par. 279.

an industrial centre are considerable. In Bombay, two major works were completed in the years 1925 and 1926 respectively, the Bhandardara Dam which is the highest (270 feet) in India, and the Lloyd Dam at Bhatgar, which is the largest mass of masonry in the world. In the United Provinces, satisfactory progress has been made in connexion with the Sarda-Oudh canals. The Sarda River irrigation scheme was formally put into service in the autumn of 1928, and it will irrigate more than a million acres. Also in the Central Provinces, an elaborate and comprehensive programme extending over a period of 14 years has been laid down. Another important work nearing completion is the Damodar Canal in Bengal. Almost every province has several schemes under investigation. In recent years important irrigation projects have been undertaken, and in some cases completed, in the Indian States of Hyderabad, Mysore and Gwalior. Moreover some of the irrigation projects in British India also affect Indian States, and in Rajputana and the Punjab many schemes are worked and financed jointly by a State and a British Indian province. 'When allowance is made for the more promising projects now being considered and for the natural expansion of existing schemes, an ultimate area of 50 million acres is by no means improbable.'[1]

The Agricultural Commission recommend the establishment of a closer relation between the Irrigation and Agricultural Departments; creation of local advisory committees (on the analogy of the local railway advisory committees) to deal with complaints about irrigation matters; and the establishment of a central bureau of information at Delhi.[2] The last recommendation was given effect to in May 1931 when the Central Bureau of Irrigation was established as an essential adjunct of the Central Board of Revenue. Its main functions are to serve as a clearing-house of information to provincial officers, to co-ordinate research in irrigation throughout India and to disseminate the results achieved.

§17. **Irrigation versus railways.**—A few words may be said about the irrigation vs. railways controversy, which was very prominent at one time, especially in the closing years of the last century. R. C. Dutt, who took a leading part in it, showed how, by 1902, only about 38 crores of rupees had been spent by the Government on irrigation as against 370 crores on railways. This disparity appeared especially objectionable on account of the railways being on the one hand a losing concern down to the opening years of the present century, and in view of the intensity

[1] *India in 1934-5*, pp. 23-4 and *Indian Year Book* (1938-9), pp. 346-7.
[2] *Agricultural Commission Report*, pars. 269-76.

of the famines at the close of the last century on the other. Dutt argued that under the influence of capitalists, speculators and manufacturers in England, pressure was brought to bear upon the Government to hasten railway construction under the guarantee system, with the result that it was overdone. Military considerations, and also a growing sense of responsibility for extending relief to the famine-stricken tracts, influenced the policy of the Government. It has already been pointed out that protective irrigation works were not paying and therefore progressed very slowly. Furthermore, the critics of Government policy alleged that the undue hastening of railway construction accelerated the decline of indigenous industries and led to the congestion in agriculture, thus partially defeating the object of the protective railways, namely to reduce the severity of famines.

The controversy has since considerably abated for various reasons. Now that the railways have become normally a paying concern and do not involve a drain on the pocket of the taxpayer, his opposition to their extension, while it has not altogether died out, has considerably diminished in vigour. Moreover, as a result of the recommendations of the Irrigation Commission of 1901, the Government's irrigation policy has become progressively liberal. In fact, some new works not contemplated by that body have been undertaken.

Turning to the merits of the controversy itself, we may say that while the exact proportion between railways and irrigation may be a matter of dispute, they are in no way antagonistic but supplementary and complementary to each other. It is clear that while an additional food supply can be secured by irrigation, its proper distribution in the country can be effected mainly by the railways. It is, however, true that towards the close of the last century the Government's irrigation policy was not as progressive as it is today, and even today there exists considerable scope for the extension of irrigation, if considerations of immediate profit and loss are allowed less weight in deciding to undertake protective irrigation works. This applies particularly to Bombay where, excluding Sind, less than four per cent of the total cropped area is irrigated from all the sources, the Government's share being about half, though the new projects now under construction or contemplation are calculated to extend it in the future. In the Bombay Presidency, exposed as it is to the vagaries of a freakish monsoon, the importance of adequate irrigation facilities cannot be exaggerated. The organization of the Water Court and the Land Development Court of the Bombay Presidency Agricultural Show (1926) may be taken as showing a clear perception of this

need by the Government. So far as the whole country is concerned we seem to be on the horns of a dilemma. In those tracts where irrigation is highly remunerative, as in northern India, the liability to famine and unstable agriculture is not great, whereas in peninsular India, especially in the Bombay Presidency proper where the monsoon is very precarious, irrigation is not directly remunerative. It must, however, be remembered that strictly commercial considerations of profit and loss are out of place here and the question must be looked at from a broader point of view.

§18. **Waterlogging and salt effervescence.**—Waterlogging and salt effervescence are dangers particularly associated with canal irrigation, and these dangers have not always been effectively guarded against in the past, so that soils have sometimes deteriorated as a result of irrigation. For example, in the Punjab, 125,000 acres were thrown out of cultivation in 1926-7 by the rise of subsoil water, and a much larger area by the appearance of salts (*kallar*) driven to the surface of the soil, and there is a danger of the evil spreading over a still larger area.[1]

In the Nira valley (Bombay) it has been definitely proved that alkali (*lona*) lands have arisen as a direct result of canal irrigation and that the evil is increasing every year.[2]

The enormous waste of water by the cultivator in canal-irrigated tracts, which is one of the causes which leads to water-logging and salt effervescence, is universally admitted. But as the Agricultural Commission point out, this cannot be wholly attributed to the fact that the cultivator has no incentive to economize water which the Government provides for him. No small percentage of wastage is due to the uncertainty of water supply. To ensure economy of water, the Agricultural Commission recommend that further investigation and experiment, which were started on the recommendation of the Irrigation Commission, should be undertaken both in the Punjab and elsewhere before a final decision against the sale of water by volume is reached.[3]

Lack of proper drainage in the canal tracts has not only been a handicap from the agricultural point of view, but has converted originally healthy tracts into malarious ones. Canal irrigation therefore is not only the work of the engineer, but also of the soil physicist, the agricultural chemist, and the medical and sanitary expert as well. The Agricultural Commission recommend that a careful drainage survey should in future form an integral

[1] Brij Narain, *Indian Economic Life*, p. 383.
[2] Howard, op. cit., p. 45.
[3] *Agricultural Commission Report*, par. 277.

part of all new irrigation projects and that drainage maps should be prepared.

§19. **Canal colonies in the Punjab.**[1]—We may conclude our discussion of irrigation in India by saying a few words regarding the Canal Colonies in the Punjab which have played a striking part in our irrigational history. In the Punjab the irrigation problems which have had to be faced by the Government have been different from those in other provinces. Before the advent of irrigation in the eighties of the last century, the whole vast stretch of the country now irrigated by the lower Chenab, Jhelum and Bari Doab canals was a desert, owing to meagre and precarious rainfall. Hence 'it was necessary simultaneously with the introduction of irrigation to transport bodily whole communities into the new areas thus opened up' (Harris). Before the colonists arrived, the alignment of the water-course was made, the land in each colony tract was demarcated into large and small similar squares and rectangles, the village boundaries were settled, roads were marked out, and land was set aside in the vicinity for grazing and other communal purposes. On arrival the colonists had to build their houses and commence breaking up the land allotted to them. These colony villages were thus systematically planned and possess sanitary advantages superior to those of the ordinary villages. The colonists were judiciously chosen by the Revenue Officers from the specially congested districts of the provinces and from among the classes of hereditary landlords or occupancy tenants for holding the so-called peasant grants under which the bulk of the land is allotted. Groups of this kind connected by common ties were dispatched to the colonies as units to form separate village communities. The terms of grant vary in different colonies. The average area allotted to each individual is generally from one and a half to two squares, or about 40 to 50 acres. In most of the earlier colonies inalienable occupancy rights in the holdings were granted at the end of the term of probation, either free of charge or on payment of a nominal sum. But under a subsequent revised procedure 'occupancy rights are granted after a first term of years and after a further term tenants are given the option of purchasing alienable proprietary rights at a privileged price payable in easy instalments'. Larger grants are made to hereditary landholders of substance and status and to men of means wishing to experiment in improved methods of cultivation and irrigation. Grants are also made in recognition of special civil or military services to the Government. The development of

[1] See Harris, op. cit., pp. 48-59; and Darling, *Punjab Peasant*, ch. vi.

the colony proceeds apace, once the colonists are settled in their new villages, by means of improved communications, metalled roads and railways and by the rise of towns and markets. Thus what was once a treeless, waterless waste land has been converted by the beneficent hand of man into these flourishing canal colonies. Their backbone is the small peasant proprietor who holds nearly 80 per cent of the land. The financial results are striking. The Government earned a net profit of over 30 per cent upon the canals serving the three major colonies of Lyallpur, Shahpur and Montgomery and 13·4 per cent upon its whole canal system of nearly 20,000 miles and its capital outlay of 34·68 crores in 1935-6. The benefit to the cultivator has been even greater. In the same year, in spite of low prices, the value of the crops grown on canal-irrigated land throughout the province was 39 crores. As M. L. Darling briefly puts it, ' the colonies have, in fact, opened for the Punjab an era of prosperity undreamed-of in the past'.[1]

[1] M. L. Darling, op. cit., p. 119.

CHAPTER VIII

AGRICULTURE: LABOUR, EQUIPMENT AND ORGANIZATION

§1. **The human factor: its unsatisfactory nature.**—It is no exaggeration to say that efficient agriculture depends on the qualities of the man behind the plough more than on anything else.[1] In order therefore to understand the present position of Indian agriculture, we must make an attempt to assess the merits and the defects of the Indian cultivator. As things stand at present, he must be acknowledged to be inferior in point of intelligence, enterprise and capacity for labour to the European or American farmer. His inefficiency, however, is not innate or rooted in the nature of things and is capable of being remedied. He is bowed down with the heavy and weary weight of many burdens and handicaps, and the wonder is that he still continues to carry on the struggle for existence and is not altogether extinct.

The question whether race and climate have anything to do with the relative inefficiency of the Indian peasant is highly speculative and need not detain us. In practice, the only safe hypothesis is to assume that the major cause of the backwardness of the Indian cultivator must be looked for in the heart-breaking conditions under which he works. This view is borne out by the fact that the Indian peasant is comparatively alert, tenacious and enterprising in those tracts where the rains are dependable or where irrigational facilities are available and he can confidently expect to reap the reward of his labour. Where, however, conditions in this respect are unfavourable, he is apt to be lazy, pessimistic, easy-going and miserably poor. Dr Voelcker, Consulting Chemist to the Royal Agricultural Society, who was sent out in 1889 to report on the agricultural practice in India from the modern scientific point of view, has borne admiring testimony to the careful husbandry 'combined with hard labour, perseverance and fertility of resource' of the Indian agriculturist. Opinions

[1] 'A study of rural conditions in different countries leads to the conclusion that far more depends upon the human factor than is commonly supposed. Defects in character can and will nullify the richest gifts of nature, while what may appear to be insuperable difficulties are apt to disappear before the sustained application of human energy, human intelligence and human knowledge.'—H. Calvert, *Wealth and Welfare of the Punjab*, p. 25.

of this kind bearing the imprimatur of high scientific authority must be respected and should leave us in no doubt as to the excellence which Indian farming is capable of attaining under favourable conditions. But we must not allow such laudatory remarks, torn out of their context and mainly intended to correct extreme views in the opposite direction, to lull us into a false sense of security. If the average cultivator in India had been as efficient and go-ahead as the unwary may be led to imagine from encomiums such as that of Dr Voelcker, the rural problem in India would have been much simpler than it is. It would be not only erroneous but positively mischievous to suppose that the personal factor in Indian agriculture is all that one could wish it to be and that no special effort is needed to improve the cultivator himself. It is a matter of the most vital importance to recognize clearly the actual defects and shortcomings of the cultivator, due to whatever causes, and seek remedies for them directly through education in the widest sense of the term, as well as indirectly through an improvement of external conditions. If we would paint the Indian peasant, warts and all, without setting down aught in malice, we should have to admit that, generally speaking, he is lacking in originality and initiative and is too much wedded to traditional methods and practices, many of which are wasteful and unscientific. Also, he is steeped up to the lips in superstitions and prejudices, which in their totality are a serious drag on his economic progress. The dead weight of his inertia, apathy and conservatism is an obstacle in the way of every reform proposed for alleviating his condition. By his insanitary habits of living, he draws upon himself much avoidable physical suffering, with its attendant evils of low vitality and incapacity for persistent and strenuous labour, and a sombre outlook on life. He is ignorant, improvident and reckless, a combination of qualities which make him an easy prey to anyone desirous of taking advantage of his weaknesses. He is too prone to waste his substance and energy in needless litigation and too fond of locking up his capital in jewellery and trinkets instead of devoting it to such forms of personal expenditure as would increase his efficiency, or employing it in more remunerative investment. He generally spends far beyond his means on marriages and other ceremonies and thus walks with open eyes into the money-lender's parlour, from which he is rarely able to get out. He shows an insufficient appreciation of the truth that God is wont to save only by human means, and a tendency to rely too much on Providence or some other external agency, and too little on personal endeavour for remedying every evil which he may be suffering from and for which he

is generally inclined to blame Fate or Providence rather than himself.[1]

Everyone acquainted with rural conditions in India will admit that all these are real evils, and a direct frontal attack must be made on them. 'Take care of his environment and the cultivator will take care of himself' is a good enough motto, but a better is: 'Improve at once both worker and environment, so that each may help the other.'

§2. **A comprehensive scheme of rural education.**—The only way of changing the psychology and the social and personal habits of the peasant is to educate him. It is obvious that so long as ignorance and illiteracy prevail in our villages and barely eight per cent of the population can read and write, all talk about rural progress is futile. The absence of widespread literacy and of a suitable system of rural education is largely responsible for many of the evils we deplore: illiteracy aggravates indebtedness, promotes improvidence and extravagance, impedes the progress of improved agriculture and, what is more serious than anything else, prevents that mass awakening without which no reform can be permanent. For the problem of rural uplift cannot be solved until the cultivator himself desires his own improvement and can think and act for himself. The present system of education needs to be remodelled so as to suit it to the needs of the rural masses, and in preparing textbooks and laying down curricula, the Education Department must absorb the result of the labours of, and work in consultation with, other departments whose servants are brought into contact with the villagers in the course of their duties. The education imparted in the rural schools must be such as will promote interest in and love for agriculture and rural life in general and should cease to deserve the criticism which is often made against it that it creates a bias in the mind of the rural scholar against his ancestral occupation and makes him soft-handed and unfit for agricultural work. This defect has been stressed by recent inquiries into the educational system of India conducted by Messers Abbot and Wood (1937) and later by the Zakir Husain Committee appointed by the Wardha Education Conference (1937), as also by the Committee on Vocational Training appointed by the Government of Bombay (1938). It is now generally agreed that the education of children in the primary

[1] In connexion with the uplift work in the Gurgaon District, Punjab, F. L. Brayne, who is the father of the movement, tells us of a new proverb invented for Gurgaon, which says: 'Zamindar ki be-aqli parmeshar ka qasur.' Providence is blamed for what is really the fault of the cultivator himself. See *Brayne, Remaking of Village India*, p. 12.

schools should be based more upon the natural interests and activities of young children and less upon book learning.[1]

The Zakir Husain Committee has accepted Mahatma Gandhi's basic idea 'that education, if sound in its principles, should be imported through some craft or productive work which should provide the nucleus of all the other instruction provided in the school'.[2] 'The principle of educating children through purposeful activity leading on to productive work is peculiarly suitable to village conditions and requirements.'[3]

The present tendency of attaching a spurious value to mere literacy, which makes a person think that he is in quite a different class from his unlettered fellows, and fires him with the insensate ambition of driving a quill rather than a plough, must be destroyed by taking special pains to inculcate the dignity of labour by imparting education by means of vocational or manual training and also by making education universal and compulsory. The benefits of education should be extended to both the sexes, and it should not be considered necessary to hold up female education till there is a sufficient number of women teachers. Spread of literacy among women is indispensable for the spread of *lasting* literacy among the young. Nature study of plant and animal life, school gardens and farms, textbooks dealing with rural subjects, manual training, education with special reference to local subsidiary industries,[4] physical and boy-scout training and lessons in first-aid would be some of the items in a complete scheme of rural education.[5]

A proper scheme of adult education is also necessary in order to increase the all-round efficiency of the farmer and in order that the present generation should be in a position to take advantage of modern developments in agriculture. Adult education is also important as tending to prevent the too frequent relapse into illiteracy of the young villager as soon as he leaves his school. It should also include women within its scope as it is most important to improve their ideas so that they should not act as clogs in the wheel of progress. Adult education must have a very prominent place in any programme looking forward to building up and organizing a strong and efficient democracy. As the recent (1938)

[1] *Report on General and Vocational Education,* by Abbot and Wood, par. 98.

[2] *Report of the Zakir Husain Committee,* Section I.

[3] *Report on Vocational Training in Primary and Secondary Schools* (Bombay) par. 24.

[4] For further particulars see the proposed syllabus drafted by the Zakir Husain Committee.

[5] In this chapter we have made considerable use of our paper 'Some Aspects of Rural Reconstruction in India' in the *Indian Journal of Economics,* Conference Number (1928).

Bombay Committee on Adult Education observe, 'adult education must have a recognized status in the general system of education and the State must be the driving force'. The Government should assist adult education wholeheartedly, especially by financial support to literacy programmes and recreational activities.

Special machinery is needed for carrying literacy and general enlightenment to grown-up people and should include such things as night schools, continuation classes, libraries and reading rooms, magic lantern and cinema shows, demonstration trains, such as those run on the Eastern Bengal Railway, etc. The cinema especially has great uses as an educative agency. So has the radio.[1] The cinema brings in new wants and fresh incentives to exertion, and as a vehicle for carrying enlightenment to the untutored mind of the villager it is far more effective than the mere written or spoken word. Much of adult education must depend on such agencies as these rather than on formal instruction in regular schools.

The first step in a programme of adult education as it affects the villager should be an endeavour to help him to overcome his dejection and apathy and to find an interest in life. It is, therefore, necessary to link up the adult education movement in the rural areas with a general programme of rural reconstruction.[2]

§3. **Physical inefficiency of the peasant: its causes and cure.**[3]—Many of our villages are ravaged by 'major' diseases, like malaria, plague, cholera, dysentery, tuberculosis, kala azar, hookworm, and the so-called 'minor' diseases such as skin complaints, leprosy, etc. This is one of the major causes of the inefficiency of the peasant. Disease may reduce the economic power of a community by carrying off the strong and the able-bodied and decreasing the proportion of workers to non-workers. Secondly, it often debilitates those whom it attacks even when it does not kill them, thus causing not only shortage of labourers but also shortage of labour power. Thirdly, it often incapacitates the workers just when agricultural operations are in full swing; and lastly, it tends to make people lethargic, listless and fatalistic. A campaign of public health and self-hygiene must be opened on a large scale to wipe out disease, create an active and enlightened

[1] The possibilities of broadcasting in the rural areas as a means of village uplift are being studied at present by more than one Provincial Government and experiments have already been made by some of them. Special broadcasts for village folk are now a regular feature of the programmes of several of the All-India Radio Stations.

[2] *Report of the Adult Education Committee* (Bombay), 1938, pp. 4-5.

[3] See *Agricultural Commission Report*, Minutes of Evidence, vol. II, p. 141.

'public health conscience' and overcome prejudices, some of which are all the more formidable because of their being bound up with religion.

Health publicity bureaux, baby weeks, Red Cross work, child welfare, maternity leagues, and co-operative dispensaries have all a part to play in the service of village health and sanitation. Drainage of irrigated tracts and marshy swamps, supply of pure drinking water and village housing are all necessary. Substantial progress in the campaign against malaria, 'our greatest morbidity scourge', can only be achieved by vigorous action by the people themselves assisted by the Government. A much wider distribution of quinine is necessary and the Central Government should make itself responsible in this important matter and address itself vigorously to the problem of cheapening quinine and increasing its supply by extending the cultivation of cinchona.[1]

The absence of adequate medical facilities in village areas constitutes a serious difficulty. It is necessary that the claims of indigenous systems of medicine should be properly investigated and the use of such indigenous drugs as are found to be effective should be encouraged as substitutes for the more expensive allopathic drugs. A few years ago the Bombay Government started an interesting experiment for increasing medical facilities in rural areas by the establishment of the Village Aid Scheme, under which, in certain selected districts of the Presidency, primary school teachers undergo a short course of medical training at the district civil hospital and then return to their villages with medical chests. They treat simple cases, render first aid and send the more serious cases to a neighbouring dispensary. More recently the Government have commenced subsidizing medical practitioners in rural areas.

Closely connected with rural sanitation is the problem of providing sanitary and decent dwellings in the villages. It must not be supposed that the housing problem exists in cities alone. For although there is more space in the villages, the houses themselves are generally flimsy structures of mud, with a thatched roof and a single door and hardly any windows, dark and infested with mosquitoes, rats and other vermin. Human beings and animals often share the same room, breathing each other's exhalations, an arrangement injurious both to man and beast. A supreme effort is needed to dismantle these village 'slums' and replace them by decent and clean dwellings. Rural co-operative

[1] See the evidence of the Public Health Commissioner with the Government of India, *Agricultural Commission Report*, Minutes of Evidence, vol. I, p. 147. Also ibid., pars. 411-12.

housing societies financed and otherwise helped by the Government should be started. The state may not only grant loans directly but may also help by guaranteeing the interest and redemption of loans made by special financial institutions started for the purpose.

§4. **Need for closer contact between village and town.**—The reform of the villager consists essentially in replacing the various mistaken, stupefying and pauperizing ideas which hold him down at present, by new, daring and inspiring ones. Anything therefore that fosters the contact of the village with the outside world and brings it within the orbit of more progressive influences emanating from the town should be welcome. The villages are no longer landlocked and isolated as of old, but much still remains to be done in the way of cheap and easy transit by more and better roads and railways. We may also refer here to the post-office as a civilizing agency.[1] The part which the post-office can play in the life of a people will obviously depend on the extent to which literacy prevails. The provision of postal facilities, however, itself stimulates the desire for literacy and helps to sustain literacy once attained. The post-office may also help in propaganda work by putting up interesting bulletins prepared specially for the instruction and amusement of the villager. Postal savings banks tend to promote thrift among the people, and, coupled with the cash certificates system, make investment of small rural savings possible. A minor advantage of the post-office lies in its serving as an agency for the distribution of seeds and cheap quinine in villages. Wireless and broadcasting have immense possibilities and will increase rural amenities and bring about an undreamt-of change in the life of the village people.

§5. **Methods of propaganda.**—In order to improve the cultivator physically and mentally, continuous and intensive propaganda, through officials and other public servants as well as through non-official agencies, is necessary, and much care is needed in selecting the right type of men for propaganda work. Knowledge of rural conditions, energy, tact, imagination and genuine sympathy with the villager and his difficulties are essential qualifications.

Making an effective appeal to one's hearers is an art which the would-be reformer must take some pains to learn before he confronts a village audience. Many an excellent discourse replete with useful knowledge fails to take effect because the speaker

[1] See the memorandum and evidence of H. A. Sams, Deputy Director-General of Posts and Telegraphs, *Agricultural Commission Report*, Minutes of Evidence, vol. I.

does not understand how to put things to his hearers. As F. L. Brayne acutely remarks: 'If the village audience maintains a stony silence, the lecturer can cut no ice, but once the villager can be drawn into an argument or made to laugh at himself, the battle is won.' The speaker must be *L'Allegro* as well as *Il Penseroso*. He must jest as well as preach, and it is not given to everybody to be able to do this.

Also the actual reform advocated must be within the reach of the agriculturist and it must be thoroughly tested before it is preached. Anything in the nature of unreal theorizing without thorough practical acquaintance with the methods in use must be avoided. The technique developed in India is the result of centuries of practical experience and contact with the soil, and in the words of Sir James Mackenna, 'has been built up on the traditional customs of years in which reside, though unexpressed and unexplained, deep scientific principles, the reasons for which can only gradually be elucidated'. There is no doubt that the agriculturist in India has much to learn from the agriculture of more advanced countries. Methods which were useful at one time may survive their usefulness; and because the knowledge of the agriculturist is purely empirical he is not able to realize this quickly. All the same, patient study and inquiry are necessary before improvements can be suggested with advantage.[1]

§6. **Hired agricultural labour.**—The foregoing discussion of the personal factor in Indian agriculture has been primarily with reference to the cultivator who owns the land he cultivates. For the sake of completeness of treatment, it is now necessary to say a few words, first about hired labour, and secondly about the part which the landlord plays in the agricultural economy of India. As regards hired labour, the position must be pronounced far from satisfactory. Agricultural labourers who hire themselves out are partly landless labourers, a class which is at present small but which is tending to grow, and partly those who possess bits of land which, however, are so small that their owners are under the necessity of hiring themselves out for work on other people's land in order to make a living. Labour drawn from either of these

[1] Sir M. Visvesvaraya in his *Planned Economy for India*, p. 45, suggests: 'There should be permanent agricultural museums established in every city and large town and also in a centrally situated village in a village group which has a local organization to promote the interests of agriculture. Such museums should maintain books and pamphlets giving descriptions of the latest agricultural practices, tools and machinery. They should also give demonstrations and hold annual agricultural exhibitions. This might with advantage be done in connexion with local festivities by the co-operative effort of the farmers and with the encouragement and support of Government.'

classes is dear, inefficient and unreliable. The modern facilities for migration as well as the increasing demand for labour on the part of railways and public works, and of commerce and industry, often put the labourers in a strong position. Further, owing to the heavy mortality caused by epidemics like plague and influenza, there may be temporarily an appreciable decrease in the number of labourers. Lastly, there is also a certain tendency on the part of small peasant proprietors to retire from personal labour on their farms and rely on hired labour as soon as their financial position permits the indulgence of this luxury. All this has resulted in a rise in the wages for hired labour. But there has been no corresponding improvement in its efficiency. The relatively high wages, instead of serving as a stimulus to greater exertion, seem to have the opposite effect. The labourer chooses to work less and there is no perceptible increase in his standard of life, and, through a higher standard, in his efficiency. The labourer, in short, has the same weaknesses and shortcomings as characterize the cultivator and he also may be expected to benefit by the measures devised for bringing about a general revival in the rural areas.

§7. **The landlord and his place in rural economy.**—One of the greatest difficulties under which Indian agriculture labours is its comparative failure to attract the necessary brains, enterprise and capital. Modern amenities of life, such as education, sanitation and well-developed communications, have been largely monopolized by the towns, in spite of the fact that the money for the provision of these facilities has been drawn mostly from the rural side. The wider opportunities and greater attractions offered by the town have induced an exodus from the village to the urban areas of its best intelligence and enterprise, leaving a blank in the village which it is not easy to fill. Lastly, the educated people of the towns and the landlords have not hitherto cared much to study rural problems and to understand and meet rural needs. Their knowledge, resources and enterprise have not been made available for the promotion of village prosperity. The ignorance of the urban population in this country on agricultural matters is 'so colossal and so genuine as almost to deserve respect'.[1] The leadership of big landlords such as Bakewell, Bates and 'Turnip Townshend', to whom English agriculture owed so much in the eighteenth century, has had no counterpart in India. One of the

[1] Adapted from A. Collett's remark quoted by H. Calvert, *Wealth and Welfare of the Punjab*, Preface, p. i. The observation refers to English conditions but is not less true of India. See also Radhakamal Mukerjee, *Land Problems of India*, pp. 123 and 193-4.

hopes entertained by those responsible for introducing permanent settlement in Bengal was that it would create a class of big landlords who would live on their estates and whose personal influence and material help would be of great benefit to the cultivators. This expectation, however, has unfortunately not been fulfilled. The landlords with very few exceptions have preferred to live in the big towns away from their properties and interest themselves in their estates and tenants merely as sources of rents. The only function they perform is that of a distant suction pump for drawing rents from the tenants with such thoroughness as the tenancy laws permit. Absentee landlordism is the rule, not only in Bengal but also in other parts of the country wherever there is a considerable landlord class. Speaking of the evils of absentee landlordism Carver says: 'Next to war, pestilence and famine, the worst thing that can happen to a rural community is absentee landlordism.'[1] The evil is particularly serious in those parts where the zamindari system prevails, though it is not altogether absent even in ryotwari areas. We may say that the landlords, as a class, are even more of a detached and outside agency so far as the development of land is concerned than the state. The state has at least charged itself with such important functions as provision of irrigation facilities, roads and railways, agricultural education, grant of takkavi loans, etc., whereas the landlord as a rule does nothing whatever for the improvement of the land. It is of the greatest importance to agricultural progress that it should secure the active interest of the landlord class; this would prevent rack-renting and establish personal relations between landlord and tenant to their mutual advantage, and it would ensure more rapid progress. The big landlords possess at least two requisites of progress, namely, capital and intelligence, and if they only develop a new sense of values and realize that there is not only greater profit, but also greater pleasure, in living in the country and helping forward the cause of rural renaissance than in idling away their time uselessly in the cities, we shall not have to wait for the slow process of a general public awakening before agricultural reform makes any considerable headway. The landlord can help reform in various ways, by starting home farms, building up pedigree herds of cattle, producing improved strains of seed and introducing more efficient implements and, last but not least, by familiarizing the bucolic mind with the idea of progress. They should help in increasing the attractions of the countryside by living in the villages and promoting sanitary and educational reforms there.

[1] *Principles of Rural Economics*, p. 377.

It would indeed be unreasonable, not to say undesirable, to insist that everyone who owns land must live on it. It would be absurd to suggest, for example, that a prosperous and highly competent doctor in a big city should not own any land unless he is prepared to go and live on it. It may be far more advantageous, not only from the individual point of view but also for the community, that he should be in a position to give undivided attention to his profession. At the same time, it would be unjust in any way to penalize or discriminate against people who are earning money in other occupations and who are desirous of investing their savings in land without giving up their occupations in favour of agriculture. Such a procedure is sure to bring down land values and check agricultural development by preventing the free flow of capital into it. It would, however, always be possible for the landlord, whose personal absence from his property is unavoidable and pardonable for reasons suggested above, to see to it that he is not rack-renting his tenants and is treating them in such a manner as to produce in them an adequate incentive for careful cultivation of the land. The case of a landlord, however, who is not following any alternative profession and who is living entirely on the rents from his estate is on a different footing. It is clear that he owes it both to himself, his tenants and to the community in general that he should actively interest himself in the development of his estate.

§8. **The duties and responsibilities attaching to land-ownership.**—It has always been recognized that, of all forms of property, property in land carries with it special duties and responsibilities. On purely theoretical grounds, it may occur to us to ask how the position of a shareholder in a joint-stock company, who is merely content with drawing dividends without taking any part in the management, is different from that of the landlord who is similarly content with drawing rent and doing nothing else. The answer to this is, in the first place, that it *would* be a good thing if the shareholder were to take a personal interest in the affairs of his company; his failure to do so is often the cause of the mismanagement and consequent ruin of many a joint-stock enterprise. It must, however, be remembered that the average shareholder has neither the leisure nor the necessary knowledge and ability for taking an intelligent interest in the affairs of his company and the enterprise in which it may be engaged. Again, he is only one of many shareholders and his individual attitude does not alter circumstances for better or for worse to any appreciable extent. Because a particular shareholder does not actively help

in the management, it does not follow that the concern is left without management altogether. Joint-stock organization has reached such a high pitch of efficiency that there is generally ample provision for able management and leadership in spite of the indifference of the generality of shareholders. Also, as regards the workmen or labourers, we must remember that their position is more favourable than that of agricultural tenants because they can unite and create organizations such as trade unions for effectively expressing and enforcing their wishes. Lastly, as J. M. Keynes has pointed out, 'the trend of modern joint-stock institutions when they have reached a certain age and size, is to socialize themselves and assume the status of public bodies rather than individualistic private concerns. The general stability and reputation of the firm are the first consideration and dividends assume quite a secondary position'.[1] In these circumstances, the interests of the labourers (and the consumers) are particularly looked after so as to avoid public criticism. In all these respects, the case of land stands by itself and the idea that all property is a trust to be administered on behalf of the community is felt to have a greater applicability to land than to other forms of property. And in the present helpless condition of the Indian ryot, it is necessary to give prominence to this idea and to make the landlord an effective and useful agent in rural uplift work. This problem has become more urgent than ever today owing to the widespread awakening among tenants, and legislation, either passed or under contemplation, in the several provinces for protecting tenants against landlords. Unless the latter read the signs of the times and move with them, it will be increasingly difficult for them to justify the continuance of their right in land merely on the ground of heritage.

Technique and Equipment

§9. **Technique: methods of cultivation.**—The Indian agriculturist for the most part follows methods of extensive cultivation which are unsuitable in view of the smallness of the average holding, with the result that the yield is much smaller than it need be. Contrasting Indian conditions with those in Japan in this respect, Sir M. Visvesvaraya writes: 'Japan, although not entirely self-sufficing in the matter of food, maintains normally a population of fifty-six millions on a cultivated area of seventeen millions, or one-third of an acre per head as against India's five-sixths of an acre.' Agriculture is carried on in Japan and China

[1] *The End of Laissez-faire*, pp. 42-3.

very intensively and thoroughly, almost like gardening, and the salvation of the Indian peasant lies similarly in adopting intensive methods of cultivation. This involves, among other things, more expenditure on permanent improvements and irrigation, more efficient cultivation, careful selection of seed, a better system of rotation of crops and adequate manuring. We have already disposed of the first two items in this list. As regards methods of cultivation, they can occasionally be seen to reach a very high standard in India, but in many parts of the country there is considerable scope for improvement in respect of preliminary preparation of the soil, sowing, harrowing, weeding, thinning and spacing out, harvesting, etc. The value of pure seed of good quality is great, but very often the farmer is either not careful enough in selecting his seed or he fails to get it even when he realizes its importance. There are a certain number of seed societies and seed farms, but they need to be multiplied many times to ensure an adequate supply of seed of high quality to the farmers in all parts of the country. The Agricultural Commission recommend the creation of a separate organization, for the distribution and testing of seed, in charge of a Deputy Director under the Director of Agriculture.[1] As regards rotation of crops, there has been a distinct falling-off from former standards. The lure of immediate gain has in too many cases led to an unhealthy and in the long run unprofitable concentration on certain crops like cotton and wheat. Bitter experience will no doubt eventually make the cultivator realize the necessity for a rational system of rotation, but something may also be done by propaganda. A recent welcome development in certain parts is the introduction of groundnut as a rabi crop into the scheme of rotation and this has been facilitated by the immediately profitable character of this particular crop. The possibilities of giving a place to fodder crops in a regular system of rotation need to be properly explored, especially in view of the present acuteness of the problem of an adequate food supply for the cattle.

§10. **Manure.**[2]—The application of manure and fertilizers is a vital factor increasing the yield from the soil especially in view of the intense pressure on the land and the fall in the world prices of agricultural commodities, calling urgently for more efficient methods of agricultural production. It is, however, not always the farmer's fault that the land is insufficiently manured. There may be no irrigation facilities, and heavy manuring of

[1] *Agricultural Commission Report*, par. 103.

[2] See *Agricultural Commission Report*, pars. 80-95, *Agriculture and Animal Husbandry in India* (1935-6), *India in 1934-5*, pp. 10-11.

land in dry tracts is worse than useless. Also, it may often be that the required manure is very scarce and difficult to get, or too expensive, having regard to the limited means of the average cultivator. But on the whole the question of proper manurial treatment of the soil and of the careful conservation of manure is much neglected in this country. One of the wasteful practices to which people in India are addicted is the use of cow-dung as fuel. This should be discouraged, and in so far as the use of farmyard manure as fuel is a matter of necessity,[1] the solution would lie in providing alternative forms of fuel. Waste areas near villages should be planted with fuel trees, and fuel reserves should be established as near the village as possible through the agency of the Forest Department and local bodies. The possibilities of afforestation for increasing fuel supplies and of cheap railway freight for fuel should be thoroughly examined. Cattle urine is usually allowed to run to waste, and there is still much prejudice against the use of human excreta as manure, though it is gradually breaking down. The Indian cultivator has much to learn from the Chinese and the Japanese cultivator with regard to the manufacture of composts. In China there is no organic refuse of any kind which does not eventually find its way back to the land as manure.

Mr Brayne was able to get the villagers in the Gurgaon District of the Punjab to dig pits into which all village sweepings were to be thrown so as to serve the double purpose of cleanliness and conservation of manure. More than 40,000 pits, all six feet deep and ten or twelve feet wide, were thus dug in the course of a few years. Mr Brayne also attempted to induce the villagers to use the 'pits for latrines for men and women with hedges for privacy and planks across for convenience' to ensure clean villlages and heavy crops. The full utilization of human excreta and all garbage and sweepings for agricultural purposes would mean that the present drainage systems in several cities and towns, where all such manurial matter is let into the sea or river water, would have to be changed. Poudrette is the least obnoxious form in which night-soil can be supplied to the cultivator and in this connexion the methods adopted at Nasik are worthy of study by other municipalities. The value of leguminous crops in rotation as a source of combined nitrogen has always been recognized by the Indian cultivator. The Agricultural

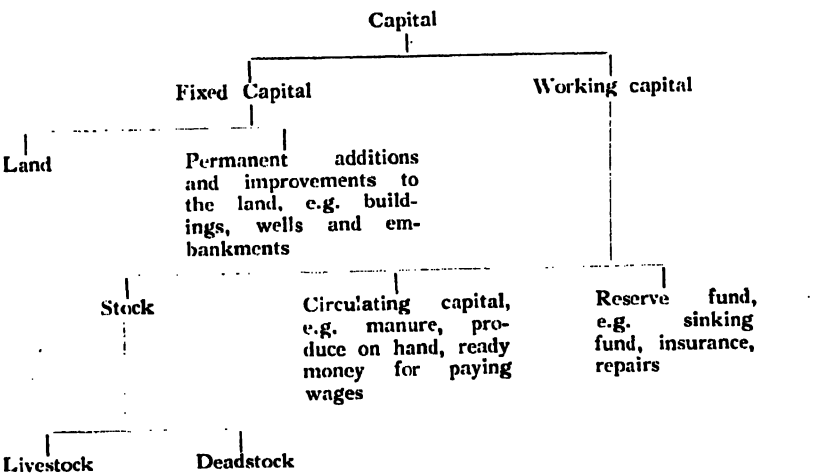
[1] The use of cow-dung as fuel is not always due to the fact that no other fuel is available. It is often just thoughtlessness or prejudice. In the Punjab, for example, the belief is apparently common that ghee cannot be made without dung cakes (see Brayne, op. cit., p. 6).

Departments, however, should investigate the best methods of employing leguminous crops to increase soil fertility.

The Agricultural Departments are not in a position, as things stand at present, to give definite advice to the cultivator about the economic use of fertilizers. It is therefore gratifying that the Imperial Council of Agricultural Research has constituted a Fertilizers Committee (1930) to carry out investigations into problems relating to the conservation of indigenous manurial resources and the use of fertilizers and the preparation of a programme of research on fertilizers. A small grant to each province has been sanctioned to collect and correlate data on manurial experiments carried out in the provinces. This is likely to prove of value in the future. In canal and other irrigated areas, ammonium sulphate, bonemeal, fish manures and oil-cakes are being used in gradually increasing quantities, thanks to the propaganda of the Agricultural Department. The extent to which the demand for artificial manures is increasing throughout India is demonstrated by the increase in the quantity of imports of such manures from 21,590 tons in 1925-6 to 84,000 tons in 1936-7.

Equipment

The following classification has been suggested by Mr Keatinge as giving a comprehensive idea of the varied equipment which a farmer ought to possess:



Keatinge remarks that, 'if a man's business is to be put on a sound basis . . . and the maximum profits extracted from the land, every form of capital enumerated above must be provided for in some way or other; and it is only by a proper understanding of

each form of capital that correct accounts can be kept, and the true sources of profits and losses determined'.[1]

§11. **Implements.**[2]—The Indian agriculturist still largely uses his old and simple implements which are cheap, light and portable, easy to make and to repair, and within the capacity of draught oxen; but greater productivity obviously depends on the use of improved implements. Iron ploughs, sugar-cane crushers, small pumping machinery and water-lifts have been introduced to some extent, but much still remains to be done in this direction. Other improved implements distributed include harrows, hoes, seed drills and fodder cutters. American methods based on an extensive use of agricultural machinery are ill-suited to a country of small-holders, but these limitations are capable of being partly overcome by co-operative and joint farming. It is interesting to note that a large number of tractors are being employed by farmers in Gujarat and elsewhere. Most of these have been bought and are being used by speculators who work on hire, though a few of the larger landowners have purchased their own. In upper Sind, the northern part of Bihar and Orissa and the Central Provinces the larger zamindars are showing considerable interest in tractor development, and if demonstrations could be carried on and reliable data obtained, this is likely to result, in the near future, in increasing the demand for tractors which make possible deep and thorough cultivation of the soil such as is beyond the capacity of ordinary bullocks, and effect great saving of time.[3] Tractor ploughing for the removal of the deep-rooted weed called *harichi* is being used in the Southern Division of the Bombay Presidency by the Karnatak Agricultural and Transport Company.[4] There is also a large scope for the improvement of agricultural implements worked by hand power and cattle. Intensive propaganda is necessary to induce a large number of cultivators simultaneously to use improved implements, because one of the difficulties in the way of their adoption by the individual cultivator is his fear of ridicule and of being regarded as a crank. The work of popularizing the use of improved implements clearly falls within the scope of the Agricultural Departments, agricultural associations and co-operative societies, and it is desirable that all these agencies should combine and co-ordinate their activities. The Agricultural Departments should give careful thought to the question of

[1] *Rural Economy in the Bombay Deccan*, pp. 103-4.

[2] See *Agricultural Commission Report*, pars. 107-10.

[3] *India in 1930-1*, p. 195.

[4] *Annual Report of the Department of Agriculture in the Province of Bombay, 1936-7*, par. 87.

cheapening improved implements, for example, by mass production of their wooden parts. Improvement of existing types of implements rather than the introduction of new types should be the aim. Excessive multiplication of implements is likely to confuse the cultivator and make him suspicious of the policy of the Agricultural Department. The railway authorities should be induced to give their most sympathetic consideration to the question of concession rates on agricultural implements and machinery. One of the useful measures adopted by the Agricultural Department is the appointment of agricultural engineers to advise cultivators and to arrange for the installation of machinery, particularly for irrigation, etc. Attention is also being given to the manufacture of improved implements cheaper than those used in the west and simpler to operate. To ensure full benefit from new implements, it is necessary that they should be manufactured in the country itself and full provision should be made for the supply of spare parts and facilities for repairs. The Agricultural Commission suggest that if the protective duty on the import of iron and steel is found to impose a serious handicap on the Indian manufacturer, a rebate might be given on any iron and steel imported for the manufacture of agricultural machinery and implements. Agricultural machinery valued at several lakhs of rupees was exhibited at the great Bombay Presidency Agricultural Show held at Poona in October 1926. The machinery exhibited was, however, for the most part of foreign manufacture, and if special efforts are put forth—including state aid to indigenous manufacturing firms—our present dependence on foreign supply may soon be expected to diminish considerably or vanish altogether.[1]

§12. **Livestock.**[2]—Cattle are the most important part of the livestock possessed by the Indian cultivator. 'Without them the fields remain unploughed, store and bin stand empty, and food and drink lose half their savour, for in a vegetarian country what can be worse than to have no milk, butter nor ghee?'[3] In India, cattle supply practically all the motive power for ploughing, for lift irrigation, etc. They are also the principal source of the manure commonly used. Also, carting for hire is almost the only subsidiary rural industry in India, and strong and healthy

[1] The recent (September 1938) Conference at Delhi of the Ministers in charge of Industries strongly favours the manufacture of all machinery in the country itself.

[2] See *Agriculture and Animal Husbandry in India* (1935-6), pp. 242-54.

[3] M. L. Darling, op. cit., p. 31.

cattle are necessary as draught animals. Again, the improvement of cattle is important for the development of a well-organized dairy industry, which is often mentioned as offering great possibilities as a subsidiary rural occupation in India. Lastly, the necessity of an abundant supply of milk is obvious in a vegetarian country where milk affords the only easy means of rendering the diet of the people rich enough in nutritive elements for health and strength. In spite of the supreme importance to India of an adequate and healthy livestock, conditions in this respect leave much to be desired.[1] The country is maintaining an excessive number of cattle but they are so deplorably poor and ill-fed as a general rule that there is a serious deficiency of cattle power. There are 67 cattle per 100 acres of net sown area. The inter-provincial distribution of cattle is markedly irregular, even when allowance is made for the nature of the land to be tilled, the extent of well irrigation, the amount of scrub and jungle, the rural population and size of holdings, etc. Considering the general average, the Agricultural Commission argue that, in whatever respects Indian cattle may be lacking, they do not lack in numbers. Holland possesses the largest number of cattle in relation to the size of the country and yet has 38 cattle per 100 acres of cultivated land. In Egypt, where general conditions under which agriculture is carried on are much more similar to those obtaining in parts of India than in Holland, there are 25 cattle per 100 acres of cultivated land.[2]

The Agricultural Commission are of the opinion that the census figures of livestock in India suggest a vicious circle. 'The number of cattle within a district depends upon, and is regulated by, the demand for bullocks. The worse the conditions for rearing efficient cattle are, the greater the numbers kept tend to be. Cows become less fertile, and their calves become undersized and do not satisfy cultivators, who, in the attempt to secure useful bullocks, breed more and more cattle. As numbers increase, or as the increase of tillage encroaches on the better grazing land, the pressure on the available supply of food leads to further

[1] The first general quinquennial census of livestock in British India was undertaken in 1919-20. The report on the fourth quinquennial census taken in January 1935 shows that there were then in British India, excluding Bengal, Bihar and Orissa, 113 million head of bovine cattle made up roughly of about 84 million head of oxen and 29 million head of buffaloes. The total figure for this census was over 5 millions higher than that recorded at the preceding census in 1930. A large number of these cattle are economically superfluous. See *Indian Year Book* (1938-9), p. 324.

[2] *Agricultural Commission Report*, par. 188.

poverty in cows, and a stage is reached when oxen from other provinces or male buffaloes are brought in to assist cultivation, as in Bengal.'[1]

§13. **Problem of fodder supply.**—The cattle in India are not only overworked but also ill-fed. Tradition and custom fix the responsibility for finding food for his cattle on the European stock-owner. This is not so in India where the cultivator rarely puts forward any special effort to keep his animals in efficient condition—a task difficult enough in any case owing to the natural handicap of periodical droughts and fodder famines. Over the greater part of India there is a shortage of fodder from December to July. The condition of the cattle is especially deplorable between March and June when they roam about on the parched fields picking up a precarious living, and a large number of them are reduced to bags of bone by the time the rains commence. As soon as the rains set in and the young grass begins to grow, they gorge themselves on it and suffer from various diseases as a consequence.[2] As Keatinge says, there is hardly any lesson that the people in India have to learn 'more important than the growing, efficient storage, and economical use of fodder crops'.[3] The problem of an adequate fodder supply is even more serious than that of food, as fodder is not easily transported from place to place on account of its large bulk and small value. The old days of extensive pastures are gone, never to return, owing to increase of cultivation. No considerable additions to existing grass areas are possible. But it is possible to increase the productivity of land already growing grass. A more sympathetic forest administration in the matter of providing grazing facilities and fodder will remedy the situation to some extent. The possibilities of fodder supplies from forests in times of scarcity should be carefully examined and grass cutting should be preferred to grazing. The common pasture land in the village is too small in area, and moreover, owing to the carelessness of the villagers, it is rendered less valuable than it might be, being generally blocked with brambles and useless trees and bushes of all kinds. It is necessary that people should learn the value of growing fodder crops like Egyptian clover, leguminous fodder crops, etc., and laying down pastures. Conservation of fodder stacked dry or preserved green in silos or pits is a matter which requires careful attention. Every effort should be made to prevent wastage, and suitable chaff-cutters

[1] *Agricultural Commission Report*, par. 168.

[2] See *Rural India* (April 1927), p. 188.

[3] op. cit., p. 123.

should be used for the purpose.[1] Stall-feeding should be more widely resorted to. The Government may encourage all these methods by rewards or remissions of land revenue and premia for well-kept cattle and fodder. The economical use of fodder supply implies the reduction in the number of useless cattle. A large number of maimed and worn-out bullocks and barren cows are maintained in a half-starved condition. In western countries they would be slaughtered for food. In India the demand for beef is comparatively negligible, and killing of useless cattle is a procedure against which the sentiment of the cultivator and a large part of the public revolts. The cultivator does not kill them but has no objection to starving them. His attitude is that of 'thou shalt not kill but need'st not strive officiously to keep alive'. It would really be much kinder both to himself and to the animals, which are uselessly kept alive in wretched condition, if the Indian cultivator were to take a more business-like view of the matter like the western farmer. But the prejudices are so deepseated that we shall have to wait long for reform. Another way to reduce the pressure on the available supply of fodder is to evolve dual-purpose breeds which will render buffaloes largely superfluous as sources of milk.[2]

§14. **Cattle-breeding.**—Professional cattle-breeders, formerly common in India, are now abandoning grazing in consequence of the growth of cultivation, and cattle-breeding is now regarded as an accident of husbandry rather than as an essential part of it. On the other hand, a constant supply of large numbers of improved bulls will be required to counteract the tendency to deterioration which is bound to occur in the conditions in which the ordinary stock of the ryot are bred and maintained. Elimination of bulls by compulsory castration is necessary in order to improve the quality, and the Veterinary Department has recently begun to perform this important function by methods unobjectionable to the religious susceptibilities of the people. For selective breeding and cross-breeding animals need to be enclosed. The cattle in Gujarat are superior and present a contrast to the half-sized and quarter-sized animals common in the Deccan. This has been attributed to the prevalence of enclosures in Gujarat. Co-operative

[1] It is interesting to note that the Punjab peasant is realizing the economy of fodder secured by the use of fodder cutters, no less than 14,250 of them having been purchased in 1930-1. See *India in 1930-1*, p. 194.

[2] The Agricultural Commission, however, utter the warning that in view of the difficulty of the task of breeding in Indian conditions even for a single purpose, it should not be endangered by the quest for dual-purpose breeds (*Report*, par. 197).

breeding societies have been started in some places but some authorities believe that this type of work requires individual attention and does not lend itself to treatment by the co-operative method. The Imperial and Provincial Departments of Agriculture are devoting much attention to the problem of cattle-breeding with a view to raising a more efficient livestock both as regards draught and milk. Breeding work is being conducted at the Imperial and Provincial cattle farms (notably at the Hosur cattle farm, Madras and the cattle farm at Hissar in the Punjab) in order to bring about an improvement in the milk yield of cattle by better feeding and selective breeding, as also by crossing indigenous breeds with sires of European pedigree.[1] At Pusa,[2] the milk yield of the pure Sahiwal herd has been very greatly increased by these methods, and the experiments that are being conducted are expected to end in the evolution of a well-defined Sahiwal-Ayrshire strain sufficiently hardy for Indian conditions. The apathy of the big landowners is a stumbling-block to progress in this matter and attempts should be made to overcome it by high officials who are in a position to exert influence on them. Giving a more scientific and practical education to the sons of landowners ought also to go a long way towards breaking down the present indifference of the landlord class towards rural economics. It is similarly within the power of the Princes to give a push forward to the movement of agricultural reform and every legitimate means should be adopted to stimulate their interest in practical agriculture. The recent (1937) scheme of 'gift bulls' adumbrated by H. E. the Viceroy Lord Linlithgow and the Cattle Conference held at Simla in May 1937 has served to focus public attention on this very important aspect of agricultural development. Considerable impetus has thus been given to cattle improvement in all the provinces and States of India.

§15. **The Veterinary Department.**—The direct and indirect losses due to disease among cattle are heavy. Loss of cattle by death is an important cause of rural indebtedness. The enfeeblement of the surviving cattle is perhaps an even more serious consideration. The uncertainty of animal life also compels the cultivator to keep reserves of cattle, which he is unable to feed properly, and thus he neglects their quality. It is also one of the reasons of the reluctance even of the larger landowners to engage in cattle-breeding operations.[3] The work of the Veterinary

[1] See *India in 1934-35*, p. 17.

[2] The Imperial Agricultural Research Institute was moved to New Delhi in 1938.

[3] *Agricultural Commission Report*, par. 236.

Department in reducing the appalling incidence of disease and mortality among cattle must be briefly noticed. The number of cases treated at veterinary hospitals and dispensaries and by itinerant officers is steadily on the increase, showing a gradually improving appreciation by the public of the valuable work being done by the Department.[1] Not the least important work of the Veterinary Department is granting immunity against contagious diseases in infected areas by compulsory inoculations carried out with sera and vaccines, and here also the tendency on the part of the cultivator to resent such action taken by the Department is on the decline owing to a growing conviction of its utility. In Madras, prophylactic measures have been taken against rinderpest, the most dreaded of cattle diseases in India. In the same province compulsory inoculation by the serum method has been legalized in villages notified by a District Magistrate. The disease being widespread, effective isolation would be impracticable, and in view of Hindu sentiment, destruction of healthy cattle in contact with infected ones is out of the question. Measures must therefore be devised for protecting the individual animal instead of trying to stamp out the source of infection. Compulsory inoculation, however, is undesirable at present. The Agricultural Commission strongly recommend what is called the 'serum simultaneous' method in preference to the 'serum alone' method of inoculation against rinderpest.[2] No charge should be made for preventive inoculation. The provision of veterinary aid in India is most inadequate and the Commission recommend the establishment in each district of a central veterinary hospital with a number of dispensaries serving the subdivisions of the district. The staff attached to these dispensaries should be increased and men sent out to tour the districts. A substantial increase of veterinary officers of all grades is necessary. Veterinary research work should be concentrated at the Muktesar Institute.[3]

§16. **Reserve capital.**[4]—As in other industries, so in agriculture, some provision for unforeseen expenditure as well as by way of a sinking fund and insurance is necessary if agriculture is to be conducted, as it ought to be, on sound business principles. It is a common experience, especially in tracts of uncertain rainfall like

[1] *Agricultural and Animal Husbandry in India* (1935-6), pp. 248-9.

[2] The latest (1935-6) available *Report on Agriculture and Animal Husbandry* (pp. 247-8) shows that as a result of systematic work a stage has now been reached at which, given the necessary staff, rinderpest can be brought under control at a comparatively small cost.

[3] *Agricultural Commission Report*, par. 237.

[4] See G. Keatinge, op. cit., pp. 141-5.

the Bombay Deccan, that there is a regular cycle of good, bad and indifferent years. Lack of any provision for meeting the more or less inevitable calamities like famines intensifies the suffering and distress resulting from them. There is similarly an absence of any systematic arrangement for meeting the charges on unproductive mortgages or loans or in connexion with depreciation of field improvements and implements. As Keatinge points out, the sinking fund maintained for these various purposes need not be kept idle and in cash. It might be utilized for objects like cattle-breeding or the planting of fuel trees, investments which could be liquidated whenever necessity should arise for so doing.

The principle of agricultural insurance has scarcely yet struck root in India. It is, however, a necessary precaution to insure stacks of fodder, farm buildings, crops, cattle, etc. Insurance is particularly needed in the case of fodder and cattle. The recurrent losses due to rick-burning and cattle mortality are very heavy. It may be noted here that a beginning has been recently made, especially in Burma, in the direction of cattle insurance on a co-operative basis. Failing a regular sinking fund and insurance, for a general resort to which by the Indian farmer we shall have to wait for a long time, the next best plan would be to encourage the cultivator to build a farm-house on his holding, 'so that he may be on the spot to protect his property, to have a reserve of fodder, to make his cattle secure against famine, to have an enclosed pasture in which he may segregate them when contagious diseases occur, and to have an irrigation well to serve as an insurance against unemployment in the dry season'.[1]

Organization

§ 17. **Importance of rural industries.**—Agriculture is as much in need of organization as any other business, but in India it is at present in a very bad way as regards both internal and external organization. Some of the serious shortcomings in internal organization, such as the absence of economic holdings, permanent improvements etc. have already been discussed. The particular defect which we now propose to single out for special treatment relates to the absence of subsidiary industries to enable the farmer to distribute his labour more evenly throughout the year than is the case at present, and thus improve his economic position. The absence of such industries constitutes a source of great weakness to the smallholder, who at present attempts the impossible feat of maintaining himself on his little holding without any supplementary sources of income worth mentioning.

[1] See G. Keatinge, op. cit., p. 145.

There is an appalling waste of rural labour on account of the seasonal character of agricultural operations. Except in irrigated tracts, where it is possible for the cultivator 'to sow something every month and to reap something every month and be always watering and weeding', the average farmer does not get employment on his farm all the year round. The duration of this enforced unemployment has been variously estimated at from 150 to 270 days in the year. Mr E. H. H. Edye, Census Officer for the United Provinces, writes in the Census Report of 1921: 'The bulk of the population is agricultural, and agriculture here means ordinarily the growing, harvesting and disposal of two crops in the year, and not the mixed farming familiar in England. Agriculture of this kind involves very hard work for certain short periods—generally two sowings, two harvests, an occasional weeding in the rains, and three waterings in the cold weather—and almost complete inactivity for the rest of the year. In precarious tracts, inactivity may be unavoidable for a whole season, or even for a whole year. These periods of inactivity are, in the great majority of cases, spent in idleness.' According to Dr Slater, taking the land of south India all round, there is agricultural work for the cultivator only for five-twelfths of his possible working time. Mr J. C. Jack in his *Economic Life of a Bengal District* says: 'The time-table of the cultivator . . . when his land is unfit for jute, shows three months' hard work and nine months' idleness; if he grows jute as well as rice, he will have an additional six weeks' work in July and August.' According to Keatinge, there are only 180 to 190 working days in the year in the Bombay Deccan, while according to Calvert, the work done by the average cultivator in the Punjab does not represent more than about 150 days' full labour. The Royal Commission on Agriculture point out that while the amount of spare time varies very greatly according to local agricultural conditions, it may be assumed as a broad generalization that by far the greater number of cultivators have at least two to four months of absolute leisure in the year (par. 488). The U. P. Banking Enquiry Committee estimate that for the province as a whole the peasant is occupied for not more than 200 days (par. 361).

In the absence of industries ancillary to agriculture, the Indian farmer looks upon the slack season as the time for recreation, marriage and litigation. Occasionally he may accept temporary employment in a town factory or on Government public works, or migrate to rural areas to sell his labour, or ply his cart for hire. In the case of the last alternative he has nowadays to reckon with the increasing competition of the motor truck. None of

these usual occupations are altogether satisfactory from the agriculturist's point of view. As Mr Darling points out: 'The only way in which a small farmer can keep himself out of debt is by being frugal and industrious and by having a second string to his bow.' This is the experience of the smallholder all over the world. In Japan, the rearing of silkworms is an important supplementary rural industry. France, Germany and Italy all have their own rural industries. Moreover, agriculture in the west is of a mixed and varied character and gives employment to the farmer without any interruption. Dairy-farming, pig-keeping and poultry-farming are the chief rural spare-time occupations. The problem is how to supply the small farmer in India with some satisfactory spare-time occupations which can be undertaken by him or his family without detriment to the cultivation of his land, in order to add to the income from agriculture.[1] Special attention has been drawn to this problem in recent years as a result of the inauguration of the all-India Village Industries Association in December 1934. The village uplift campaign (see ch. xi) and the keen interest of Congress Ministries in the revival of rural industries have also served to focus attention on this urgent problem of rural economy.

§ 18. **Dairy-farming, etc.**—Dairy-farming is one of the possible subsidiary industries in India, and if it could be successfully established it would not only improve the economic position[2] of the ryot but also solve the problem of an adequate and pure milk supply. The problem is especially acute in the urban areas where the milk is adulterated by the mixture of highly injurious substances like boric acid, formalin, etc., and is not only poor in quality but also much dearer than in almost any other country in the world. Attempts to start dairies that have been made hitherto have on the whole failed almost without exception, firstly, owing to the poor milk-producing qualities of the indigenous cattle (which have deteriorated owing to the hard conditions of their life), want of protection by legislation and want of encouragement by the Government. Having regard to the fact that milk and its products are the best media possible for carrying bacteria and germs of typhoid, diphtheria, etc., it is essential that production on scientific lines should be made a financial success

[1] For an interesting survey of the existing and possible rural industries, subsidiary to agriculture, in the various provinces of India, the Reports of the Provincial Banking Enquiry Committees and the Report of the Central Banking Enquiry Committee (par. 299) may be consulted.

[2] The annual cash value of dairy products has been estimated at over Rs. 800 crores.

so as to ensure a safe and sure supply of milk to the public. Villages adjoining cities should be in a position to cater for the large demand that exists in urban areas for milk of reliable quality at reasonable prices. Even in villages which are distant from towns and cities, there is scope for milk products being manufactured in forms such as cream, ghee and butter, suitable for transport over long distances. Dairy-farming, however, if it is to be properly conducted, involves careful attention to the quality of the animals so that their milk-yielding capacity may be adequate. It is necessary, by means of scientific breeding, to produce good milkers and to breed out the disadvantageous characteristics produced by generations of starvation and of promiscuous mating.[1] As Keatinge points out, the subsidiary industry *par excellence* of the cultivator should be the breeding and rearing of livestock, which would provide an occupation and an income at all seasons and return to the soil the manure which is necessary to maintain its productivity. There are difficulties in the way, such as the crowding of the animals together with the men into the village houses, where proper attention to the cattle is impossible. Existing circumstances such as scattered holdings and congested villages need to be modified in order that animal husbandry on a commercial scale may be possible. Also there are various difficulties in connexion with adequate grazing facilities and fodder supply. All these difficulties must be steadily overcome in order that there should be a better balance between crop-production and animal industry than at present.[2]

Apart from dairy-farming and cattle-breeding, the following rural cottage and home industries may also be mentioned: poultry-keeping, fruit-growing, fishing, market-gardening, gur-making, hand hulling, sericulture, lac-culture, bee-keeping, tanning, soap-making, mat-making, bamboo- and cane-work, rope-making, pottery, knitting, making bidis, toy-making, glass-bangle manufacture, agricultural tools and smithing, woodwork, lace and embroidery work, paper-making, pastry- and sweet-making.[3]

It is obvious that not all the industries can be introduced everywhere in India. In order to ascertain the possibility of introducing any of them in the different areas, a series of intensive

[1] See *Agricultural Commission Report*, Minutes of Evidence, vol. I, part i, pp. 338-41.

[2] See Dr Wright's *Report on the Dairying Industry of India.*

[3] See the *Annual Reports of the Village Industries Association* for further particulars regarding village industries.

regional surveys would be necessary.[1] The special conditions of each district and village would have to be carefully studied and industries selected accordingly. Poultry-farming, for example, would be possible only in those parts where there is no strong religious repugnance to its pursuit as an occupation. A similar consideration would rule out bee-keeping, for example, in Gujarat where Jainism has a strong hold on the minds of the people. Poultry-farming and market-gardening would again require ready markets near at hand and could be introduced with advantage only in rural areas near towns. Sericulture requires special altitudes and climatic conditions and has now to face the competition of the growing imports of artificial silk.

§19. **Economics of khaddar.**—Hand-spinning requires a somewhat more detailed treatment, not so much because of its intrinsic importance as because of the controversy which has raged in recent years round the charka and its possibilities. The advocates of the charka maintain that hand-spinning is the only supplementary industry possible and suitable in present conditions for the large masses in rural areas, and that it affords the simplest and quickest means of utilizing existing idle man-power. Mahatma Gandhi, the great preacher of the gospel of the charka, summarizes its advantages[2] as follows:

(i) It is immediately practicable, because (*a*) it does not require any capital or costly implements to put it into operation; both the raw material and the implements for working it can be cheaply and locally obtained; (*b*) it does not require any higher degree of skill or intelligence than the ignorant and poverty-stricken masses of India possess; (*c*) it requires so little physical exertion that even little children and old men can practise it and so contribute their mite to the family fund; (*d*) it does not require the ground to be prepared for its introduction afresh as the spinning tradition is still alive among the people.

(ii) It is universal and permanent as, next to food, yarn alone can be sure of always commanding an unlimited and ready market at the very door-step of the worker, and thus it ensures a steady regular income to the impoverished agriculturist.

(iii) It is independent of monsoon conditions and so can be carried on even during famine times.

[1] Sir M. Visvesvaraya suggests that, as in Japan, a classification of some districts primarily as agricultural and others as industrial, according to the resources of each, should be attempted in the Indian provinces and states, and that the people should be assisted and encouraged to follow recognized occupations. *Planned Economy for India*, p. 39.

[2] See R. B. Gregg, *Economics of Khaddar*, pp. 170-2.

(iv) It is not opposed to the religious or social susceptibilities of the people.

(v) It provides a most perfect and ready means of fighting famine.

(vi) It carries work to the very cottage of the peasant and thus prevents the disintegration of the family under economic distress.

(vii) It alone can restore some of the benefits of the village communities of India now well-nigh ruined.

(viii) It is the backbone as much of the hand-weaver as of the agriculturist, as it alone can provide a permanent and stable basis for the hand-loom industry which at present is supporting from eight to ten million people and supplies about one-third of the clothing requirements of India.

(ix) Its revival would give a fillip to a host of cognate and allied village occupations and thus rescue the villages from the state of decay into which they have fallen.

(x) It alone can ensure the equitable distribution of wealth among the millions of inhabitants of India.

(xi) It alone effectively solves the problem of unemployment, not only the partial unemployment of the agriculturist, but of the educated youth aimlessly wandering in search of occupation. The very magnitude of the task requires the marshalling of all the intellectual forces of the country to guide and direct the movement.

C. Rajagopalachari, writing on the charka in his Memorandum submitted to the Royal Commission on Agriculture, says: 'Hand-spinning is the only occupation that can fill the spare hours of the rural population if we take into account the limited skill and knowledge of the people and the necessary conditions of any spare-time occupation, namely that it should be simple, easily learnt, and capable of being taken up and put aside any time so that it may not interfere with the main occupation.' This conclusion, he says, is confirmed by actual experience in the khaddar revival work in the Tamil Nad in the Madras Presidency. People there, especially women, have taken kindly to the charka, and their supplementary earnings, small as they are, ranging from Rs. 15 to Rs. 25 per charka annually, are a useful addition to their incomes especially as, in not a few cases, the income from land itself is no more than about Rs. 50 per family per year. Similarly, Puntambekar and Varadachari, in their excellent essay on hand-spinning and weaving, maintain that the charka has a great future before it and is capable of effectively supplementing the existing mill production so as to provide clothing for the whole

population on an adequate scale, if only a suitable organization on decentralized lines is called into existence for this purpose. There are, however, two main difficulties admitted even by fervent advocates of khaddar like Rajagopalachari, namely (i) the taste that has been created for fine fabrics, and (ii) the greater cost of hand-spun cloth as compared with that of mill products, especially those imported from abroad. He holds that the second is the greater difficulty and suggests that a state bounty should be given so as to help production and make reduction of prices possible, and maintains that this will be necessary only for some time pending an increase in the general prosperity and purchasing power of the poorest classes through the recurring annual savings. He also recommends other methods of state help, such as loans of capital and facilities for production and distribution, reduced freights and preferential treatment in octroi and other taxes. We cannot agree, however, that 'the increase in the purchasing power of the poorest classes', even assuming it can come so easily, will induce them to buy khaddar in preference to the cheaper mill-made cloth. Unless khaddar sells as cheap as or cheaper than mill-made cloth, a permanent system of artificial props in the shape of bounties will have to be maintained at the expense of the general taxpayer. In his preliminary report, the special officer appointed by the Madras Government to carry out a survey of cottage industries, emphasizing the limitations of the khaddar movement in the Presidency, arrives at the conclusion that the annual savings are not sufficient to hold out any large inducement to hand-spinning. These difficulties are real, and apart from the question of cost, it is not easy to change people's psychology and preference for 'cooler and more attractive substitutes for the coarse khaddar which lie within the reach of all but the very poorest'. However, so long as the farmer is not and cannot be supplied with any other more remunerative supplementary industry, hand-spinning offers him some chance of balancing his budget at the end of the year. The case for the charka is this, that spinning on the charka is better than doing nothing whatever. But the quest for more remunerative subsidiary industries must be pursued to bring substantial economic relief to the cultivator.

§20. **Some other rural industries.**—Another way to tackle rural unemployment is to promote the establishment, in rural areas, of industries connected with the preparation of agricultural produce for consumption and export, such as cotton-ginning, decortication of groundnuts, rice-milling and husking, manufacture of refined sugar, oil-pressing, manufacture of bone manure, etc.

These industries should, as far as possible, be organized on co-operative lines. They should not be concentrated in towns but should provide widespread rural employment. The supply of cheap electric power would be a great facility for the development of such industries connected with agriculture. The Punjab and Bombay offer a promising field for the establishment of hydro-electric works for the distribution of cheap power in rural areas. A suitable system of technical education is a *sine qua non* of success. State aid to these industries will also be necessary, at least in the beginning. The Agricultural Commission favour the local manufacture of agricultural implements by private firms helped by the engineering sections of the Agricultural Departments. This will also reduce the present heavy cost of transport and bring the local price within the reach of the agriculturist. The exploitation of bamboo as a material for paper manufacture might give employment to the rural population living on the outskirts of forests. Preservation of fruit by drying, canning and making into jams seems to hold out much prospect of employment to the agricultural community and of profit to the promoters. The Commission, however, are on the whole sceptical about the possibilities of improving the conditions of the rural population by the establishment of rural industries and look for the chief solution of the problems of the cultivator in the intensification or diversification of his agriculture.[1]

In Madras, the survey of cottage industries, undertaken with a view to their revival and establishment on an economic basis as subsidiary occupations for agriculturists in the non-agricultural season, was completed in four districts in 1927-8 and subsequently in other districts. Similar regional surveys by other provincial Governments are essential for clearing the ground for the adoption of a systematic policy. The inquiry now (1938) being conducted by the Industrial Survey Committee appointed by the Government of Bombay is expected to indicate the possibilities of reviving cottage industries in rural areas. It is the considered view of the Central Banking Enquiry Committee that by the introduction of new and the expansion of the existing industries much can be done to provide the cultivator with a suitable subsidiary occupation for his spare time. They urge that provincial Governments should devote their earnest attention to the development of these industries.[2]

[1] *Agricultural Commission Report*, pars. 491-3, 500. A similar conclusion has been reached by Messrs Abbot and Wood in their *Report on Vocational Education in India*, par. 17.

[2] *Report of the Central Banking Enquiry Committee*, pars. 301-2 For further particulars regarding state aid to rural industries, see vol. II, ch. ii.

§21. **Defective marketing of agricultural produce.**[1]—So long as the Indian farmer was practising subsistence husbandry and enjoying the protection of the old village organization, perhaps no further and special organization was necessary in rural areas, but today the conditions are altogether different. While the commercialization of agriculture and the establishment of wide and competitive markets have made a stronger organization necessary, even the old archaic organization has been so weakened that it has ceased to be serviceable, and the ryot is left without any guidance or protection to face an altogether novel situation. As the Agricultural Commission remark: 'His interests have in the main been left to the free play of economic forces, and they have suffered in the process. For he is an infinitely small unit as compared with distributors and consumers of his produce who, in their respective fields, become every year more highly organized and more strongly consolidated.'[2]

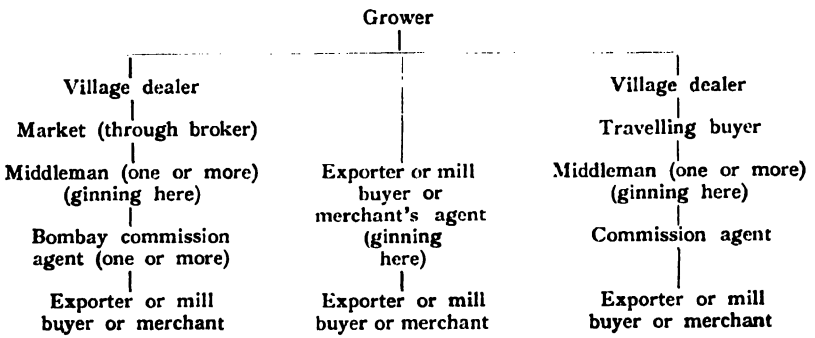
It is a common experience everywhere that the producer of raw materials generally fails to get his fair share of the good things of the world, and this is particularly the case at the present time in India where farming is carried on by small units unassisted by any special organization for their protection. The Indian cultivator is normally dependent on the money-lender, to whom his crops are often mortgaged in advance. Besides the money-lender, there are a number of professional dealers and middlemen who attach themselves at every point and create a comfortable corner of nourishment for themselves at the expense of the cultivator. A further difficulty arises owing to an inadequate provision of roads, bridges and feeder railways to enable the agriculturist to deal directly with the consumers or wholesale dealers. Other handicaps of the cultivator are: his low standard of literacy, the absence of properly regulated markets and of combinations among farmers, the chaotic condition of weights and measures, the unauthorized deduction of a number of market allowances, and inadequate storage facilities.[3] In these circumstances, it is not surprising that the cultivator does not get a fair price for his produce. Owing to his chronic shortage of capital

[1] For a comprehensive treatment of the problem of agricultural marketing, consult the chapter 'Marketing of Agricultural Produce' by S. G. Beri in *Co-operation in India* (edited by H. L. Kaji), pp. 340-65.

[2] *Agricultural Commission Report*, par. 320.

[3] For particulars regarding methods of sale, malpractices prevalent in the market and the various marketing charges see *Report on the Marketing of Wheat in India* (1937), pars. 148-62. This Report has revealed the fact that out of a rupee which the consumer pays for his wheat the producer gets nine annas and a half.

and the need to satisfy the demands of the sahukar and of Government land revenue, he is compelled to sell his produce at a disadvantage just when everybody is selling and the market is glutted. There is a long chain of middlemen, especially in the case of staple exports. Large firms often enter into forward contracts with the cultivator, to whom advances of money are given in anticipation of the delivery of produce. As a typical example of the multiplicity of middlemen who intervene between the cultivator and the consumer, the following diagram is reproduced from the Memorandum submitted by the Indian Central Cotton Committee to the Royal Agricultural Commission.[1]



As the Memorandum goes on to remark, the possible variations are obviously extremely numerous and the number of intervening middlemen may be very high. But even if we put aside extreme cases, there are usually too many intermediaries between the agriculturist and the consumer, such as the agriculturist's local agent, the mofussil purchaser's agent, mofussil purchaser and retail purchaser. And as V. L. Mehta points out in his Memorandum, it would be possible to eliminate these intermediaries by the adoption of the co-operative method. A co-operative sale society, for example, may dispense with the local agent and the mofussil purchaser's agent and make possible direct dealings with the mofussil purchaser. Not only this, but if there are efficient consumers' societies at the centre, all the intermediaries may be eliminated, to the very great advantage of both producer and consumer.[2] Co-operation offers the only satisfactory solution for enabling the agriculturist to realize the full market price of his produce. The agriculturist sometimes deals directly with the consumer, but as each cultivator acts for himself, a disproportionate amount of time and energy is necessarily involved in taking the

[1] *Agricultural Commission Report*, Minutes of Evidence, vol. II, part ii, p. 21.
[2] See ibid., vol. II, part ii, p. 110.

produce over considerable distances and disposing of it in small quantities.

§22. **Co-operative sale.**—It is only recently that the realization has dawned upon the Agricultural and the Co-operative Departments that rural marketing is the crux of the whole question of rural prosperity and betterment, and the movement for co-operative marketing has already made some headway in India. Burma led the way by inaugurating joint paddy sale societies. But the most promising development has been in the sale of cotton in provinces like Bombay. Co-operative cotton sale societies have been started in Bombay, the Central Provinces, Madras and the Punjab. The movement has so far achieved the most considerable success in the Bombay Presidency, where there are four principal areas in which cotton sale societies are situated: (i) Dharwar and Belgaum; (ii) Bijapur; (iii) Surat, Broach and Kaira and (iv) Khandesh, those in the first and third areas being the most important. In 1936-7, there were in all 28 cotton sale societies whose transactions were valued at about Rs. 45 lakhs. These societies have established their reputation as an effective agency for improving the quality of cotton grown and securing better prices to the cotton grower.[1] Several different types of organization are being given a trial at present: (i) societies which pool their members' produce, arrange for ginning and sell ginned (and baled) cotton; (ii) societies which organize periodical auction sales of graded kapas—the sales being on individual account; (iii) co-operative commission shops which provide storage so that the grower is not obliged to sell on an unfavourable day—such societies are being tried in the Punjab;[2] and (iv) co-operative ginning and sale of members' cotton by seed unions. These unions are mainly organized for the production of pure seed and can scarcely be regarded as touching the real question of cotton marketing. The first type is the only one which makes a serious attempt to dispense with the small middleman altogether and has attained some measure of success in the Surat District, where the cotton sale societies have recently combined in a federation which has taken over the co-operative ginning factory already started

[1] See *Annual Report on the Working of Co-operative Societies, Bombay* (1936-7), par. 60.

[2] The commission shops at present do *kachhi arhat* business and so represent an attempt to deal co-operatively with marketing in its simplest form. The first of these was started in 1919. In 1937 there were 22 commission shops in the Punjab and they sold produce worth about Rs. 22 lakhs. See article, 'Co-operative Commission Shops' by Sayed Zahur Hussain in the *Bombay Co-operative Quarterly* (September 1938).

by the members. The second type is in operation mainly in the Dharwar District with Gadag and Hubli as the prominent centres.

When all is said and done, however, the progress of co-operative marketing organization even in its most remarkable development, namely, in cotton, has not been very rapid, nor has it been unattended entirely by serious defects, such as lack of expert knowledge on the part of the co-operative officials, inefficiency of management, absence of hold on the members (who cannot be legally forced to sell their cotton through the societies), inadequate finance, especially hindering prompt advances of money to growers, and lack of godown and storage facilities. All these defects must be removed, and the movement must be highly organized and skilfully worked in order that it may be able to fight against the powerful vested interests of dalals, adtyas and other middlemen.[1] The Reserve Bank of India should extend financial help to Co-operative Marketing Societies through the Provincial Co-operative Banks. (See ch. x.)

The principle of co-operative sale has been extended to other agricultural products like gur, tobacco, chillies, paddy, areca nuts and potatoes, and there is a fairly efficient organization for the sale of gur, especially in the canal areas in the Bombay Presidency. Unfortunately the experiments made in Bengal in the co-operative sale of jute and paddy have not met with success. Madras has a number of sale societies, but their transactions are small and they have not made much progress.[2] The sale movement has, however, as indicated above, struck root in the Bombay Presidency, especially in Gujerat and Bombay Karnatak, where the cotton-grower has reaped considerable benefits from the cotton sale societies.[3] The new marketing organization (see §24 below) established by the Government of India and the provincial Governments is expected to stimulate the development of co-operative marketing of agricultural produce in India.

§23. **Certain improvements in marketing organization.**— Modern industry requires that consignments should be up to sample and uniform from year to year; and unless these conditions are fulfilled, large-scale marketing for distant customers cannot be satisfactorily conducted to the fullest possible advantage of the primary producer. At present various abuses exist such as

[1] See *Agricultural Commission Report,* Minutes of Evidence, vol. II, part ii, pp. 22-31.

[2] *Indian Year Book* (1938-9), pp. 414-15.

[3] For a detailed study of the sale of agricultural produce in the Karnatak see S. G. Beri's paper on 'Marketing of Agricultural Produce in the Bombay Karnatak', *Indian Journal of Economics,* Conference Number (January 1930).

damping and admixture, not only on the threshing floor but also in the godowns of brokers and dealers. Legislation has been felt to be necessary in order to prevent these malpractices. As we have already mentioned, at the instance of the Indian Central Cotton Committee, the Cotton Transport Act and the Cotton Ginning and Pressing Factories Act were passed in 1923 and 1925 respectively. Under the former Act (which now applies to the most important staple cotton areas of the Bombay and Madras Presidencies and of the Baroda, Rajpipla and Indore States) the provincial Government is enabled to notify definite areas of cotton for protection and to prevent the importation of cotton from outside these areas except under licence. This is aimed against the practice of importing inferior cottons for purposes of adulteration which had resulted in ruining the reputation of several valuable varieties of staple cotton. Under the Cotton Ginning and Pressing Factories Act which, as already said, is a corollary of the former Act, provision has been made for a certain amount of control of ginning and pressing factories and for the marking of all bales of cotton pressed with a press-mark and serial number so as to facilitate tracing them to their origin. A third piece of legislation, which also affects cotton, is the Bombay Cotton Markets Act (1927), which, while based on the Berar model (the Berar Cotton and Grain Markets Law of 1897) is in some respects in advance of it. It is of an enabling character and permits the notification of open cotton markets where trading takes place in the unbaled cotton brought by the grower under proper rules and by-laws administered by a market committee, on which the cotton-growers are represented. Thus the grower can now hope to obtain a square deal owing to the operation of rules designed to protect him from unauthorized deductions, false weighings and unduly low quotations—practices made possible by the ignorance and lack of bargaining power of the cultivator. Another advantage is that through the agency of such an organization the cultivator should gain that touch with substantial buyers which selling in the open markets promotes. Legislation seeking to establish regulated markets has also been adopted by Hyderabad (1930), Madras (1933) and the Central Provinces (1935), and was introduced in the Punjab legislature in August 1938. The plan of such regulated markets may be imitated with profit by other provinces.

It is natural that attention should have been first directed towards the development of an efficient marketing organization in the case of cotton, the most important commercial crop. It is, however, desirable that the principle should be extended to other

crops also. A serious drawback in the existing marketing organization is the absence of information in regard to marketing conditions, such as collection, storage and transport of produce, and manipulation, together with a detailed analysis of the price structure at every stage. (See however §26 below.) This is essential in evolving a satisfactory policy for securing improvement in marketing. The Indian Central Cotton Committee made some investigations into the finance and marketing of cultivators' cotton and their reports contain much valuable information.[1] The Agricultural Commission strongly emphasized the need for undertaking marketing surveys and for the training of the necessary personnel. They recommended the appointment of an expert marketing officer under the Agricultural Department in each province.[2] The various provincial Banking Enquiry Committees devoted a great deal of attention to the marketing conditions in various provinces (including some Indian States like Hyderabad), and their reports throw a good deal of light on the various marketing problems in different parts of India and show how marketing conditions vary greatly from province to province and in respect of different products in the same province.[3]

§24. **The new marketing organization.**—Although provincial Governments had accepted the recommendations of the Agricultural Commission regarding market surveys and the appointment of expert marketing officers in the provincial Agricultural Departments, they were deterred by financial stringency from making substantial progress. The Government of India came to the conclusion that substantial expenditure from central revenues was justifiable even at a time of financial stringency for studying the all-India aspects of the problem in view of the fact that improved agricultural marketing is an aid to the general economic recovery of the country. This was also necessary to safeguard India's future in the face of the intensified foreign competition which is being felt as a result of modern scientific and economic developments in competing countries. Accordingly, in consultation with the provincial Governments and the advisory board of the Imperial Council of Agricultural Research, the Government of India took

[1] See *General Report* (also separate *Reports*) *on Eight Investigations into the Finance and Marketing of Cultivators' Cotton* (Indian Central Cotton Committee).

[2] *Agricultural Commission Report*, pars. 347-8.

[3] For the recommendations of the Central Banking Enquiry Committee regarding marketing of agricultural produce see their *Report*, pars. 284-6 and 289.

the first step in the new direction by appointing in April 1934 Mr A. M. Livingstone, a senior officer of the marketing branch of the British Ministry of Agriculture, as the Agricultural Marketing Adviser to the Research Council. The question of agricultural marketing was also considered by the Provincial Economic Conference held in April 1934, and it was generally agreed that an intensive programme for developing marketing facilities for agricultural products (both crops and livestock products) offered the best possible prospect of substantial results. The Conference recommended action on the following lines: propaganda and the supply of information in external markets regarding Indian products; the grading, storing and bulking of the main staple products, special market organization for perishable commodities, information to India's producers of consumers' requirements both in India and abroad; the planning of production on the basis of quality and demand, the establishment and development of regulated markets, the undertaking of market surveys for the purpose of developing a common plan throughout India and the establishment of properly organized 'future' markets, commodity exchanges and warehouses. The Government of India, in a resolution issued on 5 May 1934, outlined their new marketing policy—on the lines recommended at the Conference—which was to be carried out in collaboration with the provinces and Indian States.[1] For this purpose a central and provincial marketing staff has already been appointed. The central staff consists of the Agricultural Marketing Adviser, three Senior Marketing Officers, three Marketing Officers, one Supervisor for experimental grading and packing stations, and twelve Assistant Marketing Officers. The provincial marketing staff consists of a Senior Marketing Officer and Junior Marketing Officers. The cost to the provinces of Rs. 2 lakhs per annum is to be borne by the central Government for a period of five years. Besides 92 full-time Marketing Officers operating throughout India, 226 Officers have been nominated to deal with marketing questions in the smaller Indian States and Minor Administrations.

The work done by the central marketing staff in conjunction with the provincial marketing staff falls into three main divisions: (i) investigation work, (ii) development work and (iii) work on grade standards. The investigation work includes a series of

[1] The new policy broadly follows the recommendations of the Royal Commission on Agriculture which were endorsed in general by the Central Banking Enquiry Committee.

marketing surveys with immediate reference to the more important commodities, such as cereals, oil-seeds, tobacco, fibres and fruit, and animal husbandry products, dairy products and livestock. Certain general questions are also included, such as regulated markets, problems of transportation, storage and preservation of commodities. The marketing surveys, when completed, will set out in detail the present system of marketing the commodities concerned, not only in each of the provinces separately but also in respect of inter-provincial, inter-state and foreign trade, so as to provide an all-India picture of the existing conditions and a common basis for future progress. The reports on marketing surveys will formulate proposals regarding the essential and practicable improvements. The work connected with the execution of these surveys is being shared between the central and provincial marketing staffs, and the planning of the surveys, compilation of data, and preparation of the results fall mainly on the central staff. The development work, which must obviously depend upon the results of the marketing surveys, includes the demonstration of any recommendations made with the object of keeping the producers and traders in touch with consumers' requirements, and the popularization of the recommended standard grades, containers, etc. The development work for each commodity has to be done mainly by the provincial marketing staff. The work on grade standards is of a technical character relating to the chemical and physical characteristics of such products as oil-seeds, grains, fruit, etc. and the testing of grading technique and equipment under practical conditions.[1]

§25. **Work done by the new marketing organization.**[2]— Although the new marketing organization has been in full operation for less than three years, a good deal of work has already been accomplished. By the end of the year 1937 as many as 360 local marketing survey reports were received for compilation by the central marketing staff from various provinces and Indian States. In carrying out the investigation work in close consultation with producers, distributors, wholesalers, manufacturers, railway agents and other groups of persons concerned in the production and distribution of commodities, special attention is being given

[1] See Government of India's resolution dated 5 May 1934, and *Proceedings of the Provincial Economic Conference* (1934).

[2] For further particulars see the *Annual Report of the Agricultural Marketing Adviser* and *Summarized Reports of Senior Marketing Officers in Provinces and certain Indian States* (1938), pp. 1-12; *Agriculture and Animal Husbandry in India* (1935-6), pp. 225-30 and *Indian Year Book* (1938-9), pp. 329-30.

to a study of prices and the quality of the products concerned. Surveys were in the first instance initiated in regard to rice, wheat, linseed, groundnuts, tobacco, coffee, fruits, milk, eggs, livestock and hides and skins; and also in respect of markets and fairs and co-operative marketing. Already a few all-India Marketing Survey Reports have been published. Special mention may be made of the *Report on the Marketing of Wheat in India* (1937). It gives an exhaustive picture of the marketing of wheat in this country and contains much valuable material which should be of interest to all those connected with the wheat trade.[1]

Earnest efforts have been made since the commencement of the year 1937 to put into practical effect the preliminary results obtained in the course of the marketing surveys. Much of the information so collected has been compiled for use in discussions with the producers and trade interests concerned with grains, oilseeds, ghee, milk and dairy products. At the same time the preliminary surveys showed that the selling of mixed produce of doubtful quality is a common practice which adversely affects the returns to producers. There proved to be, therefore, a *prima facie* case for the better grading of agricultural produce in order to eliminate waste and provide a common basis for trading on standard quality to the advantage of both producers and consumers. With this end in view the Agricultural Produce (Grading and Marketing) Act was passed by the Central Legislature in February 1937, providing for the fixing of grade designations to indicate the quality of any scheduled article of agricultural produce, for defining standards of quality, and specifying grade designation marks. The rules issued under the Act empower the Agricultural Marketing Adviser to issue certificates of authorization to suitable persons who are prepared to grade and mark their produce. To give a practical lead to all concerned the central marketing staff initiated the grading and marking of different commodities at more than 25 centres. The success achieved at these centres in spite of many difficulties clearly indicates that there is a demand for graded goods and that, particularly for perishable goods such as eggs and fruits, producers can in many cases secure considerably better returns by proper grading. Provincial and State marketing

[1] Besides the marketing survey work which is being carried on by the central marketing staff and the marketing officers appointed by the different provinces and States, the various statutory all-India Central Commodity Committees (for lac, jute, sugar, coffee, and cotton) have recently (1937) decided to have their own marketing staff to carry out special surveys on the products concerned in close association with the central and local marketing staffs.

staffs have assisted in establishing these grading stations. With the necessary backing from their Governments they should be able to develop this side of their work rapidly in the near future.

In the year 1937 substantial progress in regard to the standardization of uniform contract terms (for white wheat, linseed, and groundnuts) was also made with the co-operation of many trade associations covering the whole of India. The chief object of having standard trade contracts is to reduce within practicable limits the amount of refraction (dirt and other impurities) in the product and to encourage the sale of clean produce by having a scale of mutual instead of non-mutual allowances inserted in the contract. In the case of non-mutual terms the seller gets no reward for delivering produce better than the minimum basis. There is therefore a direct incentive to lower the quality to the minimum.

Finally arrangements have been made for a Market News Service through weekly broadcasts from the Delhi Station of the All-India Radio in English and Indian languages regarding prices, stocks and movements of wheat, linseed and rice, and daily broadcasting of the closing rates at Hapur market. Similar steps are being taken by provincial marketing officers to improve the system of marketing news service.

The whole question of the future development of agricultural marketing and production was recently (November, 1938) considered by the conference of Ministers on agricultural marketing held at New Delhi. It made valuable suggestions including one to ensure the correlation of agricultural production and marketing.

It is gratifying that a number of Indian States have offered their co-operation in the improvement of agricultural marketing, which is the real crux of the whole question of rural prosperity. This great combined effort which is now well under way, will, it is hoped, ensure results of substantial benefit to the Indian agriculturist.

§26. **Need for warehouses, standardization of weights and measures, etc.**—Another improvement in marketing organization relates to the provision of suitable warehousing facilities and of the issue of warehouse certificates to the growers, who should be enabled to obtain advances from co-operative and other banks against the deposit of such certificates. This should make it possible for the grower to hold his produce against a favourable turn of prices. In this connexion we would invite attention to the American system of licensed warehouses and the Egyptian scheme of loans on the security of cotton to assist the small

producer. The reports of the various provincial Banking Enquiry Committees have much to say on the question of the applicability of these two schemes to Indian conditions and express a variety of opinions as regards legislation for licensing and otherwise controlling warehouses. For example, the Punjab Committee opine that such warehouses are at present premature, but may be needed in time.[1] The Bombay Committee on the other hand recommend that licensed warehouses should be introduced in a few important centres to begin with.[2] The Central Banking Enquiry Committee make several useful recommendations in this connexion. They suggest that the question of providing warehouses by private agencies and licensing them, and the provision of capital for their construction, should be taken up by provincial Governments, their efforts being co-ordinated by the Imperial Council of Agricultural Research. The problem of starting railway warehouses should be undertaken by the Railway Board and the railways should be asked to start experiments at selected centres. Provincial Governments should offer long-term loans at concessional rates of interest to co-operative societies to build godowns in centres which provide good markets.[3] It is generally believed that it would be premature to adopt the Egyptian Cotton Scheme, as its utility even in Egypt is not established, and as it is not desirable to encourage the small cultivator under present conditions to hold up produce for a long period in the hope of a rise.[4]

Another much-needed reform is the standardization of weights and measures. This has been strongly emphasized by the Agricultural Commission, the various provincial Banking Enquiry Committees and the Central Banking Enquiry Committee. In this connexion attention may be invited to the Central Provinces Weights and Measures of Capacities Act (1928) which lays down the units of weights and measures and empowers the Government to secure standardization by notifying areas for the purposes of the Act.[5] A similar Act came into force in the Bombay Presidency in the year 1935. The Marketing Officers' Conference held in September 1937 at Simla strongly recommended the standardization

[1] *Report of the Punjab Banking Enquiry Committee*, par. 92.

[2] *Report of the Bombay Banking Enquiry Committee*, par. 151.

[3] See *Report of the Central Banking Enquiry Committee*, pars. 279-82.

[4] See *Reports of the Punjab Banking Enquiry Committee*, par. 93 and of the *Central Provinces and Berar Banking Enquiry Committee*, par. 1085.

[5] *Annual Report of the Agricultural Marketing Adviser for the year ending 31 December 1937*, p. 9.

and adoption throughout India of the three cardinal all-India weights standing in the relation:—

180 grains = 1 tola
80 tolas = 1 seer
40 seers = 1 maund.[1]

We fully support this recommendation.

In conclusion, it is necessary to consider the possibility and advisability of creating throughout the country properly regulated forward markets run on orthodox lines in the interest of both sellers and buyers so that the value of produce may be hedged and the risk of market fluctuations mitigated.

[1] *Preliminary Report on Agricultural Credit by the Reserve Bank of India* (1936), par. 26.

CHAPTER IX

RURAL INDEBTEDNESS

§1. **Rural indebtedness: a serious problem.**—Owing to her fertile soil, abundance of labour and considerable inherited agricultural skill, India seems to be marked out by nature as a prosperous agricultural country. And yet Indian agriculture is in a very backward condition and the lot of the average cultivator in India is not far removed from utter destitution. The existence of crushing debt is universally acknowledged to be one of the main causes of this state of affairs. As the late Mr Wolff put it: 'The country is in the grip of the mahajan. It is the bonds of debt that shackle agriculture.'[1] The presence of a huge volume of indebtedness, which is for the most part unproductive, inhibits improvement in every direction and constitutes one of the most serious problems of agricultural economy in India.

§2. **Extent of indebtedness: early inquiries.**—In 1875 the Deccan Riots Commission, analysing the situation in twelve villages in the Ahmednagar district (Bombay), came to the conclusion that one-third of the occupants of Government land were embarrassed with debts, that these debts averaged about eighteen times the assessment, that two-thirds of the debt was secured by mortgage of land and that the average debt per occupant amounted to Rs. 371.

The Famine Commission of 1880 inferred from evidence collected from all parts of India that one-third of the landholding classes were deeply and inextricably in debt and that at least an equal proportion, although in debt, were not so beyond the power of recovering themselves. In 1895 Sir Frederick Nicholson estimated the total rural debt of Madras at Rs. 45 crores.

The Famine Commission of 1901 came to the conclusion that one-fourth of the Bombay cultivators had lost possession of their lands, less than one-fifth of them were free from debt and the remainder were indebted to a greater or less extent.

Sir Edward Maclagan calculated the total agricultural debt of British India to be about Rs. 300 crores in 1911 on the basis of Nicholson's estimate for Madras. M. L. Darling, preferring the Punjab figure of 1924 as a more reliable basis than the Madras

[1] H. Wolff. *Co-operation in India*, p. 3.

figure of 1895, arrives at the figure of Rs. 600 crores for British India. 'The Punjab figure (90 crores) is nineteen times the land revenue of the province. Applying this multiple to the land revenue (35·45 crores) of British India (including Burma) in 1923-4, we get a debt of Rs. 674 crores. There is, however, reason to believe that the Punjab is more highly indebted than most parts of rural India. Various things suggest this: for instance. . . the number of money-lenders, which in proportion to population is three times as great in the Punjab as in the rest of British India, and the special legislation that has had to be passed to protect the cultivator against the money-lender. Instead therefore of taking a multiple of 19, it will be safer to take one of 17. This gives a total of 603 crores. The amount is probably higher, as wherever there is a permanent settlement, land revenue is on a much lower scale than elsewhere; nor does the land revenue figure taken for British India include land revenue enjoyed by assignees, though it does in the case of the Punjab. Further, if we apply the Punjab figure in terms of population, we get a total of 1,080 crores, for the rural population of the Punjab is only one-twelfth of that of British India. Very tentatively therefore we may say that the total rural debt of British India with its population of 247 millions, is not less than 600 crores.'[1]

The inquiries referred to above were no doubt sporadic and some of them not sufficiently wide in scope, although, taken together, they indicated clearly enough the seriousness of the embarrassment through debt in rural India. The investigations into this question on the part of the various provincial Banking Enquiry Committees in 1929-30 have resulted in comparatively more comprehensive estimates which have confirmed this general impression left on the mind by the earlier enquiries while adding a little more definiteness to it.[2] The estimates do not pretend to be thoroughly accurate but are useful by way of giving a general notion of the total debt.

§3. **Estimates of agricultural indebtedness by provincial Banking Enquiry Committees.**—We give below estimates of rural indebtedness culled from the reports of the various provincial Banking Enquiry Committees published in the course of the year 1930.

[1] M. L. Darling, op. cit. (1928 edition), p. 17; cf. 1932 edition, pp. 18-19.

[2] The Agricultural Commission suggest that periodical reports on money-lending should be prepared and issued by the Income-Tax Department so as to throw some light on the different aspects of rural debt (*Report*, par. 368). The same object can be served by reports on the working of the money-lenders' Acts, requiring registration and maintenance of accounts by them, passed in recent years in several provinces: see §8 below.

(i) *Bombay.*—The total agricultural debt of the whole province including Sind is estimated at Rs. 81 crores. The debt works out at fifteen times the total land assessment and forms about 53 per cent of the average value of the total agricultural produce of the province. The average debt per family comes to Rs. 329. The percentage of families free from debt is 13 in Sind; 21 in North Gujarat; 23 in South Gujarat; and 29 in the Konkan (pars. 49-50, 54).

(ii) *Madras.*—The Madras Banking Enquiry Committee consider that at the maximum in the year, the total debt is in the neighbourhood of Rs. 150 crores and that the debt which continues from year to year is at present about Rs. 70 crores. The average debt for the Presidency works out at Rs. 19 per rupee of assessment (pars. 96, 98).

(iii) *Bengal.*—The total agricultural debt for the whole of Bengal is estimated at Rs. 100 crores. The average debt per 1921 to Rs. 45 in 1929 (par. 22).

(iv) *United Provinces.*—The United Provinces Banking Enquiry Committee arrive at the figure of Rs. 124 crores (in round figures) for the total debt of the landlords, peasant proprietors and tenants in the whole province (Appendix II).

(v) *Punjab.*—The total agricultural debt of the Punjab is estimated at Rs. 135 crores in 1929 as compared with Rs 90 crores in 1921, thus showing an increase of 50 per cent upon the estimates of the latter year. The debt's multiple of land revenue was 27 in 1929 as compared to 19 in 1921. The debt per head of those supported by agriculture was Rs. 104 in 1929, as compared with Rs. 76 in 1921. The debt per cultivated acre rose from Rs. 31 in 1921 to Rs. 45 in 1929 (par. 22).

(vi) *Central Provinces and Berar.*—The total debt of about Rs. 36½ crores comes to about 49 per cent of the normal gross crop outturn. The interest charges amount to 2½ times the total land revenue demand, and to more than one-third of the normal balance from agricultural income. The total cultivators' debt represents Rs. 227 per cultivating family (pars. 644, 653-4).

(vii) *Bihar and Orissa.*—The total rural indebtedness for the whole province may be put with some confidence at Rs. 155 crores. Of this, it would be reasonable to put down Rs. 24 crores to the landlords, Rs. 2 crores to the other rural households excluding ordinary cultivators, and Rs. 129 crores to the ordinary cultivators (par. 90).

(viii) *Assam.*—The Assam Banking Enquiry Committee estimate that the total agricultural indebtedness of the plains districts

would be somewhere over Rs. 22 crores. This debt is 21 times the annual land revenue. The average debt per family is Rs. 242. Fifteen per cent of the families are free from debt (par. 33).

(ix) *Burma.*—The Burma Banking Enquiry Committee consider that an estimate of Rs. 50 to 60 crores for the total indebtedness seems likely to be of the right order of magnitude (par. 103).

(x) *Central Areas.*—The total indebtedness in the areas centrally administered is estimated at Rs. 18 crores.

(xi) *Coorg.*—The indebtedness is placed between Rs. 35 and 55 lakhs.

From these estimates it would appear that the total agricultural indebtedness of the British Indian provinces in 1929 was in the neighbourhood of Rs. 900 crores,[1] though these estimates have no pretensions to complete accuracy. Agricultural debt has since then appreciably increased and is believed to exceed Rs. 1,200 crores for British India alone.[2] The actual incidence or burden of indebtedness has become much more crushing, having regard to the great fall in the prices of crops during the post-War years, more particularly during the recent years of the world economic depression which was ushered in in October 1929.[3]

The seriousness of the debt, however, does not lie in its volume nor in its rate of growth, which in themselves are not alarming considering the size of the country, nor are they unparalleled in other countries. What gives cause for uneasiness is that the greater part of the debt is unproductive. For example, according to Darling, less than five per cent of the debt in the Punjab is due to land improvement. One of the disadvantages of unproductive debt is that it tends to increase automatically. Productive debt, by fertilizing the soil, creates its own means of repayment, but unproductive debt is apt to be repaid with difficulty.[4]

[1] See *Report of the Central Banking Enquiry Committee*, par. 77.

[2] P. J. Thomas, *The Problem of Rural Indebtedness*, p. 19.

[3] 'Measured in commodities, it must now be twice as large as a result of the fall in prices since 1929.'—*Preliminary Report on Agricultural Credit by the Reserve Bank of India* (1936) par. 13.

[4] cf. 'One peculiar feature of agricultural indebtedness is that it is in most cases a mark of distress, whereas in the case of other industries, borrowed finance is a normal feature. As the loans are mostly for unproductive purposes, the pressure of indebtedness falls very heavily on the ryot. . . . A high debt does not necessarily imply substantial assets leading to increased productivity. Therein lies the tragedy of agricultural indebtedness . . . If the debt had been, as it should be, only another phase of credit, the problem of indebtedness would have been very easy of solution'—*Report of the Bengal Banking Enquiry Committee*, par. 104.

§4. **The causes of indebtedness.**—If indebtedness is a cause of poverty, the reverse also is equally true. It is therefore to be expected that much of what is advanced in explanation of the indebtedness also explains the poverty of the rural masses in India. We may take the following as the principal causes of rural indebtedness:

(i) *The excessive pressure of the population on the land.*

(ii) *The excessive subdivision and fragmentation of the soil.*

(iii) *The decline of the cottage industries and the loss of income to the ryot owing to the absence of a subsidiary occupation in the off season.*[1]

(iv) *The ill-health of the ryot.*—At certain seasons, sickness, e.g. malaria, puts the cultivator out of action when his labour is most needed, and generally lowers his efficiency to a very serious extent.

(v) *The insecurity of harvests.*—This feature has justified the description of Indian agriculture as a gamble in the monsoon, which as Darling remarks, 'has all the proverbial caprice of the Eastern potentate'. It has been calculated that an agricultural cycle of five years gives one good year, one bad and three that are neither good nor bad. It is only in good years that the peasant can possibly keep himself out of debt.

(vi) *The loss of cattle owing to famine and disease.*—Diseases like rinderpest are another obvious cause of the economic embarrassment of the cultivator, as evidenced by the large percentage of loans given by co-operative societies for the purchase of cattle.

(vii) *Depreciation.*—Another cause is the failure to provide for depreciation of cattle and implements, so that when their usefulness comes to an end there is no fund to replace them without borrowing. There is thus a steady consumption of capital going on. This is largely due to a lack of appreciation of facts, but is also partly the consequence of a desire for a higher standard of living. It is difficult to put aside funds for depreciation of, say cattle, when so many desirable things, whether luxuries or not, are lacking in the household. The difficulty is aggravated owing to the lack of banking facilities and a tradition of saving.[2]

(viii) *The excessive love of litigation.*—This characteristic of the Indian ryot, though amenable to treatment and cure by better

[1] See *Report of the Central Banking Enquiry Committee*, par. 81.

[2] See *Report of the Burma Banking Enquiry Committee*, par. 113.

education, is at present undoubtedly an active factor tending to increase the ryot's financial embarrassment.

(ix) *The improvidence and extravagance of the ryot.*—It is possible to explain the improvidence and extravagance of the ryot by attributing them to the tyranny of social customs, his lack of education and the speculative character of his calling which endows him with the mentality of a gambler; but it is not possible to deny their existence and their effect in the direction of aggravating indebtedness. Although the Indian peasant normally lives a most frugal and abstemious life, he is undoubtedly apt to carry his expenditure on special occasions to extravagant limits. The Deccan Riots Commission (1875) do not, however, agree that extravagant expenditure on marriages is a primary cause of indebtedness. Let us quote their words: 'It would be idle to say that improvidence does not exist as a cause of indebtedness. It consists, however, rather in the short-sighted imprudence of an ignorant class ready to relieve present necessity by discounting future income on any terms, than in an extravagant expenditure or misapplication of income. . . . Undue prominence has been given to the expenditure on marriage and other festivals as a cause of the ryot's indebtedness. The expenditure on such occasions may undoubtedly be called extravagant when compared with the ryot's means, but the occasions occur seldom and probably in a course of years the total sum spent in this way by any ryot is not larger than a man in his position is justified in spending on social and domestic pleasures. The expenditure by itself rarely appears as a nucleus of his indebtedness. . . . The constantly recurring small items of debt for food and other necessaries, for seed, for bullocks, for the Government assessment, do more to swell the indebtedness of the ryot than an occasional marriage.' The Bengal Banking Enquiry Committee endorse this view (par. 95).

We do not fully concur with this opinion and are inclined to the usual view that expenditure on marriage and social and religious ceremonies is one of the most important causes of debt. There are numerous instances of heavy debts having been contracted on these occasions from which the borrower has never been able to extricate himself. Moreover, the standard of expenditure on such occasions in rural areas has latterly been distinctly on the increase.

(x) *Ancestral debt.*—The Deccan Riots Commission expressed the view that the chief cause of the existing indebtedness was ancestral debt, debt being passed on from father to son, generation

after generation without any equitable restrictions. The crushing burden of ancestral debt is due to the ryot's ignorance of the legal position that the debts of a deceased person only pass to his heirs when they succeed to the deceased debtor's property and only to the extent of such property. It is also due to the force of tradition which makes the ryots regard hereditary debt as a debt of honour and the legal fiction of moral and pious obligations to discharge ancestral debt. The ryots need to be instructed with regard to their rights and induced to use them. The enactment of a simple Insolvency Act suited to rural conditions should also be carefully considered. As the Agricultural Commission remark: 'No one desires to see a wholesale resort to insolvency and no one, we trust, desires to witness a continuation of a system under which innumerable people are born in debt, live in debt and die in debt, passing on their burden to those who follow.[1] This recommendation has been endorsed by the Central Banking Enquiry Committee who suggest certain special provisions in the proposed Rural Insolvency Act.[2]

(xi) *The modern change in the cultivator's economic position.*—With the establishment of the Pax Britannica and the development of a strong and stable rule added to a definite assessment of land, better communications, growth of towns and high prices, the value of land increased and the capacity to borrow on the strength of it. While it served to mitigate distress, it led to a rapid increase of mortgage debt. Further, the brief spells of exceptional prosperity, such as that initiated during the cotton boom of the sixties owing to the American Civil War, and again during and some time after the Great War, had on the whole a demoralizing effect on the ryot. Prosperity is as much a cause of debt as insecurity of harvest. 'With prosperity the necessity to borrow may be less, but the opportunity is greater and wants are as much dictated by the one as by the other.' Especially when the prosperity owes little to the efforts of the cultivator, its effects on the character of the illiterate and uneducated ryot are apt to be injurious, for it leads to the evils of drink, dissipation, gambling, bribery and extravagance, or reckless and disastrous investment in land. It leads to a rise in the standard of living—in itself a desirable result—but when it has been too sudden and is followed by periods of scarcity and depression, the standard cannot be

[1] *Agricultural Commission Report*, par. 367. See also *Report of the Bombay Banking Enquiry Committee*, par. 56.

[2] *Report*, par. 93.

immediately accommodated to the change in the circumstances, and leads to a growth of indebtedness.[1]

(xii) *The money-lender and the system of usury.*[2]—Money-lending has always existed in India as in other countries, but in pre-British days there were two restraints on the money-lender, namely, the existence of a vigorous village community which made unconscionable bargains with the isolated cultivator by the money-lender difficult, if not impossible, and the apathy of the state towards recovery of loans, a function that used to be performed by the village panchayats which settled questions of arrears, etc., equitably, promptly and summarily. Under British rule these checks have been largely removed. The disintegration of the village community weakened the position of the cultivator, and the money-lenders and land-grabbers fully utilized their opportunity, their superior shrewdness and resources to exploit the cultivator. The establishment of civil courts to administer a new system of civil justice based upon the ideas of *laissez-faire* and contract, and an elaborate and complicated procedure turned the balance further against the ryot. Owing to excessive pressure of work, the judges of the civil courts followed the line of least resistance and favoured a rigid and literal application of the law without attempting to go behind the bond. Being also generally town-bred and therefore ignorant of rural conditions, they played easily into the hands of the astute sahukar. Sale of the mortgaged land for the satisfaction of debt under a civil decree became an ordinary expedient instead of the exceptional resort that it had been in the pre-British period.

The high interest rates and the system of compound interest led to the exploitation of the ryot who 'was as easily shorn of his gains as the sheep of its fleece' (Darling). In pre-British days, custom generally limited compound interest to 50 per cent for cash and 100 per cent (*damdupat*) for grain. No such restriction was recognized under British rule, and interest accumulated without limit and was allowed by the courts. Decrees were often obtained *ex parte* through the collusion of the sahukar with the corrupt and underpaid establishment of the court. Thus, with the decline of the village community, the establishment of civil courts and increase in the value of land as security, the uncon-

[1] For an excellent discussion of this topic see M. L. Darling, op. cit. (1932 edition), ch. xii.

[2] For a comprehensive account of the various types of money-lenders who supply rural finance and their methods of business, see *Report of the Central Banking Enquiry Committee*, ch. vii.

trolled supremacy of the money-lender began, and the series of famines in the latter half of the last century put the cultivator entirely at his mercy. The facilities for the recovery of debt provided by the civil courts and other factors had given rise to an inferior class of money-lenders not susceptible to the code of honour of the older class of respectable sahukars; and generally speaking, the old customary human relations between the ryot and the money-lender were changed into legal relations of creditor and debtor with no other tie than the cash nexus between them.[1] There is little wonder therefore that land began to pass, on an alarming scale, from ryot to sahukar and, particularly in Bombay and the Punjab, the peasant proprietary tenure began to degenerate into a 'Marwari tenure' and the 'cultivator capitalist' began rapidly to evolve into a 'sahukar's serf'.

The expropriation of the cultivator by the money-lender generated agrarian discontent and hatred of the money-lender which resulted in murderous uprisings of the exasperated peasants such as the Sonthal rebellion (1855), the Deccan riots (1874), and the riots of Ajmer (1891).

From the above description of the money-lender, we must not allow ourselves to infer that he is an unnatural monster of cruelty and inhumanity. He shares the weaknesses as well as the virtues of ordinary human beings, though the condition of the peasantry among whom his lot is cast is such as to call his weaknesses more than his virtues into action. The risks he undertakes are many and great owing to the ignorance, improvidence and irregularity of the cultivators and therefore the high interest he charges is largely an insurance against them. Moreover, the money-lender himself is suffering from shortness of capital, and his expenses of collection and management of loans given to innumerable small borrowers are much higher than the similar expenses of say, a joint-stock bank. The lack of education and the conservative habits of the people as well as the semi-monopolistic position of the money-lender account for the high rates of interest charged by him.[2]

In justification of the sahukar's high rates of interest it has further been urged that the unpopularity of his calling must be allowed for. Moreover, there being no other opening for his capital, lending is the only use he can make of it. The need of the agriculturist for loans is imperative, and the money-lender is

[1] See *Deccan Riots Commission Report.*

[2] See *Report of the Central Banking Enquiry Committee*, par. 114.

the only person to satisfy it.[1] If, in these circumstances, he often drives hard bargains and abuses the great power he enjoys, this is only human nature. 'To censure him is to censure the imperfections of mankind. We should rather blame the system than the man it has moulded.'[2]

Until a better system of credit fully meeting rural needs is evolved, the money-lender cannot be dispensed with. While trying to curb the money-lender in every possible way whenever his dealings appear to take an undue advantage of the necessitous position of the cultivator, we must not be blind to the useful part he plays at present in the rural economy. The money-lender is the only oasis of thrift in a desert of improvidence and extravagance, and is the very foundation of the simple system of Indian rural economy and a fount of ever-ready credit on which the villager can draw for all his needs. He serves the village in a variety of ways other than as supplier of credit. He is, for example, usually also a grain dealer, and is in this capacity particularly useful in times of famine and drought, when he issues grain and helps the village to tide over difficult times. 'Down with the money-lender' would therefore be a silly battle-cry. Even under any other conceivable scheme of rural credit, such as co-operative credit societies or land mortgage banks, it would be an immense advantage to make the money-lender an integral part of the new credit institutions and to induce him to make his knowledge and his capital available through these new organizations.

(xiii) *The land revenue policy.*—There are many persons who, like the late R. C. Dutt, regard the heaviness of the land tax together with the rigidity of its collection as one of the causes of rural indebtedness. They contend that there has been an increase in the amount of land revenue in spite of many years of famine or a partial failure of crops and the diminishing yield of land in many parts of the country. The Famine Commission of 1901 seem to support this view when they say: 'In good years the cultivator has nothing to hope for except bare subsistence and in bad years he falls on public charity.' The Famine Commission of 1880, on the other hand, make the following observation in this connexion: 'The fact that landowners, who have no land revenue or only a light quit-rent to pay, are often also deeply

[1] Co-operative credit is still far from wholly displacing the money-lender. In the Bombay Presidency, for example, only about seven per cent of the finance required by the agricultural population is provided through the co-operative machinery. (*Bombay Banking Enquiry Report*, par. 227.)

[2] M. L. Darling, op. cit. (1932 edition), p. 207.

embarrassed proves . . . that the payment of the land revenue is not the main cause of the debt. If a man spends all his income on himself and borrows to pay his rent or taxes, it can hardly be said that his indebtedness is due to the fact of his having rent and taxes to pay, when these charges bear so light a proportion to income as the land revenue does to the gross outturn of the land.'[1] The ryot often borrows for paying Government assessment. But land revenue cannot for this reason alone be called a cause of indebtedness any more than seed and food for which also the ryot may have to borrow.

It would, however, be quite fair to attribute the condition of indebtedness to land revenue, if and when it can be shown to have operated oppressively, either by reason of the heaviness of the levy or of lack of elasticity in its collection. That the land revenue system has sometimes erred in these directions is admitted even by those who are not prepared to concede that rural indebtedness is to any extent chargeable to the land tax. Talking of the Punjab, for example, M. L. Darling admits that, although with the advent of British rule the land revenue demand was lowered and converted from kind to cash, it was not at first lowered enough to suit the less elastic system of collection.[2] He goes on to argue, however, that though land revenue is 'often an occasion of borrowing', it 'is not a primary cause of debt'. But this is a distinction without a difference. The distinction between original and aggravating cause does not appear to be scientific. What we want to know is whether an alleged cause is a real cause. A person may be already burdened, say with ancestral debt, and he may aggravate his indebtedness by borrowing for extravagant expenditure on a marriage ceremony, but this should not debar one from describing the expenditure on the marriage ceremony as a cause of indebtedness. All borrowing which is due to the perversity of the ryot himself, or the unjust exactions of the sahukar, or occasionally of the Government themselves, whenever their land revenue policy is too harsh, must be regarded as a cause of indebtedness. Further, it is argued that the reduction of land revenue would not reduce debt because 'every blessing is neutralized by an increase of population'.[3] Now this may or may not be a good reason for reducing the burden of assessment, but it certainly does not afford a valid ground for holding that heavy assessment cannot be considered a cause of debt. The argument

[1] *Famine Commission Report* (1880), p. 132.
[2] See M. L. Darling, op. cit., p. 231.
[3] ibid., p. 232.

we are criticizing does not really deny that the land revenue may be a cause of indebtedness; it merely suggests that if it is removed, another cause, namely, increase of population, will supervene. Unrestricted breeding may neutralize the beneficial effect of the abolition of an oppressive system of taxation, as indeed it may neutralize the effect of the removal of any abuse whatsoever, but this does not prove that a heavy land tax is not a *vera causa* of indebtedness. There have been periods during which it has by universal acknowledgement been excessive, for example, in the Deccan so long as the Pringle Settlement was in force. Again, in working the system of suspensions and remissions, a proper understanding of the ryot's position has not always been displayed. Even at the present time, in spite of numerous amendments and improvements which the land revenue system as a whole has undergone, individual cases of unduly harsh treatment, for which there is no effective system of obtaining redress, can be shown to occur.

In so far as these defects have been operative in the past and still persist,[1] it is not unreasonable to include them among the causes of indebtedness. However, having regard to the fact that the land revenue amounts to perhaps one-seventeenth or less of the total rural indebtedness, and further bearing in mind that not the whole of the levy can be considered as a removable cause of the indebtedness, only a minor place can be assigned to it among the causes of the evil we are diagnosing. It need scarcely be pointed out that this is not to say that the present land revenue system is wholly free from defects.[2]

§5. **State policy regarding rural indebtedness.**[3]—We may now review the measures adopted by the Government to tackle this problem which was forced on public attention in the early

[1] The Bardoli Inquiry (1929) gave rise to the strong suspicion that the actual operation of the present land revenue system is more burdensome and inequitable than was imagined. Moreover, the very serious fall in the prices of agricultural commodities during the last few years has increased the real burden of land revenue, making relief necessary in many areas.

[2] Mere growth of indebtedness cannot, however, be used as an argument to show that agriculture does not pay and that land revenue is oppressive. On the contrary, 'the existence of debt borrowed on the security of the land is itself evidence that the land is good security. The extent of the debt is an indication of the value of the security' (*Bardoli Report*, par. 119).

[3] See S. C. Ray, *Agricultural Indebtedness in India and its Remedies* (Calcutta University), *Statutory Report on Agricultural Credit by the Reserve Bank of India* (1937), *The Indian Finance Year Book* (1937), *The Indian Co-operative Review* (July-September, 1937) and C. F. Strickland, *The Relief of Agricultural Debt* (1028).

seventies of the last century. The question was discussed from time to time by the Deccan Riots Commission and the Famine Commissions of 1880 and 1901 and formed the staple of the debates and dispatches on the Deccan Agriculturists' Relief Bill (1878), on the Takkavi Loans Act (1882-3), the Agricultural Bank Scheme (1884), Nicholson's Report (1897), the Punjab Land Alienation Bill (1899) and the Co-operative Credit Societies Bill (1903).

Sir Edward Maclagan, in his Note on Agricultural Indebtedness in India, classifies the measures taken by the Government under four heads as follows: (i) measures taken to encourage the avoidance of unnecessary debts; (ii) measures for the improvement of the civil law in connexion with agricultural debts, including measures to regulate money-lending; (iii) measures for restricting the alienation of land; and (iv) measures undertaken with the object of providing or maintaining credit or reducing debt. To these we may add (v) measures for debt conciliation and liquidation. These may be considered after (ii).

§6. **Measures to avoid unnecessary debts.**—Under this heading we may mention efforts made to popularize primary education in rural areas to enable the ryots to take a more businesslike view of their indebtedness and to meet the money-lender on a more equal footing. Education, however, remains woefully deficient both as regards quantity and quality. All the other measures taken by the Government to increase the resources of the agriculturist may logically appear under this heading, but a good many of them have already been discussed in previous chapters. Suspensions and remissions of assessment in years of scarcity have also been granted as partial remedies. But the system needs to be more liberally administered in order to fulfil adequately the purpose for which it is meant. Village post office savings banks have been started to inculcate habits of saving and thrift among the people. But these facilities need to be far more widely extended than at present to produce an appreciable effect in promoting thrift and in gathering together the little savings of the ryot for fruitful employment.

§7. **Measures for the improvement of the civil law.**—As we have already seen, the original policy of *laissez-faire* had to be abandoned by the Government as it unduly disturbed the old balance between creditor and debtor,[1] and it was found necessary

[1] It may be readily granted that the changes which have come with the advent of British rule, such as better-defined rights of property, a more complete recognition of the force of contracts and a stricter enforcement of them

to 'take back many of the weapons inconsiderately placed in the money-lender's hand and shown to have been misused . . . and to substitute for the blind and ruthless operation of legal machinery the intelligent dispensation of justice between man and man'.[1] In achieving this object, however, it is of the utmost importance as well as difficulty to guard against the possibility of violent interference with the legitimate business of the rural banker, leading to a disastrous contraction of credit. The sahukar, far from being hindered, should be actually assisted by law in recovering his reasonable claims. The ryot, no doubt, should be protected from extortion and oppression but at the same time he should be constrained to pay his just debts to the full extent of his means. To protect the ryot several alterations were made in the Code of Civil Procedure in the matter of executing decrees against agriculturists. For example, agricultural tools and implements, and cattle necessary for tillage, and the materials of the agriculturist's house were exempted from attachment or sale; the agriculturist debtor was also exempted from arrest for a decree of the court and was given the concession of repayment of his debts by instalments.

The Deccan Agriculturists' Relief Act of 1879 was passed on the recommendation of the Deccan Riots Commission of 1875 appointed to inquire into the riots in certain districts of the Deccan, a feature of which was a violent attack on the money-lenders by their oppressed debtors. The Act allowed the courts to go behind the contract and to modify it in favour of the agriculturist so as to reduce an oppressive rate of interest, to prevent sale of land unless specifically pledged and to restore the land to the cultivator even when there was a sale deed between the two parties. The Act made it obligatory on creditors to furnish accounts and grant receipts, and required mortgages by agriculturists to be in writing. The period of limitation, which since 1859 had been three years only, was extended in the case of suits against agriculturists to twelve years, if the suit was based on a registered deed, and to six years otherwise. Though the Act was well-intentioned it has, on the whole, been found to be ineffective

through the civil courts, are marks of a transition from a less to a more advanced social organization. But so far as most of the cultivators were concerned, these changes were immediately disastrous to them as they were not sufficiently advanced either as regards education or economic condition to benefit by the changes.

[1] Sir T. Hope's speech in the Governor-General's Council on the Deccan Agriculturists' Relief Bill (1879).

and even positively injurious. It has increased litigation and disturbed the structure of normal credit by introducing uncertainty into the transactions between ryots and sahukars; it has led to an abuse of the concessions by the cultivators and made the money-lender more guarded and exacting in his dealings with them, thus increasing the difficulty of borrowing. The definition of 'agriculturist' is also too wide, and it is often abused for the benefit of persons for whom it was not intended, and makes it possible for them to dodge the courts and defeat honest creditors. According to the Famine Commission of 1901, there was positively room for holding that transfer of property both by sale and mortgage had become more frequent since the Act was passed. A recent Bombay committee has therefore suggested radical changes in the Act so as to make it workable and truly beneficial to the agriculturist.[1] Several witnesses before the Bombay Banking Enquiry Committee urged its total abolition, pointing out that the Usurious Loans Act of 1918 and the courts' inherent power to grant relief from unconscionable bargains make the Act superfluous. That Committee, while suggesting that the Usurious Loans Act should be utilized more than is being done at present, held the view that it cannot entirely replace the Deccan Agriculturists Relief Act. They recommend therefore that the latter Act should be repealed and replaced by a new Act containing a few provisions to safeguard the interests of only small and genuine agriculturists. Investigations of past transactions should be rendered possible by requiring money-lenders to keep proper accounts. Provision should be made for allowing repayment by reasonable instalments and for restricting the time within which the validity of a sale can be challenged.[2]

The Bombay Money-lenders' Bill (1938), which has been referred to a Select Committee, seeks to regulate money-lending in a more thoroughgoing manner than is provided for under the Deccan Agriculturists Relief Act (see §8 below).

As another instance of the alteration of the civil law, mention may be made of the Act of 1899, by which certain changes were made in the Contract Act, and the scope of the term 'undue influence' was extended so as to cover all cases in which unfair advantage was taken of his dominating position by the sahukar. Whenever the transaction was apparently unconscionable, the burden of proving absence of undue influence was thrown on the

[1] See also *Agricultural Commission Report*, K. S. Gupte's Memorandum, Minutes of Evidence, vol. II.

[2] See *Report of the Bombay Banking Enquiry Committee*, pars. 239-40.

money-lender. The Usurious Loans Act, as consolidated and amended in 1918, aims at determining the legal and maximum amount of interest recoverable, reducing the rate of interest chargeable and fixing a maximum rate of interest. (The Act applies to all persons, whether agriculturists or non-agriculturists.) 'An important feature of the Act is that the court once seized of a case may, of its own motion, re-open old transactions and inquire into the equity of the terms. The Act was amended in 1926 to include cases in which either party to a mortgage seeks relief. Where the debt is unsecured, the debtor can draw the creditor into court and, therefore, into the sphere of this Act, by the simple expedient of refusing to renew his loan.'[1] The Agricultural Commission and some of the provincial Banking Enquiry Committees held that the Act was practically a dead letter. Its failure has been attributed to 'the lack of an obligation binding the overworked Munsifs to use it, to the lack of a prescribed rate of interest, to the debtor's ignorance of law, or even to an excessive regard for the sanctity of contracts which were substantially unfair'.[2] In recent years (1933-7) several provinces (Bengal, Assam, the Central Provinces, the Punjab, the United Provinces, and the North-West Frontier Province) have amended the Usurious Loans Act (1918) making it incumbent upon a court of law to re-open the account and reduce the rate of interest as prescribed in the amending Acts. The Bombay Money-lenders' Bill (1938) contains a similar provision.

§8. **Legislation regarding licensing and control of money-lenders.**—In several countries measures have been taken to regulate the business of money-lending, because the power which money-lenders have over their borrower is so apt to be abused. This is especially the case with regard to unscrupulous money-lenders, particularly among petty money-lenders who have no status to maintain. The number of such persons and the degree of their sharp practice depend upon the degree of the backwardness of the community among whom their operations are conducted. The Royal Commission on Agriculture commended the principles underlying the Punjab Regulation of Accounts Bill (passed into an Act in 1930) and the British Money-lenders' Act of 1927 to the consideration of provincial Governments.[3] The English Act provides for the taking out of licenses by money-lenders, prohibition of compound interest, supply of information and copies of the

[1] *Agricultural Commission Report*, par. 365.
[2] C. F. Strickland, *Relief of Agricultural Debt*, p. 10.
[3] *Agricultural Commission Report*, par. 366.

relevant documents relating to the state of loan on demand by the borrower. The various provincial Banking Enquiry Committees were not unanimous as regards the expediency of licensing money-lenders, while most of them favoured legislation on the lines of the Punjab Regulation of Accounts Act. The Central Banking Enquiry Committee did not favour either a compulsory or a voluntary system of licensing money-lenders. Licensing of money-lenders has been objected to on the ground that the illiterate class of borrowers in the country cannot afford to lose the goodwill of the creditors on whom they are dependent, that there is difficulty in defining the term 'money-lender' and that there is little use in passing legislation which on account of the strong position of the money-lender can be easily evaded. On the other hand it has been rightly pointed out that licensing and registration of money-lenders are essential for the enforcement of any regulation of professional money-lenders and that there is no valid reason for any resentment by them having regard to the fact that the principle of registration and license is applied to the members of one of the most respected professions, namely that of law.[1] In recent years the adoption by provincial Governments of the policy of granting relief to and protecting the agriculturist debtor, who has been hard hit by the slump in prices, has resulted in several enactments for the registration and licensing of money-lenders, and regulation of money-lending in the interest of the borrower.[2] In Bombay the Money-lenders' Bill of 1938 was expected to come before the provincial legislature in the budget session of (February-April) 1939. The Orissa legislature is also considering a similar bill. The Usurious Loans Act (1918), as already pointed out, has been amended in several provinces.

As it is not possible to review here the several provincial Acts and Bills, we shall indicate their main features: (i) definition of money-lenders, (ii) registration and licensing of money-lenders,

[1] See *Reports of the Bengal* (par. 320) and *Central Provinces* (pars. 1678-80) *Banking Enquiry Committees.*

[2] The relevant Acts for the various provinces are as follows:—

(i) *The Punjab*: The Regulation of Accounts Act, 1930; Relief of Indebtedness Act, 1934; Debtors' Protection Act, 1936 and Registration of Money-lenders' Act, 1938. (ii) *Bengal*: Money-lenders' Act, 1933. (iii) *Central Provinces*: Money-lenders' Act, 1934; Reduction of Interest Act, 1936; Protection of Debtors Act, 1937. (iv) *United Provinces*: Agriculturists' Relief Act, 1934; Encumbered Estates Act, 1934; Regulation of Sales Act, 1934. (v) *Assam*: Money-lenders' Act, 1934. (vi) *Madras*: Debtors' Protection Act, 1934; Agriculturists' Relief Act, 1938. (vii) *Bihar*: Money-lenders' Act, 1938.

(iii) regulation of accounts, (iv) regulation of interest and (v) miscellaneous provisions.[1]

(i) *Definition of money-lenders*:—Provincial legislatures have not found it easy to define a money-lender. In some Acts (Assam, Bengal and Bihar) the definition is rather broad. The usual phrase is one who 'advances a loan in the regular course of business'. The general object is to regulate private money-lending which is not organized, unlike money-lending by Banks, Co-operative Societies and the Government.

(ii) *Registration and licensing of money-lenders*:—The money-lender is required to register himself and obtain a license in Bihar, the Central Provinces and the Punjab. The Bombay Money-lenders' Bill makes a similar provision. The annual license duty as prescribed by the Bombay Bill varies according to the capital employed by the money-lender, being Re. 1 when the capital does not exceed Rs. 2,000 rising to Rs. 1,000 when it exceeds Rs. 10 lakhs. Provision is made for the cancelling of licenses under certain circumstances such as dishonesty on the part of the money-lender. The penalty to the money-lender for not taking out a license is the withholding of the assistance of the courts in enforcing his claims, as in Bihar and the Punjab. In the Central Provinces the money-lender is liable to a fine. Time for making good the defect is allowed in Bombay, on payment of a penal license fee. The enforcement of registration of numerous money-lenders, especially in a province like the Punjab, is not an easy task. Even in England unlicensed persons are from time to time detected. The device of lending through a man of straw, as in Zanzibar, can be adopted without fear of frequent detection. The 'law merely enables an honest money-lender to offer prima facie evidence that he is honest'.[2] A system of state inspection and supervision of money-lenders' activities as in the U.S.A. may ensure better enforcement of the law.

(iii) *Regulation of accounts*:—Under the various provincial enactments regulating money-lending, the money-lender is required to maintain regular account books and to furnish each debtor annually, or six-monthly, with a legible statement of accounts signed by himself or his agent in respect of each loan transaction, showing the outstanding amount of principal and interest and the amount of every payment received from the debtor. In Assam and Madras this statement is to be supplied only on the debtor's

[1] See Paper on 'Legislation for the Relief of Indebtedness' read by Professor C. N. Vakil at the Indian Economic Conference (1938).

[2] C. F. Strickland, op. cit., p. 17.

demand. The debtor is not, however, bound to admit correctness of accounts as furnished by the creditor. The money-lender is also required to pass receipts for payments received. The usual penalty for failure to maintain proper accounts is the loss of interest (wholly or in part) found due, and also of costs of suits for the recovery of arrears. It is generally thought that these penalties are light and can hardly be deterrent. Non-suiting of the creditor can be the only effective penalty, and even the latest Bombay Bill does not provide for it. The entry of a fictitious amount in excess of the actual amount loaned out has been declared an offence which is punishable with a fine in Assam, Bihar, Bombay and the United Provinces. The Punjab Act provides for dismissal of the suit.

(iv) *Limitation of rates of interest*:—The various Acts prescribe the maximum rates of interest that can be charged, distinction being made (except in Madras) between secured loans and unsecured loans. Higher rates of interest are allowed on unsecured loans. Compound interest is prohibited in the case of the Bombay Bill, and Bihar and Assam. The following table indicates at a glance the position regarding rates of interest prescribed by law in the various provinces.[1] The United Provinces have adopted

Province	Secured		Unsecured	
	Simple interest	Compound interest	Simple interest	Compound interest
Madras	6¼	...	6¼	...
Bombay (Bill)	9	prohibited	12	prohibited
Bengal	15	10	25	10
Punjab	12	9	18	14
Bihar	9	prohibited	12	prohibited
Orissa (Bill)	9	prohibited	12	prohibited
Central Provinces	7	5 with yearly rests	10	5 with yearly rests
Assam	12½	prohibited	18¾	prohibited

a novel arrangement, namely notification by the Government from time to time of the interest allowed in consonance with the conditions of the money market in relation to loans incurred prior

[1] See Paper on 'Legislation for the Relief of Indebtedness' read by Professor C. N. Vakil at the Indian Economic Conference (1938).

to the Agriculturists' Relief Act of 1934. On loans subsequent to the Act, the rate of interest varies according to the amount of the loan, being lower as the amount is larger. This arrangement provides for a reasonable element of elasticity, which is lacking in the other provincial Acts.

In this connexion it may be noted that most of the provinces (Assam, Bengal, Bihar, the Central Provinces, Madras, the Punjab, and the United Provinces) have adopted the old Hindu rule of *damdupat*, which appeals to the Indian mind and has been embodied in the recent debt legislation including the Bombay Money-lenders' Bill (1938). According to this rule, interest on a loan is not to exceed the principal. The interpretation of the rule is not, however, easy in the case of a running account—and the phraseology of the various Acts is not uniform. This rule may be welcomed in so far as it leads creditors to sue the debtors within a reasonable time.

The great disparity of interest rates as prescribed in the various provincial Acts reveals the divergence of conditions in the money market in the different parts of India and the imperfect control of the money market by the Reserve Bank of India. Limitation of the rate of interest has appealed to many governments in the past, but it is an ideal very difficult of enforcement in practice. In those cases where the legal rate of interest is not adequate to cover the risk involved in the grant of a loan, or where the borrower is a needy person or again where the lender is unscrupulous, the law may be evaded either by agreement in favour of a higher rate of interest out of court, or by entering a fictitious large loan at the legal rate of interest. The legal rate of 6¼ per cent (simple interest) on all future loans prescribed by the Madras Agriculturists' Debt Relief Act of 1938 (see §11 below) appears to be too low to ensure adequate supply of credit and does not even allow for the distinction between secured and unsecured loans. The local Government has, however, been allowed by the Act to declare a higher rate and this probably will have to be done having regard to the fact that even Co-operative Societies (other than Land Mortgage Banks) are charging rates of interest higher than those prescribed by the new Madras Act.

(v) *Miscellaneous*:—Finally the provincial enactments regulating money-lending and seeking to protect the agriculturist debtors contain provisions which forbid molestation and intimidation of debtors, as in the Central Provinces and Bombay (the Money-lenders' Bill) and prescribe punishments for this offence. Exemption of a part of the holding from attachment and sale in execution of a decree of the court as in the Punjab, Bihar, the United Provinces and

Bombay,[1] grant of instalments as in the Central Provinces and the United Provinces, Bihar (in the case of mortgage suits) and Bombay, restriction of usufructuary mortgages to a reasonable number of years and permission to the debtor to redeem certain old mortgages, as in the United Provinces, are other forms of relief granted to the agriculturist debtor.

Rural debt legislation as outlined above and relating to debt conciliation and reduction (see §§10-11 below) has a certain tendency to restrict the supply of credit in the rural areas. According to reports received there is already such a tendency in evidence. 'In areas where such legislation is in force it is said that money-lenders have discontinued lending except to old and trusted clients, and have restricted their loans to a minimum.'[2] This is not, however, an unmixed blessing as it has taught the cultivator to live within his means and has created a demand for the establishment of additional co-operative credit societies. Moreover, legislation regulating money-lending must not be judged by this temporary result. Honest money-lenders have nothing to lose from enactments intended to protect illiterate and needy debtors from the malpractices of unscrupulous money-lenders. Then again, capital now used in money-lending must find a use, and there are not many alternative channels of remunerative investment available to the money-lender. For many years to come there will remain a wide field for honest business in supplying the legitimate needs of agricultural operations.

§9. **Debt conciliation and liquidation.**—The Central Banking Enquiry Committee suggested that a serious effort should be made to find a remedy for the chronic indebtedness of the agriculturist, so far as it relates to unproductive debt. In their opinion the most effective remedy would be found in the pursuit by provincial Governments of a vigorous policy of debt conciliation on a voluntary basis. For this purpose special officers should be appointed in each province whose function would be by propaganda to persuade the lender and the borrower to agree to a redemption of standing debt on the basis of a cash payment or equated payments spread over a number of years. The existing co-operative

[1] 'Bengal and Bihar exempt one acre of land and Bengal the dwelling house. The United Provinces has a similar but less explicit provision. The Bombay Small Holders' (Temporary) Relief Act (1938), exempts land, house, crops and cattle (owned by a "small holder", i.e. a cultivator holding land not exceeding six acres of irrigated land, or eighteen acres of other land) and indicates the probability that such exemption will be granted by the permanent law which is promised.'—C. F. Strickland, op. cit., p. 23.

[2] *Statutory Report on Agricultural Credit* (Reserve Bank of India), par. 11.

societies should be utilized as the agency for the payment to the lender by the borrower, who should become a member of the co-operative society which, in turn, should supply him with his current needs in future. The Government should have a regular programme of advances to co-operative societies for debt redemption where the lender wants a cash payment. If necessary, the whole arrangement should have the backing of a legislative enactment. In those cases where the lender would not agree to a voluntary settlement of the debt it would be necessary to take action to secure compulsory settlement by means of a legislative enactment.[1]

§10. **Recent debt conciliation legislation.**—The question of conciliation of rural debts has attracted the notice of almost all the provincial Governments owing to the severity with which the slump in agricultural prices has fallen on the farmer-debtor class. Several legislative measures, largely based on the recommendations of the Central Banking Enquiry Committee, have been passed to give the rural debtor a much-needed relief, or are under consideration. The Government of the Central Provinces and Berar were the first to introduce the experiment of debt conciliation boards under the Debt Conciliation Act passed in February 1933. Their example was followed by the Punjab in 1934, when the Punjab Relief of Indebtedness Act was passed authorizing the establishment of Debt Conciliation Boards as in the Central Provinces. Bengal followed suit with its Agricultural Debtors' Act in 1935. Madras provided for debt conciliation by the enactment of the Debt Conciliation Act of 1936. Assam passed its Debt Conciliation Act in the same year. In Bombay, the Debt Relief Bill was referred to a Select Committee in April 1939, and similar legislation is contemplated in Bihar.

Debt conciliation legislation in the various provinces has certain common features, although there is divergence in the detailed procedure. We may now review the main provisions of the Acts.

Debt Conciliation Boards.—The central idea underlying these Acts is that scaling down of debts should take place as a result of mutual agreement between the debtor and the creditor through the machinery of Debt Conciliation Boards varying in size from 3 to 9. The Boards consist of officials and non-officials and include representatives of the class of debtors and creditors respectively. The chairman is an officer from the executive or judicial service. The jurisdiction of the Boards is limited in certain provinces, e.g. in the Central Provinces only debtors who do not

[1] See *Report of the Central Banking Enquiry Committee*, pars. 91-2.

owe more than Rs. 25,000 may apply to the Debt Conciliation Boards. In the Punjab the limit is Rs. 10,000. In Madras the minimum limit is Rs. 100 and the maximum Rs. 25,000. Co-operative debts are differently treated in the various provinces: e.g. they may be included in the scope of debt conciliation in the Central Provinces and Madras subject to the previous approval of the Registrar of Co-operative Societies; on the other hand, co-operative debts are excluded in the Punjab. It is wiser to include them and then to discriminate between them and other debts so far as the degree of conciliation of debt is concerned.

Procedure:—A debtor or any of his creditors may apply to the Board appointed for the area in which the debtor resides, to effect a settlement between him and his creditors or debtor respectively. Every creditor is called upon to submit a statement of debts owed to him within a specified period. Failure to do so entails a discharge of all debts owed to him. The Board has to give an opportunity to all the parties to explain their case. In certain provinces, e.g. the Central Provinces, lawyers are not allowed to appear before the Boards. In others, e.g. the Punjab and Assam, they are allowed. The Board has no authority to give a decision, but has to depend only upon powers of persuasion to induce the parties to arrive at an amicable settlement. In case agreement is reached relating to a certain percentage (40 per cent in the Central Provinces) of the debts owing to the creditors, it is signed by the Board and is registered under the Indian Registration Act, and takes effect as a decree of the civil court. The instalments of the debt, as conciliated, are fixed with due regard to the paying capacity of the debtor and usually no interest is allowed on the conciliated amount. The rule of *damdupat* is generally observed.

In Bengal it was thought necessary to endow the Boards on occasions with powers for compulsion in varying degrees whenever voluntary methods fail. Another noteworthy feature of the Bengal Agricultural Debtors' Act (1935) is that it provides for a simple insolvency procedure on the lines recommended by the Royal Commission on Agriculture[1] for rural areas. The absence of such procedure in other provincial Acts is a handicap in those cases where there are difficulties to arrange for the satisfaction of the conciliated debt even by a number of instalments.

Refractory creditors:—The various Acts provide for the issue of certificates by the Board to the debtor of a refractory creditor who refuses to accept a fair offer. Such creditors are not entitled

[1] *Report*, par. 367.

to costs in suits for the recovery of such debts or to any interest after the date of the issue of the certificates in excess of simple interest of 6 per cent per annum on the amount due. In the Punjab the Board can grant such a certificate only when creditors to the extent of 40 per cent of the debtor's liabilities have come to an amicable settlement with the debtor; the percentage in Madras being 50. The decisions of the Boards are final and Civil Courts are debarred from entertaining suits regarding debts conciliated. The Board itself has, however, power to review previous orders under certain circumstances. In Bengal appeals are allowed against the awards made by the Board.

Working of the Debt Conciliation Boards:[1]—The working of these Boards shows variation from province to province. In only three provinces, namely, the Central Provinces, the Punjab and to some extent in Bengal, have substantial results been achieved. A greater degree of success has attended the experiment in debt conciliation in the Central Provinces, where nearly fifty Debt Conciliation Boards were established by the Government. Several of these have already been wound up after completing their work. Taking the work of all these Boards, 46,537 cases involving an amount of Rs. 5·63 crores were settled till the end of June 1937. The amount was scaled down to Rs. 2·93 crores, which means that 48 per cent of the total debt has been remitted.[2] Remissions generally have been the largest in the case of unsecured loans. Frequently no future interest has been allowed on the reduced amount of debt. The number of Boards at work in the Punjab is five, while in Assam there are only two Boards. In Madras the work is in the experimental stage and a feeling prevails that a fair trial has not been given to the Conciliation Boards. The working of the Boards in Bengal has not been smooth and is characterized by long delays. The operation of the Boards in the Punjab has revealed certain defects. The provision in the Punjab Act requiring creditors, to whom there is owing not less than 40 per cent of the total debt, agreeing to an amicable settlement with the debtor for the grant of a certificate to the latter has had the result that the debtors include fictitious creditors in the list so that the limit of 40 per cent may be reached. Genuine creditors are thus made to suffer. We have already referred to the restrictive effect on the supply of rural credit.

[1] See *Indian Co-operative Review*, July-September, 1937 and Papers on Rural Debt Legislation read at the Indian Economic Conference, 1938.

[2] Article on 'Debt Relief in the Central Provinces' by Dr P. J. Thomas in the *Indian Co-operative Review*, July-September, 1937.

Repayment of conciliated debts:—The crux of the whole problem of debt conciliation is the arrangement for the repayment of the amount of the debt as finally settled. Although in some cases, especially in the Punjab, payment has been made in a single transaction by sale of cattle and jewellery or by a terminable lease of lands, instalments are usually arranged spread over a period of 15 to 20 years. As Mr Strickland points out, 'the test of conciliation will come when the first few annual instalments have been paid and the sense of alleviation has worn off'.[1] It is obvious that the method of debt conciliation would work more successfully provided a suitable mode of repayment could be devised. Creditors would then agree to large remissions. The Land Mortgage Bank, which has the necessary technical equipment for carrying on long-term transactions on business lines (see ch. x.) appears to be a very suitable agency for carrying out a programme of debt conciliation. If such a bank is prepared to advance the whole conciliated amount to the creditor he would agree to a substantial remission of his claims. Thus the need for co-ordinating the working of Debt Conciliation Boards and Land Mortgage Banks is obvious. It was the realization of this need which led the Government of the Central Provinces in 1935 to launch a system of Land Mortgage Banks, of which there are now about a dozen in that province. Madras with its 100 Land Mortgage Banks has shown the most promising progress in this direction.[2]

Need for compulsion:—There is a growing conviction in the Central Provinces, Madras and elsewhere that if conciliation of debts is to make fair progress within a reasonable time the voluntary principle must be replaced by one based on compulsion. It should be borne in mind that conciliation is an emergency measure and is analogous to a surgical operation. If it is to do any good without serious harmful reaction, it should be carried out with reasonable speed and should not be unduly prolonged. Voluntary debt conciliation does not ensure dispatch and moreover its working is apt to be uneven and uncertain.

§11. **Compulsory scaling down of debts**:—(i) *The Madras Agriculturists' Relief Act* (1938).—It was the realization of this fact that led to the adoption of a bold policy of debt relief by the Congress Ministry in Madras, which got the Agriculturists' Relief Act through the Provincial Legislature early in 1938. This Act is an aftermath of the Moratorium Bill of the preceding year, which the Ministry had to abandon owing to widespread opposition.

[1] C. F. Strickland, op. cit., p. 13.

[2] The progress made by Land Mortgage Banks in the various provinces is reviewed in ch. x.

The object of this measure, which is more radical and drastic than any that has been passed or contemplated in the rest of India, is to rehabilitate agriculture, the basic industry of the province, by relieving the producers of food from the incubus of indebtedness. The Act provides for the compulsory scaling down of debts as distinguished from conciliation and settlement by agreement attempted earlier in Madras and elsewhere. It offers relief to ryots without any upper limit irrespective of their capacity to repay and of the status of the creditor. The Act rightly distinguishes between pre-depression and post-depression debts. All arrears of interest outstanding on 1 October 1937 on debts incurred prior to October 1932 are wiped off, only the principal being payable. The debts incurred after that date are to be charged only 5 per cent interest up to 31 October 1937. The rule of *damdupat* is to be enforced in favour of the debtor. Debt accordingly is deemed to be discharged if the total payments either by way of interest or principal amount to twice the principal. In case the payments are less than twice only the balance has to be paid. On debts so scaled down as also on future debts incurred after the commencement of the Act the maximum legal rate of interest has been fixed at 6¼ per cent; but it may be altered from time to time by the Provincial Government. Co-operative Societies, and certain classes of banks have been exempted from the operation of the Act. The Act also extends relief to tenants by wiping out all arrears of rent except those of the previous two years, provided these latter are paid by September 1939. The provisions of the Act can be applied also to decreed debts. Sales of movable or immovable property of the agriculturist can be set aside if such sales are made in execution of a decree after 1 October 1937. The enforcement of the Act will be affected by the ordinary courts. According to figures contained in a press communique recently issued by the Government of Madras on the working of the Agriculturists' Relief Act in the half year ending with August 1938, more than 36,000 cases have been disposed of involving Rs. 76 lakhs of debts which have been scaled down to Rs. 40 lakhs, i.e. by 47 per cent. But 7,000 of these cases involving Rs. 46 lakhs were applications by judgement-debtors for the amendment of decrees passed by courts already and there were 18,700 applications for the stay of execution proceedings.[1]

[1] The Act may be expected to be more vigorously enforced now that recently (February 1939) the Madras High Court has given its decision that the Agriculturists' Relief Act is not *ultra vires* of the Provincial Legislature where it affected the liability arising under pro-notes which are also governed by Central legislation, viz. the Negotiable Instruments Act.

This unique piece of rural debt legislation in Madras has been the subject of numerous criticisms. In the first place, the Act does not make any provision for the setting up of machinery with legal powers and financial resources to satisfy the claims of creditors or to relieve the debtors quickly, to pay off the scaled down debts to the former and recover them gradually from the latter.[1] No doubt there are several Land Mortgage Banks operating in the province, but the creditors are not compelled to receive payments through them. Furthermore, apart from delay in grant of loans by these Banks, their resources are limited. It is noteworthy, however, that the Government of Madras have provided in the last (1938) budget a sum of Rs. 50 lakhs for the relief of small indebted agriculturists by way of direct loans from the Government.[2]

Another criticism is that the maximum legal rate of interest (6¼ per cent) prescribed by law is too low, especially in the case of unsecured loans, and will have to be revised by the Government if adverse effects on the supply of credit are to be avoided. Already it is said that the Act has curtailed the supply of credit even to the extent of land being left fallow in some districts. In other cases the legal rate of interest is being circumvented, the needy borrower becoming himself an accomplice. The demand for even the unpopular takkavi loans and for co-operative credit has increased.[3] The last-mentioned result is not in itself undesirable, provided the expansion of co-operative credit is directed on sound lines.

(ii) *Central Provinces and Berar Relief of Indebtedness Bill* (1938):—The Central Provinces Government have also recently (July 1938) brought forward a new Bill for substituting certain compulsory methods for scaling down of debts in place of the mutual agreement of the old Debt Conciliation Act (1933). The new Bill proposes to scrap the machinery of Debt Conciliation Boards (in this respect it differs from the Madras Act (1938) which retains these Boards) and provides in its place Debt Relief Courts with certain restricted appeals to the District Judge. The Bill provides for the grant of graded relief based on the estimated fall in the value of land in respect of the principal of the debts as follows: (*a*) 30 per cent reduction in the case of debts prior to 1-1-1926,

[1] See paper on 'Debt Legislation and Rural Credit in Madras' read by Professor K. C. Ramkrishnan at the Indian Economic Conference (1938).

[2] *Indian Co-operative Review*, April-June, 1938, p. 143.

[3] See paper on 'The Madras Agriculturist Debt Relief Act' read by Dr B. V. N. Naidu and P. Vaidyanathan at the Indian Economic Conference, 1938.

(*b*) 20 per cent in the case of debts between 1-1-1926 and 1-10-1929 and (*c*) 15 per cent in the case of debts between 1-10-1929 and 31-12-1930. No relief is provided for debts incurred subsequent to 31-12-1930. The payment of interest is limited to 4½ per cent compound interest with yearly rests, or 6 per cent simple interest on secured loans and 9 per cent on unsecured loans. Rent debts (unlike in Madras), debts due to co-operative societies and certain banks are excluded from the scope of the Bill. The scaling down of debts under the new Central Provinces Bill will be more thorough than in Madras but this is likely to involve more delay since this process is subject to a legal arrangement, while in Madras resort to a court of law is necessary only if the parties do not agree in the application of the law to their case. The Bill provides for the transfer of land in lieu of debt. Altogether the proposed Central Provinces legislation appears to be more complex than the Madras Act of 1938.[1]

(iii) *The Bombay Agricultural Debtors Relief Bill* (1939) :—A Bill to provide for the relief of agricultural debtors in the province of Bombay has recently (April, 1939), been referred to a Select Committee of the Bombay Legislative Assembly. Compulsory scaling down of debts according to capacity to pay as ascertained by Debt Adjustment Boards appointed by the Government is its most salient feature. The Boards—there will be some 900 of them—will work under the control of the Civil Courts, which are empowered to hear appeals in specified cases. Interest is to be not more than 6 per cent on debts contracted before January 1939 and not more than 9 per cent on subsequent debts. The relief contemplated by the Bill is limited to cultivating agriculturists the total principal amount of whose debts, secured by property, is not more than Rs. 15,000 and not less than Rs. 100. The debtor seeking relief must be a member of a resource society which will supply him with current finance. A debtor whose assets are inadequate for payment of the scaled-down amount can be declared insolvent by the Board. The award made by a Board after being registered by a Civil Court will be executed by the Collector. The Debt Adjustment Board or Court is authorized to order sale of a debtor's property in liquidation of his debt if such a procedure is in his interest. Only approved co-operative societies can lav claim to standing crops; to all other creditors they will be inalienable.[2]

The purpose of the Bill as pointed out by the Hon Mr A. B. Latthe is to relieve debt, to lighten past burdens and prevent

[1] *The Servant of India*, 14 July 1938.

[2] *Bombay Government Gazette*, 20 February 1939, pp. 117-60.

future ones; and to regularize what advances must be made to farmers to maintain a sound, cyclical, rural economy.

(iv) A Bill for the relief of rural indebtedness which aims at liquidating about Rs. 100 crores of debts and regulating future credit to prevent the cyclic recurrence of heavy rural indebtedness is to be introduced by the Government of the United Provinces in the Legislative Assembly in the near future.[1]

(v) Some Indian States like Bhavnagar, Mysore and Travancore have also adopted measures for setting up boards for the conciliation of debts. The most striking success has been attained in Bhavnagar where the debts, on being settled and very greatly scaled down, have been taken over by the Durbar who have paid off the creditors. We should, however, do well to bear in mind that it would not be quite so easy to launch in British India any conciliation scheme with the same prospects of success as in the case of the small Bhavnagar State where there was a ruler ready to wipe off arrears of land revenue and a counsellor so able and benevolent as the late Sir Prabhashankar Pattani and where sahukars with a realistic turn of mind were prepared to have their debts scaled down to as low as 25 per cent. There are inherent difficulties in a British province with a much larger population and more heterogeneous creditors.

In conclusion it may be pointed out that scaling down of debts, either by the voluntary method or one involving compulsion, simply aims at curing rather than preventing the fundamental causes of rural indebtedness and has therefore a limited utility. The Reserve Bank of India in its Preliminary Report on Agricultural Credit (1936) has rightly stressed the two aspects of this problem, namely the need for reducing debt and restricting credit and at the same time for increasing the earning capacity and purchasing power of the farmer by devising various measures for rural betterment. (*Report*, par. 10.)

§12. **Restrictions on the transfer of land.**—Almost everywhere in India 'proprietary' and 'tenant rights' greatly increased in value during the last 40 or 50 years of the nineteenth century, causing an unprecedented expansion of the peasant's credit, which was for the most part misused. No precautions were taken to prevent an ignorant and unthrifty peasantry from borrowing recklessly on the strength of the improved security of land, which began to pass rapidly out of the hands of the cultivator. So far from desiring to prevent transfer of land, the Government seemed at first actually to welcome it. It was thought that the facility of

[1] *The Times of India*, 10 April 1939.

transfer would result in land coming into the possession of cultivators with sufficient resources to exploit it fully. The authors of the Joint Report in Bombay, for example, wished special measures to be adopted to facilitate transfers, more especially as the customs of the country were adverse to transfers. The realization, however, gradually dawned on the Government that transfer of land to non-cultivating classes had reached a stage at which it was economically as well as politically dangerous, and that it was therefore necessary to restrict free alienation. Those who favoured legal restriction on free transfers of land desired it primarily to prevent the passage of land into the hands of the non-cultivating classes, though they also welcomed the secondary effect of such restriction, namely decrease of credit, as likely to diminish the rate at which debt was being contracted by the peasant class. Action was taken or contemplated in one form or another, the most outstanding case being that of the Punjab. Under the Punjab Land Alienation Act of 1901, non-agricultural classes are not allowed to buy land from a member of an agricultural tribe nor to take it in mortgage for more than twenty years. The success of the Act in preventing the expropriation of the peasant proprietor by the money-lender is undoubted. There is, however, a fly, or rather several flies, in the ointment. In the first place, the difficulty placed in the way of the educated townsman wishing to bring his capital, intelligence and enterprise to bear on the land is a handicap to agricultural progress. Such enlightened enterprise has been the principal cause of the progressive character of English agriculture. Even the agricultural classes have suffered from the inevitable contraction of credit. Another serious and unexpected evil has been the emergence of the agriculturist money-lender, and the growth of his influence. The restrictions of the Act until recently (see below) did not apply to him and he took advantage of his privileged position to expropriate his brother agriculturist in a manner as unscrupulous as that of the old money-lender. While therefore the Act has helped materially the retention of land in the hands of agriculturists, it is open to doubt whether it has appreciably diminished the evil of indebtedness.[1] In this connexion two recent (1938) amendments of the Act deserve notice. By the first of these amendments *benami* (fictitious), transactions are declared null and void, thus seeking to prevent alienation of land to men of straw. The second amendment aims at the inclusion

[1] See M. L. Darling, op. cit., pp. 183, 210, and the *Report of the Punjab Banking Enquiry Committee*, par. 175. A similar Land Alienation Act was passed for Bundelkhand in 1903. Restrictions on the alienation of land by aboriginal tribes exist in the Central Provinces and Bombay.

of the agriculturist money-lenders to a certain extent in the same category as the non-agriculturist money-lenders, in order to prevent the former from taking undue advantage of his privileged position under the original Act.

The Punjab Restitution of Mortgaged Lands Act, 1938, empowers a mortgagor to present a petition to the Collector praying for the restitution of possession of the land mortgaged prior to 8 June 1901, subject to certain conditions. Recent debt legislation in several provinces, as already pointed out (see §8), seeks to protect the property of the borrower by the exemption of a part of the holding from attachment and sale in execution of a decree of the court and restriction of usufructuary mortgages to a reasonable number of years. Facilities are also offered to redeem certain old mortgages in the United Provinces.

§13. **The supply of money and credit.**[1]—The takkavi loans are a very ancient form of state help to the ryots in India, and the Government passed Takkavi Acts in 1871, 1876 and 1879 respectively. But no active help was rendered until after the passing of the Land Improvement Loans Act of 1883 and the Agriculturists' Loans Act of 1884 as recommended by the Famine Commission of 1880. Under the former Act, long-term loans for permanent improvements on land, such as wells and embankments, were to be granted, and under the latter, short-term loans for current agricultural needs, such as the purchase of seed, cattle, manure, implements, etc. These loans have been useful to agriculturists, especially at critical times, when they have helped to mitigate the prevalent rates of interest and have served in some measure to establish a connexion between the village and the wider money-market from which the Government sometimes borrow for this purpose.

Takkavi loans, however, have never been popular. The Irrigation Commission of 1901-3 estimated the total amount so lent at six crores of rupees—a mere drop in the ocean. The figures relating to loans under the two Acts furnished more recently by the provincial Banking Enquiry Committees illustrate the very insignificant part played by the Government in the matter of supplying

[1] The sources from which rural financial supplies are now obtained may be conveniently mentioned here. They are: (1) Money-lenders (including sellers on credit), both professional and non-professional. (2) Indigenous bankers. (3) Co-operative organizations. (4) The Government. (5) Commercial banks, including the Imperial Bank of India, the exchange banks and the joint-stock banks. (6) Loan offices in Bengal. (7) *Nidhis* and chit funds in Madras. See *Report of the Central Banking Enquiry Committee*, par. 104.

rural finance.[1] These loans are granted only for specified purposes so that the ryot, rather than imperil his credit with the money-lender from whom he can borrow for all purposes, prefers not to avail himself of the state loans unless absolutely forced to. It is impossible to make any system of Government loans as elastic as that of the money-lender. The rigidity in the matter of collection is another disability which makes the takkavi loan unpopular. The endless delays in distribution, the exactions of petty official underlings and the general red-tape character of the revenue agency by which it is administered are further drawbacks. The system is also extraordinarily difficult to supervise and does not go to the root of the matter in that it fails to exercise any educative influence on the character of the ryot; some would even say that it tends to demoralize them. A fundamental defect of the Land Improvement Loans Act (1883) is that no loans can be granted under it for the redemption of old debts and consolidation of holdings—the two essential pre-requisites for agricultural improvements. Under the recent amending Acts passed in Madras (1935) and the United Provinces (1934), loans are now permissible in these provinces for redemption of old debts.[2] Lastly, the Government's credit and resources being limited, funds cannot be made available to the extent required.[3] As a general means of financing agriculture the system is a failure, although in respect of specified famine tracts and backward areas it has a limited use.[4] The Government seem to be waking up to the necessity of amending the administration of the takkavi. In illustration of this we may refer to the recent Government resolution on the subject containing instructions to make the procedure less rigid. The Board of Agriculture recommended in 1917 that takkavi loans should be given more freely to enable the ryots to purchase such manures, improved seeds and implements as may be recommended by the Agricultural Departments. In Bombay, under rules framed in 1922, the Government have availed themselves of the co-operative agency in the distribution of these long-term loans for effecting permanent improvements. An annual allotment is placed at the disposal for the Bombay Provincial

[1] See *Report of the Central Banking Enquiry Committee*, par. 236.

[2] The Government of Madras provided in the budget for 1938-9 a sum of Rs. 50 lakhs for the relief of indebted agriculturists by way of direct loans from the Government. *Indian Co-operative Review*, April-June, 1938, p. 143.

[3] See H. Wolff, op. cit., pp. 1-3.

[4] See *Agricultural Commission Report*, Minutes of Evidence, vol. III, Srinivasa Achariyar's evidence, also the *Report of the Central Banking Enquiry Committee*, par. 241.

Co-operative Bank for the purpose. The whole system of takkavi loans was passed (1929-30) under review by the various provincial Banking Enquiry Committees and the Central Banking Enquiry Committee[1] and several useful recommendations (for instance, the creation of a Government publicity agency) were made.

Outside the scope of any Acts, the Government have from time to time accommodated with loans certain well-known families, such as the Tagore family, to save them from ruin. Further, by the Encumbered Estates Acts and the Court of Wards Acts, the Government have assumed power to take special measures on behalf of the larger estates or the indebted properties of a definite area in order to rescue encumbered estates and protect from ruin estates that might otherwise have become insolvent.

All these measures have failed to solve the main problem of indebtedness, and the provision of a suitable and cheap system of credit for agriculturists still remains a desideratum. As Mr Ewbank observes, ' no mere legislative fiat can control the working of economic law '.[2] The Government realized this as early as 1884, when the Viceroy in a dispatch to the Secretary of State urged the necessity of a private bank to replace the village usurer and supply cheap capital to solvent ryots. Under the inspiration of Sir William Wedderburn and M. G. Ranade, a committee of the capitalists of the Poona district was formed in 1883 with the object of establishing a bank to finance the agriculturists of the Purandhar taluka. Relying on the power of recovery through the revenue officers and a few other small concessions such as priority granted to the loans of the bank, remission of stamp duty, etc., they raised a capital of 10 lakhs and had intended to begin by redeeming all the outstanding debts of the ryots. Though the scheme was approved of both by the Government of India and the Bombay Government, it was negatived by Lord Kimberley, the then Secretary of State, on the grounds (i) that the banks would be virtually a Government institution, (ii) that the scheme was financially unsound, as, judging from the assessment of the Purandhar taluka, the ryots could not possibly pay the interest or the amount advanced within any reasonable period, and (iii) that the Takkavi Acts of 1883 and 1884, already referred to, along with the Deccan Agriculturists' Relief Act and better judicial arrangements and proper registration of titles to land, would go sufficiently far to meet the needs of the situation. He further pointed out that what

[1] *Report*, pars. 238-45.

[2] R. B. Ewbank, *A Manual of Co-operative Societies*, p. 2.

the ryot wanted was a running account after the manner of the sahukar, which the bank could not possibly allow.[1]

§14. **Co-operative credit.**—The idea of using co-operation in India as a means of combating rural indebtedness and supplying credit was first suggested by Frederick Nicholson, a Madras civilian who had made a special study of agricultural and other land banks in Europe. Nicholson was entrusted by the Madras Government with the work of conducting an inquiry as to the feasibility of starting, in the Madras Presidency, a system of agricultural or other land banks, and in his famous report published in 1895-7 he pleaded powerfully for the introduction of co-operative credit societies in India. He asserted that in a country like India, no scheme could have any effect unless it was based on an intimate acquaintance with the circumstances of the borrowers on the part of the lender, whether an individual or a society, and that, although the sahukar in the village is usually acquainted with the circumstances of the borrower, he is an isolated unit unconnected with the general supply of credit in the country. He pointed out that the land banks in Europe had been of use only to the large cultivators. He disapproved of the idea of state banks as a cure for indebtedness, because the banks would have to be impossibly numerous to satisfy the chief test of credit, namely, proximity and security to the lender, and facility and safety to the borrower, and would demand an elaborate official establishment. Also the state could not command the requisite funds, and by excessive bureaucratic interference it would further encourage the disposition of the people to look to the state even in the ordinary affairs of life. The Government would, moreover, incur the odium of the bailiff in addition to that of the tax-collector. Nicholson concluded that co-operation offered the only satisfactory solution in a country like India for 'bringing to the peasant that continued ever-fluctuating credit which he needed'. He observed that conditions in Madras were not less favourable than those in Europe for co-operative credit banks, as there were already a number of successful indigenous societies known as *nidhis* comparable to the Friendly and Building Societies of Great Britain. He suggested that the starting of agricultural co-operative banks should be encouraged by the Government by legislation and suitable indirect means, although personal devotion and zeal were necessary for success. He summed up his conclusions in the two words, 'Find Raiffeisen'

[1] See *Agricultural Commission Report*, pars. 356-7, for an account of the Agricultural Bank in Egypt.

Some idea of the relative importance of the main classes of societies may be formed from the following table:

Type	Number of societies		Number of members	
	1906-7 to 1909-10 (average)	1936-7	1906-7 to 1909-10 (average)	1936-7
Central (including provincial and central banks and banking unions).	17	622	1,987	199,549
Supervising and guaranteeing unions (including re-insurance societies) ...		710		33,629
Agricultural (including cattle insurance societies)	1,713	96,209	107,643	3,154,711
Non-agricultural	196	13,426	54,267	1,563,430
Total ...	1,926	110,967	161,910	4,718,141
			Total number of members of primary societies.	

The official classification of co-operative societies adopted by the provinces on the suggestion of the International Institute of Agriculture at Rome is: (i) credit, (ii) purchase, or purchase and sale, (iii) production, (iv) production and sale, (v) insurance and (vi) others.

The following statistics give some idea of the progress made by various types of (i) agricultural and (ii) non-agricultural societies up to the year 1936-7.[1]

Credit	Purchase and purchase and sale	Production	Production and sale	Other forms	Total number of societies	Number of members	Working capital in Rs.
Agricultural societies							
80,915	402	1,296	2,790	1,436	95,989[2]	3,151,822	34,58,72,371
Non-agricultural societies							
5,936	636	14	1,233	5,186	13,417[3]	1,547,071	24,93,01,727

[1] *Statistical Statements Relating to the Co-operative Movement in India* (1936-7), pp. 12-15.

[2] Includes 9,150 societies for which details are not available.

[3] Includes 412 societies for which details are not available.

This brings out the overwhelming predominance of the credit societies, especially the agricultural credit societies, and the comparatively poor development of other types, though the situation in this respect is gradually improving. This classification is somewhat defective in so far as the returns based on it do not give an adequate idea of the true development of co-operation in India in certain important directions. For instance, many a credit society in India has tacked on purchase or sale or production or a combination of two or three of these functions to its original business of giving credit.

§9. **Primary agricultural credit societies.**—Let us now consider the different types of co-operative societies in India, laying special emphasis on rural credit societies, which represent the great bulk of the total number of societies. Beginning with a typical primary agricultural credit society we may consider it under various headings as follows:

(i) *Size.*—Any 10 persons can apply for the registration of a proposed rural credit society. The maximum strength of the society should preferably not exceed 100, because as the number increases the efficiency of management and supervision, as also the quality of training received by the members, suffers.

(ii) *The area of operation.*—The rule should be as far as possible one society for one village, which is usually the case. This is necessary to ensure mutual knowledge and the exercise of mutual control on the part of members.

(iii) *Liability.*—This is unlimited unless exemption from this rule is permitted by the Government. As the Maclagan Committee explain, unlimited liability means contributory unlimited liability, that is, in the case of default 'where there is a deficit in the engagements of a society to its creditors, this deficit should, after the full payment of shares (if any), be recoverable by a series of *per capita* levies upon the members up to the full extent of their property, direct proceedings by a creditor against individual members being forbidden'.[1] Unlimited liability carries with it a twofold advantage. It exercises an educative influence on the members by stimulating mutual control and supervision, and improves the credit of the society by inspiring confidence among its outside creditors.

(iv) *The management.*—This is democratic and honorary.[2] It

[1] *Maclagan Committee Report*, par. 47.

[2] Honorary services are necessary because the bank works with the primary object of facilitating loans at reasonable interest. Any addition to expenses

is entrusted to two bodies, namely, a general committee consisting of all the members and a managing committee which is a smaller body of from five to nine members chosen from among the members of the former body at its annual general meeting. The general committee elects members of the managing committee, appoints a paid secretary (who must not be a member), adopts the annual balance-sheet submitted by the managing committee, considers the orders and reports of the registrar and auditors, expels members if necessary, fixes the maximum credit of the society as a whole and of the individual members separately, and amends the by-laws of the society. The managing committee is responsible for the routine and the executive business of the society. It admits new members, disposes of loan applications made by members, recovers arrears due from members and exercises supervision over them, raises funds for the society and inspects the accounts maintained by the secretary.

(v) *Working capital.*—The sources of this may be divided into two, internal and external. The internal sources consist of entrance fees paid by members, deposits by members, share capital if any, and surplus assets in the reserve fund of the society. Entrance fees are necessary to cover preliminary expenses and serve the useful purpose of bringing home to members that the privilege of membership implies sacrifice. Share capital plays only a small part, except in some provinces like the Punjab, Madras, and the United Provinces. Recently, the instalment share system has been introduced in the Bombay Presidency, especially in the canal areas, and it is welcome as a 'second line of defence' and as 'buttressing the unlimited liability of members'. It is generally defended on the ground that it helps a co-operative body in the speedy acquisition of a substantial permanent capital of its own. But on the whole, this object is best fulfilled by forming a substantial reserve fund fed by as wide a margin between the borrowing and lending rates as is consistent with the attainment of financial self-sufficiency on the one hand, and the provision of cheap credit on the other. A fairly wide margin is possible because lending rates are generally very high in India. Too low a rate of interest is also to be deprecated because it may tempt the borrowing members to re-lend. In the provinces mentioned above, members of rural credit societies have shown a preference for the share capital, so as to enable them to have their own capital. There should be no objection to this, provided the shares

would tend to nullify this object. Secondly, a sense of public duty and business habits are encouraged by gratuitous service. Thirdly, the amount of labour involved is so trifling that payment is scarcely justified.

do not keep out poor persons and do not lead to dividend-hunting as in an ordinary joint-stock company; and as a matter of fact, the resort to share capital is often being found necessary to lessen the dependence on outside agencies. Deposits raised locally constitute a highly desirable method of raising the capital required by a rural credit society because they 'imply thrift in the village, form a good lying or reserve money, and they tend to interest in the management of the society a useful body of men who stand as sentries over their own deposits'.[1] Local deposits, however, form only a small part of the total working capital of rural societies in India, in striking contrast with the Raiffeisen Societies in Germany, which raise the bulk of the funds required by them locally. Attempts are everywhere made to encourage such deposits, but the response has been small, except in the province of Bombay where deposits by members form about ⅓th of the total working capital.[2] The habit of deposit banking is yet in its infancy, especially in rural areas, and money-lending and commerce fetch higher rates of interest than can be secured on deposits. In the richer parts of the country the tendency towards the purchase of land or gold and silver still persists largely. Furthermore, the average income of the masses is very small and leaves a very narrow margin of saving, if any. But unless there is a substantial increase in the deposits, co-operation will have failed in one of its objects. The system of compulsory deposits is, however, unsound, and thrift can be better stimulated by the introduction of shares payable by small instalments.[3]

We must now turn to the external sources of capital. These are mainly loans and deposits from other societies, from the Government, and most important of all, from secondary or central financing agencies like the central and provincial co-operative banks which have been found indispensable in every province. The Government have very wisely avoided the policy of doles and have restricted their loans to quite an insignificant amount. Regarding loans from central financing agencies we shall have more to say later on when we deal with the problem of co-operative finance. We need only remark here that the rural credit societies are today largely dependent upon such outside loans, shares and deposits contributing only a portion of their total working capital.

[1] *Maclagan Committee Report*, par. 48.
[2] *The Indian Year Book* (1938-9), p. 409.
[3] *Report of the Central Banking Enquiry Committee*, par. 155.

The following statistics show the relative position of the different constituents of the working capital of agricultural societies in 1936-7. Since, out of a total of 95,989 agricultural societies, 80,915 are credit societies, the figures given here may be regarded as fairly typical with reference to credit societies in general.

	Rs.
Share capital (paid up)	4,31,63,223
Loans and deposits held at the end of the year from	
Members	1,42,93,914
Non-members	1,38,34,356
Societies	20,15,870
Provincial or Central Banks	17,27,18,785
Government	10,68,867
Reserve Fund	7,32,59,787
Other Funds[1]	2,55,17,569
Total ...	34,58,72,371

These figures show that the Agricultural Societies own nearly 50 per cent of their working capital, including members' deposits under that head.

We may also give here statistics regarding the composition of the working capital of all societies in India in 1936-7.[2]

	Rs. 1,000
Share capital (paid up)	14,15,23
Loans and deposits held at the end of the year from	
Members	9,07,34
Societies	4,24,08
Provincial or Central Banks	25,22,20
Government	1,17,05
Non-members and other sources ...	29,81,39
Reserve Fund	11,65,06
Other Funds	6,27,20
Total ...	1,01,59,55

(vi) *The object of loans.*—Loans are given to members only for three objects: productive purposes, non-productive purposes,

[1] Funds outside the Statutory Reserve.

[2] *Statistical Statements Relating to the Co-operative Movement in India* (1936-7), Abstract Table III.

and redemption of past debts. Productive loans fall into three classes: short-term loans for current agricultural operations, payment of Government taxes, and long-term loans for permanent improvements on land. Loans for unproductive purposes, such as ceremonial expenses, are theoretically not permissible, but they are necessary to prevent the ryots from falling into the clutches of the money-lenders.[1] It is desirable, however, to inculcate economy as regards such expenditure by restricting these loans to small sums and to absolutely essential purposes. Turning to the redemption of past debts, the ideal policy should be to enable members to be free from all obligations other than those to their society. There are, however, two limiting considerations which make a wholesale redemption of the debts impracticable and undesirable: impracticable because of the impossibility of raising funds large enough for this purpose in addition to those required for loans to members for other purposes; undesirable because the psychology of a person chronically and heavily in debt, like the average cultivator in India, must be considered. A complete release from the burden of indebtedness effected at one stroke, even assuming such a feat to be possible, would have a distinctly demoralizing influence on the ryot and would lead to recklessness and extravagance. In the interests of thrift itself, emancipation from debt must come about by gradual stages. The point, however, is of purely academic interest, because owing to deficiency of funds what is to be feared is that the process of redemption will be too slow rather than too fast.

(vii) *Repayment of debts.*—As regards the time of repayment, the general rule is that agricultural finance should follow the agricultural cycle of crops which should be an average of good, bad and indifferent seasons. In other words, repayment should be made out of the proceeds of the productive objects for which the loan has been issued; as for unproductive loans, they should be so adjusted to the position of the borrowing member, that by the exercise of thrift it should be possible for him to save enough out of his income to meet the instalments of his loans as they fall due. More should not be lent than can be repaid by fairly easy instalments within a reasonable period. Punctual repayment should be the ideal constantly striven for, and laxity in this respect should

[1] In Bombay and Madras, a system of normal credit statement has been devised which provides for almost every need of the cultivator, including unproductive expenditure on marriage, etc., and fixes the credit limit of each member in advance of the season and makes arrangements for the necessary finance in time. This system is endorsed by the Central Banking Enquiry Committee (*Report*, par. 174).

not be tolerated. Postponement should be granted only in urgent cases of real distress. Fictitious repayment and frequent and automatic renewals of loans should not be allowed as they do great injury to the interests of the society. The promptness in repayment of loans by members is rightly regarded as one of the most important tests of the success of a co-operative credit society. Judged by this standard it must be said that in India societies have not obtained any very great measure of success. The Provincial Banking Enquiry Committees have especially emphasized the feature of overdue loans and their evil effects. There has been an alarming growth of overdues in recent years. For instance, on 30 June 1936 the overdue loans were 34 per cent of the working capital and 44 per cent of the total loans due by individuals in the case of agricultural societies. The position has grown very serious owing to the calamitous drop in agricultural prices and the world depression, which have reduced the repaying capacity of the agricultural borrower.[1] All precautions to ensure punctual repayment should be taken, such as the fixing of the normal credit of each member, careful selection of borrowers from among the applicants for loans, a proper scrutiny of the purpose of the loan and the repaying capacity of the borrower in dispensing co-operative loans, and effective supervision—by other members and sureties—of the activities of the borrowing members, and so forth. It is also necessary that repayments of loans should not be restricted to the same period for all debtors but should be fixed according to the special needs of individual borrowers.[2]

(viii) *Security.*—The ideal co-operative security is that offered by honesty and character. 'Honesty should be capitalized.' In practice, however, the risk of bad debts may be lessened and the credit of the society as a whole may be improved by asking the borrowing members to furnish sureties, normally from among the members, and accepting as collateral security movable and immovable property, though material security is, strictly speaking, inconsistent with the dictates of co-operation. If material security is altogether excluded, there is the danger of its owner pledging it with the money-lender. It has therefore to be tolerated to some extent. Under the law, mortgage security is permitted and power is given to provincial Governments to regulate it for any society or class of societies as may be deemed advisable. In all

[1] *Indian Year Book* (1938-9), p. 411.

[2] See *Maclagan Committee Report*, par. 63; V. L. Mehta, *Studies in Co-operative Finance*, pp. 84-6 and the *Report of the Central Banking Enquiry Committee*, par. 170.

cases, however, the main security ought to be personal and a general bias against material security should be maintained.

(ix) *Division of profits.*—There are no profits in the ordinary commercial sense to be distributed in a rural credit society, especially if there is no share capital, all profits being credited to the reserve fund. Exception may be made, however, in two cases provided for by the Act of 1912, which allows a certain amount of expenditure from the profits for such objects as education and charity, and the distribution of limited dividends on share capital where there is any. Such expenditure has the additional advantage of arousing interest in the movement. In no case, however, should a co-operative society be allowed to degenerate into a dividend-hunting concern.

(x) *Arbitration.*—Arbitration for settlement of disputes between a society and its members is necessary to avoid the drain on the time, energy and the funds of the society and to discourage litigation by exempting the society from the jurisdiction of the ordinary civil courts and procedure. Such arrangements exist in Bombay and some other provinces.

(xi) *Summary powers.*—The grant of summary powers to societies for the recovery of arrears is most objectionable, militating, as it does, against the basic principle of co-operation. The only weapons of recovery should be the joint liability of members and exercise of moral force apart from the ordinary method of recovery through the civil courts. The grant of summary powers would lead to an injurious relaxation of close mutual vigilance and supervision.

(xii) *Dissolution.*—It is desirable to use the power of dissolving societies sparingly. But the power itself is necessary for the purpose of abolishing such societies as are a blot on the whole co-operative movement and offer no prospect of a useful career.[1] The Act has provided for the exercise of such power by the Registrar after inquiry into the affairs of the society.

The benefits conferred by co-operative societies, their limitations and defects, and the remedies that might be adopted to remove the latter are dealt with later in the chapter (§§24-5).

[1] The causes put forward for the failure of societies are various and include a want of due supervision, indiscreet loans, contumacy of borrowers, unpunctuality in repayments, the restriction of loans to a few individuals, dishonesty or incompetence of society officials, bad selection of members, the extension of a society over too large an area, concealment of old debts, faulty constitution, internal dissensions, insufficient funds or membership, the preponderating influence of one member, and general lack of interest by members in the affairs of the society (*Maclagan Committee Report*, par. 86). See also the *Report of the Central Banking Enquiry Committee*, par, 178.

§10. **Non-agricultural credit societies.**—Speaking about the need for non-agricultural credit societies, the Maclagan Committee observe: 'With rising prices, insufficient and insanitary housing accommodation, wages often held in arrears, and a desire for a higher standard of living consequent on the spread of education, industrial difficulties are bound to increase, and we are of opinion that any form of organization, such as co-operative societies, that has a tendency to alleviate these difficulties is worthy of support.'[1] Moreover, the excessively seasonal demand for money by agricultural societies makes it difficult for central banks to employ their capital profitably. Though, at the outset, more attention was paid to the starting of rural credit societies, non-agricultural credit societies of the Schulze-Delitsch type have also made some progress in all the provinces, a development which is in consonance with the policy, recommended by the Maclagan Committee, of abandoning the earlier emphasis on agricultural credit. The following main types of non-credit societies may now be discussed:

(i) *People's banks.*—Urban credit societies of the Luzatti type, meant specially for the benefit of the middle class, serve a useful purpose in making good, at least partially, the deficiency of joint-stock banking facilities in India and supplying a training ground for the study of the theory and practice of banking, though they are often not truly co-operative.[2] In Bombay, there were in 1936-7, 81 full-fledged urban banks excluding salary earners' societies with a working capital of over Rs. 50,000 as against 72 of the previous year. During the same period the total number of non-agricultural credit societies in the province increased from 605 to 653 credit societies. Speaking of them, the Registrar of Co-operative Societies, Bombay, in his *Annual Report* for 1926-7, observes: 'It would be difficult to exaggerate the effect which the urban and people's banks are having on the life of the towns. Local trade is being developed or fostered in areas where otherwise population and industries are dwindling; small artisans and citizens in every walk of life are acquiring the banking habit;[3] and in almost every important town the influential persons of all castes and professions are taking up this side of co-operative activity as one of the main forms of public work.' The urban co-operative societies of Gujarat have organized a supervising

[1] *Maclagan Committee Report*, par. 15.

[2] *Maclagan Committee Report*, par. 17.

[3] The *Annual Report* (1928-9) for Bombay refers (par. 80) appreciatively to the service being rendered by these societies in popularizing the use of cheques. See also *Report of the Bengal Banking Enquiry Committee*, par. 283.

union of their own for internal audit. At the end of the year 1936-7 there were 1,057 urban banks in Madras.[1]

(ii) *Thrift and life insurance societies.*—An important variant of the urban co-operative society is the thrift society whose object is to promote thrift by collecting regular savings every month for a period of two to four years and investing them to the best advantage. In many societies loans are also advanced. The Punjab has 1,000 such societies, the bulk of the members being schoolmasters. Madras and, to a limited extent, Bombay have also made progress in this direction.

Recently life insurance societies have been started in Bombay, Bengal and Madras. The Bombay Co-operative Insurance Society, started in 1930, has made good progress and has recently issued a special scheme, under its rural branch, for the benefit of the members of primary societies.[2] The South Indian Co-operative Insurance Society, Madras, has also made commendable progress.

(iii) *Societies for the employees of large firms and of Government departments.*—The objects of such societies (called the Salary Earners' Societies) ought to be mainly the encouragement of thrift and saving and not the wholesale redemption of past debts. The success of these societies, which have made remarkable progress in Bombay, Bengal and to some extent in Madras, is due to the interest taken by the administrative head of the department or office and the facilities that exist for the recovery of the dues through paysheets. Official tutelage and favouritism are the evils to be guarded against in this class of credit society.

(iv) *Communal societies.*—Credit societies based on communal lines particularly lend themselves to co-operative effort on account of the strength of the communal feeling, which, however, is to be discouraged on wider national grounds. Within certain limits, however, these societies are useful for the educational and economic uplift of backward communities.

(v) *Artisans' societies.*—(See also § 14 (i) below.) These correspond in their constitution and business to agricultural credit societies. Their area of operation is small, membership is open only to persons of the same occupation, the share capital is small and funds have to be borrowed from central institutions and other sources. Unlimited liability is therefore essential, though under the law it is optional. The most important of these societies are those established for weavers. The hand-loom weaving industry being even today the most important cottage industry, it needs organization

[1] For an instructive study of the urban banks in India see the *Indian Co-operative Review* (Jan. 1936).

[2] See *Annual Report* (1936-7), Bombay Presidency, par. 96.

on a co-operative basis and state assistance. In Bombay considerable progress has been achieved in this direction, and direct financial help by the Government to such societies would be thoroughly justified. A few credit societies for other small artisans, such as basket-makers, shoe-makers, blacksmiths, carpenters, etc., have been organized, but the progress made so far has been inconsiderable. The hope may be expressed, however, that co-operation may be used as a lever for the revival of the small industries of India. The small artisan is indeed confronted with the same difficulties as the small farmer in respect of credit and other needs, and a simultaneous organization of both the types of small-scale industry is urgently called for.

(vi) *Societies for factory workers.*[1]—There is an urgent need for credit societies among the mill-hands in such factory towns as Bombay and Calcutta. Their economic and social conditions are far from satisfactory. Low wages, bad housing, high cost of living, exploitation by jobbers, ignorance, illiteracy, heavy indebtedness and intemperance are some of the evils from which they are suffering. These conditions can be largely improved by organizing the wage-earners into co-operative societies. Public-spirited employers of labour like the Tatas have rendered some help to such societies, many of which have been organized by the Social Service League in Bombay for the benefit of mill-hands. Apart from providing cheap credit and promoting thrift, these societies also serve as centres for various social and educational activities which react favourably on the efficiency of the workmen. The illiteracy of the worker and his migratory habits are among the major obstacles to the rapid progress of co-operation among mill-hands.

(vii) *Societies for the depressed classes.*—The social and economic conditions of the depressed classes are much worse than even those of the factory hands, and co-operative societies are calculated not only to improve their economic condition but also to enable the depressed classes to raise their social status. A very praiseworthy attempt was made in Bombay by the Debt Redemption Committee under the guidance of the late Mr G. K. Deodhar of the Servants of India Society. The Committee organized a number of societies for the benefit of unskilled workers such as the municipal scavengers, who are heavily indebted to Pathans and Marwaris. The experiment, however, was not a success and showed that wholesale redemption of old debts without the previous

[1] For further particulars regarding co-operation among factory workers see *Indian Co-operative Studies* edited by R. B. Ewbank, ch. iv by N. M. Joshi, and *Co-operation in India*, edited by H. L. Kaji, pp. 97-101.

inculcation of the habit of thrift was doomed to failure. The inadequate earnings of these classes and the tyranny of corruption to which they are subject were other causes of want of success.[1]

The Non-credit Co-operative Movement

§11. **Some general questions.**—Before taking up a study of the various types of non-credit societies we may briefly discuss some general questions relating to the subject.

(i) *The recent development of the non-credit movement.*—'The forms of co-operative activity that have proved most popular and successful in England are those connected with purchase, production and distribution. But in most Continental countries, these branches of work were not undertaken until credit societies had been firmly established, and development in India has followed the Continental precedent.'[2] The growing demand for non-credit co-operation which manifested itself soon after the co-operative movement was launched, was a healthy sign of the appreciation of co-operative principles by the people and essential to the balanced development of the economic condition of the country as a whole. The Act of 1912, which recognized non-credit societies, was an effort to meet the demand. The progress made by the non-credit movement, however, has not been uniform in all the provinces. The earlier policy of concentration on rural credit has not yet weakened appreciably, and there have been greater difficulties in the way of non-credit than of credit co-operation. At the same time, the importance of non-credit institutions is now being realized to some extent, as is attested by the establishment of societies for various purposes, such as purchase, sale, production, insurance and housing, both in the agricultural and the non-agricultural sphere. The general organization of agriculture on a co-operative basis, bringing within its scope all the stages of agriculture, is a movement fraught with great possibilities. The benefits from co-operative credit can be fully realized only if the middleman in other spheres is eliminated by the starting of co-operative societies for non-credit purposes as in Denmark. We are in full agreement with the Central Banking Enquiry Committee's recommendation[3] that the non-official leaders of the movement and the officials of the Co-operative Department should make

[1] *Co-operation in Bombay*, edited by H. L. Kaji, ch. ix by P. G. Kaneker.
[2] *Maclagan Committee Report*, par. 8.
[3] *Report*, par. 171.

special efforts in promoting societies of special types, such as joint cultivation societies, societies which provide manure and seeds or other agricultural requisites, processing societies in rural areas for rice-hulling, cotton-ginning, peeling of grains, preparing milk products and the like. With the assumption of office by Congress Ministries in eight provinces the need for pushing forward non-credit co-operation in rural areas is being increasingly realized.

(ii) *Types of non-credit societies.*—We may divide the non-credit societies into agricultural and non-agricultural, each of which may be further subdivided into several types, such as societies for the purchase of raw materials and implements, sale of produce, production, distribution or consumption, insurance, construction and acquisition of dwelling houses, and miscellaneous. The official classification of non-credit societies and statistics pertaining to them have already been mentioned. It has also been pointed out that many credit societies undertake several non-credit activities as well.

(iii) *Liability.*—Under the Act of 1912 it is optional for non-credit societies to accept either limited or unlimited liability. The nature of the liability varies according to the needs and circumstances of the different types of societies. For example, agricultural non-credit societies will generally prefer limited liability, as their members are likely to have already pledged themselves to unlimited liability if they happen to be members of a credit society as well. Dairy societies and those of weavers, on the other hand, might find unlimited liability more suitable as their need for external capital is usually great.[1]

(iv) *Dealings with non-members.*—Such dealings, according to strict co-operative theory, are undesirable. In the case of artisans' insurance and building societies, dealings are necessarily confined to members. It is in purchase and sale societies that the question of dealings with non-members arises. If they are allowed, membership is apt to become stagnant, and ordinary commercial profiteering is likely to creep in, and there will also be unfair competition with private traders as, under the Act, co-operative societies enjoy certain privileges and concessions denied to the ordinary private trader. In certain cases, however, such dealings may be permitted, especially for propagandist purposes, to enable a society not only to manage its affairs with profit and economy but also to demonstrate its utility to non-members so that they also may join.

[1] See V. L. Mehta and V. Subbaiya, *Co-operation in India*, p. 116.

§12. **Single v. Multiple purpose society.**—Much controversy has centred round the question of single *v.* multiple purpose societies. A separate society for each purpose as in Denmark was until recently advocated in this country, and in a way such a plan appears to be both ideal and businesslike. The chief practical objection to it arises on account of the paucity of the right type of men for the management of several societies in a village. Moreover, the Indian agriculturist does not much relish multiplicity of agencies, being accustomed to deal with the Sahukar for his various needs such as the supply of credit, purchase, sale, etc. Moreover in order to ensure the fullest benefit from the supply of co-operative credit, it is necessary to link it up with purchase and sale and to secure proper co-ordination between them. Expert opinion in recent years has favoured the establishment of Multi-purpose Societies. The main objects of an agricultural Co-operative Credit Society are to educate its members in the value and use of money and dispense controlled credit to them. In practice, however, it has been found that it is difficult to achieve these objects when credit is divorced from supply and sale.

Although the co-operative movement in India started for very good reasons with small, simple credit societies, there is at present a general and growing feeling that the agricultural credit movement has not yielded results corresponding to the effort made and that the time has arrived when it is desirable and possible to broaden the basis of the primary unit. In other words, the village society should cater for as many needs of its members as possible. This opinion has recently been vigorously championed by the Agricultural Credit Department of the Reserve Bank of India. The Bulletin on Village Banks issued by the Reserve Bank in 1937 advocates the reconstruction of the primary credit society, which is the pivot of the whole co-operative movement, on sound co-operative lines so as to bring the whole life of the village cultivator within its ambit.[1] The policy of establishing multi-purpose societies has been endorsed in the Joint Report submitted to the Government of Bombay by the Registrar and Mr V. L. Mehta as the result of an inquiry directed in the Government resolution issued in September 1937. The Report suggests the need of village multi-purpose societies on an unlimited liability basis, in areas provided with marketing facilities, for a village or villages within a radius of five miles or less. Such societies would

[1] See *Co-operative Village Banks* (Bulletin No. 2, pars. 23-4), also *Statutory Report on Agricultural Credit* (Reserve Bank of India), par. 18.

supply the normal cultivation needs of their members such as seed and manure, as well as credit to a limited extent for agricultural needs such as the purchase of bullocks. They would also serve as agencies for the sale of their marketable produce and produce of members of other co-operative societies. As multi-purpose societies develop they should act also as consumers' societies in rural areas.

The main advantage claimed for the multi-purpose society are: greater loyalty and more sustained interest of members, more economical and efficient management assisted by paid employees, economy both of men and resources, and an opportunity to the villages to undertake work of social and economic improvement by co-operation. The multi-purpose societies could be further strengthened if they could affiliate themselves to a Banking Union operating say, over a taluka, on the lines advocated by the Agricultural Credit Department of the Reserve Bank of India (see § 17 below). Such a Union could interest itself in the various activities of the primary multi-purpose societies. On the other hand, there are certain defects of multi-purpose societies. Multiplicity of functions with financial responsibility creates the danger that failure of one line might affect other lines too. Then again, unlimited liability, which is essential for securing deposits and credit on moderate terms, and ensuring effective mutual supervision by members, cannot be easily fitted in with the non-credit functions of the society.[1] It is also doubtful whether suitable men would be available to run comprehensive multi-purpose societies, when there is at present a dearth of men to manage simple credit societies. Finally the multi-purpose society operating over a group of villages would not ensure the close mutual knowledge so essential for the success of the co-operative idea.[2] These difficulties are real, and cannot be brushed aside lightly. Nevertheless, in the existing circumstances of the rural economy of India, the multi-purpose society appears to be promising and necessary and deserves to be given a fair trial.[3] The experience of several countries other than Denmark also lends support to the idea of the multiple purpose society. As Mr Calvert points out, in Bavaria, Saxony, Belgium, Austria, etc., the credit society or local bank does many other

[1] *Agricultural Commission Report*, par. 375.

[2] See *The Indian Co-operative Review*, January-March, 1938, article 'Multi-purpose Society', by K. C. Ramkrishnan.

[3] See the speech of Mr M. B. Nanavati, Deputy Governor of the Reserve Bank of India, at the opening of the new building of the Surat District Co-operative Bank, Ltd. (*The Bombay Co-operative Quarterly*, Sept. 1938).

things besides supplying credit. The most striking feature of Japanese rural co-operation is the very common combination of various branches, purchase, sale and so on, and almost in every instance credit, in one and the same society.[1] At the same time we fully endorse the view that multi-purpose societies cannot and are not intended to replace all agricultural credit societies. They may however be considered to be a further stage of evolution of agricultural credit societies; and may also function as helpmates of ordinary credit societies, wherever possible.

§13. **Non-credit agricultural movement.**—We may now proceed to discuss the progress made by the non-credit movement in India in its two branches, agricultural and non-agricultural. The need for the non-credit agricultural movement is very great, for, as the example of Denmark shows, agriculture can thrive in a country of peasant proprietors only if its operations are organized on a co-operative basis and the middleman is dispensed with, so that all the profits may go to the cultivators. The latter are at present mulcted heavily in their sale and purchase transactions by the money-lender (who is generally a grocer and merchant as well) and other intermediaries. Co-operative societies for obtaining implements, machinery, manures and seed of good quality at moderate prices are needed, and a few of them have already been started, as also a certain number of co-operative sale societies.[2] This is, however, an enormous task, and the progress made so far has been slow. Co-operative supply has not made much advance as business is on a small scale and there is an absence of efficient management and adequate staff for supervision.

A word may be said regarding some other types of non-credit agricultural societies started in India. The principle of co-operative insurance has so far been applied only to insurance of cattle; farm-buildings, crops and haystacks being left untouched. Cattle insurance societies were supposed until recently to be progressing very satisfactorily. But the Committee on Co-operation in Burma (1929) found that quite a large number of them were not doing well and would have to be wound up. The chief obstacles to success are the social disintegration of the village, prevalence of virulent cattle epidemics like rinderpest, and difficulty of management and finance. The development and extension of co-operative insurance in our agricultural system must, however, be steadily aimed at.

[1] H. Calvert, *Law and Principles of Co-operation*, pp. 29-30.

[2] *Annual Report of the Registrar of Co-operative Societies*, Bombay (1936-7), pars. 59-61.

Reference may also be made to cattle-breeding societies for improving the quality of cattle and for adequate provision of fodder by way of insurance against famine. The cattle section of the first Bombay Presidency Agricultural Show, 1926, served to prove the fact that such societies are capable of doing useful work. A few fencing and crop protection societies have already been started, especially in the southern division of the Bombay Presidency, to protect the crops from the inroads of wild pigs and other pests. A small number of co-operative irrigation societies have been established and they offer a promising solution of the water problem in dry tracts where canal irrigation is expensive or impossible. They have achieved notable success in some districts in Bengal and Madras. There are eight land improvement societies at work in the Bombay Presidency.

Another remarkable instance of co-operative activity to which allusion has already been made, is the work that is being done for the consolidation of holdings in certain Punjab villages. The field of co-operative farming has hardly been touched. It is obvious that the successful introduction of improved husbandry demands joint cultivation on a co-operative basis, as in Italy, especially so long as agricultural holdings continue to be tiny and scattered.

The consumers' movement which has achieved such striking progress in England, has made very little headway in India, especially in the rural areas. The domestic needs of the rural community are few, and are met mostly either out of local produce or at village bazaars, and the standard of living is so low that distributive co-operation has hardly any scope, even if we ignore other difficulties regarding management. Hope lies only in the general advance of the rural masses and an improvement in their standard of living. There is a great scope for dairy societies to supply pure milk at moderate prices, especially to the towns. There are a few such societies scattered about the country but a great many more are wanted.

The co-operative movement in Indian agriculture is still in its infancy and there is any amount of highly useful work ready for non-credit agricultural co-operation which, in Denmark and some other European countries, has equipped the peasant so thoroughly as to enable him to compete on equal terms with the capitalist farmer.[1] As Dr Clouston says: 'The good work done by the cotton sale societies in Bombay, the irrigation and milk

[1] See Irvine, *The Making of Rural Europe*, p. 195.

societies in Bengal, the co-operative seed societies and dairy societies in the Central Provinces, and the societies for the consolidation of holdings, clearance of silt in canals and sale of farm produce in the Punjab, encourages one to hope that, given the necessary organizing staff, co-operation will play in course of time as great a part in assuring the cultivator of the full return of his labour as it has in providing him with cheap capital.'[1] In order that the Government may help this consummation more effectively, one of the reforms needed is a closer co-ordination of activities between the Co-operative Department on the one hand, and the Agricultural and Veterinary Departments on the other. Indeed, co-operative societies promise to be the best agency for the propagandist activities of the Agricultural and Veterinary Departments. It is only through a wide development of non-credit co-operation that the teaching of the expert can be brought to the masses who could never be reached individually by any official organization.[2] A movement in this direction has been made in Bombay by the establishment of divisional boards consisting of the Assistant Registrar of Co-operative Societies, the Deputy Director of Agriculture and some non-official representatives. To carry out their work, special agricultural organizers have been appointed. The actual work in the rural areas is done by the Taluka Development Associations registered under the Co-operative Societies Act. Their number increased from 95 in 1935-6 to 103 in 1936-7. These associations have been doing propaganda for introducing improved methods of agriculture and for improving the breed of cattle and poultry. Several of them are taking part in the rural uplift movement. The Agricultural Commission suggest that the desirability of appointing in every province a special officer of the grade of Deputy Director of Agriculture to work under the Registrar to encourage, improve and increase non-credit societies and to explore all other forms of co-operative activity, should be examined.[3]

§14. **Non-credit non-agricultural societies.**—Though this movement has not yet gained sufficient strength, some progress has already been made in the different provinces.[4] As the Maclagan Committee found, 'successful attempts have been made to arrange for the purchase of yarn and silk for weavers, cane for basket-makers, timber for carpenters, and implements (sometimes of

[1] *Review of Agricultural Operations in India* (1926-7).
[2] *Agricultural Commission Report*, par. 386.
[3] Ibid., par. 388.
[4] See table on page 327.

improved pattern) for several industries, the production and sale of cotton and silk cloth, durries, and furniture. Building societies have been organized. The purchase and sale of most sorts of common necessaries is being carried on at various co-operative stores.'[1] We may now discuss the various types of non-credit non-agricultural organizations.

(i) *Artisans' societies for purchase and sale.*—As in the case of the farmer so in that of the artisan, not only credit but also other needs, such as purchase of raw materials and marketing of finished products, must be organized on a co-operative basis for the improvement of the economic condition of our cottage industries. The hand-loom industry offers an excellent field for co-operative organization directed towards the attainment of such objects as wholesale purchase of raw material, the employment of improved looms and implements and the direct sale of cloth to the consumers. The co-operative industrial exhibitions held at various centres give a good idea regarding the range and variety of such co-operative products. In Bombay, the importance of co-operative weaving has been recognized by the Government, who are running a few weaving schools under the supervision of the Co-operative Department. A more notable measure adopted recently (1935) in furtherance of the hand-loom industry is the establishment of District Industrial Co-operative Associations at important centres in the province to supply raw materials at reasonable rates and to accept on consignment account against partial payment hand-loom products from weavers and to purchase outright hand-loom products and to sell them. The new scheme of marketing is controlled by a Joint Board of the Director of Industries and the Registrar, Co-operative Societies.[2] Promising schemes of marketing of hand-loom products based on co-operative effort have been adopted by other provinces.[3] Some progress has been made in the case of other artisans such as shoe-makers, goldsmiths, cane-workers, furniture-makers, coppersmiths, etc.

(ii) *Unskilled labourers' societies.*—In various districts in Madras co-operative societies of unskilled labourers are found which undertake considerable contracts for earthwork, road

[1] *Maclagan Committee Report*, par. 10.

[2] See *Annual Report of the Registrar of Co-operative Societies, Bombay* (1936-7), pars. 112-15 and *Annual Report of the Department of Industries, Bombay* (1936-7), pars. 107-16.

[3] See also vol. II, ch. ii, §40.

repairs, etc., requiring largely unskilled labour. They include many small ryots who have been enabled thus to increase their agricultural earnings. The difficulties they encounter are mismanagement and opposition of vested interests, namely those of private contractors. There are other societies also which take up joint road construction.[1]

(iii) *Consumers' societies in urban areas.*—Reference has already been made to the backwardness of this movement in rural areas. The situation is only slightly better in urban areas. A few co-operative stores have been started in Bombay, Madras, the United Provinces, etc. The Triplicane Stores, Madras, may be regarded as the most successful among such stores. Stores attached to college hostels are being managed with notable success in some cases in the United Provinces and Bombay.[2] Railway stores have also proved successful. Taken as a whole, however, we are faced with the fact that the progress made by the consumers' movement is insignificant as compared with that in western countries, especially England. There are several difficulties that must be overcome. As the Registrar of Co-operative Societies, Bombay, observes, the main reasons why several societies (consumers') have done badly are want of loyalty on the part of members, lack of good business management and proper supervision. Other difficulties are the small margin between the wholesale and retail prices which is not sufficiently attractive to the consumers, inability to withstand outside competition, absence of a large class of people with settled periodical incomes, and disregard in some cases of true co-operative safeguards such as sales for cash only, dealings with members only, etc.[3] There is no doubt that while the need of distributive stores is imperative for the benefit of the middle and working classes in towns, the consumers' movement is the weakest part of the Indian co-operative organization. Unless people acquire habits of systematic well-planned expenditure and are able to exercise a sound judgement as regards the quality of the goods bought, the stores movement will hardly prosper.

§15. **Housing societies.**—Among the various efforts made in England to tackle the problem of slums in the factory towns and to provide decent housing accommodation, co-operative housing societies occupy a prominent place. Their success in England

[1] See *Agricultural Commission Report*, Minutes of Evidence, vol. III, evidence of the Registrar, Madras; also his *Annual Report* (1927-8), par. 82.

[2] e.g. The Sydenham College Co-operative Stores, Ltd.

[3] See *Annual Report of the Registrar, Bombay* (1936-7), par. 97.

has attracted attention in India. In Bombay and other urban areas, we have now to face a similar problem, not to speak of the tremendous task of providing decent housing in the villages. In some of the towns of Madras, Mysore and, more recently, Bombay, a beginning has already been made in the direction of co-operative housing. The Government of Bombay have recently issued rules regarding the financial help they are prepared to offer to building societies of various kinds. In the town of Bombay, under the auspices of the Bombay Co-operative Housing Association, a number of housing societies have been organized chiefly for the benefit of middle-class communities. There were in all 85 housing societies with an aggregate membership of 6,089 in 1936-7 in the Bombay Presidency.

Four main types of building societies may be distinguished: (i) land societies, which only purchase the building sites or plots for their members, who build on them separately, each on his own account; (ii) mutual benefit lending societies, which build houses on a co-operative basis but with the ultimate object of enabling their members to own them. Both these types are not truly co-operative inasmuch as co-operation among members covers only a small part of their activity and is not intended to be permanent; they are more suited to meet the needs of the well-to-do classes. The following types are better adapted to meet the case of the poorer classes; (iii) tenant co-partnership societies, under which the houses are not only built jointly but are jointly owned and maintained in good condition, the necessary funds being raised by shares subscribed to by members and external loans on the security of the joint house property; (iv) societies for hiring and purchasing houses, which are particularly suited to supply the need of the wage-earner in factory towns, for he cannot afford even to construct and own houses jointly with his fellows, much less to own them on his own account.[1]

§16. **Central societies. Co-operative finance.**—We have so far discussed the various types of primary societies. It remains now to say something about the higher stages of the co-operative pyramid that have been devised to organize, supervise and finance the primary societies of various kinds. We may consider this aspect of the movement with reference to three types of central societies, namely, unions, central banks and provincial banks.

[1] For further details regarding the Co-operative Housing Movement see S. S. Talmaki, *Co-operation in India and Abroad*, pp. 116-26 and *Indian Co-operative Review*, July-September, 1937, article by M. D. Bhansali, Registrar, Bombay.

The following statistics show the position of these three types of societies in 1936-7.

(i) *Unions*

Number of unions	Number of societies affiliated	Total number of individual members in societies affiliated	Total working capital of affiliated societies Rs.
709	33,621	1,332,675	19,08,92,777

(ii) *Central Banks*

Number of banks	Number of members		Working capital Rs.
	Individuals	Societies	
611	85,127	91,293	29,49,89,991

(iii) *Provincial Banks*

11	3,895	19,234	12,57,90,866

§17. **Unions.**—' Almost all provinces in India have some central co-operative agency covering a unit very much smaller than the revenue district for supervision and assessment of credit.' These are either (i) guaranteeing unions, as in Burma, (ii) supervising unions, as in Madras and Bombay, or (iii) banking unions, as in the Punjab. A union consists of about five or more societies usually situated within a maximum radius of five to eight miles from the union headquarters. The management is in the hands of a union committee consisting of the representatives of the various member societies. It appoints a paid secretary and a sub-committee to inspect the affairs of member societies, and guides them in their working. Where the union is also a guaranteeing union, the committee further determines the total external borrowings of member societies which it is prepared to recommend to the central financing bank, and to which it extends, under certain conditions, a guarantee regarding the bank's loans to member societies. These recommendations may, it is claimed, be relied upon by the central bank, for the primary societies are also shareholders of the bank. The unions, it was thought, would be useful not only in supervising the affairs of the member societies but

also as forming a link between the primary societies and central financing institutions, though they themselves are not financing bodies. The Maclagan Committee strongly recommend the establishment of a guaranteeing union where there are primary societies and central banks. They consider that it is indispensable where there is only a provincial bank dealing directly with primary societies. The guaranteeing unions started in Bombay did not prove a success, partly because in most cases the so-called guarantee was nominal and partly because funds being limited, no competent supervisor could be engaged. The work of the committee was often irregular and inefficient.[1] It was therefore decided to encourage only the supervising unions, as in Madras, covering large areas and in a financial position to provide for efficient supervision. The guaranteeing unions used to be cited until recently as a highly successful instance of this type of organization and described as the mainspring of the co-operative movement in Burma. This opinion is now recognized to have been mistaken, so much so that the Committee on Co-operation in Burma (1928-9) considered the unions as largely responsible for the defects of the movement in that country, and recommended the abolition of the union guarantee as soon as practicable, and the reconstruction of the union system so that the unions should be only supervising and educative bodies.[2]

It is too early to give a final opinion regarding the usefulness of supervising unions as agencies for supervision. In Bombay, the Thomas Reorganization Committee (1932) pronounced a hostile verdict, and recommended their abolition and the transfer of their functions to departmental auditors. This retrograde suggestion of transferring supervision from non-official to official agency was rightly rejected by the Government of Bombay, who have recently (1936) launched a new scheme of strengthening the system of supervising unions by insisting on better qualifications for the supervisors and by creating district boards of supervision to ensure the proper and efficient working of the unions on the recommendations of the Supervision Committee (1934). These Boards have been given wide powers under the by-laws, the most important of which is the suspension of the Managing Committee of an affiliated society. They are expected also to serve as stabilizing forces in the structure of agricultural co-operation.[3]

[1] See *Annual Report of the Registrar, Bombay* (1923-4), p. 9; (1936-7), par. 43; also Mehta, *Studies in Co-operative Finance*, pp. 77-8, for fuller discussion of the question.

[2] See *Report of the Burma Committee on Co-operation*, pars. 51-4.

[3] *Report of the Supervision Committee* (1934) and *Registrar's Annual Report* (1936-7), par. 40.

The inspectors appointed by central banks also assist in the work of supervision.

The Agricultural Credit Department of the Reserve Bank of India recently (1937) reported on the Banking Union at Kodinar (Baroda State) and made suggestions about its applicability elsewhere. A Banking Union of that nature, in addition to finance, would take over the functions of the supervising union, and a supervising union which is working satisfactorily and has good primary societies affiliated to it could be considered suitable for conversion into a Banking Union on the lines suggested therein, provided such a Banking Union is able to supplement its resources, if necessary, direct from the apex bank.[1]

§18. **Central co-operative banks.**—Central co-operative banks are in general the higher financing agencies necessary in a country like India where the capital raised locally by the primary societies requires to be largely supplemented from outside and distant money-markets. Hence arises the necessity of establishing higher federations which will successively connect the primary societies with the most remote towns and which will make their monetary resources available as the working capital of such societies. Such a special co-operative financing mechanism is necessary, first, because rural finance requires large amounts of long-term capital, and secondly, because the ordinary joint-stock banks carrying on their business only in a few important towns cannot be persuaded to issue loans to distant rural societies of which they know next to nothing, even if they were in a position, which generally they are not, to issue long-term loans. The underlying idea of the financial distributory system is that the resources of the society at large should be made available to thousands of small cultivators who need accommodation.

The central bank serves as a balancing centre for adjusting the excesses and deficiencies of the working capital of the primary societies under its jurisdiction. It raises the additional capital required by the primary societies and lends it to them either directly or through guaranteeing unions where these exist. In some cases, the central bank may undertake organization and supervision of societies, especially if, as is usually the case, they are its shareholders. The central bank, however, is essentially a financing agency. The area of its operation usually extends over the administrative district, though it may vary from a big taluka to a small province. Too small an area leads to unduly heavy cost of management, while too large an area leads to inefficient

[1] *Agricultural Credit Department* (Reserve Bank of India) *Bulletin* No. 1.

supervision. In every case, effort must be made to strike the golden mean between the two extremes.

Central banks may be of three types: capitalist, mixed and pure, according to their constitution.[1] The capitalist central banks are dominated by individual shareholders. This type does not exist in India. Mixed central banks, consisting partly of societies and partly of individuals, offer special facilities to the former regarding share capital and representation on the board of management. Such types of banks are acceptable as a step leading to the realization of the ideal federal type, namely a central bank consisting of societies only. The mixed central bank, while enlisting the advice and help of well-to-do expert business men and members of the middle classes, safeguards the interests of societies and can itself be transformed into the ideal type of pure central bank in which individual members are completely eliminated. The mixed type is the most suitable under the present circumstances in India, and is favoured in almost all the provinces. The ideal federal type, though theoretically the best, labours under certain handicaps, namely, inability to be entirely self-dependent in the matter of supplying the necessary business ability and failure to interest the middle classes and therefore to attract sufficient resources to finance primary societies. In some provinces like Bengal and the Punjab, there is a growing number of purely federal central banks (banking unions).

As regards the sources of the working capital, though share capital is an important item, deposits from individuals and societies constitute the bulk of working capital in the case of both central and provincial banks, as can be seen from the statistics for 1936-7.[2]

Constituents of the working capital	Central Banks	Provincial Banks
Share Capital	2,77,89,899	76,59,767
Loans and Deposits from :—		
Societies	3,00,33,970	91,54,736
Provincial or Central Banks ...	3,03,02,047	3,68,35,140
Government	36,02,951	16,70,217
Individual and other sources ...	16,58,63,393	5,98,59,772
Reserve Fund	1,82,19,144	41,35,759
Other Funds	1,90,88,587	64,75,475
Total ...	29,49,89,991	12,57,90,866

[1] See V. L. Mehta and V. Subbaiya, op. cit., p. 138.

[2] *Statistical Statements Relating to the Co-operative Movement in India* (1936-7), pp. 10-11.

For this reason, it is necessary not only to have adequate cash reserves or fluid resources, a point on which the Maclagan Committee laid special, and as many would have it, exaggerated emphasis,[1] but also to attract a sufficiency of long-term deposits. The same point has recently (1937) been emphasized by the Agricultural Credit Department of the Reserve Bank of India in its Statutory Report on Agricultural Credit. Central banks should so adjust their loans to primary societies as to ensure adequate repayment for the return of deposits when they fall due. To impart elasticity to the operations of the banks, provision of facilities such as cash credits and discounting of their co-operative paper is necessary. Owing to their long standing, several central banks now possess sufficient resources to be independent of outside financial assistance, but they all continue credit arrangements, mainly with the provincial banks, on which they rely for emergencies.[2] This brings us to a discussion of the nature and utility of provincial co-operative banks.

§19. **Provincial co-operative banks.**—To enable them to perform their functions properly, the central banks require the help of a provincial apex bank to co-ordinate and control their working, serve as a clearing house to balance the excesses and deficiencies of their working capital, and act as the financial centre of the province. It would also extend to central banks the facilities of cash credit and discounting referred to above. The joint-stock banks cannot be depended upon in this matter as they are unable to accept the particular security offered. The provincial bank is also a useful link between the general money market and the joint-stock banks in the towns on the one hand, and the primary rural societies on the other. In this connexion, reference may be made to an interesting development in Bengal of making the surplus co-operative money accumulated in the provincial bank in the slack season of agriculture available for the needs of outside trade and commerce through the joint-stock banks, to the advantage of both parties. The provincial apex banks should not deal directly with primary societies, but should consolidate and strengthen their position as financing agencies and balancing centres for central banks.[3] Practice in this respect is not, however, uniform. In certain provinces the apex banks do not deal with the primary societies at all, while in certain others (like Bihar,

[1] See *Maclagan Committee Report*, par. 18; Mehta, op. cit., p. 132, and *Statutory Report on Agricultural Credit* (Reserve Bank of India), par. 22.

[2] *Indian Year Book* (1938-9), p. 410.

[3] See *Report of the Central Banking Enquiry Committee*, par. 150.

Orissa, Bombay and Mysore) they still continue to finance primary societies in areas where central banks have not come into existence. The provincial bank in Bombay has 30 branches covering the few districts that have no local banks or parts of districts not taken over by local banks for some reason or other.

Regarding the constitution of the provincial bank, the same considerations apply as in the case of the central bank. For a time, the capitalist provincial bank may have to be the only alternative for raising sufficient funds to supplement the working capital of central banks and primary societies and to ensure the supply of the requisite business knowledge. Steps, however, should be taken eventually to secure a majority of votes to the affiliated co-operative institutions.

Provincial apex banks more or less on these lines have been already established in Madras, Bombay, Bengal, Bihar and Orissa, the Punjab, Burma,[1] the Central Provinces and Berar, Assam, and in two of the Indian States, Mysore and Hyderabad.[2] Out of these the Bombay Provincial Bank, started in 1911 as a central bank, is unanimously pronounced to be the most efficient, and its activities are multifarious. There is no form of co-operative development or endeavour, whether of finance, propaganda or supervision, in which it does not take part. The Bank has a solid record of valuable work to its credit during the 28 years of its existence and occupies a unique position in the co-operative hierarchy.[3]

Regarding the working capital, the necessity of a cash reserve, and provision of facilities such as cash credit and rediscounting of co-operative paper discounted in the first instance by the provincial bank, the same considerations hold good as in the case of central banks. The suggestions made by the Reserve Bank of India for the reorganization of the Central and Provincial Co-operative Banks, in its Statutory Report on Agricultural Credit, are reviewed in a later section (see §22).

§20. **Is an all-India co-operative bank necessary?**—The Maclagan Committee had recommended that in addition to all the foregoing types of financing agencies, an all-India co-operative bank should be established to provide the provincial banks with facilities for rediscounting so as to give their finance that elasticity

[1] The Bank in Burma is in liquidation.

[2] A similar bank is proposed for the United Provinces by the U. P. Banking Enquiry Committee (*Report*, par. 308)—a recommendation strongly supported by the Central Banking Enquiry Committee (*Report*, par. 158).

[3] *Annual Report of the Registrar, Bombay* (1936-7), par. 80.

without which the stability and progressive development of the movement would be difficult.[1]

Since the Maclagan Committee reported, opinion on the necessity or desirability of an all-India bank has undergone considerable change. The new factors in the situation are the present superfluity of funds lying unutilized with the provincial banks, most of which hold fluid resources in excess even of the very high standard suggested by the Committee of 1915; the assurance of financial accommodation which many of them have succeeded in obtaining from the Imperial Bank of India[2] or other banks, the fact that co-operation is now a transferred subject and the provinces are anxious to retain full liberty to develop along their own lines without being fettered by any external authority such as an all-India bank, and lastly, the introduction of the spontaneous and healthy system of inter-lending which the various provincial banks have developed. Moreover, now that the Reserve Bank of India has been established, the need for an apex bank for the provincial banks will no longer be felt, as the provincial banks will be provided by the Reserve Bank with re-discounting and loan facilities. There is no need for an apex bank for the present (see §21).

§21. **The Reserve Bank of India in relation to agricultural (co-operative) finance.**—Since the inauguration of the Reserve Bank of India[3] on 1 April 1935, great expectations regarding the financial assistance it can extend to agriculture have been raised in the country. In the first place, let us see what financial accommodation the Reserve Bank is authorized to give to Indian agriculture through the agency of provincial co-operative banks.[4] The Bank is allowed to purchase, sell and rediscount agricultural bills and promissory notes endorsed by a scheduled bank or a provincial co-operative bank, drawn for the purpose of financing seasonal agricultural

[1] *Report*, pars. 219-29.

[2] Unfortunately the policy of the Imperial Bank of India in regard to the grant of financial assistance to some of the provincial and central banks seems of late to have undergone a definite change, and it is stated that it shows today a much smaller measure of readiness to help them than it used to do in the past. This is particularly so in the case of the Bombay Provincial Co-operative Bank. We fully endorse the emphasis laid by the Central Banking Enquiry Committee on the importance of cash credit and overdraft facilities being generously given by the Imperial Bank of India on proper co-operative paper. See *Report of the Central Banking Enquiry Committee*, par. 179. Also *Annual Report of the Registrar, Bombay* (1933-4), par. 45.

[3] The question of the Reserve Bank has been dealt with in vol. II, ch. x.

[4] See §17 (2) (*b*), (4) (*a*), (*c*) and (*d*) of the Reserve Bank of India Act; also the *Statutory Report on Agricultural Credit* (par. 37) issued by the Reserve Bank of India.

operations, or the marketing of crops; and maturing within nine months. It should be noted that in the case of commercial bills the period allowed is only three months. This is a concession in favour of agriculture, since the cycle of agricultural finance is longer than that of commercial finance. The Reserve Bank is further authorized to make loans or advances for ninety days to provincial co-operative banks and central land mortgage banks declared to be provincial co-operative banks and through them to co-operative central banks and primary land mortgage banks against the security of (i) Government paper or (ii) approved debentures of recognized land mortgage banks, which are declared trustee securities and which are readily marketable. The Bank can extend advances to provincial co-operative banks for ninety days against the security of (i) promissory notes of central co-operative banks and drawn for financing seasonal agricultural operations; (ii) promissory notes of approved co-operative marketing or warehousing societies endorsed by provincial co-operative banks and drawn for the marketing of crops; and (iii) promissory notes of provincial co-operative banks supported by warehouse receipts or pledge of goods against which a cash credit or overdraft has been granted by the provincial co-operative bank to marketing or warehousing societies.

The Reserve Bank has already established the Agricultural Credit Department as required by the Act, to study all questions of agricultural credit, offer expert advice to the Government and co-operative banks, and to co-ordinate the operations of the Bank in connexion with agricultural credit and its relations with provincial co-operative banks and any other bank or organizations engaged in the business of agricultural credit. As required by the Act the Agricultural Credit Department of the Bank submitted a Report on Agricultural Credit to the Government of India in December 1937.[1] The Department has also issued so far four interesting and instructive Bulletins on (i) the Banking Union at Kodinar (1937), (ii) Co-operative Village Banks (1937), (iii) Recent Developments in the Co-operative Movement in Burma (1938) and (iv) Co-operation in Panjawar (Punjab) (1939). These studies are very useful at the present juncture for the re-orientation of the co-operative movement.

§22. **Role of the Reserve Bank in relation to co-operative banks.**—In its recent (1937) Report on agricultural credit the Reserve Bank has clarified the provisions of the Act relating to financial assistance to co-operative banks and indicated its attitude

[1] For further particulars, see vol. II, ch. x, §60.

towards them. There is some controversy as to what is the proper role of the Reserve Bank in relation to the various credit agencies dispensing credit to the agriculturist, especially the co-operative banks. There are two opposite views current on this question. According to the popular view, which represents the dynamic ideal of central banks, the Reserve Bank should directly undertake the financing of agriculture. Indeed, according to this school of thought, the extent of such help is the acid test of the success of the Reserve Bank. According to the orthodox view, which represents the conservative school of thought, it is neither desirable nor possible for a central bank directly to finance agriculture either for short or long periods, having regard to the risky and unorganized nature of agricultural business carried on by illiterate and small farmers as in India. The decisions of the Reserve Bank of India relating to agricultural finance have been largely influenced by the orthodox view. Moreover, as the Statutory Report points out, the Reserve Bank is entrusted with the cash reserves or the fluid resources against deposits of all the important banks. These form by far the largest portion of its working capital. The idea underlying this arrangement is that the entire pool of these resources may be available in times of emergency. It cannot be locked up in forms of business which the scheduled banks themselves cannot undertake. The Bank is thus a Bankers' Bank and cannot lend to agriculturists direct or supply normal finance to any of the credit agencies, which should not therefore rely on the Reserve Bank for doing their business. The correct role of the Reserve Bank is to produce monetary conditions under which there would be adequate facilities for all those seeking credit for legitimate purposes or having funds to invest. The Reserve Bank can come into the picture as the lender of last resort, only when the ordinary pool of commercial credit appears inadequate to meet reasonable business requirements of the country. The same basic principles must be followed in the case of the co-operative banks. These, like the commercial banks, must stand on their own legs and obtain normal finance from deposits and cannot expect the Reserve Bank to supply it as the apex bank of the movement. In granting them the financial assistance which it is authorized to grant under its statute, the Reserve Bank must judge for itself the advisability and expediency according to circumstances. It will also have to insist on provincial co-operative banks maintaining financial statements in certain forms and submitting them to itself periodically. It must also have the right to inspect such banks and the latter will have to maintain with the Reserve Bank some minimum balances. All that the Reserve Bank can do is to help

the provincial co-operative banks to tide over a temporary shortage of funds. It is not clear whether this covers busy season finance. The Reserve Bank is not at present prepared to grant cash credit facilities to co-operative banks, since there is already provision under the Act for the grant of advances against Government securities to them. We feel that the Reserve Bank has taken an ultra-conservative view. The grant of cash credit facilities to provincial co-operative banks is essential to impart elasticity to co-operative finance and keep down lending rates of co-operative banks. If the Reserve Bank cannot see its way to do this, co-operative banks will have to explore the possibility of establishing an all-India co-operative bank, since the present situation, characterized by surplus funds lying idle with co-operative banks, cannot be expected to last indefinitely.

We welcome, however, the proposal of the Reserve Bank from time to time to issue instructions and circular letters to co-operative banks indicating criteria of sound banking which would justify grant of advances by the former to co-operative banks.

The problem of agricultural credit is admittedly a complex one, especially in the conditions of India. No universally applicable solution has yet been found anywhere. The task before the Reserve Bank is thus a difficult one, particularly having regard to the fact that since its inception it has naturally had to devote its energies primarily to evolving its own organization. Moreover, this period of three years has coincided with the aftermath of a severe depression in agricultural prices, which has occasioned all sorts of legislative measures to afford relief to the farmer. It is too early to pronounce definitely on their ultimate effects.

A perusal of the Preliminary and Statutory Reports on agricultural credit issued by the Reserve Bank shows that the Bank, in spite of these handicaps, has come to close grips with the problem entrusted to it by the legislature, and has approached it in a realistic spirit. It has kept clear of sentiment in reaching its conclusions and making its recommendations. So far so good. After all, business is business and there is no room in it for philanthropy.

Nevertheless it appears that the Bank has greatly exaggerated the difficulties of the problem and unduly emphasized the shortcomings of the co-operative movement in India, without making proper allowance for the exceptional severity of the economic crisis through which Indian agriculture and the co-operative movement have had to pass during the last decade. The Reserve Bank authorities do not appear to have carefully studied the special machinery devised for supplying the financial needs of agriculture

in the U. S. A., Australia and England. We readily admit that the problem of agricultural finance is widely different from that of industrial finance, and further that the special circumstances of India make it all the more difficult of solution. The anxiety of the Reserve Bank to keep its investments liquid and to avoid all risks is also perfectly natural. A way out of the difficulty must be explored, in the direction of establishing special credit machinery for meeting the three distinct financial needs of agriculture, namely, short-term, intermediate, and long-term credit.[1] We feel that it is possible within limits of prudence to establish valuable contacts between the Reserve Bank and agricultural finance through the existing agency of co-operative banks. We also advocate the extension of the scope of functions of the Agricultural Credit Department of the Reserve Bank. Early steps to bring the indigenous bankers directly within the orbit of the Reserve Bank should be taken, as thereby the assistance given to agriculture by the Bank could be substantially extended.[2]

It is reassuring to learn from the Statutory Report that the problems of agricultural credit will have the Bank's unremitting attention, that it will give its friendly consideration to any practical suggestions about them from any quarter, and that as it acquires experience by experiments it will be able to make a real contribution towards their solution.

§23. **The state in relation to the co-operative movement.**—It is the duty of the state to offer its good offices and to act as friend, philosopher and guide to the co-operative movement, which is recognized on all sides to be a powerful agency for bringing about social regeneration. Well-meant state interference and assistance may of course be carried to the extent of spoon-feeding, which is objectionable because it runs counter to the very bedrock principle of co-operation, that people must achieve their salvation through their own efforts. On the other hand, the state's fear of the evils of excessive interference may lead it to adopt a policy of extreme *laissez-faire* amounting to callous indifference and unconcern, and the essence of statesmanship lies in steering clear of both these extremes and not grasping either virtue so hard as to transform it into its opposite vice. In India, owing to the widespread ignorance of the masses, the long tradition of state interference and the urgency of the problem of rural credit, the Government have very properly taken a vigorous initiative in the co-operative movement. Equally properly, they have refrained from

[1] The question of long-term credit and the Reserve Bank's attitude towards land mortgage banks is dealt with later in the chapter. See §§27-8, 30.

[2] This question is fully discussed in vol. II, ch. x, §§ 4-5.

the policy of financial spoon-feeding, which, as the experience of France shows, does more harm than good. We fully approve of the recommendation of the Central Banking Enquiry Committee that in the interest of the general taxpayer and to encourage self-help and self-reliance in the co-operators themselves, state aid should be of a temporary nature, sufficient to enable the societies to tide over a crisis.[1] From this point of view, private enterprise, as measured by the growing volume of the working capital engaged in the movement, has been strikingly successful in the short time that has elapsed since 1904. We have already seen that the state has conferred on co-operative institutions certain fiscal and judicial concessions and granted limited financial help to new societies. In Bombay, the Government have gone a few steps further with ample justification for their policy. In the first place, they have extended a guarantee of interest at four per cent on the debentures issued by the Bombay Provincial Co-operative Bank up to a maximum amount of twenty lakhs of rupees. This concession has enabled the bank to raise the much-needed long-term capital for rural finance at a moderate rate without any drain on the funds of the Government, who are not likely to be called upon to make good the guarantee on account of the safe character of the business of the bank. In more recent years the Government of Bombay, as also the Government of Madras, have extended similar help to the debentures issued by Provincial Co-operative Land Mortgage Banks.[2] In the second place, the Government of Bombay have adopted the policy of advancing takkavi loans for permanent improvements of land through the agency of co-operative societies. It would be sound policy in all the provinces to extend liberal assistance to the more specialized forms of co-operation, such as consolidation of holdings, adult education, irrigation, etc.[3] We have already referred to the establishment of the Agricultural Credit Department of the Reserve Bank of India and its interest in the co-operative movement.[4] It may also be noted here that a sum of Rs. 15 lakhs out of the total grant of one crore for village uplift made by the Central Government in 1935 (March) has been earmarked for the purpose of extension and improvement of the co-operative movement in the light of the recommendations made by Mr M. L. Darling, I.C.S., in his report on the opening of the Agricultural Credit Department of the Reserve Bank of India.

[1] See *Report of the Central Banking Enquiry Committee*, par. 187.
[2] See §30 below.
[3] *Report of the Central Banking Enquiry Committee*, par. 191.
[4] See §§21-2.

Turning to the policy of the Government as regards guiding and controlling the movement, it has been on the whole a sound one. For instance, in negativing the demand made in certain quarters for the devolution of some of the duties of the Registrar on the District Officer, the Government have rightly agreed with the Maclagan Committee, who deprecate excessive official interference and lay down that 'the correct position of such servants as the Collector would be to stand as well-wishers equipped with the requisite knowledge and sympathy and to refrain from having any intimate connexion with the management or assuming any direct financial responsibility'. The state has often clearly expressed its wish that its servants should not have any large interest in such matters, though, of course, as the Agricultural Commission point out, 'it is the duty of the officers of all departments to render such assistance to the promotion of the movement as the nature of their particular duties permits'. An exception, however, seems to be implied as regards the relation between the Co-operative Department and the movement of co-operation. While the original policy was progressively to relax the hold of the Department and to make the Registrar ultimately little more than a registering officer as the societies became self-reliant and private enterprise was capable of standing on its own legs, it does not seem to have been consistently carried out. If anything, the position of the Registrar is becoming one of increasing dominance, and the dry-nurse element in his duties is not showing any signs of disappearance. And the Maclagan Committee appear to put the seal of their approval on this apparently retrograde policy. They recommend that the Registrar should wield the power of the 'money stick', that is to say, should control the maximum borrowings of all classes of societies and adoption of rates of interest and that he should supervise the work of the establishment for the preaching of co-operative principles and control the primary audit of societies conducted non-officially. In addition to the Registrar, they propose the appointment of a Joint Registrar for every hundred societies. The Committee hold that, in general, the continued development of co-operation in India on any other condition than the permanent maintenance of an efficient and highly paid staff of Registrars cannot be contemplated. It is, however, generally agreed that even at the risk of some inefficiency, the policy ought to be to encourage responsible private enterprise and to deofficialize the movement as far as possible and make it more self-reliant. With the inauguration of the Montagu-Chelmsford Reforms in 1921 there was a welcome tendency to liberalize the movement, but since the advent of the

economic depression there has been a reaction, and the tendency is to bring the movement more and more under the control of the Department. One way to make the movement more non-official in character, would be to give all possible encouragement to non-official bodies like the Bombay Provincial Co-operative Institute or the Provincial Co-operative Union, Madras, and to delegate to them some of the functions of the Registrar in the matter of supervision, organization and audit of societies and to stimulate them to carry on propaganda by holding conferences, arranging training classes for society office-bearers and the general public, conducting journals and generally devoting themselves to rural reconstruction work. The vital need of the movement is the creation by unofficial federations and other central agencies of their own supervising and controlling staff, the absence or inadequacy of which inevitably leads to official interference. An official audit at suitable intervals may be retained as a healthy check on the affairs of the societies and to ensure public confidence. Official control and guidance are no doubt necessary and will continue to be so for some time to come. And there is nothing wrong in pleading for an increase of the official staff to enable the department to perform its statutory duties more efficiently and to insist that it should be highly educated, well-trained and well-paid. It is also quite legitimate to urge that in view of his onerous and difficult duties 'the personality of the Registrar is a matter of the greatest importance and that the best man available should be selected for the post'.[1] But officials and non-officials alike concerned in the movement should direct strenuous efforts towards making it self-regulating, self-sufficing and democratic as rapidly as circumstances permit. We therefore welcome the recommendation made by the Central Banking Enquiry Committee[2] that in order to popularize the co-operative movement and to promote a sense of responsibility among the members of societies the official control that now exists in the provinces should be slackened. The prospects of relaxation of official control may be expected to be brighter, with the advent of Congress Ministries in eight provinces. No definite indication, is, however, yet in evidence.

§24. **Co-operative Institutes, etc.**—The Bombay Co-operative Societies Act (1925) has recognized the Bombay Provincial Co-operative Institute, which under a non-official president serves to focus the

[1] For an excellent discussion of the qualifications which the Registrar ought to possess and the all-embracing nature of his functions, see *Agricultural Commission Report*, par. 376, and also C. F. Strickland, *Report on Agricultural Co-operation in Palestine*, pars. 26-9.

[2] See *Report*, par. 168.

co-operative activities of the Presidency, including the holding of the provincial co-operative conferences. The Institute, which had 5,422 members (4,610 societies and 812 individuals) on 30 June 1937, receives a grant from the provincial Government for its threefold work of propaganda, training, and publication of co-operative literature. In 1928 it opened co-operative schools at Surat, Poona and Dharwar for giving instruction to rural secretaries, supervisors and bank inspectors. It has several divisional and district branches to carry out its work in the Presidency. Unlike provincial co-operative unions, which are the final federations of all societies, being entrusted with definite duties of audit and supervision and enjoying a definite legal status, the Institute is a body mainly for propaganda. While, however, the Institute is doing excellent propaganda work, it has not yet fulfilled to any degree its additional objects of the systematic study of co-operative problems and of contributing expert knowledge and advice on the more specialized sides of the movement. The Government of Bombay have recently (January 1938) issued a scheme for the re-organization of the Institute, providing for a revised constitution under which its main duty would be to impart education to the members of the co-operative societies and to the workers of the co-operative movement, and under which its membership will consist of District Supervision Boards and other federations of co-operative societies. It will also serve as a focussing centre of non-official opinion on various subjects affecting the movement.[1]

A recent interesting development regarding the progress of non-official co-operative agencies was the establishment, on 1 October 1929, of the All-India Co-operative Institutes' Association, the formation of which was agreed to by the first All-India Co-operative Institutes' Conference in Bombay in September 1929. Its main object is to promote and extend co-operation through the member institutes and to furnish advice and assistance to them on all co-operative questions. The Association started the issue of its own quarterly journal *The Indian Co-operative Review* (edited by Ramdas Pantulu) from January, 1935. It offers a useful periodical survey of the co-operative movement in the whole of India.

Another all-India co-operative organization is the Indian Provincial Co-operative Banks' Association, which has for its object the furtherance of common interests, especially in matters of

[1] See *Annual Report of the Registrar, Bombay* (1936-7), par. 126 and *Bombay Co-operative Quarterly*, March 1938.

finance, legislation and administration. The Central Banking Enquiry Committee recommend that the Co-operative Societies Act should be amended so as to provide for the registration of societies of an all-India character, or societies operating in more than one province. This recommendation was endorsed by the eleventh session of the Registrars' Conference held in Delhi in February 1934; and by the Joint Conference of the All-India Co-operative Institutes' Association and the All-India Provincial Banks' Association held at Amraoti in June 1934. If this is expedited and the working of the two institutions strengthened so as to make them serve as co-ordinating agencies in matters of finance and research, it will not be necessary to set up another all-India body, e.g. an All-India Co-operative Council with administrative or controlling functions as suggested by the foreign banking experts.[1]

25. **A critical estimate of the co-operative movement in India.**—The co-operative movement in India has not indeed succeeded in curing all the economic and social ills from which the country is suffering today. On the other hand, it has not been altogether barren of valuable results. In the first place, owing to the cheaper credit made available by co-operative societies, much saving, estimated at about a crore of rupees, has been effected by the agricultural and artisan classes, and it is not unduly optimistic to expect that, in the not-too-distant future, this figure will multiply itself many times over, especially if other forms of co-operative organization intended to provide long-term credit come into existence. Co-operation, moreover, has substituted a system under which credit is controlled and debt restricted, for the money-lender's demoralizing system of dangerously facile credit. In several places co-operation has successfully undermined the predominant position of the money-lender and compelled him to bring down his rates of interest. In the matter of debt redemption, although much still remains to be done and although it is true that co-operation alone would be unequal to the colossal task of ridding the peasantry entirely of its burden of indebtedness, something has nevertheless been achieved, especially by the establishment of land mortgage banks on co-operative lines.[2] As Mr Darling says, the co-operative movement may be regarded as a new form of communal life to protect the peasant from within and without his gates, in the place

[1] See *Report of the Central Banking Enquiry Committee*, par. 161, and *The Indian Co-operative Review* (Jan., 1935), p. 7.

[2] See §29 below.

of the old communal life of the village which prevented the cultivator from being exploited.[1] Further, with the progress of co-operation, the banking habit is slowly but steadily developing in rural and urban areas and the hoards that were lying unused are gradually coming into fruitful employment. Agriculture, the premier industry of the country, has benefited in a variety of ways by co-operation, which has facilitated the work of the Agricultural Department in popularizing improved seed and cattle, cheap manures and implements and, in general, helping the realization of the ideal of 'better farming, better business and better living'. The gradual development of a truly organic connexion between co-operation and agriculture is pregnant with great possibilities.[2] Co-operation has also made important beginnings in dealing with problems of rural sanitation, provision of suitable medical facilities in rural areas, etc.

Societies started for special non-agricultural purposes, though as yet on a small scale, are doing useful work in their respective fields. The condition of factory labourers, depressed classes and employees of all sorts, is being gradually ameliorated under the benign influence of co-operation. Cottage industries, notably the hand-loom industry, are receiving the support and the assistance of the movement. Finally, the co-operative movement has served to counteract the tendency towards rural depopulation in certain parts of the country.

Not the least important of the advantages of co-operation, in the widest sense of the term, are intellectual and moral, and wherever co-operative societies have been started they have generally not failed to yield these advantages. 'It is difficult to give conclusive evidence of this [moral progress] as the signs of moral progress are too illusive to be pinned down in a statement of facts; but for all that they are unmistakable to close observers of the movement. Litigation and extravagance, drunkenness and gambling are all at a discount in a good co-operative society and in their place will be found industry, self-reliance and straight dealing, education and arbitration societies, thrift, self-help and mutual help.'[3] The movement has in some cases created a keen desire for education, and even persons fairly advanced in age have been found to seek its benefit. It has also improved the character and the general tone of morality and promoted the development of a feeling of 'all for each and each for all' among the village

[1] See M. L. Darling, op. cit., p. 261.

[2] See Government of India's Resolution on Co-operation, 17 June 1914, par. 7.

[3] M. L. Darling.

folk. In short, the co-operative movement bids fair to be a powerful instrument for the revival of the old corporate life of the villages and to restore their vitality.

It must, however, be admitted that all these benefits—moral, educational, as well as purely economic—have been secured only on a very small scale. For example, much yet remains to be attempted and achieved in the field of non-agricultural co-operation. Even agricultural co-operation is practically confined to the sphere of credit and here too, as Sir M. Visvesvaraya remarks, 'all that has been done amounts only to a scratching of the surface'.[1] Co-operative credit again has generally prospered only where the monsoon is normal. In precarious tracts, overdue loans and failure to repay are distressingly common. Moreover, as the Central Banking Enquiry Committee point out, the credit provided by the co-operative organization is still much too dear for the cultivator in some provinces and it is necessary to take further steps to effect a reduction in the present rates of interest.

It is also clearly necessary that we should frankly recognize, in order to be able to remedy the various defects in the actual working of the movement in India today, such as unpunctuality of payments, fictitious payments, excessive overdues, defective audit, inefficient control, *benami* loans, nepotism, red-tapism, inelasticity, dilatoriness and inadequacy of co-operative finance, etc.[2] The staff appointed to teach members the true principles of co-operation is itself sometimes ignorant, ill-trained and unfit for the work entrusted to it. Managing committees and presidents are too often allowed to usurp all power, to the detriment of the rank and file of the members; and office-holders and leaders of the movement often display 'an undue delicacy and lack of moral courage in dealing with the faults and misdemeanours' of the members, and put up with serious irregularities in the hope that a Government officer will come one day and put things right. They show a great dislike to incur the unpopularity attendant on stringent action taken against recalcitrants and the recovery by legal process of overdue debts'. The overdues have, as already pointed out, shown an alarming increase during recent years of depression, and are at present the most disquieting feature of the

[1] op. cit., p. 185. The Central Banking Enquiry Committee also find that the credit facilities now provided by the co-operative movement to agriculturists cover but a very small proportion of their needs (*Report*, par. 169).

[2] For a detailed study of the various weaknesses of the co-operative movement in India see the *Reports on Agricultural Credit* issued by the Reserve Bank of India, also Eleanor M. Hough, *The Co-operative Movement in India*, pp. 226-40.

co-operative movement. Although the fall of agricultural prices, which has reduced the repaying capacity of the agriculturist, and the uneconomic nature of the agricultural industry in this country have an obvious bearing on the position regarding the overdues, the grant of generous loans, loans for unproductive purposes and slackness in recovery, are equally important causes of the overdue loans which are everywhere large and have in effect become long-term loans.

Many of the members seem to believe that the co-operative movement is merely a state-managed affair and that it is Government money which they borrow from their society. The failure of members to understand properly the aims and objects of co-operation engenders in them an attitude of apathy and indifference which is fatal to the movement. They are also apt to take only a mercenary view of their society, regarding it merely as a cheaper substitute for the village money-lender, and are thus unable to identify themselves with the movement in the whole-souled manner that is essential for its success.

As we have seen, the co-operative movement in India owes its origin to Government initiative and not to spontaneous action taken by the people themselves, but the fact that it still remains very largely in official leading strings must be regarded as a radical defect, since the essence of co-operation is self-help. The vital principle and the will to live must come from within and not be supplied by some extraneous agency.

The movement is just now passing through a phase of healthy introspection and self-criticism.[1] There is no longer any straining after spectacular triumphs, and solid results are being aimed at more and more. The keynote of the official attitude everywhere has come to be 'consolidation' and 'rectification' rather than 'expansion'. Official booming of the movement in the spirit of a pedlar crying up his wares has happily disappeared, and there is instead a genuine desire to find out faults with a view to removing them. Searching inquiries have been carried out with telling effect in the Central Provinces, the United Provinces, Madras, Bihar and Burma.[2] The Preliminary and the Statutory Reports

[1] There has been a crisis in the movement in Bihar and Burma and painful adjustments are being effected to rehabilitate it.

[2] In Bombay the co-operative movement has in recent years been scrutinized not by one but by a number of small committees such as the Supervision Committee (1934) and the Land Mortgage Bank Committee (1934) apart from the somewhat unsympathetic review by the Thomas Reorganization Committee (1932-3). More recently (1937), the Congress Ministry of Bombay asked Mr M. D. Bhansali, I.C.S., Registrar of Co-operative Societies and

on Agricultural Credit issued by the Reserve Bank of India and the Bulletins published by it during the last two years have further subjected the co-operative movement to the searchlight of criticism. This is all to the good, because it is suicidal to ignore or gloss over defects. They must be squarely faced and tackled resolutely. Workers in the movement must not despair of the movement because the results so far have not been commensurate with their enthusiastic expectations. They must keep their faith bright in the gospel of co-operation which has after all worked such wonders elsewhere, and labour more strenuously than ever to make it a success in this country. For as the Agricultural Commission remark: 'If co-operation fails, there will fail the best hope of rural India.'[1]

§ 26. **Re-orientation of the co-operative movement.**—We may conclude our account of the co-operative movement in India by a brief review of the several valuable suggestions made by the Agricultural Credit Department of the Reserve Bank of India in its Statutory Report with a view to effecting the requisite rectification and consolidation of the co-operative movement.[2]

In the first place, the overdues and long-term loans of co-operative societies should be separated from short-term loans and placed on a proper footing. To this end, the overdues should be scaled down so as to make their redemption from agricultural profits possible within a period of twenty years. This should be done partly by writing them off from reserves and other funds, and partly by recovery from sale of part of the member's assets, transferring the remainder to a special agency like the Land Mortgage Banks. This procedure is less objectionable than the present policy of withholding further finance or wholesale liquidation of societies in arrears.

In the second place, co-operative societies are advised to build up strong reserve funds by providing for an adequate margin between their borrowing and lending rates. This would enable them to tide over unfavourable seasons when their members are prevented from repaying the loans and to meet the losses thus

Mr V. L. Mehta, Managing Director of the Bombay Provincial Co-operative Bank, to examine and report on the present position of the co-operative movement in the province and make recommendations on the future lines of development. The Government of Bombay have already (1938) passed orders to give effect to some of the recommendations of the Report. Other recommendations are under consideration.

[1] *Agricultural Commission Report*, par. 371.

[2] See *Indian Co-operative Review* (April-June, 1938) for the views on this Report expressed by the Joint Session of A.C.I. and I.P.C. Associations.

caused. While such a practice would undoubtedly strengthen the financial standing of co-operative societies, there is at the same time some justification for the criticism that the proposal, if adopted, would lead to the charging of high interest rates which would be beyond the capacity of agriculture to pay.

In the third place, it is recommended that loans should be restricted to cultivation expenses including limited advances for supplying intermediate credit for such purposes as the purchase of cattle and implements. Loans for other purposes, which though not strictly productive are absolutely necessary, should be reduced to a minimum, and should not be beyond the capacity of the agriculturist to pay. To this end the agriculturist should be prevented from borrowing from more than one source and his total future liability should be limited in terms of a suitable multiple of land revenue or on the basis of the average value of land.

In the fourth place, the primary credit society, which is the pivot of the whole co-operative movement, should be reconstructed on sound lines as indicated in the Reserve Bank's Bulletin on Village Banks. It should work as a multi-purpose society and aim at bringing the entire life of the cultivator within its ambit. It should build up its own funds with shares and reserves and attract deposits from members by teaching the lesson of thrift and prudence to them. (See §12 *ante*.)

In the fifth place, primary societies should be federated into small Banking Unions (as at Kodinar in Baroda State), which will be able to concentrate in their hands all the functions of finance, supervision, and education for which different agencies are employed at present resulting in a diffusion of energy and waste. (See §17 *ante*.)

Sixthly, co-operative marketing should be developed by making a start from the bottom. With this object in view, primary societies should be induced to take up joint marketing of agricultural produce raised by their members. They should be linked up with larger central sale societies.

Seventhly, the existing central and provincial co-operative banks should be re-organized. The large and unwieldy central banks should be split up into suitable banking unions, even if the central co-operative bank is to be retained. The provincial co-operative bank should play a much wider part in the direction and guidance of the movement. Both these types of banks should maintain sufficient fluid resources to provide for the withdrawal of deposits, build up adequate reserve funds and make a strict provision for setting out overdues in the balance sheet in such a way as to present a true picture of their conditions. We

welcome the suggestion that co-operative banks should establish closer contact with first-class commercial banks and take the latter's advice in re-organizing their business, and have some professional bankers on their boards. They should also make adequate provision for the training of their staff.

Finally, provision should be made for the intensive training of the co-operative staff in co-operation, rural economics and the theory and practice of banking. Special importance should be attached to the proper training of the Registrar who forms the foundation of the whole movement. We support this recommendation provided adequate opportunities are offered to non-official workers both to receive the requisite co-operative education and to look after their own affairs. It is gratifying that increasing attention is being paid to co-operative training in Bombay and other provinces. The Central grant of Rs. 15 lakhs to the provinces has given a welcome stimulus to the introduction of co-operative training schemes.[1]

Land Mortgage Banks

§27. **The need for land mortgage banks.**—Nearly 35 years have passed since the inception of the co-operative movement. The experience gained during this long period has compelled its advocates to moderate their original expectations in regard to the possibility of completely wiping off the indebtedness of the rural classes and of supplying long-term credit also for other purposes through its agency. It is now being realized by every competent authority on co-operative credit in India that the existing primary societies, central banks and provincial banks, by reason of the character of their resources and other obvious limitations from a banking point of view, can supply only short and intermediate credit. They must therefore be supplemented by other types of organization dealing specifically with the problem of long-term credit,[2] the gravity of which has greatly increased during the last six years of agricultural depression, and has emphasized the urgency of scaling down the existing agricultural debts. The chief reason for the establishment of land mortgage banks is the necessity of stabilizing good and deserving agriculturists who are creditworthy.

In order to bring about the permanent release of the agriculturist from his indebtedness, loans for sufficiently long periods are necessary. They are also required to enable the agriculturist, big and small, to effect costly but profitable improvements.

[1] See *Annual Report of the Registrar of Co-operative Societies, Bombay* (1936-7), pars. 129-32.

[2] See *Report of the Central Banking Enquiry Committee*, pars. 154, 157.

Co-operative societies are unable to meet adequately either of these requirements and the utmost they can be expected to do is to supply the current capital needs of the agriculturist. They cannot afford to lock up their funds for long terms, and yet the cultivator badly needs long-term loans for various purposes. The Raiffeisen type of village bank is not intended to meet the requirements of the large landed proprietor who forms the money-lender's easiest and readiest prey. Moreover, the ordinary commercial banks and money-lenders cannot afford to tie up their capital for long periods nor to recover the loans in small driblets out of the earnings or savings of the borrower. Hence arises the need for special types of credit institutions generally called 'land mortgage banks'. These banks will displace not only the money-lender but also the present unsatisfactory system of state loans and, by lowering the rates of interest, will bring many productive improvements within the reach of the landholder.[1]

§28. **Land mortgage banks and co-operation.**—The objection has been raised against land mortgage banks that they are bound to be capitalistic concerns and that they are devoid of the moral or educative value of co-operative associations. But even if we grant the truth of this contention, there is no escape from the position that, since old debts are a serious obstacle to the economic regeneration of the ryot and their extinction is a task beyond the capabilities of the co-operative movement in its ordinary forms, as is also the almost equally important task of financing permanent improvements, other devices suitable for this purpose, though lacking in some of the characteristic virtues of co-operation, must be resorted to. We must further remember that the existence of prior debts on the present scale prevents the realization of the full benefits of co-operation itself. Anything therefore that tends to cure the malady of indebtedness and to strengthen the economic position of the ryot, must be regarded not as a rival but as an indispensable ally of co-operation. Moreover, the alleged differences in basic principle between land mortgage banks and co-operative credit societies are capable of being eliminated by organizing land mortgage banks according to co-operative principles.[2] Land mortgage banks may be co-operative, non-co-operative, or quasi-co-operative. So far as relief to small agriculturists and owners of small holdings is concerned, the co-operative type is the most suitable, being based on mutual association and guarantee of the property mortgaged by the members. Strictly speaking, however, the type which is in vogue in India is of the

[1] See *Report of the Central Banking Enquiry Committee*, pars. 381, 384.

[2] See Strickland, *Studies in European Co-operation*, pp. 2-4.

quasi-co-operative variety. Although there are substantial elements of co-operative theory and practice in all land mortgage banks, they are conceived as limited liability associations of borrowers with a few non-borrowing individuals thrown in to attract initial capital as well as the business talent and organizing capacity needed to make the management efficient. Moreover the valuation of lands is effected by trained officials lent by the Government and loans require the previous sanction of the Registrar. The Reserve Bank stresses the danger of relying too exclusively on institutions of a co-operative character. Their directorate and management represent the would-be borrower too exclusively and offer inadequate security to lenders. The quasi-co-operative type that is now being established in Bombay and other provinces (see §§29 and 31 below), should go a long way in meeting the danger pointed out by the Reserve Bank. The non-co-operative or commercial land mortgage bank is better suited to finance big landlords or zamindars.[1]

29. **History of land mortgage banks in India.**[2]—As early as 1863, a company called the Land Mortgage Bank of India Limited, with the sub-title of Crédit Foncier Indien, was registered in London, being based on the model of the French Crédit Foncier. The company had its agents in Calcutta, Bombay and Madras and sub-agents in all the principal cities, towns, and districts of Bengal, Madras, Bombay, Oudh, etc. Loans were given for a period of seven years at a time at seven to eight per cent interest. The bank made a good beginning and had a flourishing career for about twenty years. It appears, however, to have gradually declined owing, among other reasons, to its large advances against tea (the price of which was then going down), the non-fulfilment of its expectation regarding the extension of Permanent Settlement to the whole of the country, and the appearance of rivals like the loan offices in Bengal which began to advance money to the landlords. Perhaps we need not after all regret the failure of this European enterprise in the sphere of land mortgage banking for, as the Punjab Government pointed out in 1908, it was politically objectionable to place the

[1] See *Report of the Central Banking Enquiry Committee*, pars. 198-9, and the Preliminary Report on Agricultural Credit (Reserve Bank of India), par. 17.

[2] For the earlier history of land mortgage banks, see J. C. Sinha's paper on Land Mortgage Banking read before the Indian Economic Conference, Lucknow, 1928. For their present position see the *Report of the Central Banking Enquiry Committee*, pars. 204-10 and a note on the working of land mortgage banks in the several provinces in the *Indian Co-operative Review* (July-September, 1937), pp. 498-501.

welfare of the people in the hands of a powerful bank with its headquarters in London and in a position to influence the Secretary of State.[1] The unsuccessful project of a land bank for the Poona district suggested by Sir William Wedderburn in 1883 has been already described.[2] Sir Frederick Nicholson held (1895) that land banks were neither suited to, nor needed by the ryots of the Madras Presidency. Dupernex, in his *People's Banks of Northern India*, advocated land mortgage banks for the benefit of the encumbered estates in the United Provinces. Sir Dinshaw Wacha was also a strong advocate of land banks of the Egyptian type, which he regarded as affording the only satisfactory solution for the problem of indebtedness. In 1919, Sir James Meston, then Finance Member, spoke in favour of land banks started very largely by local enterprise and maintained under local supervision and control by groups of intelligent landlords; but, at the same time, he pointed out that it was not advisable for the Government to undertake work of this sort on a large scale. Most of the earlier schemes, it will be observed, did not contemplate the grant of loans to ryots on the security of their holdings, being for the most part intended for the bigger landlords. Opinion in this respect has, however, changed since, and the establishment of such banks for the benefit of ryots may now be regarded as the official and non-official creed in India, one which was also adopted by the Bombay Registrars' Conference in 1926.

The Punjab had the honour of giving the lead in this matter, and its first co-operative land mortgage bank was started in 1920 at Jhang. In a few years the number of such banks increased to twelve. It is unfortunate that the movement in the Punjab is now at a standstill. No new banks are being started, and very few loans are being granted. Attention is being concentrated on recoveries, and the question of re-organization of these banks is receiving attention from the Registrar. Lack of caution in granting loans, absence of proper inquiries by directors both as regards the security of loans and the purpose of borrowing and in general the unfettered discretion enjoyed by the directors in sanctioning loans (which was unwisely used) appear to be some of the main causes of the lack of success of this pioneer experiment in land mortgage banking. There have also been other factors in operation. The banks were started when high prices and agricultural prosperity were at their peak. The depression that followed has adversely affected the capacity of borrowers to meet their obligations. There was also a mania for the purchase of land at

[1] See B. G. Sapre, *Essentials of Indian Economics*, p. 226.

[2] p. 315.

uneconomic prices, and loans, ostensibly taken for redemption of land, were used for investment in land. Lack of loyalty on the part of the directors, partiality and favouritism aggravated the situation.[1]

Madras, Bengal, the United Provinces and Assam have also taken steps to inaugurate such banks, and Bombay has already established 13 such institutions in select districts of the Presidency on the model of the national farm loan associations of the United States. The Burma Government have approved of an experimental scheme. In 1935 the Central Provinces Government established 10 Co-operative Land Mortgage Banks, guaranteeing capital and interest to the extent of Rs. 50 lakhs. Two more have since been started. Madras has made the most remarkable progress in this direction and has to its credit over 100 land mortgage banks (see §31 below). Progress is slow in Bengal and the United Provinces, each of which has only 5 land mortgage banks. One difficulty in Bengal is the unwillingness of co-sharers to join in the execution of land mortgage bonds. Splitting up of holdings and high lending rates are other difficulties. The movement for the establishment of land mortgage banks has been considerably influenced by the success obtained by the land mortgage banks (*Landschaften*) in Germany, and the question of introducing banks on this model has received careful study in India, particularly at the hands of the Agricultural Commission, the provincial Banking Enquiry Committees, and the Central Banking Enquiry Committee. Increasing attention is being paid to it by the provincial Governments in the recent years of depression, and even the Central Government are taking a keen interest in the establishment of land mortgage banks which formed an important item in the agenda of the Provincial Economic Conference which met in April 1934 at Delhi. Conciliation of rural debts has imparted a new urgency to the establishment of land mortgage banks in the several provinces.

There are certain favourable circumstances for the extension of land mortgage banks at present. In the first place, moneylenders in the rural areas are in a mood to compound their dues by accepting smaller but surer cash payments, and a programme of debt conciliation can be carried out by these banks with a view to effecting considerable reduction in debt liabilities. In the second place, abundant supplies of cheap money are available in

[1] See an instructive article on the Punjab Experiment in Land Mortgage Banks by Sh. Ataullah in the *Indian Journal of Economics*, January 1936 and *Report of the Registrar on the working of the Co-operative Societies in the Punjab* (1937).

the money market on easy terms against sound security. 'It is for the banks to utilize the cheapness of money in assisting the cultivator who is in difficulties owing to the cheapness of produce.' In view of the fall in the prices of agricultural produce it has become imperative to adopt means to increase the income of the agriculturist by financing agricultural improvements, such as consolidation of holdings, minor irrigation, livestock breeding, bunding operations, better implements, etc.[1]

At the same time there is need for caution in organizing land mortgage banks. They should be established after the most careful preliminary inquiry, and their constitution and working should be as simple as possible. The management should be efficient and punctual. Defaults committed by a bad bank might endanger the reputation of good banks and destroy public confidence in debentures. No money should be advanced which is not likely to be profitable to the borrower.

§30. **Help for mortgage banks by the State and the Reserve Bank.**—We need hardly emphasize the value of state help for the successful working of the land mortgage banks in India. State assistance may be given in the form of a guarantee for the repayment of both principal and interest, purchase by the Government of a portion of the debentures or bonds pledged against land, declaration of such bonds as trustee securities,[2] grant of special facilities and privileges to the bank as a mortgagee (as in Germany), the grant of concessions similar to those enjoyed by co-operative societies and subsidies for meeting working costs.[3] In the absence of such state aid, land banks are not likely to be able to sell their bonds in the market at a reasonable price and quote a moderate rate of interest. The successful issue, by the Bombay Provincial Co-operative Bank, of debentures of the value of ten and a half lakhs of rupees enjoying a guarantee of interest at four per cent from the Secretary of State, may be regarded as an encouraging precedent in this connexion. This is further supported by the striking success which has attended the floating of debentures at even lower rates in recent years by the provincial land mortgage banks in Madras and Bombay. (See §31 below.)

[1] See *Report of the Bombay Land Mortgage Committee*, pars. 11-13.

[2] A recent (1934) amendment of the Indian Trusts Act by the central legislature provides for the inclusion of the debentures floated by land mortgage banks in the list of trustee securities.

[3] For particulars regarding the assistance given by the provincial Governments to land mortgage banks, see §31 below.

Since the establishment of the Reserve Bank of India, the question of direct financial assistance by the Bank to the existing co-operative land mortgage banks, by investing or advancing money on the security of their debentures, has assumed an important aspect. We are surprised at the somewhat sceptical attitude of the Bank towards the debentures of land mortgage banks, which have already been declared trustee securities. The Reserve Bank is not prepared to purchase them at this stage of the development of these banks and prefers to wait and see how far their debentures are easily marketable. It is well known that land mortgage banks have attained a fair measure of success in Madras and Bombay, and the postponement of a decision on this vital matter indicates an ultra-conservative attitude on the part of the Reserve Bank. All that it promises immediately to do is that the Agricultural Credit Department will make it a point to keep in touch with the co-operative land mortgage banks, study their constitution and working, and give them the benefit of banking advice.[1]

If the Reserve Bank feels nervous directly to accept responsibility, a special intermediate agency like the Agricultural Mortgage Corporation of England should be established. The former could then extend to agriculture such assistance as it can through the agency of this intermediate body.

§31. **The Madras and Bombay schemes.**—An examination of the Madras and Bombay schemes of land mortgage banks organized on co-operative lines will indicate the general lines of the constitution, finance and management of such banks.

(i) *Madras scheme.*—In 1924-5 a scheme for special land mortgage banks was sanctioned. 'The primary object of the scheme is to facilitate the redemption of mortgages of agricultural land and thereby to afford relief to the ryots who are encumbered with mortgage debts. . . . Amongst the objects of the land mortgage banks will be included the improvements of agricultural lands and of methods of cultivation. All loans to members of the proposed banks will be secured on the mortgage of agricultural land and the bulk of the working capital will be obtained by the issue of debentures secured on these mortgages.' The Government of Madras undertook to take up half the debentures to the maximum amount of two and a half lakhs of rupees, provided that at least debentures of an equal amount were taken up by the general public. In addition to debentures and deposits (accepted for not less than three years), a portion of the working capital

[1] *Preliminary Report on Agricultural Credit*, par. 21.

consisted of share capital, the value of the shares being kept low so as to enable the small cultivator to join the bank. The formation of these banks was to be confined to valuable wet areas.

A limited area of operation restricted to a group of villages within six or seven miles from the headquarters of the bank, was considered desirable so as to ensure some degree of mutual knowledge and to facilitate the identification and valuation of the land to be mortgaged to the bank without the help of professional experts. Latterly, however, the tendency has been to extend the local area. A number of ryots who owned landed property in this area and who had mortgaged land to money-lenders combined to form a co-operative land mortgage bank. The old scheme, before the establishment of the Central Land Mortgage Bank, was thus described. 'They [the primary land mortgage banks] will re-mortgage their lands to the bank which will proceed to issue debentures on the security of these mortgages. These debentures will be sold in the open market and the sale proceeds will be utilized by the bank in lending to its members in exchange for their mortgage deeds. . . . The total value of the debentures will not exceed the amount covered by the mortgages given by the members of the group for whom a particular series of debentures is issued.' The period for which debentures were issued was ordinarily not less than twelve and not more than twenty years, carrying a rate of interest not exceeding seven per cent. The rate of interest to be paid on debentures was, to begin with, fixed at seven per cent. The Registrar was to be the trustee for these banks to safeguard the interests of the debenture holders.[1] These banks were organized on a limited liability basis—as no person can be a member of two unlimited liability societies at the same time. The value of the land mortgaged as security for a loan must be at least twice the amount of the loan.[2] The number of land mortgage banks was twenty as reported by the Madras Banking Enquiry Committee (1929-30). Of these only eight issued any debentures. In spite of Government help, the progress achieved by these banks on the whole was poor, mainly owing to the inability on their part to sell their debentures to the public. The Townsend Committee on Co-operation (1927-8) examined their

[1] In the case of the famous German land mortgage banks (*Landschaften*), the legal connexion between the mortgage bonds and the hypothecated estate which supports them is guaranteed by a special commission of control.

[2] See the draft scheme submitted by the Registrar, Madras, in his letter to the Secretary to the Government, Development Department, 1 June 1924.

position and found that they could not make any satisfactory progress unless a central land mortgage bank were formed with individuals and primary land mortgage banks as members, to issue debentures as a floating charge on the value of the mortgages transferred to the central land mortgage bank by the primary land mortgage banks. Accordingly the Central Land Mortgage Bank was started in December 1929 at Madras and is calculated largely to remove a serious defect of the Madras scheme, namely a number of scattered, unco-ordinated and small land mortgage banks, flooding the market with competing issues. The Government of Madras have given some facilities to the Bank, such as a guarantee for interest up to six per cent on all debentures floated by the Bank in the first five years up to the limit initially fixed at Rs. 50 lakhs—this limit has since been successively raised and now stands at Rs. 250 lakhs—but for the full term of the issues, loan of the services of two Deputy Registrars to inspect local mortgage banks and of ten Sub-Deputy Registrars, in the first instance for a period of three years to assist in all inquiries on behalf of the local land mortgage banks, and a subsidy of Rs. 25,000 for its working expenses. To safeguard their interests, the Government are represented on the Board by the Registrar, and by a nominee of the Registrar approved by the Government. Apart from leading co-operators, commercial magnates and public men in the Presidency were included in the first Board of Directors of the Central Land Mortgage Bank whose debentures evoked a fair response from the investing public. Its career has been one of fair and steady progress excepting for the lull during 1931-2, which was an exceptional year of severe financial stringency.[1] There are at present (1939) over 100 primary land mortgage banks affiliated to the Central Land Mortgage Bank. The debentures are so highly valued that they can be floated at 3 per cent. The Bank has so far advanced long-term loans to the extent of Rs. 1·75 crores at less than 5 per cent to agriculturists through the primary banks. The Madras Co-operative Land Mortgage Bank Act (1934) empowers the Local Government to guarantee the debentures, the principal as well as the interest on them, floated by the Central Land Mortgage Bank and gives the bank effective powers to collect from defaulters, and removes several legal impediments hampering the successful working of these banks.

[1] See Article on *Land Mortgage Banks—Madras Presidency* by Mr T. Austin, I.C.S. in *The Indian Co-operative Review* (Jan. 1935). See also *Annual Report of the Registrar* (Madras) for 1936-7 and *Indian Co-operative Review* (April-June, 1938).

The land mortgage banks are expected to play a special part in helping the clearance of prior debts scaled down by the application of the Madras Agriculturist Debt Relief Act (1938).[1]

(ii) *The Bombay scheme.*—The question of land mortgage banks for the Bombay Presidency was originally considered at the Gujarat Divisional Co-operative Conference in April 1923. In September 1926 the Government of Bombay approved of the draft scheme prepared by Mr J. A. Madan, I.C.S., the then Registrar, and considered by a conference called by the Minister of Co-operation and a special committee. The Government approved of the registration of two land mortgage banks for Dharwar and Broach districts (on the model of the national farm loan associations of the United States) as an experimental measure to be financed provisionally by the Bombay Provincial Co-operative Bank and agreed to buy its debentures worth Rs. 5 lakhs carrying 4 per cent interest. In order to provide the land mortgage banks with sufficient capital the services of a land valuation officer for one year, free of cost, for each bank were also provided. An additional bank for Pachora (East Khandesh) was also approved later, and it was registered in 1926, while those at Broach and Dharwar were registered in January 1929. Debentures of the value of Rs. 2 lakhs issued by the Bombay Provincial Co-operative Bank were purchased by the Government. The Provincial Bank has set up a separate land mortgage department for carrying out its new duties. The Broach and Dharwar banks financed members throughout the district, while the Pachora Bank's operations were limited to the taluka itself. Every loan had to be finally sanctioned by the Bombay Provincial Co-operative Bank and the Registrar. The limit of individual finance was fixed at Rs. 10,000. The bulk of the loans were given for redemption of prior debts and in a few cases only the loans were advanced for installing costly machinery and for the improvement of land. Membership was restricted to borrowers only, but intending borrowers could also join.

The experiment in Broach District proved very encouraging although a scrutiny of the working of these banks by the Bombay Land Mortgage Committee (appointed by the Bombay Government on the recommendation of the Co-operators' Round Table Conference at Poona in 1933) revealed certain defects in the case of the Pachora and Dharwar banks. For instance it was found that the estimates of the repaying capacity of the borrowers were defective and that sufficient allowance for the variations in prices and unfavourable seasons had not been made. There were also

[1] See ch. ix, §11.

some constitutional defects, viz. only borrowers or intending borrowers were eligible for membership and consequently in unfavourable years there was not sufficient pressure exercised by the boards of directors of the primary banks to secure repayment of the instalments. The powers of these boards were too meagre to stimulate interest in the working of these banks. But as the Bombay Land Mortgage Committee pointed out, these are not insuperable objections militating against the success of these banks. The Committee therefore strongly urged the extension of land mortgage banks in the various districts of the Presidency and formulated an improved scheme, making provision for the establishment of a separate central land mortgage bank (corresponding to the 'federal land bank' under the American system) for issuing debentures. The Bombay Provincial Co-operative Bank, which receives short-term deposits from the public and serves as an apex bank for the ordinary primary credit societies and district central co-operative banks granting short-term loans, is entirely unsuitable for financing primary land mortgage banks.[1] Besides, the latter is a special type of business which requires distinctive handling and expert staff.

The Government of Bombay have recently (1935) given effect to the recommendations of the Land Mortgage Committee. In addition to the three experimental banks started earlier, 10 more primary land mortgage banks have been registered since 1 April 1935, so that their total number is now 13. The area of operations has been restricted to places which are less liable to scarcity and famine and wherein the co-operative movement has made appreciable progress. At the same time steps were taken to constitute a new central land mortgage bank. Accordingly the Bombay Provincial Co-operative Land Mortgage Bank was formally registered on 7 December 1935, under the Bombay Co-operative Societies Act, with an authorized capital of Rs. 10,00,000, of which Rs. 3,94,700 was the paid-up capital on 30 June 1938. The late Sir Lalubhai Samaldas was the first president of the bank.

The main functions of the new apex bank are to finance the primary mortgage banks—all of which are now affiliated to the apex bank—by issuing debentures, to inspect their working and give them advice and help. In the budget session of 1935, the Bombay Legislative Council passed a resolution authorizing the Government to guarantee both the principal and interest of the debentures

[1] See *Report of the Bombay Banking Enquiry Committee*, par. 116 and *Report of the Bombay Land Mortgage Committee*, par. 21.

to be issued by the bank to the extent of Rs. 50 lakhs. The Government have, however, provisionally sanctioned the issue of debentures to the extent of Rs. 20 lakhs only. During the year ending 30 June 1938 the bank floated the first series of debentures of Rs. 20 lakhs at 3½ per cent. The period of the debentures is 25 years but the bank has reserved to itself the option to redeem them after a period of 20 years on giving six months' notice. Arrangements have been made for sinking funds in respect of each separate issue of debentures. The fulfilment of the obligation of the Bank towards the debenture holders is to be secured through a trustee appointed by the Government. These debentures are now declared trustee securities and appear to be a popular line of investment to insurance companies, banks and private individuals.[1]

The Provincial Land Mortgage Bank advances loans to agriculturists through the primary mortgage banks on the security of their lands. The primary banks have to investigate the title to lands, income, and the repaying capacity of the agriculturists. Loans are given only to members on the recommendations of the Board of Directors of the primary banks, submitted to the Provincial Land Mortgage Bank. The maximum amount of such loans to individual members is restricted to Rs. 10,000. Subject to this maximum no member can receive from the primary bank a loan exceeding twenty times his paid-up share capital in the bank, or half the value of his immovable property given in mortgage to the bank. No loan can be granted for a period exceeding 20 years. Sanction of the Registrar is necessary for all the loans from the Provincial to primary banks and from the primary banks to individuals in the initial stages. Interest on loans granted by the bank is not to exceed 1½ per cent over the rate (4½ per cent) charged by the Provincial Land Mortgage Bank. The members of the primary banks are thus able to borrow at 6 per cent, a rate substantially lower than the existing onerous rates of interest charged to agriculturist borrowers by money-lenders. This should in itself go a long way to reduce the existing liabilities of the debtors. Repayment of the loan is to be either by equal annual instalments of principal, interest being calculated on the amount outstanding from time to time, or by equated annual instalments including both principal and interest. The land mortgages taken by the primary banks are assigned to the apex land mortgage bank as security for the loans advanced by the latter. Thus the security for the bank issuing the loans is ample.

[1] See the Third Report by the Directors of the Bombay Provincial Co-operative Land Mortgage Bank, Ltd. (1938).

To begin with, loans have been advanced mainly for the redemption of old debts. As long as relief from indebtedness is the immediate and pressing need of the agriculturist, this feature of the business is bound to persist.[1] The bank negotiates with money-lenders and creditors through private conciliation boards, taking advantage of the anxiety of the lender for the repayment of his money in order to effect a reduction in the amount to be repaid. Since its inception the bank has granted loans for Rs. 13,03,830 to 12 primary banks for advancing to 939 borrowers, in respect of which remissions of Rs. 3,31,040 were secured in the period ending 30 June 1938. The primary banks are likely to extend their activities for financing improvements (including the installation or purchase of costly agricultural plant and machinery) in order to increase the productivity of agriculture.

Apart from the substantial assistance in the shape of a guarantee of both principal and interest on the debentures floated by the Provincial Co-operative Land Mortgage Bank, the Government of Bombay have agreed to grant the following concessions: (*a*) exemption from (i) stamp duty, (ii) registration fees, and (iii) income-tax on the profits of the bank and dividends on shares, as in the case of other co-operative societies, and (*b*) the grant of an annual subsidy to cover any deficit which may occur in the working of the bank in the first three years up to a maximum of Rs. 10,000 in the first year, falling to Rs. 6,000 in the third. This is in addition to the cash subsidy of Rs. 5,000 per annum to the primary banks with a view to enable them to meet part of the cost on account of the employment of land valuation officers lent by the Government to the banks. To safeguard their interests and generally to ensure the sound working of the banks the Government are represented on the board of the apex bank by the Registrar, and on the boards of primary banks by a nominee of the Registrar. These concessions have been modelled on the lines now in operation in the Madras Presidency.

The membership of the Provincial Land Mortgage Bank is open to individual persons as well as primary banks and co-operative societies. Although this composite membership is a departure from the strict orthodox co-operative pattern, the inclusion of individual members is to be welcomed, since their presence will ensure better confidence in the bank on the part of the investing public and secure strict adhesion to business principles. Any tendency towards dividend-hunting is prevented by the by-laws which require 25 per cent of the net profits to

[1] See *Annual Report of the Registrar, Bombay* (1936-7), par. 40.

be carried to the reserve fund and restrict the maximum dividend payable on shares to 6¼ per cent. Moreover, provision has been made for giving adequate representation on the board of directors of the apex bank to the primary banks, which are authorized to elect five directors (out of a total of 15 directors) voting by groups in five constituencies. The remaining ten directors are distributed as follows: (i) two nominated from among the shareholders of the bank by the Registrar with the approval of the Government; (ii) one nominated by the Bombay Provincial Co-operative Bank; (iii) five elected by members of the bank other than the primary banks, (iv) the Registrar and (v) the managing director of the bank. The inclusion of the Registrar and of his two nominees, is, at any rate for some time to come, necessary, not only because of the Government's stake in the solvency and prudent management of the bank, but also with a view to inspiring public confidence.

The membership of the primary land mortgage banks is not restricted to borrowing members only. The non-borrowing shareholders are given separate representation on the board of directors. The by-laws of the primary land mortgage banks provide for the nomination of the board of directors by the Registrar for the first three years.[1]

§32. **Limitations of land mortgage banks.**—There is a great need for caution in dealing with this admittedly difficult and delicate problem of rural credit. The wise observations made in this connexion by the late Lord Brabourne, Governor of Bombay, on the occasion of the formal inauguration of the new Provincial Land Mortgage Bank in January 1936, deserve to be taken to heart by all concerned. Characterizing Bombay's new scheme of land mortgage banks as 'a great experiment', His Excellency said: 'I make no apology for calling this an experiment. There is of course no doubt in theory about the soundness of the principles on which these banks are founded nor of the beneficial results which will accrue from their successful working. But theory is not practice, and we have yet to make certain that a margin of profit between the borrowing and lending rates of the central bank and of the primary and district or regional banks will remain after due allowance has been made for working expenses, bad debts and the various unforeseen items which always whittle away the surpluses which appear so substantial on paper.' Referring to the working of the three primary banks in

[1] See By-laws of the Bombay Provincial Co-operative Land Mortgage Bank, Ltd., and By-laws of the Primary Land Mortgage Bank (Leaflet LL).

Bombay, Lord Brabourne pointed out that the great lesson to be derived therefrom was that there must be no bad debts and no arrears, and that the success of the new bank depended upon the extent to which this standard was attained. 'Where the primary banks are cautious, the provincial bank must be doubly cautious, for it is the financial foundation of the whole organization.'

We must clearly realize certain inevitable limitations of the land mortgage banks. In the first place, it is evident that they cannot transfer to themselves the entire agricultural debt. The maximum limit on loans, and other restrictions on them, which are essential, the possession of the tangible security of land and the careful selection of borrowers, in themselves make such a transfer impossible. In the second place, the land mortgage banks can only reduce the burden of debt by transferring it to themselves and by reducing the interest rate: they cannot remove it altogether. Nor is it desirable even were it possible, to do so in the interest of the agriculturist himself. Only the prudent cultivator will benefit by the facilities granted for the liquidation of his debts in small instalments. Unless he practises an all-round thrift, avoids all unproductive debts especially for ceremonial expenditure, and makes efforts to increase his earnings, the prospects of the entire elimination of old debts are not very bright. In order that the agriculturist should be enabled to improve his earning capacity a comprehensive scheme of economic planning and rural reconstruction is necessary.

The Reserve Bank of India has pointed out (see the Statutory Report on Agricultural Credit, pars. 27-30) the risk which land mortgage banks are running in devoting their almost exclusive attention to the liquidation of old debts of their members. The main purpose of the long-term loans raised on the security of land should be the improvement of land itself. These banks are rightly advised to take a greater part in supplying finance for land improvement in co-operation with the Agricultural Department. We welcome the suggestion that arrangements should be made for the person, whose debt is to be paid by the land mortgage bank, to serve a period of probation with a good primary agricultural credit society and that even after the land mortgage bank has advanced him a loan he should continue to be a member of a multi-purpose society, so that the regular repayment of his instalment may be ensured by a proper supervision of his activities.

§33. **Commercial land mortgage banks.**—The Central Banking Enquiry Committee and the Agricultural Credit Department of the Reserve Bank of India have recommended the development of well-organized commercial (joint-stock) land mortgage banks in this

country for the benefit of the numerous classes of landowners who cannot be adequately served by the co-operative credit organization. Provincial Governments might assist such banks by providing a portion of the initial capital, and by guaranteeing the interest on the debentures issued by them. The need for such mortgage institutions is particularly felt in provinces where the Permanent Settlement prevails. Such banks should undertake the redemption of debts of the landlord class and finance their long-term requirements.[1]

[1] See *Report of the Central Banking Enquiry Committee*, pars. 233-4, and *Preliminary Report on Agricultural Credit*, par. 19.

CHAPTER XI

THE STATE IN RELATION TO AGRICULTURE

§1. **The evolution of the Agricultural Departments.**—While it has been a matter of controversy whether and how far the state should actively assist the industrial development of the country, the necessity of its concerning itself with the amelioration of the cultivator's position and the improvement of the agricultural system has been definitely recognized for a long time.[1] The idea of improving agriculture by means of a special Government department was first mooted in connexion with the Orissa famine of 1866. It was later on taken up by Lord Mayo's Government, but materialized only in 1884 as a result of the recommendations of the Famine Commission of 1880, and, let us also add, of the representations of the Lancashire cotton industry whose interest in the growth of long staple cotton in India is easily understandable. Agricultural Departments were established in the various provinces under Directors, Deputy Directors, Superintendents and Overseers. Although the earlier idea was to take up agricultural inquiry, famine relief and land improvement, little was done beyond a certain amount of statistical work. Unfortunately the Departments were saddled with a good deal of work not properly belonging to them, for example the work of keeping land records and the supervision of land registration. They were also further handicapped by the meagre grants allotted to them. We have already referred to the visit of Dr Voelcker in 1889.[2] He held the opinion that Indian agriculture was not so primitive and backward as often alleged, but that it was ill-equipped from the point of view of modern agricultural practice, and he emphasized the value of agricultural education and improvement. In 1892 an agricultural chemist to the Government of India was appointed. The finances of the Departments were in the meanwhile improved by the princely donations given by H. Phipps, an American visitor, and Sir David Sassoon. In 1901 an Inspector-General of Agriculture was appointed to advise the Imperial and Provincial Governments. This for the first time gave the Imperial Agricultural Department the services of an expert head in agricultural matters. The post

[1] For more information on this point see J. Mackenna, *Indian Agriculture*: and *Agricultural Commission Report*, pars. 15-37.

[2] *Ante*, p. 241.

was abolished in 1912 and its duties were entrusted to the Director of the Agricultural Research Institute, Pusa, who was also until recently (1929) the Agricultural Adviser to the Government of India. The Pusa Institute was established in 1903, together with a college for more advanced training and special short practical courses. It was in 1905 that, thanks to the tireless zeal of Lord Curzon, the organization of the Departments was greatly improved, they were relieved of the extra work with which they had been burdened, and larger funds were set apart for the development of agricultural experiments, research, demonstration and instruction. The Agricultural College at Poona was started in 1908 together with a research institute to relieve the congestion in the agricultural classes attached to the Science College, Poona, since 1878. In subsequent years similar colleges were established at Cawnpore, Nagpur, Lyallpur, Coimbatore and Mandalay.

As a result of the rapid extension in recent years of the use of agricultural machinery, especially for irrigation, agricultural engineers have been appointed to advise cultivators and to arrange for the installation of the necessary machinery. Lastly, an all-India Board of Agriculture was founded in 1905 with the object of bringing the provincial Departments more into touch with one another and to discuss at their annual meetings programmes of agricultural work, and make recommendations to the Government of India. The centralized control by the Government of India over provincial Departments has been considerably relaxed as a result of the Reforms of 1919, and since 1921 agriculture has been under the control of provincial ministers. The Imperial Department of Agriculture now concerns itself only with agricultural problems of all-India importance, and maintains the following institutions: (i) the Agricultural Research Institute, which was transferred from Pusa to New Delhi in September 1936; (ii) the Imperial Institute of Veterinary Research, Muktesar; (iii) the Imperial Institutes of Animal Husbandry and Dairying, Bangalore and Wellington; (iv) the Imperial Cattle-breeding Farm, Karnal; (v) the Creamery at Anand; (vi) the Imperial Cane-breeding Station, Coimbatore; and (vii) the Sugar Bureau, which, originally at Pusa, was transferred to Cawnpore in 1931 and placed in charge of a Sugar Technologist. The advisory functions of the Agricultural Adviser to the Government of India, who was previously responsible for the administrative control of these institutions, have been transferred to the whole-time members of the Imperial Council of Agricultural Research, which was established in July 1929 in accordance with the recommendations of the Royal Commission on Agriculture.[1]

[1] See §10 below.

As recommended by the same body, separate directors have now been appointed for the Imperial Institute of Agricultural Research, Delhi, and the Imperial Institute of Veterinary Research, Muktesar. The post of Agricultural Adviser to the Government of India was abolished on the retirement of Dr Clouston in October 1929. The newly constituted Imperial Council of Agricultural Research has also assumed responsibility for the agricultural publications previously edited by the Agricultural Adviser and the Council of the Pusa Research Institute.[1] Reference has already been made to the creation of a new post in April 1934, viz. the Agricultural Marketing Adviser to the Government of India, who is the head of the central marketing section of the Imperial Council of Agricultural Research.

To supplement the work of and co-operate with the Agricultural Departments, certain other bodies have been started, e.g. the various District Agricultural Associations. More recently, in Bombay, the Divisional and the Taluka Development Boards, consisting of representatives of the Agricultural and Co-operative Departments and the non-official public, have been established, and serve to co-ordinate the work of the two Departments. In fact, the policy in the Bombay Presidency is to use both the Co-operative Department and the non-official machinery for the promotion of the work of the Agricultural Department. This policy has been greatly strengthened by the recent (1939) decision of the Government of Bombay to establish a combined Co-operative and Rural Development Department (see §7 below).

§2. **Functions of the Agricultural Departments.**—The provincial Departments of Agriculture carry on experiment and research on agricultural farms and in laboratories, and organize propaganda to secure the adoption of new methods and improved implements. They also concern themselves with the introduction of new and artificial manures and the production, maintenance and distribution of pure seeds of improved varieties of crops. Demonstrations are conducted on Government farms or fields of cultivators.

In our survey of the principal crops of India, we have already noticed the useful work that has been done by the Agricultural Department, especially with reference to wheat, sugar-cane, groundnut, cotton, tobacco and fodder crops. Jute, potatoes, rice, etc. are some of the other important crops which are engaging the attention of the department. The following table

[1] The Research Council at present publishes three journals, *The Indian Journal of Veterinary Science and Animal Husbandry*, *The Indian Journal of Agricultural Science*, and *Agriculture and Live Stock in India*.

gives the area in acres under the principal improved varieties of crops in British India (including Burma) and Indian States so far as information is available.[1]

Crop	1928-9	1935-6	1936-7
Cotton	3,963,991	5,059,932	5,080,493
Wheat	4,126,905	6,970,855	8,498,553
Rice	976,913	3,669,097	4,591,703
Jute	1,143,665	1,121,019	1,315,769
Sugar-cane	499,890	3,244,336	3,274,140
Other crops[2]	1,464,528	2,118,424	2,342,090
Total ...	12,175,892	22,183,663	25,102,748

The above table shows that the area reported to be under improved varieties in the year 1936-7 was more than double as compared to the area in 1928-9. This has appreciably increased the annual yield of the agricultural crops of the country. This is welcome so far as it goes, but does not go far enough. The vastness of the ground yet to be covered will be seen when we reflect that, out of the total sown area of 82 million acres under rice, less than five million is under high-yielding varieties of paddy, though the position in respect of wheat, cotton and jute is more satisfactory. In recent years the area under improved varieties of paddy and sugar-cane has shown a more considerable increase thanks to the research work on rice and cane now being done under the auspices of the Imperial Council of Agricultural Research. The relatively satisfactory situation in respect of cotton is due to the work of the Indian Central Cotton Committee which has its own separate finances. This indicates the necessity of creating similar bodies for the improvement of other crops as well. The Agricultural Commission emphasized the need for such a committee for jute, and it has recently (1936) been established. The All-India Crop Planning Conference (1934) recommended that in the present welter of economic uncertainty, machinery should be provided for the systematic and continuous study of the problems relating to the cultivation of India's more important crops such as wheat and rice through the agency of special appropriate committees. This recommendation has been accepted by the Government. We may here refer to the

[1] *Review of Agricultural Operations in India* (1928-9), p. 14 and *Agriculture and Animal Husbandry in India* (1936-7), p. 24.

[2] Include groundnuts (341,529), millets (553,758), gram (344,801), potatoes (12,720), etc. in 1936-7.

just complaint often made to the effect that the Agricultural Department has hitherto concentrated its reforming energies on the export crops, to the comparative neglect of non-export crops like jowar, bajra, fruit and vegetables, which are quite as important both from the point of view of food requirements of the population and the profit of the agriculturist. The Imperial Council of Agricultural Research is, however, now devoting increasing attention to some of these requirements, especially the development of fruit-growing. For example, in the Bombay Presidency the Council is financing important investigations on the conditions under which the principal Indian fruits can be stored and transported.

§3. **Demonstrations of new methods and improved implements.**—In addition to the economic work on crops, researches and investigations have been set on foot under departmental auspices bearing on fundamental problems of agricultural chemistry, agricultural bacteriology, plant pathology, mycology and entomology. Among the investigations in progress may be mentioned those dealing with the lime requirements of soils, the reclamation of saline lands, the conservation of soil moisture, the fixation of nitrogen, the manufacture of artificial farmyard manure, the nitrification of manures in the soil, the utilization of the sources of natural indigenous phosphates, the detection of adulterants in ghee, animal nutrition, the mosaic disease of sugar-cane, and the control of pests infesting food-grains.

In western countries the great utility and educative value of agricultural shows and exhibitions is well understood and the enormous expenditure on them is regarded as excellent investment. India has only just begun to realize the importance of holding periodical shows. The first Bombay Presidency Agricultural Show held at Poona in October 1926 was the largest ever held in Asia. Besides holding big shows like that of Poona as frequently as possible, smaller shows for divisions, districts and talukas must also be organized so as to give full recognition to variations in local conditions and needs, and to carry the lessons of the shows to every nook and corner of the country.[1]

The Agricultural Departments are thus doing useful work in various directions and are gradually gaining in knowledge and experience. The progress of agricultural reform, however, has been very slow. This is to be attributed to some extent to red-tapism, and this the Agricultural more than every other

[1] For particulars regarding agricultural shows and exhibitions held in the several provinces and States see *Agriculture and Animal Husbandry in India* (1936-7), pp. 329-33.

Department must endeavour to shake off. More important reasons, however, are the inadequacy of the capital at the command of the agriculturist, the insufficient irrigational facilities and the general ignorance and conservatism of the people. To these must be added the paucity of funds placed at the disposal of the Agricultural Department. The net expenditure of the Central and the Provincial Departments of Agriculture amounted, during the year 1936-7, to about Rs. 3 crores only as compared to the total expenditure of Rs. 211·18 crores, which means that a very small percentage of the revenues of the country is spent on the development of its chief and basic industry. This stands in marked contrast with the very liberal expenditure on agricultural improvement in foreign countries, such as the United States of America and Japan. The United States of America spent in 1927-8 about eleven times as much. The recent improvement in the budgetary position, and the lively interest in agricultural matters shown by the present Viceroy and by the Ministers of Agriculture in the Congress Governments in the provinces have galvanized the Agricultural Departments into unwonted activity.

§4. **Other items of state aid.**—Other items of state aid may be briefly reviewed.

(i) *Land policy.*—The salient features to be noticed in this connexion are the security of title to the land conferred upon agriculturists and the protection granted to tenants in zamindari and more recently in other areas by special legislation. (See chapter xii.) Among other privileges conferred by the state on the cultivator has been that of freedom of transfer which, however, as we have seen, has not proved an unmixed blessing. As to land revenue policy, this will come under examination in a separate chapter. State assistance in the shape of direct Government construction of irrigation works and the grant of takkavi loans to enable the agriculturist to undertake various permanent improvements on his own behalf have already been discussed.[1]

(ii) *Tariffs.*—One aspect of tariff manipulation, namely, export duties on food-stuffs, raw materials and manures has been discussed and the bearing of the various proposals in this connexion on agricultural prosperity has been made sufficiently clear. As regards import duties, the question has assumed some importance in recent years owing to the competition of Australian wheat in the Indian markets. We have already referred to the Wheat Import Duty Act of 1931 renewed in subsequent years which is intended to give relief to the Indian wheat grower. A more

[1] See also G. Keatinge, *Rural Economy in the Bombay Deccan*, ch. xiii.

important case is that of the Indian sugar industry, which has already been examined above. The refined sugar industry is of sufficient national importance to justify the protective import duties levied in 1932 as recommended by the Tariff Board. The Indian rice-grower has also had to be protected against the imports of cheap broken rice by the levy of an import duty in 1935.

The part played by the state in the spheres of credit, equipment, co-operation, and marketing has already received detailed treatment in previous chapters.

§5. **Agricultural education.**—The general principles governing the problem of rural education in its relation to agricultural efficiency have been already indicated. It now remains to give some account of the educational machinery provided by the state.[1]

(i) *Agricultural colleges.*—There are at present five colleges established in different provinces, viz. at Poona, Coimbatore, Nagpur, Cawnpore, and Lyallpur. They are intended to train the future personnel of the Agricultural Departments as well as to provide teaching in modern methods for those actually engaged or intending to be engaged in farming, either as landowners or agents. Moreover, they are the provincial centres for scientific research in agriculture. Apart from full degree courses, the colleges also provide short courses of one or two years leading up to a diploma or certificate in agriculture. These courses are meant for practical agriculturists, but incidentally they also afford a recruiting ground for filling up appointments in the subordinate agricultural service. Post-graduate training in agriculture is provided for at the Imperial Agricultural Institute, New Delhi.

(ii) *Agricultural middle schools.*—The agricultural vocational middle schools are intended to give special training to the sons of farmers. There are now three such schools in Bombay (Dhulia, Devihosur in Dharwar district and Rajapur) where the first school of this type was opened in 1910. Agricultural middle schools are, strictly speaking, technical or craft schools providing a course in agriculture of a practical character, and receiving pupils at about the age of 13 after they have undergone a course of general education. In these schools, education is imparted in the local Indian language. The object aimed at is to send the pupils back to their land so that they may utilize their training in cultivating it more efficiently, but it is feared that this object is generally

[1] For a detailed account of the system of rural education prevalent in India, see *Agricultural Commission Report*, Minutes of Evidence, vol. I, pp. 114-18, Memorandum of J. A. Richey, Educational Commissioner with the Government of India; *Report*, ch. xv; *Agriculture and Animal Husbandry in India* (1936-7), pp. 358-67.

not attained. It is also complained that admission to these schools is not sought by agriculturists with any noticeable eagerness, that they are very expensive and are an artificial addition to the educational system and in no way a natural development of it, though Bombay claims that these schools have proved a success.

(iii) *Agriculture as a subject in the general curriculum.*—Practical instruction in agriculture is not attempted in the primary schools, which are content with providing for simple nature study intended to create a general bias in favour of life in the villages. Agricultural or Rural 'Bias' Schools are being increasingly recognized to be an important step towards adapting the educational system to the needs of the rural community, and in the Punjab and the United Provinces definite action has been taken to see that teachers are properly trained. Similarly in the Bombay Presidency 93 schools have recently started classes with an agricultural bias, and the majority of students are reported to have taken to agriculture in their respective villages. Further extension of these schools is impossible without more trained teachers, without which this movement cannot possibly succeed.[1]

Instead of starting agricultural middle schools like the other provinces, the Punjab has introduced the teaching of practical agriculture in the vernacular middle schools, so as not to debar students taking agriculture from proceeding to a higher stage of education if they desire to do so. Farms are attached to schools where agriculture is taught, and have generally met with considerable success, and the whole scheme is likely to be adopted by other provinces as well. The Agricultural Commission show marked hostility to the Bombay type of school mainly on the ground of disproportionate expense and a strong preference for the Punjab type as pointing to the true solution of the problem of relating the instruction given in middle schools in rural areas to their environment. They hope that these schools will develop into rural community centres. As regards high schools in rural areas, the Commission recommend the addition of a more advanced course in agriculture to their curricula.

The reorientation of educational policy on the lines of the Wardha scheme under contemplation at present is likely to have far-reaching effects on agricultural education in the provinces. (See ch. viii, §2 *ante*.)

The account given above shows that although the Government have done something for agricultural development in this country

[1] *Annual Report of the Department of Agriculture in the Bombay Presidency* (1936-7), p. 92.

they can do much more. Nor has the educated class yet learnt properly to appreciate the vital importance of agriculture. Social workers have so far devoted exclusive attention to towns and their problems. The work started by some societies like the Servants of India Society in backward rural areas is promising, but it needs to be carried out on a larger scale. In order to ensure continuity of policy and steady pressure over a long period, work done through properly organized societies is preferable to individual effort.[1] Most Indian universities have hitherto neglected the study of agricultural economics except at the agricultural colleges. As the Agricultural Commission point out there are two directions in which the universities can make themselves useful, firstly, in regard to such technical matters as economic surveys of social conditions and, secondly, in imbuing rural communities with ideals of leadership and service.[2]

§6. **Village uplift: the Gurgaon experiment.**—As the Agricultural Commission truly remark, no substantial improvement in agriculture can be effected unless the cultivator has the will to achieve a better standard of living and the capacity, in terms of mental equipment and of physical health, to take advantage of the opportunities which science, wise laws and good administration may place at his disposal. Of all the factors making for prosperous agriculture, by far the most important is the outlook of the peasant himself. The demand for a better life can be stimulated only by a deliberate and concerted effort to improve the general conditions of the countryside, and the responsibility for initiative in this matter rests with the Government. What is required is an organized and sustained effort by all those departments whose activities touch the lives and the surroundings of the rural population.[3] The sympathy, interest and active support of the general public are also essential. The whole weight of those who seek to guide the villagers should be thrown into suggestions as to how by corporate action they can improve the amenities of the village. In order, however, that the cultivator should revive the ancient tradition of concerted action for the improvement of the village and its surroundings, enlightened leadership is necessary. One way of providing this is by instilling ideals of village improvement into the thousands of village officials and dignitaries such as the patel and patwari. Another solution is the system of village guides introduced by F. L. Brayne in the Gurgaon

[1] *Agricultural Commission Report*, par. 425. [2] ibid., par. 426.

[3] See our paper on *Some Aspects of Rural Reconstruction in India* read before the Indian Economic Conference (1928).

district in the Punjab.[1] The idea is that it would be an advantage to the cultivators to have some *one* reliable individual to look up to instead of a bewildering multiplicity of agencies. He would act as a kind of channel through which the advice of experts in the various departments would pass on to the villagers.

But village guides will require the constant stimulus of new ideas and their work will need to be encouraged and appreciated if they are not to lapse into inactivity. The Gurgaon uplift scheme therefore attempted to supply 'a strong central driving force that will encourage enthusiasm, develop public spirit, and provide suitable material for active workers in their campaign in favour of the improvement of village life. The scheme embraces the work of every department of Government engaged in rural areas; it seeks to assist in securing the adoption of the advice of the expert by a well-planned propaganda campaign; it depends for its success on the enlistment, in the cause, of everyone willing and able to assist, official or non-official, and more especially of the people themselves whose welfare is in the balance. Lecture, song, drama, magic lantern, cinema, and even the loud-speaker are made to contribute what they can to arouse the people to a realization that they themselves are largely responsible for their undesirable condition.'

In his *Rusticus Loquitur* Mr M. L. Darling of the Indian Civil Service has taken occasion to review Mr Brayne's work in Gurgaon and make comments, sympathetic in tone, but damaging in substance.[2] The Gurgaon experiment was novel in the sense that 'never before in any part of India was propaganda for village improvement used so intensively and over so wide an area, never before combined with such full use of official authority'. It was eagerly watched by observers interested in the cause of rural welfare, and it was hoped that it would serve as a valuable object-lesson for similar attempts elsewhere. Unfortunately, however, the experiment does not appear to have prospered in the manner that was expected by its originator. One important reason for its failure was that, while the whole programme of improvement was practically forced on the reluctant but docile villager, not all its details had been carefully thought out. Again, the village guides

[1] *Agricultural Commission Report*, par. 423. Mr Brayne gives an account of the Gurgaon experiment and explains his methods of rural uplift in his books: *Village Uplift in India* (1927), *The Remaking of Village India* (1929), *Socrates in an Indian Village* (1929), *Socrates Persists in India* (1932), and *Better Villages* (1937).

[2] M. L. Darling, *Rusticus Loquitur*, pp. 121-8, 155-9. See also D. Spencer Hatch, *Up from Poverty*, ch. i and *passim*.

who were expected to act as village leaders were 'hurriedly selected', 'insufficiently trained' and 'inadequately supervised', and on account of their extreme youth and ignorance they failed to command any influence with the villagers. It must further be admitted that sufficient account was not taken of the diversity of local conditions. The fact was that Mr Brayne was anxious to achieve something great and to achieve it quickly. Within the short period of his Deputy Commissionership he was determined to cure for ever the squalor of the villages and 'establish a *fait accompli* to the satisfaction of the district and of the world at large'. A superficial and inadequate study of the relevant circumstances of every village to which the reforms were applied was the necessary consequence. Another cause of the partial collapse of the experiment emphasized by Mr Darling was that there was too much intensive but crude propaganda and too little real teaching.

The Gurgaon experiment may be taken to enforce the following lessons: (i) Before any changes are advocated we must make quite sure that they are really useful and practicable. Grounds of opposition to them, if any, should be fairly and impartially considered. (ii) The problem of village improvement cannot be successfully tackled through individual effort. A permanent organization is essential 'to ensure continuity of policy and steady pressure over a long period'; to secure a fair hearing for all points of view, and to prevent unduly hasty action. The example of the rural area of Rae Bareli in the United Provinces, where village and district bodies and agencies have been created to foster village uplift, is instructive in this connexion. (See also §7.) Liability to error[1] is incidental to all human planning. But the mistakes will be fewer and less serious in the case of organizations than in the case of individual enthusiasts. (iii) Reform should as far as possible come from persuasion and education rather than by the use of force, open or veiled. It should, however, be remembered that resort to compulsion may sometimes be necessary, e.g. to overcome the opposition of a recalcitrant minority. The feeling of compulsion will vanish in course of time as the value of the reform is realized by the people. (iv) Mr Darling's criticism of the methods adopted by Mr Brayne is in the main just and sound. But to the unwary reader it is likely to convey the idea that all that can safely be attempted at present is to provide facilities for education and, for the rest, to leave the villager alone. But this smacks too much of *laissez-faire*. The question of rural uplift in India is too urgent to be dealt with on merely passive

[1] See S. S. Nehru, *Caste and Credit*, ch. v.

lines. It is necessary to undertake a definite, well-planned and persistent campaign if substantial progress is to be achieved within a reasonably short time.

§7. **Recent schemes of village improvement.**—Widespread and keen interest in rural uplift has been in evidence during the last few years, thanks to the initiative taken by a number of provincial Governments, especially after the establishment of Congress Ministries in various provinces. Special mention may be made of the two schemes of village uplift in Bombay. The first scheme was initiated by Sir Frederick Sykes during the last year (1933) of his Governorship. A programme of village uplift was issued, laying down the lines on which the requisite organization comprising officials and non-officials was to be set up in the various divisions, districts, talukas and villages in the Presidency.[1] The several agencies and departments concerned with rural improvement were to be linked up into a single organization in order to infuse into them fresh vigour and usefulness. The principal agency for carrying out village improvement under this new Bombay scheme was to be the District Rural Uplift Committee with the Collector of the district as the Chairman and the President of the district local board as the Vice-Chairman. The senior local officers of the various departments concerned and prominent non-officials were also placed on the Committee. The function of the Committee was to control and co-ordinate the work of village improvement in all its branches, viz. education, agriculture, housing, health, litigation indebtedness and cottage industries. This scheme, while it made encouraging progress, especially in the Central Division, was handicapped by lack of adequate funds, and the absence of a full-time rural development officer for the district. The second and more comprehensive scheme of rural development and reconstruction was recently (February 1939) unfolded by the Hon. Mr A. B. Latthe, Finance Minister, in his Budget speech. This was followed by a Press Note issued on 1 March 1939 by the Congress Ministry of Bombay. The new scheme may be briefly outlined. In view of the intimate contact of the Co-operative Department with the rural population and its problems the Government of Bombay have decided to combine the newly created department of rural work with the Co-operative Department. The combined departments are to be known as the Co-operative and Rural Development Department under the Finance Minister. This Department will

[1] Since published as an official blue book called *Manual of Village Improvement.*

absorb the propaganda and field activities of both the Agricultural and Industries Departments. These two Departments in their separate existence will be confined to research and experimentation on the one hand and education on the other. The newly created Co-operative and Rural Development Department will have the benefit of advice by a Board comprising the heads of Departments, viz. the Registrar of Co-operative Societies and Director, Rural Development, Director of Agriculture, Director of Industries and some non-official rural workers. The Finance Minister will be the Chairman of the Board. Each district will have a similar organization, the Rural Development District Officer—the overworked Collector will thus be relieved of his duties relating to village uplift—with his four or five official expert assistants in agriculture, cottage industries, co-operative organization, marketing organization and finance, forming the District Executive for rural development work, but forming part of a larger committee with non-official workers added on for the purposes of advice, guidance, propaganda and supervision. At the other end, the village, it is intended to have a trained and full-time worker who will work in a village, or in a compact group of villages, as the salaried Secretary of the Panchayat, the Co-operative Societies and other rural associations. Five training centres in the various parts of the province are to be shortly opened with the object of imparting training for a period of one year to some thousand selected workers who will later be spread over all the villages in the province. The village workers will be recruited from among educated youths prepared to adapt themselves to rural conditions. They will not be officials and their goal will be their eventual absorption in the population among whom they will be employed to serve in a semi-official capacity.[1] This ambitious scheme of rural development will, among other matters, deal with the problems arising out of the Debt Redemption Act which is expected to be on the statute book at no distant date. Under the scheme a chief marketing officer will be appointed in Bombay with assistant officers allotted for every two districts, for developing non-credit co-operative organizations for marketing agricultural produce. Similar organizations for promoting secondary occupations as well as cottage industries are contemplated. Formation of village multi-purpose societies in places having marketing facilities, extension of land mortgage banks, strengthening of the financial side of the co-operative movement, improvement of milch

[1] See the Budget speech of the Hon. Mr A. B. Latthe, Finance Minister, Bombay (1939-40), par. 11.

and draught cattle, promotion of a dairy industry, demonstration of improved methods of agriculture, and colonization of waste Government lands on a co-operative basis are other features of the new scheme of unified rural development of the province. The Government of Bombay have decided to incur a recurring expenditure of Rs. 45 lakhs annually for the economic improvement of the agricultural population.

Similar interest in village uplift is being evinced in other provinces, for example, in the Punjab, the United Provinces, the Central Provinces, Madras, and Bengal.[1] The Punjab has the benefit of a rural development commissioner to look after the work of village uplift. Village Panchayats are being established in several provinces. The rural uplift movement received a stimulus from the deliberations of the Provincial Economic Conference (1934). But the most striking gesture was made by the Government of India, which set apart a crore of rupees (from the budget surplus in 1935) for distribution to the various provinces for the economic development and improvement of rural areas. The grant was to be spent on schemes of village improvement in consultation with the Central Government. The Central Government's grant, which was repeated in the following year, gave a fresh stimulus to provincial rural uplift programmes, especially those relating to agricultural improvement, rural sanitation, and hygiene.[2] These central grants can, however, supply only a small fraction of the funds required to finance rural reconstruction work, and more funds must be made available by the various provinces concerned. As pointed out above, the Congress Government of Bombay have recently given a splendid lead to other provinces and more substantial results may be expected in the near future.

§8. **Royal Commission on Agriculture.**—The Royal Commission appointed in April 1926 was the first commission appointed specifically to examine and report on the condition of agricultural and rural economy in India. Its recommendations (embodied in a comprehensive Report which was issued in July 1928) on a variety of questions affecting the welfare of the rural community in India have already been dealt with in their proper places. The labours of the Commission have led to a general revival of interest in agriculture and a fuller realization of its supreme importance to India. The Report has also done useful service in recording in one place the measures already initiated in the different provinces for tackling

[1] See C. F. Strickland, *Rural Welfare in India* (1936).

[2] See *Agriculture and Animal Husbandry in India* (1936-7), pp. 326-9.

problems of rural uplift. Hitherto the provinces were generally content to plough their lonely furrows without much mutual help, knowledge or consultation. The Report has induced greater co-operation among them and a greater desire to learn from each other.

In order that any useful practical results should be reaped from the work of the Commission, each province will have to undertake a special investigation into its own conditions in the light of the Commission's recommendations, which are necessarily very general in character. Disappointment might also be avoided by not expecting too quick results. The process of implementing the recommendations of the Commission will inevitably be slow and difficult, and all the resources of the Government and the community will have to be patiently mobilized for many years to come before rural India can hope to turn her back on the deep shadows and emerge smiling and prosperous into the radiant light of day.

§9. **Government action on the Report: the Simla Conference.**—At the Agricultural Conference consisting of provincial representatives (Ministers of Agriculture, Directors of Agriculture, Registrars of Co-operative Societies, etc.) which met at Simla in October 1928, the main recommendations made by the Commission were discussed, the action already taken by the various provinces in respect of some of the recommendations was ascertained, and emphasis was laid upon the financial implications of the Commission's proposals which made immediate or simultaneous adoption of them impossible. The Commission's Report was accepted as the basis for rural reconstruction and agricultural advance and for the progressive application of the recommendations as the circumstances of each province might permit. The recommendation regarding the Imperial Research Council to be set up and financed by the Central Government was approved of in general terms.[1]

§10. **The Imperial Council of Agricultural Research.**—As the Agricultural Commission truly remark, the basis of all agricultural progress is experiment. 'However efficient the organization which is built up for demonstration and propaganda, unless that organization is based on the solid foundations provided by research, it is merely a house built on sand.' The Government have already taken steps to give effect, with modifications in some respects, to the recommendations of the Commission in this connexion. An all-India council of agricultural research (called the

[1] *Agricultural Commission Report*, pp. 3-4.

Imperial Council of Agricultural Research) was created in 1929 and registered as a society under the Registration of Societies Act (1860), a step which gives it a considerable measure of financial independence. Its primary function is to promote, guide and co-ordinate agricultural research throughout India. It is a body to which the imperial and provincial Departments of Agriculture look for guidance (without being subjected to any administrative control) in all matters connected with research, and to which such research programmes as they might choose are submitted for approval. It acts as a clearing-house of information in regard to agricultural and veterinary matters, and serves to link research work in India with that in other parts of the Empire and in foreign countries. It has to make arrangements for the training of research workers.[1] This central body is split up into two parts: the first, a Governing Body presided over by the member of the Viceroy's Executive Council concerned, and consisting of the provincial Ministers of Agriculture, three representatives of the Indian legislature, two representatives of commercial interests, two members elected by the Advisory Board (see below) and a whole-time Vice-Chairman who is the principal administrative officer of the Council; and the second, an Advisory Board, this latter body having as its work the examination of proposals in connexion with scientific objects. The Board has as its chairman the principal administrative officer of the Council, and as its members, two whole-time officers, one agricultural and the other veterinary, and a number of nominated and elected scientific members, such as heads of the provincial Agricultural and Veterinary Departments, including those in such of the Indian States as have elected to join, together with representatives of the Indian universities, of the Indian Tea Association, and of the Southern India Planters' Association, of the Indian Central Cotton Committee, of the Co-operative Societies, of the Forest Research Institute, Dehra Dun, the Indian Institute of Science, Bangalore, and a few other members. The Governor-General in Council has the right to nominate additional members both to the Governing Body and the Advisory Board when need arises. This power has already been utilized to give representation to the States of Hyderabad, Mysore, Baroda, Cochin, Travancore, Bhopal and Kashmir, the Railway Board, and the Army Veterinary Department. The Council, that is, the Governing Body and the Advisory Board sitting together, met in June 1929 to settle certain preliminary matters and formally

[1] Memorandum of Association of the Imperial Council (Society) of Agricultural Research.

registered itself as a society under the Registration of Societies Act. The Advisory Board meets twice a year, and in a different place each time, and thus visits all the provinces in turn. The actual business of the Board is of course continuous throughout the year; but its duties are largely carried on by special committees. At present the following standing committees of the council are at work: the Sugar Committee, the Fertilizers Committee, the Locust Committee, the Oil Crushing Industry Committee, the Joint Committee of the Imperial Council of Agricultural Research and the Indian Central Cotton Committee, the Animal Nutrition Committee, the Dairying Committee and the Cattle Breeding Committee.[1] Sub-committees of the Advisory Board to deal with the detailed special proposals are set up from time to time as required. The Advisory Board reviews all the schemes of research submitted by provincial Governments, universities and private institutions for its consideration and decides which ought to be taken up, how to deal with each problem, and in what part of India the special work upon it could best be done. The decisions of the Advisory Board are subject to the decisions and sanction of the Governing Body and the views of the Society as a whole. It is the Governing Body which has control of the Council's funds. The central headquarters in Simla have been linked up with the new Imperial Agricultural Bureau, intended to keep research workers in all parts of the British Empire in touch with the latest research work in their own subject. For instance, there is a bureau at Rothamstead where scientific work specially connected with soils is done. There is another one at Cambridge where the special subject is plant genetics. The Indian Society pays a small subscription towards the upkeep of the bureaux and has a representative on their controlling body. Among the early steps to be taken by the Governing Body in India is the arrangement of post-graduate scholarships for training research workers. The Governing Body has also started a research and reference library at Delhi.

Among the important whole-time officers of the Council are the Vice-Chairman (the Principal Administrative Officer), the Secretary, the Animal Husbandry Expert, the Agricultural Expert, the Agricultural Marketing Adviser, Director, Imperial Institute of Sugar Technology, Cawnpore, the Statistician and the Chief Economist.

Among the problems to which attention is being given by the Imperial Council of Agricultural Research are those connected with rice, sugar technology, cane-breeding, fruit and dry-farming

[1] See *India in* 1933-4 (p. 91,) and *in* 1934-5 (pp. 14-15).

research, agricultural marketing, manurial research, locust research, potato-breeding, animal husbandry, etc. Grants are made to universities to enable workers on the university staff to expand research of agricultural importance or to develop the agricultural aspect of other research.

The Agricultural Commission recommended an initial endowment fund of Rs. 50 lakhs for the Agricultural Research Council, but in place of this, the Government of India announced that they had decided to substitute an initial lump grant of Rs. 25 lakhs and to supplement it by a fixed minimum grant annually. The annual grant would be Rs. 7·25 lakhs of which Rs. 5 lakhs would be devoted to the furtherance of the scientific objects of the council and the remaining Rs. 2·25 lakhs to the cost of its staff and secretariat. The annual research grant was suspended during the retrenchment campaign of 1931-2. The Government of India in the first six years following the inception of the Council gave more than one crore of rupees for research work on agriculture. Apart from the administrative budget grant of the Research Council, the Government had given Rs. 50 lakhs for general research work, Rs. 20 lakhs for research on sugar, Rs. 25 lakhs for marketing schemes at the centre and in the provinces, Rs. 6 lakhs for a new dairy research institute, making a total of about Rs. 101 lakhs. To this must be added Rs. 14 lakhs annually for five years for the Institute of Sugar Technology Institute at Cawnpore.

As recommended by the Commission, provincial research committees have been formed by all the provinces. These are to work in co-operation with the Imperial Council of Agricultural Research and report on any applications from within the province for a grant by the Research Council. Such committees are important in promoting and co-ordinating research directed to rural improvement within the province. The Council has largely fulfilled the object for which it was brought into being. Provincial reports show that the Council's grants have done much to enable agricultural research to be maintained and somewhat extended during a period of financial stringency by supplementary provincial effort, enabling gaps to be filled and encouraging co-ordination of effort. At the same time it must be said that financial considerations have prevented the Council from doing as much as the Royal Commission on Agriculture expected it to do.

The Commission consider their recommendation regarding the organization of research as the most important among their positive proposals. And the Government have done well in not losing much time in taking definite steps towards the fulfilment of the recommendation. The need for co-ordinated effort for increasing

agricultural efficiency has become all the more imperative in recent years owing to the fall in agricultural prices and intense competition in world markets.

§11. **The Russell-Wright Enquiry.**—In 1936-7, in pursuance of the recommendation of the Agricultural Commission in favour of a periodical review of the work of the Imperial Council of Agricultural Research, the Council invited two specialists from England to report on the work done by it and to make suggestions for future work. The experts selected for the purpose were Sir John Russell, Director, Rothamsted Experimental Station and Dr N. C. Wright, Director, Hannah Dairy Research Institute, Scotland. Their reports contain useful recommendations for bridging the gulf between the research worker and the cultivator. Other recommendations relate to the methods for tackling insect pests; dry-farming research schemes; the need for work on cash crops to be done in association with the expert buyers or users of these crops and for work on food crops in association with nutrition experts; the establishment of a Soil Conservation Committee and of a Crop Protection Committee to deal with the consideration of cropping schemes on the lines adopted by the Crop Planning Conference (1934), to arrange for the working of control measures in relation to insects, pests, noxious weeds, etc.; development of research, education and advisory services relating to dairying and cattle improvement. Increased financial assistance to the Imperial Council of Agricultural Research is strongly recommended with a view to enable it to bring to fruition investigations which at present stop at the experimental stage. These recommendations are being examined by the Council.[1]

§12. **Provincial Boards of Economic Enquiry.**—In concluding this chapter we may invite attention to the recommendation of the Central Banking Enquiry Committee that in order to provide the Government with the information it requires to pursue a progressive and constructive agricultural policy, a provincial Board of Economic Enquiry should be established on a permanent basis in each province. The Committee in this connexion refer to the Punjab Board of Economic Enquiry, consisting of both officials and non-officials, interested in economic studies, formed in 1919. The Board, which practically depends on a Government grant for funds, has carried out a large number of village surveys and collected information on varied subjects such as the size and distribution of agricultural holdings, the rates of food consumed, mortgages of agricultural land, farm accounts and family budgets,

[1] *Agriculture and Animal Husbandry in India* (1936-7), pp. 13-21.

and has provided a mass of useful data on the economic position of the agriculturist. There is a Board of Economic Enquiry in Bengal also. It is necessary to have such a board in every province to collect, correlate and analyse all the economic factors influencing the agriculturist and to present the results of the inquiry in a convenient form.[1] The need for continuous adjustment to changing economic conditions in the world abroad and the country itself makes such an organization all the more imperative in these days of intense competition and economic planning.

[1] See *Report of the Central Banking Enquiry Committee*, par. 73.

CHAPTER XII

LAND REVENUE

§1. **Historical survey of land revenue in India.**—From very ancient times the state in India has claimed a share of the produce of the soil from the cultivators. The Laws of Manu mention one-sixth of the gross produce, that is, of the grain heap on the threshing floor, as the legitimate share of the king, though the proportion might rise to one-fourth in times of war and other emergencies. The plan of fixing a certain share of the gross produce offered many advantages in an early stage of society. Whatever the land produced was heaped on the threshing floor, and in the presence of the king's officer the share of the state was abstracted from the heap. The demand of the state varied automatically with the outturn, and no elaborate system of suspensions and remissions of the revenue was necessary. But the disadvantages of the plan are equally obvious. With the growth of population and extension of cultivation, the task of collecting land revenue in kind becomes increasingly difficult. Unless a large staff of officers is employed to supervise the division, the cultivators will conceal or make away with the grain, or local collectors will batten on it at the expense of the cultivator and the state. The grain may lie rotting on the threshing floor as the officer of the king may not come for a long time to supervise the division. These disadvantages sooner or later compel the adoption of alternative methods of collection. For instance, an estimate of the standing crops may be made and the share of the state fixed accordingly, irrespective of the actual outturn realized at the harvest, which may or may not agree with the estimate. This and similar devices gave place eventually to payment in money—a development hastened by the rapid expansion of some of the Mohammedan kingdoms which rendered collection in kind under the old system unworkable.[1]

The Institutes of Timur represented the first systematic attempt in the direction of commuting the state's share of the produce into money. The next attempt was made by Sher Shah (1540-5), but his labours remained uncompleted owing to the shortness of his reign. The third and the most famous settlement was made under Akbar by his able finance minister, Todar Mal. A more scientific and detailed system of investigation into the

[1] See *Taxation Enquiry Committee Report*, par. 53.

taxable capacity of different soils was undertaken as a necessary preliminary to the fixation of the revenue demand. Land was carefully measured and divided into four classes representing different grades of fertility. The Government share was fixed at one-third of the gross produce. Option to pay in cash based on the average prices of food-grains during 19 years preceding the settlement was given, and the term of the settlement was fixed at nine years.

Thus the Moguls did not introduce any fundamental changes in the ancient revenue system of the Hindus, but merely reduced the customary and unwritten usages of the Hindu administration to a coherent system. They are, however, to be credited with the introduction of regular records and revenue accounts for the purpose of gaining some definite knowledge about the financial resources of the state. In the Deccan, similar developments took place, notably under Malik Amber of Ahmednagar, who established certain revenue rates called the *ain* ('the thing itself') or essential rates, being one-third of the cash value of the gross produce.[1] The Marathas accepted these rates as the basis of their system, raising them to what they called the *kamal*, that is, maximum or perfect rates payable only by the best lands. In the majority of cases, the assessment was not permanent, but in the Deccan, 'the *miras*[2] tenure had fixed assessment as one of its incidents. The mirasdar held his land on permanent heritable tenure subject to the payment of a fixed assessment, which he was liable to pay whether the land was cultivated or not.'[3] In many cases the actual assessment was further enhanced by the levy of a number of cesses. This development was found to have taken place all over India, wherever the authority of the central Government had declined. The proportion of the cesses to the standard assessment ranged between 33 and 50 per cent in some cases, as in Bengal, according to the calculation of Sir John Shore.[4]

[1] G. Keatinge, contrasting Malik Amber's system with that of Akbar, points out that, while the assessment which he aimed at was similar to that of Akbar, his ideas of land tenure were different. His object was to attach the cultivator to the soil; and with this object he made much of the land the private property of the cultivators, attaching to the proprietary right the power of sale, and granting other lands as the joint property of the village community (*Rural Economy in the Bombay Deccan*, pp. 2-3).

[2] Under the Marathas, there was also a well-defined tenure called *upri*. The *upri* was a tenant-at-will of the Government liable to enhancement of assessment and at liberty to take as much land every year as he wished to cultivate. He paid assessment according to the crop he obtained.

[3] G. Keatinge, op. cit., p. 3.

[4] See *Taxation Enquiry Committee Report*, loc. cit.

The next most important feature in the history of land revenue and tenure is the appearance of revenue farming, a factor of great significance in the development of the local system of land tenure in more than one province. The institution was designed to ensure a steady flow of income into the treasury of the central Government, which in the declining days of the Mogul Empire became more and more incapable of controlling the revenue officials in the outlying parts of the empire. No precise date can be assigned to the advent of this system, but it became fairly general in Bengal from the reign of Emperor Farukhsiyar (1713-19). Under this system the revenue farmer paid the Government nine-tenths of the whole collection and kept the rest as his remuneration. But later on a further stage of degeneration was reached, when the right of collecting land revenue for a pargana or district was sold by public auction to the highest bidders, who were held responsible for payment of the amount thus fixed in one lump sum into the Government treasury, retaining for themselves any surplus over it. In practice revenue farmers squeezed out of the cultivators as much as they could, paying to Government as little as they could. In some cases, the Hindu chieftains or rajahs subdued by Mogul arms were made revenue farmers under Imperial warrant. Although at first the office of the revenue farmer was not hereditary and was subject to the supervision of the state officials, it tended to become hereditary as the control of the central authority relaxed. The revenue farmer gradually consolidated his position by taking full advantage of the political disorganization and of the special opportunities for self-aggrandizement which it held out to him. He pretended to be proprietor of his charge by first of all cultivating the large waste area in addition to his own (*sir*) land, and later on by buying out small neighbouring cultivators by fair means or foul. It thus happened that by the time of Lord Cornwallis the revenue farmers had evolved into a powerful body hardly distinguishable from full proprietors. As Roberts puts it in his *Historical Geography of India*, 'the zamindari[1] which was originally a hereditary contract agency for the collection of revenue became something resembling a landlord estate'. The general dislocation in administration during the later years of Mogul rule and the chronic financial embarrassment of the Government made the position of the

[1] All revenue farmers irrespective of their origin were called zamindars and sometimes talukdars—terms which did not necessarily imply any definite proprietary right in the land.

revenue farmers stronger and stronger, as they were the only source of ready money for the Government to draw upon. The official organization for controlling land revenue administration having disappeared, the revenue farmers' operations were entirely unchecked, and the Government were so demoralized that they had neither the power nor the desire to mitigate the oppression and extortion of the villagers at their hands.

Revenue farming, at first confined to the Mogul Empire and more particularly to the province of Bengal, soon extended to other parts of the country for similar reasons, and even the Marathas, whose revenue system under Nana Farnavis during the latter half of the eighteenth century was universally recognized to be extraordinarily efficient and equitable, adopted it under the incompetent rule of the last Peshwa soon after the death of Nana Farnavis. It must be noted, however, that though the system thus came to be widespread, its effects were not uniform. In northern India, where it was introduced earlier and where the central authority weakened faster, they were more complete and lasting, as shown by the growth of the zamindari rights in Bengal. In other cases no permanent traces were left, as for example in the Deccan, except in the outlying districts of the Konkan where the khots who were at one time revenue farmers acquired landlord rights. Midway between the two extremes, as in the United Provinces, the revenue farmers succeeded in acquiring only certain overlord rights. The same was more or less the case in the Punjab. The net result of revenue farming and of the general disorder characterizing the revenue administration was seen in the increasing complexity of land tenures and rights and the steady departure from former revenue practices, such as a regular survey and assessment, which had been prevalent since the days of Akbar. All this made the task of the new British administrators very difficult in the absence of any rational plan of administering the land revenue. It was quite natural therefore that mistakes were made in the beginning, and many years had to pass before a tolerable system was evolved for the various provinces.

§2. **Three kinds of land tenure.**[1]—Apart from the intrinsic interest of the subject of land tenures, it is necessary to understand it properly, because without an adequate knowledge of it,

[1] For a good deal of the purely descriptive part of this chapter, we are indebted to B. H. Baden-Powell, *Land-Systems of British India*, and also to his *Land-Revenue and Tenure in British India.*

the systems of revenue settlements prevalent in different provinces can scarcely become intelligible. The type of tenure, that is, the way in which land is held, determines, for instance, the person or persons responsible for the payment of the land revenue, that is, the form of settlement, the various gradations of interest and rights in land, their recognition and interrelation and the nature of the unit of assessment adopted.

'The system of land tenure in India exhibits almost every conceivable variation, from immense estates, containing thousands of tenants, to minute holdings of well under an acre in size. It is nevertheless possible to classify the holdings into certain fairly well-defined groups.'[1] The following are the three main types of land tenure in India. (i) First, we have the various forms of landlord tenure, where one person or at the most a few joint owners are made responsible in one sum for land revenue on the whole estate, as in Bengal. (ii) Secondly, there are the smaller estates, essentially of the same character as the first, but with certain distinguishing features. They are village estates which are held by co-sharing bodies or village communities, the members of which are treated as jointly and severally liable for the land revenue. We have here to deal with a collective or 'ideal' landlord. (iii) Lastly, land may be held in single independent holdings owned severally, though aggregated locally in villages, the individual holders being severally responsible for the payment of the land revenue. These three kinds of tenure are called (i) zamindari, (ii) joint village (village community) or mahalwari, and (iii) ryotwari, respectively.

§3. **Two main forms of village constitution.**[2]—We have already discussed the general causes explaining the origin of the mode of settlement known as the village.[3] We have also given some account of the main features of a typical village, such as the presence of certain village officers, artisans and menials, etc., in a generalized description applicable to most villages in India. It is now necessary to emphasize the distinction between villages in India as regards their internal constitution, a factor which has an important bearing on the nature of the land tenure, and, through the land tenure, on the form of the revenue settlement. There are two distinct types of villages in India, namely, the ryotwari or severalty and the landlord or joint village, the latter

[1] See *India in 1930-1*, p. 169.

[2] For the interesting but controversial question of the origin and of the forms of the village in India, see Baden-Powell, *Land-Revenue and Tenure in British India*, pp. 88-90.

[3] See ch. v.

being further subdivided into a number of interesting minor varieties.[1]

(i) *The ryotwari village.*—The internal constitution of the ryotwari village is comparatively simple. Land is owned and cultivated separately by the various owners, each of whom may have inherited or bought his holding, or cleared it from the original jungle. The aggregate of these separate cultivators, owners and their holdings makes up the ryotwari village. The waste land of the village is the property of the Government, though it may be used by the villagers for grazing, wood-cutting, etc. Land revenue is assessed on each separate holding and the responsibility for its payment is individual. Apart from subjection to common village officials and the common enjoyment of the services of the village artisans and menials, there are no further points of contact among the villagers. It follows from all this that the importance of the headman or patel and, in general, of the village officials is greater in the ryotwari village than in the landlord village. This form of village is universal in Madras, Bombay, Berar and Central India, and was also prevalent in the Central Provinces and Bengal before the super-imposition of malguzari and zamindari rights respectively.

(ii) *The landlord or joint village.*—The landlord village, so called, may be owned by a single individual landlord or a body of co-sharers who may represent a group of ancestrally connected families claiming to be regarded collectively as the landlord of the village as already existing, or as established by their own foundation, but in either case the village is treated as a single unit. The individual or the collective landlord has pretensions to be of higher caste than and superior title to the other cultivating tenants, though sometimes the co-sharers may themselves cultivate the estate. The waste land of the village is the property of the village community as a whole, so that it may be rented to tenants and the rents divided among the members of the community, or it may be partitioned or brought under cultivation without the leave of the Government. The whole estate is assessed to one sum of land revenue for which the whole body of co-sharers are jointly and severally responsible, although special exemption from joint responsibility may be secured and the individual share of land revenue may be separated out by a particular co-sharer with the permission of the Government. The common affairs of the village were originally managed by panchayats or representative bodies consisting of the leading co-sharing families. Strictly speaking,

[1] See Baden-Powell, *Land-Systems of British India*, vol. I, ch. iv.

there is no single village headman, although an individual may be selected as the lambardar to represent the village community in its dealings with the Government, especially in connexion with land revenue settlement. This type of village is particularly strongly developed in the Punjab and is mostly connected with Mohammedan ideas as contradistinguished from the ryotwari village, which is associated with Hindu government and Hindu ideas. It is also found among the Jat, Gujar and other tribes in the central Punjab, as well as among the conquering Aryan tribes and descendants of chiefs and nobles in other parts.

4. **Constitution and types of joint or landlord villages.**— Turning to further details of the internal constitution of such villages, we may refer to three distinct varieties depending on the principle according to which the co-sharers allot the land or the profits and produce of the land. (i) First of all we have ancestral villages,[1] where there is the ancestral or family share system under which each member of the co-sharing body takes the fraction of the whole which his place on the genealogical tree points out. There are the following types of ancestral villages: (*a*) villages held by a joint body undivided as in the case of a joint undivided family, (*b*) those divided under the ancestral share system (pattidari), and (*c*) those partially divided on the ancestral system (imperfect pattidari). (ii) Secondly, there are non-ancestral villages where there are special customary systems of sharing under the true *bhaiachara*[2] principles of (*a*) sharing in equal lots made up artificially of various strips of land, (*b*) sharing by ploughs in which land is assigned according to the number of ploughs owned, or (*c*) with reference to shares in water, or (*d*) shares in wells. In all these cases, however, allotments are still regarded as shares of a jointly owned whole. (iii) Thirdly, there is the system of *de facto* holdings where there is no specific rule of sharing, and the existing holdings are recognized as such. This may have been derived from the breakdown of an original family system, for instance, in villages once pattidari, but where, owing to the changes and chances of time and the effects of heavy revenue burdens, the old share system was upset and the principle of *de facto* holdings was therefore accepted, or it may be a custom that always existed under which *de facto* holdings have been recognized from the very beginning.

In the ancestral villages, the revenue burden is proportioned

[1] Among the ancestral villages are also included single landlord villages where, however, the question of allotment of land or shares does not arise.

[2] The term *bhaiachara* is officially used in a more general sense and covers all variations of the non-ancestral landlord villages.

to the fractional share in the estate, more or less nearly and in principle, while in the case of the non-ancestral forms, the revenue burden is proportioned to the actual holdings according to the *bhaiachara* or *de facto* holding principle.

These three different rules of sharing must be regarded as being the outcome of one or other of the three possible ways in which all joint or landlord villages have been formed, namely, (i) they were either bodies who have jointly succeeded to a village at first held by one common ancestor, who in his turn may have been either a founder, or a grantee, or a revenue farmer, or again a ruling chief reduced to the position of a landlord as in the United Provinces, or (ii) they are bodies made up of a certain number of families belonging to an immigrating or conquering clan which allotted the area according to its customary methods, or (iii) they are merely co-operative colonizing groups formed under circumstances which led them to establish cultivation on the joint-stock principle.

It may be noted here that over the village landlord bodies a superior overlordship may occasionally arise as in the case of the Oudh and Agra talukdars, who are overlords over a number of village communities. The latter, however, retain the same essential principles as in the case of independent village communities. The origin of these overlord rights is similar to that of the independent landlord villages themselves.

§5. **Landlord estates including more than one village estate.**— Some landlord estates extend over a larger area than a village, perhaps a whole district or pargana, although the component villages even here do not lose all their importance. The origin of these bigger landlord estates does not present any special features and is accounted for as in the case of village estates. The present land-holder may be a descendant of a former territorial chief or ruler, or of a revenue farmer or other land official, or of a grantee of the state, jagirdar or inamdar. The larger size of the estate in this case is merely due to the fact that the lordship started from a source of higher rank or was more directly connected with the ruling power. Such landlord estates owned by zamindars exist on a large scale in Bengal, and in Oudh and Agra to some extent, where we have the talukdar class. They are quite exceptional in the Punjab. In the Central Provinces, the estates of the special class of landlords called malguzars occupy a very large proportion of the total area of the province, but they are not landlords in the Bengal sense. In Bombay, there is a variety of landlord estates. Apart from the class of jagirdars and inamdars, there are the Gujarat talukdars and

khots on the west coast of the Deccan coming under this category. In Madras, especially in the northern part, there are several great zamindars of the Bengal type.

This survey of the (proprietary) land tenures in India brings out the enormous complexity and great variety of forms that have been developed as the result of several historical factors, such as wars and invasions, tribal and local conquests, the rise and fall of ruling families and so on. To the right by first clearing, which must have been originally of primary importance, has been super-added the right by conquest, grant or natural superiority, etc.

§6. **Sub-proprietary and tenant rights.**—In this process of super-imposition of rights one upon another as the result of conquest, grant, or revenue farming, as new overlord rights may be created so also original proprietary rights may degenerate into sub-proprietary or tenant rights. In some cases, the ex-proprietors were able to maintain a privileged position even under an overlord and the recognition of the person at the head as the proprietor made the recognition of others below also necessary. The confusion that characterized landed rights, especially the large number of grades of landed rights, made the recognition of these rights very difficult.

In the ryotwari tracts, the question was very simple in the absence of any considerable overgrowth of rights. In most cases the cultivator was also the landlord. Where tenants were employed there was no doubt that they were ordinary contract tenants created by the owner and therefore not requiring any legal recognition. In a few cases at the most, there might be a loose overlord right which could be sufficiently provided for by the payment of a fixed rent charge by the actual proprietor. But

One interest	Two interests	Three interests	Four interests	
The Government is the sole proprietor	1. The Government 2. The ryot or 'occupant' with a defined title (not a tenant) as in Madras, Bombay, Berar, etc.	1. The Government 2. A landlord (zamindar, talukdar or a joint village body regarded as a whole) 3. The actual cultivating holders, individual co-sharers, etc.	1. The Government 2. Landlord 3. Sub-proprietors, or tenure-holders 4. The ryot or actual cultivator	1. The Government 2. An overlord or superior landlord 3. An actual proprietor or landlord (usually a village body) 4. The actual cultivating holders, individual co-shares, etc.

in the zamindari tracts and the joint village estates, the position was much more complex, a number of intermediate grades having come into existence. Baden-Powell gives the table above to illustrate the various interests that may intervene between the Government, with their revenue rights and their occasional direct ownership of land, as the fountain head of rights at the top, and the actual cultivator, wherever he has any permanent right to occupation, at the bottom.[1]

(i) *Sub-proprietary rights.*—The main characteristic of the sub-proprietary tenure is that the holder is the owner in full as regards his particular holding but has no part in the whole estate or its profits and no voice in its management. The illustrations of this category are found in Bengal, where certain persons known as tenure-holders have been granted a privileged status of permanent, heritable and transferable tenure held at fixed payment, because they were able to maintain such a position in spite of the general predominance of the zamindar class. The difficulty of defining their status led subsequently to the adoption of the rule, made under the Act of 1885, that all those persons below the zamindar owning one hundred bighas of land were entitled to the status of a tenure-holder.

Another modern instance of such rights is provided by the class of pattidars who were given a permanent managing lease for a part of the estate by the zamindars who found their estates too unwieldy and were desirous of sharing their revenue responsibility with others. The pattidars in their turn often created tenants called dirpattidars endowed with similar privileges and charged with parallel revenue responsibilities. Such rights were recognized by the Bengal Regulation of 1819.

Still another class of sub-proprietors is found in those cases where the present proprietary landlord body has grown over an earlier group; certain families would be able to maintain their position paying only Government assessment and no rent to the superior landlord in respect of their holdings. In the Central Provinces, the artificial creation of the malguzars, under the influence of the earlier policy followed in upper India, of fixing revenue responsibility on one landlord for each village, even when originally ryotwari in character, necessitated the recognition of sub-proprietary rights. Lastly, in Oudh, occasionally entire village bodies were able to preserve their rights of independent

[1] See Baden-Powell, *Land-Revenue and Tenure in British India*, p. 129. Cf. 'In one estate in Bakarganj there are as many as thirty intermediate (between the proprietor and the cultivator) tenures one under another' (*Report of the Bengal Banking Enquiry Committee*, par. 17).

management subject to the payment of a fixed rent to the overlord talukdar. Their sub-proprietary rights have been recognized by a separate sub-settlement with them fixing their rent payment to the talukdar with whom the main settlement is effected by the Government.

(ii) *Tenant-rights.*[1]—We may now proceed to deal with tenant rights, not of the ordinary contract tenants, but of those holding some privileged position. First we shall concentrate on a description of the features common to all the provinces (prevalent before the enactment of tenancy legislation after the inauguration of provincial autonomy in 1937) without entering into minute details relating to every particular province. The same general features that account for the rise of the landlord and overlord rights explain the existence of tenant rights of different grades. Those who are now classed as tenants in the case of landlord estates, joint or individual, must at one time have enjoyed a superior status. The more complete the landlord or the overlord rights and the greater the opportunities and time at the disposal of persons acquiring these rights, the more will the lower grades sink in point of their status. Thus different grades of tenant rights would arise depending on the strength of the pressure exerted from above. There were two difficulties regarding the recognition and definition of these tenant rights by the British administration; one was that not in all cases was direct proof obtainable of a former superior status enjoyed by the tenants; and the second difficulty was that, besides persons entitled to recognition on the ground of a former proprietary status, were also other tenants who were in a sense a privileged class, because they were brought in by the landlords on a contract basis, but at a time when tenants were too valuable to be ejected. The result was that a distinction between natural and artificial tenants had to be adopted. The natural tenants were those in whose favour definite facts could be asserted and proved; the artificial tenants were those who were not able to adduce any definite proof of the circumstances and origin of their tenant rights. To meet the case of the artificial tenants, the twelve-year rule was adopted in Bengal, Agra, and, to a limited extent, in the Central Provinces. In Bengal and Agra, the Tenancy Act of 1859 provided for the recognition of a tenant as occupancy tenant, if he had cultivated the same land continuously for twelve years. The Act was, however, evaded by landlords who

[1] See Baden-Powell, op. cit., ch. vii, section 5, and *Taxation Enquiry Committee Report*, par. 60.

made it impossible for any tenant to hold the same piece of land continuously for the required period, and it was therefore amended in Bengal in 1885. Cultivation was now required, not necessarily of the same piece of land, but of some land in the same village continuously for twelve years. In Agra, the Act was not formally amended in this way, but a number of restrictions were imposed by an Act passed in 1901, so as to prevent the landlord from defeating the provisions of the law.[1] The Act of 1901 was revised in 1926 on the lines of the amendments made in the Oudh Rent Act in 1921, viz., the conferment of life tenures on non-occupancy tenants and in return a large extension of the *sir* (home farm) rights of landlords. The heirs of the statutory tenants were allowed to hold on for five years. The addition thus made to the *sir* land was excessive. The recent (1938-9) Tenancy Bill in the United Provinces seeks to restrict the *sir* land in the interests of tenants (see §9 (ii) below). In Oudh, occupancy rights, at first limited under the Act of 1886 to tenants who, having once enjoyed proprietary rights had lost them, were extended subsequently to ex-proprietors whose proprietary rights were transferred by sale or execution. In the Punjab, the right of occupancy can be acquired only by tenants whose claims are based on certain historical grounds and not by mere lapse of time. The Punjab Act of 1887 defines occupancy tenants as those who, for two generations, have paid neither rent nor services to the proprietor, but only their share of Government assessment. In the Central Provinces also, the twelve-year rule was applied at first, but later on it was given up in favour of an arrangement which allowed purchase of occupancy right at two and a half times the annual rental. This in its turn was superseded by another rule framed in 1920 which recognized two classes of occupancy tenants, both having transferable rights subject to certain conditions. In the zamindari estates in Madras every ryot who possessed ryoti land (that is, land which is not the home farm or the *sir* land of the proprietor) at the time of the passing of the Estates Land Act of 1908 (modelled on the Bengal Act of 1885), and every ryot admitted by the landlord to the possession of ryoti land, has a permanent right of occupancy. His position has thus been assimilated to that of the occupant in ryotwari areas. In Bombay, the special Act of 1880 dealing with the khots protected the old residential tenants in the same manner as occupancy tenants elsewhere. There are also other

[1] For further particulars regarding rent legislation in Agra and Oudh, see the *Report of the United Provinces Banking Enquiry Committee*, pars. 327-8.

cases of special tenure, such as the talukdari tenure, which are dealt with under the Special Act of 1862.

§7. **Other than occupancy tenants.**—We have devoted so much attention mainly to occupancy tenants for the reason that they constitute by far the most important class of privileged tenants in landlord areas. It is necessary, however, to add that there are several other classes of tenants occupying a status in some cases higher and in others lower than occupancy tenants. By way of illustration, we may refer to the superior class of tenants in Bengal known as tenure-holders and already mentioned above, and ryots at fixed rates who can neither be ejected nor made liable to enhancement of rent. Similarly, in the United Provinces, in the permanently-settled districts of Benares, there are certain tenants at fixed rates. Again, in the Central Provinces, we have the class of 'absolute occupancy tenants' recognized at the first settlement as holding an exceptionally strong position. These cannot be ejected practically for any reason whatever. They pay a privileged rent which, moreover, is fixed by the Settlement Officer for the whole term of the settlement. On the other hand, there are certain inferior tenants comparable to the tenants-at-will in ryotwari areas but enjoying a certain amount of protection not available to the latter.

§8. **General features of occupancy privilege.**—We may now briefly indicate the nature of the protection enjoyed by occupancy tenants. (i) There is a limit to the enhancement of the rent both as regards the amount and the period which must elapse before rent can be increased. Enhancement can occur only as a result of agreement or by decree of a court on specific grounds. In Bengal, the law lays down that these agreements must be in writing and that the enhancement cannot take place oftener than once in 15 years and cannot be more than two annas in the rupee. The grounds for enhancement recognized by the court in the event of a suit are lightness of rent as compared with neighbouring land, advance of prices, or improvement in the productivity of land due to the enterprise of the proprietor, or to fluvial action. The tenant can sue for a reduction of rent on the ground of permanent deterioration of the soil or a permanent fall in local prices. In the Central Provinces, the rent is fixed by the Settlement Officer as in the case of absolute occupancy tenants, but not for the whole term of settlement, being liable to revision every ten years. In Madras, rent cannot be increased by more than twelve and a half per cent at one time. (ii) There are certain provisions protecting the occupancy tenant from ejectment except in special circumstances. Provisions in this connexion

are really complementary to those in connexion with enhancement of rent. Either set of provisions would be useless unless supplemented by the other. (iii) The occupancy right is hereditary and can be alienated, that is, parted with, or transferred outside the family on certain conditions. (iv) There are certain laws of distraint for rent securing the exemption of cattle, tools, seed-grain and so on. Further, in every case proper notice to quit is required, and payment of rent is by instalments. (v) Remissions and suspensions of land revenue granted by the Government to landlords in a bad year must be followed by corresponding concessions granted to tenants by landlords. (vi) Lastly, the right to make improvements on the land without enhancement of rent is also protected within certain limits, or in the event of higher rent being charged, compensation must be allowed.

In short, the aim of these rules is to confer on tenants the privilege of the three F's—fair rent, fixity of tenure and free transfer—as in the case of the Irish land legislation.

§9. **New drive for tenancy legislation in zamindari provinces.**—During the last few years, especially since the introduction of Provincial Autonomy on 1 April 1937 and the assumption of office by the Congress Party in eight provinces about the middle of 1937, the age-long institution of zamindari has come in for a good deal of criticism and has often been violently attacked by the new Kisan (peasant) organizations that have sprung up in the country, especially in the zamindari provinces of Bengal, Bihar, Orissa and the United Provinces. Partly owing to the widespread political awakening created by the Congress and partly owing to the ways of the zamindars themselves a striking change has come over the peasants, who have become increasingly conscious of their political and economic rights and are trying to assert themselves. The left-wing leaders of the Kisan organizations are out to bring about a revolution in agricultural economy and the virtual extinction of the zamindari system. But the organized counter-agitation of the zamindars, who recently (April 1939) established the All-India Landlords' Federation, and the presence of moderate elements in the parties in power are responsible for the restraint that is noticeable in the measures for tenancy reform which almost every province—including even largely ryotwari provinces like Bombay and Madras—has either initiated or is preparing to initiate. These measures are briefly reviewed below.

(i) *Bihar*.—Soon after the Congress Government came into power the Bihar Government initiated legislation calculated to redress the grievances of the peasants and confer on them rights and concessions which directly diminish the power and prestige

of the zamindars, who were, however, discreet enough to read the signs of the times and agree to a compromise. Reduction in rents to the level of 1911, abolition of the method of recovering rents in kind, exemption of enhancement for a period of fifteen years, withdrawal of the zamindar's right of claiming damages in case of arrears of rent, the reduction in the rate of interest on such arrears to 6¼ per cent, the conferment of hereditary rights including the right to dig wells, build houses and plant trees, on tenants who have occupied lands in a village for twelve years and protection against eviction which is not permitted except in the case of land being rendered unfit for cultivation—are the principal features of the Bihar Tenancy Act (1938). The only right after all this that the landlord possesses is to get his rent from occupancy tenants. The number of non-occupancy tenants in the province is almost negligible.

(ii) *The United Provinces*.—The Congress Ministry in the United Provinces, after an inquiry by a Committee into the problem of land tenure in the province, has introduced a tenancy bill which consolidates and amends the tenancy laws of Agra and Oudh. Discussion of the bill still (May 1939) continues owing to failure to arrive at a compromise with the zamindars, especially the talukdars of Oudh, who stand to lose more heavily than the talukdars of Agra under the new bill. The most important provision of the bill is that which confers hereditary rights on all but a small fraction of such tenants as are not at present in enjoyment of occupancy rights. The most striking addition to tenants with hereditary rights is obtained from tenants on *sir* (home farm) land, to whom under the present law no tenancy right accrues.[1] The bill restricts the grant of *sir* rights (relating to tenancy at will) paying land revenue not exceeding Rs. 100 to small landholders and limits the area to 50 acres in the case of large landholders. The present rent rates will remain in force for the time being, but will be reduced within five years to the level of rents prevailing between 1896 and 1905. Once the rent rates are determined they will not be ordinarily revised for a period of 20 years. Rents will be remitted or suspended during periods of natural calamities and resettled during periods of economic calamity such as a slump in prices. Ejectment will be allowed only in case of prolonged default. The rate of interest on arrears of rent will be reduced to 6¼ per cent.

(iii) *Orissa*.—In Orissa the Madras Land Estates (Orissa) Act was amended in February 1938, but was reserved for the assent of the Governor-General. Later, in May 1938, the Orissa Tenancy

[1] See *The Servant of India*, 2 June 1938.

Amendment Bill was passed. Both the measures were carried in the teeth of opposition of the zamindars unlike in Bihar. Neither bill has yet received the assent of the Governor.

(iv) *Bengal*.—The Bengal Tenancy Bill introduced by the Haq Ministry was passed on 1 April 1938. It has given rise to a stormy controversy and evoked strong protests from the zamindars, whose representatives walked out during the third reading. The bill provides for the abolition of illegal exactions and cesses levied on tenants, the right of pre-emption enjoyed so far by the landlord, the transfer fee (*salami*) payable to the latter and the right to realize rent by certificate procedure. The tenant has been given the right to recover his diluvial land within 20 years on payment of only 4 years' rent. The under-ryot has been given rights similar to those enjoyed by occupancy ryots, and the rate of interest payable on arrears of rent has been reduced to 6½ per cent. The original draft of the amendment bill provided for the suspension for a period of ten years of enhancement of rent. This provision was later (August, 1938) deleted on the recommendation of the Governor, who returned the bill to the legislature for effecting certain changes. Even in its altered form the zamindars are opposed to it and hold that the loss of their rights threatened by the bill alters the character of the Permanent Settlement. On the other hand, the bill is regarded as a first step by the Bengal Government in dealing with the urgent grievances of tenants. They have therefore appointed a Commission to undertake generally an examination of the existing land revenue system of Bengal in its various aspects with special reference to the Permanent Settlement. (See §31 below.)

(v) *Madras*.—The Congress Ministry of Madras have recently (January 1939) sponsored a bill to amend the law (Madras Estates Land Act) relating to the holding of land in the province. It is based on the recommendations made by the majority of the Estates Land Enquiry Committee. The bill declares the right of the ryot (pattidar) to the soil and the right over standing crops of the zamindar. According to the bill, the rent payable to the zamindar (like the *peishcush* payable by the zamindar to the Government fixed in perpetuity in 1802) is unalterable. Provision is made for the enforcement of rights and liabilities of the ryots and the landlords on this basis.[1]

The Madras Tenancy Bill has given rise to a heated controversy and aroused protests from the zamindars who are complaining of expropriation of rights of property without compensation. On the other hand, the Hon. Mr. Rajagopalachari, the Premier,

[1] See *The Hindu*, 27 January 1939.

has declared that the zamindars were not owners of the land; that they were mere officers appointed by the Government to collect rent and that they could at any time be relieved of that duty in the public interest "without any compensation" and at best with some compassionate gratuity or pension.

(vi) *Central Provinces.*—The Government of the Central Provinces are preparing for a thorough overhaul of the land and tenancy system in the province.[1]

The foregoing survey of tenancy legislation in the various zamindari provinces and areas shows that the land problem has become very acute and that there is a serious clash of interests between peasant and landlord. It is significant of the prevalent anti-zamindar tendency that a private member of the Bihar Legislative Assembly was recently (November 1938) credited with the intention to sponsor a bill to liquidate the system in the province by affording facilities for voluntary sale by zamindars of their estates to the Government. A change in the existing socio-economic structure in the rural areas seems inevitable having regard to the changed times, spread of modern ideas and the general trend of land legislation throughout the world. All well-wishers of the country will, however, desire the transition from the old to the new social order to be as painless and smooth as is possible. To this end, it is necessary that the zamindars as a class should recognize the need for change and be willing to surrender gracefully a portion of their rights. The attitude of compromise with the Government urged by the Nawab of Chhatari in the United Provinces should make a wider appeal to his class. This should now be possible all the more because of the recent establishment of the All-India Landlords' Federation. On the other hand, the Parties in power should realize the need for hastening slowly with a view to avoiding a violent shock to the existing social fabric and the dissemination of communistic ideas. The problem is one of proper rapprochement between the Governments in power and the zamindars. The hope may be expressed that the zamindars as a body will not be found wanting in a realistic spirit of compromise and self-sacrifice in the wider interests of the country, as well as in the interest of maintaining in a changed form their own leadership of rural India.

§10. **Tenancy in ryotwari provinces.**—Here, as a general rule, there has until recent times been comparatively little artificial growth of a landlord or middleman class between the cultivator and the state. Therefore the necessity for recognizing the

[1] The Tenancy Bill introduced in Bombay is reviewed in §11 below.

subordinate rights and varieties of tenancy which need such careful treatment in north Indian settlements has not been felt so urgently. As we have already seen, there are some landlord estates even in ryotwari provinces, as in the case of the Madras zamindars or the Bombay khots and talukdars, and most of these cases, as we have just noted, have been provided for by special Tenancy Acts. As regards the ordinary contractual tenants under ryotwari holders either in Madras or Bombay, or any other province where the ryotwari system is mainly in force, there is no special legislation intended to protect them from arbitrary rent enhancement or summary eviction, although, of course, the general tenancy law will enforce the terms of an agreement, if any, between the two parties, or failing an agreement, the dictates of any particular usages of the locality in question. The increase in the number of tenancies, the passing of the land into the hands of non-cultivating classes in consequence of the disintegration of the village community and deterioration of agriculture, the excessive competition among tenants for land and the consequential tendency of increasing rents have gradually created a situation in ryotwari areas which needs to be met by tenancy legislation on lines similar to those adopted in zamindari provinces.

§11. **The Bombay Tenancy Bill (1938-9).**—The need for tenancy legislation in Bombay has been realized for some years past. It was, however, left to the Congress Ministry of Bombay to make a move in the matter and to publish in the Gazettee in August 1938 the draft of a bill for the protection of tenants in the province. The bill was formally introduced in November 1938 and has recently (February 1939) been referred to a Select Committee of the Legislative Assembly.

As pointed out in the statement of the objects and reasons accompanying the bill, the provisions of the Bombay Land Revenue Code, 1879, and the Khoti Settlement Act, 1880, which regulate at present the relations between landlords and tenants in the province, have been found to be unsatisfactory in several respects. Many tenants who have held the same land for generations have not obtained rights of permanency but continue to be tenants-at-will liable to be deprived of their tenancy at the will of their landlords, and have in consequence no incentive to make improvements, for which further they may be asked to pay higher rents. Even permanent tenants are sometimes subjected to levies sanctioned by local usage or custom and to forced or ill-remunerated labour. It is the tenants of large landowners whether in khalsa or alienated villages who are particularly exposed to these disadvantages. The bill therefore gives special protection to tenants of such landlords.

Another reason for introducing the tenancy bill, as explained by the Hon. Mr Morarji R. Desai, Revenue Minister, was that it was becoming difficult for the Government to launch any scheme for improving agriculture so long as the tenant class had no permanent interest in the improvement of land.

The bill provides for the protection of agricultural tenants from eviction where they hold land in tenancy for not less than six years immediately preceding 1 January 1938 in inam, khoti or talukdari villages, or if the landlord owns 33⅓ or more acres of irrigated land or 100 or more acres of other land or land of any description the total assessment of which exceeds Rs. 150 annually in ryotwari areas. This security is, however, subject to certain conditions, viz. the desire of the landlord to cultivate the land himself, or to use it for a non-agricultural purpose, failure by a tenant to pay rent, bad or injurious tenancy, sub-letting the land, or failure to cultivate himself. A protected tenant will be entitled to compensation on eviction where he has made any improvement on the land held by him, and his tenancy will be transferable to his heirs under certain restrictions; but his rights cannot be mortgaged or otherwise alienated, nor will they be liable to seizure or sale by process of any court. The bill also provides the procedure for determining the reasonable rent payable by the protected tenant and for suitable remission and suspension of rents in case of failure of crops, and prohibits exactions of all cesses, rates and customary service from tenants.[1]

To sum up, the bill seeks to confer the benefits of permanency of tenure, reasonable rent, freedom from liability to pay cesses and levies other than rent, and compensation for improvements on certain classes of tenants. But the area so affected amounts only to 8 or 9 per cent of the cultivated land in the province.

As might be expected the Tenancy Bill has been attacked from two different angles. The protagonists of the tenant class criticize the bill on the ground that it is extremely limited in its scope and barely touches the fringe of the problem, and further that it does not go far enough in protecting the tenants. On the other hand, on behalf of the landlords it has been argued that the bill is expropriatory in its nature and interferes with the rights of landlords without benefiting the tenants, thus dislocating the existing friendly relations between the two classes. It is not possible to offer a final verdict on the bill as the Government are likely to agree to drastic changes in the Select Committee with a view to extending the scope of the present bill, and conferring

[1] See *Bombay Government Gazette*, 26 August 1938, pp. 497-511.

benefits on the tenant class not contemplated in the original draft. The bill in its present form is certainly capable of much improvement. Nevertheless we strongly support the general principle underlying the bill, viz. that the security for good tenants in the cultivation of the land—the backbone of Indian rural economy—is desirable and that property in land does not stand on all fours with other forms of property. The measure therefore deserves our support as it calculated to promote the general welfare of the rural masses.

§12. **What is a settlement?**—The ground being prepared by a preliminary study of land tenures, we are now in a position to consider land revenue settlements. What is technically called a settlement of land revenue consists of the determination of (i) the share of the produce or the rental to which the state is entitled; (ii) the person or persons liable to pay it; and (iii) the record of all the private rights and interests in the land. As previously stated, the last item is particularly important in landlord areas, individual or joint, where there is a regular graduation of landed rights and interests that have to be recognized.

§13. **Requisites of a settlement.**[1]—Three principal stages in the process of land revenue settlement may be distinguished: (i) preparation of a cadastral record; (ii) assessment of revenue; and (iii) collection of the revenue assessed.

(i) *The cadastral record.*—The cadastral record,[2] which includes the village map, the fiscal or the revenue record, and the record of rights, is prepared by means of a detailed field-to-field survey of the land and the demarcation of the boundary lines so as to secure an exact account of the cultivable land, the extent of each kind of soil requiring its own rate of assessment, and the preparation of a correct record of rights. From this survey, a map is prepared for each village showing the separate holdings and the area and nature of the cultivable and waste land. To correspond with the village map, a field register is usually prepared, and from these two, the fiscal or revenue record, showing a correct list of revenue payers with the amount shown against their names. These are supplemented by statistical tables and returns illustrating the past history and the present condition of the village. Lastly, a record of rights, either separate or as an adjunct to the revenue record, is prepared showing the tenure of land, and the various rights in the land, such as the rights of

[1] See *Imperial Gazetteer*, vol. IV, ch. vii.

[2] 'Cadastral' literally means showing the extent, value, and ownership of land for taxation.

landlords, co-sharers, sub-proprietors, occupancy tenants, etc., as well as the rights created by mortgage, sale, lease and so on. All these records are kept up-to-date by a system of public entry and registration of all changes. The rights thus recorded are presumed to be legally valid until the contrary is proved.

(ii) *Assessment of revenue.*—In order to find the revenue demand there is a valuation of the land, the ascertainment of revenue rates and the totalling up and adjustment of them. This gives the sum payable by the estate or holding. In some cases, subsidiary proceedings to determine the distribution of this total among co-sharers and the adjustment of tenant rents are necessary.[1] The different bases for assessing revenue adopted in the various provinces will be considered presently.

(iii) *Collection of revenue*: (*a*) *Instalments.*—Land revenue is collected not in one sum but in instalments, so as to suit the convenience of the revenue payers. The average landlord, for example, cannot pay unless the harvest is reaped and the produce marketed. Another consideration governing the system of instalments is to avoid too great a demand for cash at one time, for this is likely to send prices down and raise rates of interest to inconvenient levels.

(*b*) *Procedure for the recovery of revenue arrears.*—In respect of recovery of arrears, there is a difference between tracts under Permanent Settlement and those under Temporary Settlement. In the former, the gift of the landlord right was accompanied by the rigorous condition that the revenue must be paid with absolute punctuality under threat of immediate sale of the estate—a course of action deemed to be preferable to the alternative of subjecting a great landlord to the indignity of personal imprisonment, or attachment and distraint of movable property. In the Temporary Settlement areas, the procedure is less strict and the sale of land, instead of being the first step, is usually the last of a series of steps.

(*c*) *Suspension and remission of revenue.*—Though the assessment is fixed with reference to average seasons and conditions during the period of the settlement, exceptional disasters, widespread or local, such as floods, blight, total failure of rains or of other sources of irrigation, or collapse of prices of agricultural produce as in recent years, etc., are apt to upset all calculations, even assuming that the agriculturist has the will and the power to utilize a good harvest as an insurance against a bad year, which is rarely the case. In these circumstances, relief graduated

[1] See Baden-Powell, op. cit., p. 148.

according to the degree of crop failure is necessary and may take the form of suspension, or remission (partial or complete). The suspended revenue may be recovered or remitted according to the nature of the succeeding harvest. Remission, partial or complete, is granted in the case of continued failure of crops over more than one year. In recent years of economic depression prevailing in rural areas partial remission of revenue has been granted so as to make allowance for the slump in prices. It may be noted that no such relief either by way of suspension or remission is granted in the permanently-settled zamindari tracts, presumably because of the present lightness of the burden of assessment fixed in the remote past.

§14. **Classification of settlements.**—Settlements fall into two classes according to their duration. Where the share of the state is fixed in perpetuity, as in Bengal, it is called a Permanent Settlement; and where it is fixed temporarily for a definite period, it is called a Temporary Settlement. The period is 30 years in Bombay, Madras and the United Provinces, 20 years in the Central Provinces, and 40 years in the Punjab.

Settlements may also be classified according to the system of tenure. Corresponding to the three main kinds of tenure already indicated, and as influenced by them, there are three main kinds of settlement as follows:[1]

(i) Settlements for single estates under one landlord. Varieties under this heading are:

(*a*) Permanent Settlement with the zamindars in Bengal, north Madras and Benares.

(*b*) Temporary Settlement with the remaining zamindars in Bengal.[2]

(*c*) Temporary Settlement with the talukdars of Oudh.

(ii) Settlements for estates of proprietary bodies, usually village communities. These are called mahalwari settlements. Varieties (all varieties of this are on a temporary basis):

(*a*) The mahalwari settlement in the United Provinces of

[1] Despite the diversity of settlement systems, 'they are all alike in three respects. Firstly, the process of assessment is always preceded by the preparation of a survey map and record of rights; secondly, a soil classification is always made; and, thirdly, the assessment is no longer based on the gross produce, but on the net assets.'—Sir Edward Blunt, *The I.C.S.*, p. 131.

[2] A zamindari settlement is not necessarily also a Permanent Settlement and a ryotwari settlement is not necessarily a Temporary Settlement. Zamindari settlements are temporary, for example, in Oudh. Again, there is nothing to prevent a ryotwari settlement from being permanent, though as it happens, there is apparently no actual instance of this.

Agra and Oudh (where there are no talukdars but only village communities).

(*b*) The mahalwari settlement of the Punjab.

(*c*) The malguzari settlement of the Central Provinces.

(iii) Settlements for individual occupancies or holdings. Varieties (all varieties under this are on a temporary basis):

(*a*) The ryotwari system of Madras.

(*b*) The ryotwari system of Bombay and Berar.

(*c*) Special systems (in principle ryotwari, but not officially so called) of Burma, Assam and Coorg.

Every settlement must thus belong to one or other of the three classes mentioned above and must be either temporary or permanent.[1]

§15. **Zamindari settlements: Permanent Settlement in Bengal.**—We have already seen how the development of revenue farming, particularly in Bengal, led to the supersession of the old ryots by a new body of landlords known as zamindars. We have also pointed out how, owing to the disruption of the Mogul Empire, the old regular system of revenue administration evolved by Akbar had fallen into hopeless decay, and the cultivators were ground down by the exactions of the zamindar on the one hand, and on the other, by the numberless extra imposts levied on the land by the provincial rulers. The position, if anything, was made much worse in the early years of the Company's rule after the grant of the Diwani in 1765. The confusion was worse confounded by Clive's dual government system, under which neither the Nabob's revenue officers nor the East India Company's servants felt any responsibility for the good government of the country, with the result that the people were oppressed by both and protected by neither. The supervisors of revenue appointed in 1769 to protect the cultivator from the exaction of zamindars, being young and inexperienced officers, did not in the least set matters right, especially as the kanungo, and the zamindars, who alone possessed the required information, refused to part with it. The terrible famine of 1770 served only to intensify the difficulties. The Court of Directors decided in 1772 to stand forth as the Diwan, and instructed Warren Hastings to assume the direct administration of revenue. He improved, to some small extent,

[1] In 1928-9, the total acreage of ryotwari holdings was 334,598,000 or 51 per cent of the total area; of permanently settled zamindari or village community holdings 121,017,700 or 19 per cent of the total area; and of temporarily settled zamindari or village community holdings 198,902,000 or 30 per cent of the total area (*India in* 1930-1, p. 169).

the machinery of collection by appointing Collectors, and subsequently by creating Divisional, Provincial and Central Boards of Revenue. The change in the method of assessment, however, proved disastrous. At first quinquennial and then annual leases for the collection of revenue were sold by public auction to the highest bidders, setting aside the existing zamindars and encouraging the introduction of capitalists and speculators, who tried to screw out of the peasants the utmost they could by way of rents and additional illegal cesses on land. The deplorable state of the finances of the East India Company and its anxiety to give high dividends to its shareholders was at the root of the new system. It was chiefly to straighten out these matters and to relieve the agricultural distress in Bengal that Lord Cornwallis came out to India in 1786.

The most important measure of the administration of Lord Cornwallis is the Permanent Settlement of Bengal. The idea of fixing the state demand in perpetuity, first mooted by Francis and later on adopted by Fox in his India Bill, was ultimately recommended to the Indian authorities by the Court of Directors in 1785, but is was left to Lord Cornwallis, assisted by Sir John Shore, to carry out the policy of Permanent Settlement in Bengal. After inquiries lasting for three years, a settlement was made with the zamindars, who were declared full proprietors of the areas over which their revenue collection extended, so that they might have some legal status which would enable them to fulfil their obligation to the Government, and to induce them to take an interest in their estates. This right was, however, subject to the payment of land revenue and to liability to have the estate sold for failure to pay. The Government also reserved the right to introduce any measures they might think necessary 'for the protection and welfare of the dependent talukdars, ryots and other cultivators of the soil'. The assessment was fixed approximately at ten-elevenths of what the zamindars received as rent from the ryots, the remaining one-eleventh being left as the return for their trouble and responsibility. The revenue liability was fixed in a rough and ready fashion without any survey or record of landed rights and interests, or any investigation into the productive capacity of the different classes of soils. In 1793, in consultation with the Court of Directors, the settlement was declared permanent and the assessment unalterable for ever, and the Government specifically undertook not to make any demand upon the zamindars or their heirs or successors 'for augmentation of the public assessment in consequence of the improvement

of their respective estates'.[1] It may be noted here that while Sir John Shore was at one with Lord Cornwallis so far as the recognition of the zamindars was concerned, he would have preferred to wait for the decennial period of settlement already in force to run out before declaring the settlement perpetual.

§16. **Criticism of the zamindari settlement of 1793 in Bengal.**—The settlement thus effected is open to criticism on various accounts. In the first place, the essential preliminaries to any settlement, namely a detailed survey, classification of soils and the preparation of a record of rights were dispensed with. There were no doubt several more or less valid reasons for this omission. A really scientific survey was, in the then existing circumstances, difficult owing to deficiency of trained personnel, etc. Secondly, it was thought impolitic to pry into the internal concerns of the estates and possibly to excite the distrust of the landlords. As for the ryots, it was hoped that the landlords would come to an understanding with them and protect their rights. Nevertheless, as Baden-Powell remarks: 'The fact that the Permanent Settlement was made without any survey, and without any record of landed rights and interests, has proved more fraught with evil consequences than perhaps any other feature of the settlement.'[2]

This leads us to notice the second great defect of the Permanent Settlement, namely, the failure to guard the rights and interests of the ryots, who suffered a double injustice, first, by losing their proprietary rights indefinitely, and secondly, by being left almost entirely to the mercy of the zamindars, who proceeded to rack-rent them.[3] There was, indeed, a general provision that leases or *pattas* were to be given to the ryots specifying the area as well as the terms and conditions of the holdings, but in practice this was of no avail, as the *pattas* could not be enforced and also, in some cases, because the ryots were unwilling to take them for fear of admitting their inferior position and of committing themselves to the acceptance of conditions which they did not quite

[1] See *Taxation Enquiry Committee Report*, par. 55.

[2] *Land-Systems of British India*, vol. I, p. 289.

[3] 'The errors [of the Permanent Settlement] were twofold: they consisted, firstly, in the sacrifice of what may be denominated the yeomanry, by merging all village rights, whether of property or occupancy, in the all-devouring recognition of the zamindar's permanent property in the soil; and secondly, in the sacrifice of the peasantry by one sweeping enactment, which left the zamindar to make his settlement with them on such terms as he might choose to require.'—Sir J. E. Colebrooke, quoted by Sir T. Morison, *The Industrial Organization of an Indian Province*, p. 27.

understand. It must, however, be admitted that the sad plight of the ryots was in no small measure due to the extremely heavy assessment, which was exacted with great rigour. In the event of default the estate was immediately sold by auction. That being so, it was necessary to assist the landlord in realizing the rents due from tenants to enable him to pay his Government dues with the absolute punctuality that was insisted upon. Again, in many cases, the landlord, being unable to meet the state demand, had his estate actually sold. Naturally the successor insisted upon a clear title before he could be induced to purchase it. This meant a more complete supersession of the rights of the ryot and his subjection to more and more extortionate demands on the part of the new-comer. The tenant had to wait for nearly three-quarters of a century before any attempt was made through the tenancy laws of 1859 and 1885 to grant him redress from the grievous wrong he had suffered so long.

It has been asked whether it was absolutely necessary to give such unconditional recognition as proprietors to the zamindars. It is often asserted that Lord Cornwallis, being himself an English landlord, laboured under aristocratic prejudices and desired to create a landed aristocracy here similar to that in England, though the conditions of the two countries were widely different. The Permanent Settlement, however, was emphatically the work of the Company's middle-class servants. Quite possibly the fact that Cornwallis belonged to the English aristocracy made him readier than he otherwise would have been to accept the policy with which his name is associated. But it is certainly not true that he was its sole originator and protagonist. The other consideration is that when he appeared on the scene, he found the zamindars occupying such a strongly entrenched position that it would have been impossible to ignore them and set aside the development of a century and go to the root of the problem, as it were, trying to search out the original owners of the soil, as opposed to the zamindars, who started by being merely farmers of revenue. In accepting the *fait accompli* therefore Lord Cornwallis, it may be urged, was impelled by the inexorable logic of facts. Further, it must be remembered that the all-round ruin in which the agriculture of Bengal was then involved, partly as the result of the kaleidoscopic changes in the post-Diwani revenue policy and the terrible famine of 1770, imperatively called for some drastic solution. In these circumstances, it was felt desirable to acknowledge as proprietors the zamindars, who happened to be the only well-established revenue machinery that was available, and in whose recognition seemed to lie the only chance of agricultural revival.

The third and the most important aspect of the Bengal settlement, namely, perpetuity of assessment, is a question not limited to Bengal alone but of much wider importance. It may therefore be reserved for treatment at a later stage.

§17. **The Permanent Settlement in Benares and Madras.**—In Benares the British, anxious to follow the Bengal model and as yet not sufficiently familiar with the peculiar system of joint tenure of land, ignored the existence of landlord villages with a strong clan or tribal connexion, and dealt with one of the chief co-sharers or some other prominent person on a Permanent Settlement basis (1795). In Madras no definite plan was followed until after the cession of Mysore and the Karnatak districts, when, although a settlement on ryotwari lines had already been initiated, an attempt was made to extend the permanent zamindari settlement to the whole Presidency. There was a considerable diversity of opinion as to the system to be adopted, but the Court of Directors, impressed by the punctuality with which revenue was paid under Permanent Settlement in Bengal, instructed the Madras Government to enter into a permanent engagement with the zamindars. In north Madras and certain parts of south Madras, individual landlords existed, being mostly descendants of former ruling chiefs, and no difficulty was experienced in settling with them. In south Madras, however, only a few of these landlords—or polygars as they were called—were recognized, and the others were dispossessed as a penalty for having resisted the British power. In the major portion of the Presidency, however, there were ryotwari villages where no such intermediaries existed, and in pursuance of the instructions of the Court of Directors, an attempt was made to create substitutes out of enterprising contractors. The villages were grouped together into artificial districts or parcels and sold by auction to the highest bidders, who then became the landlords of the whole estate. This experiment failed disastrously as it deserved to do. As Baden-Powell remarks, 'the real zamindar, in his natural growth of a century and a half, was bad enough; but what could be said for an auction-room landlord? Of course, the system failed miserably.'[1] The experiment was therefore abandoned in favour of the ryotwari system strongly advocated by Munro and developed, if not originated, by him. But before the ryotwari system was authoritatively adopted, between one-fifth and one-third of the Presidency had already come under the Permanent Settlement.

[1] *Land-Systems of British India*, vol. I, p. 292.

The course of tenancy legislation for zamindari estates in Madras has already been described.

§18. **Subsequent history of the Permanent Settlement:** (*a*) *Under the Company.*—In the days of the Company's rule, Wellesley, Minto, Hastings, Bentinck and Munro had all strongly advocated the extension of the Permanent Settlement to other parts of India on the ground that, judging from the case of Bengal which had experienced a great revival under it, it seemed to hold out sure prospects of rapid agricultural development. The Directors of the East India Company, however, rejected the proposals (1820), in spite of solemn pledges given by proclamation and the expectations raised in all parts of the country.[1]

(*b*) *Under the Crown.*—After the abolition of the Company the question was revived by Lord Canning on the recommendation of Colonel Baird-Smith who was deputed in connexion with the severe famine of Orissa in 1860 to inquire into the causes of, and suggest remedies for, such calamities. Sir Charles Wood, while agreeing with the recommendation, failed to take any action. Sir Strafford Northcote, the next Secretary of State, proposed in 1867 the introduction of the Permanent Settlement subject to certain conditions, such as that, where 80 per cent of the cultivable land was brought under cultivation and there was no prospect of canal irrigation increasing the produce by more than 20 per cent, the state demand should be fixed in perpetuity. These conditions meant in effect that Permanent Settlement was to be deferred as long as the land continued to improve in value. Lord Kimberley, the Secretary of State, however, finally rejected the proposal altogether in 1883 mainly on the ground that the country was as yet undeveloped. Since then the attitude of the Government has been to regard the question of Permanent Settlement as closed, although from time to time echoes of the old controversy of Permanent versus Temporary Settlement continue to be heard.

§19. **Temporary Settlement with the remaining zamindars in Bengal and with the talukdars of Oudh.**—Those parts in Bengal that are not permanently settled for one reason or another come under a temporary settlement, under which the percentage of the assets taken is very high, as much in fact as 70 per cent,

[1] As Ranade pointed out, 'Captain Wingate and his associates who were the great pioneers of the Bombay survey always regarded Permanent Settlement as the consummation of their land policy, to which the periodical settlements were only intended to serve as a preparation and midway introduction' (see *Report of the Land Revenue Assessment Committee, Bombay* [1926], p. 72).

the holders of the settlement being usually middlemen, of a class for whom 30 per cent. of the assets is regarded as ample remuneration. As to the mode of assessment, the system adopted in Bengal is identical with that in use in Agra which is described below.

The component villages under the talukdars are so important that virtually the Oudh settlement may be regarded as a modified form of the joint village settlement system which we now proceed to describe.

§ 20. **Mahalwari settlements.**—The temporary settlement as developed in the Agra province is the typical form adopted in provinces where mostly village communities with landlord rights are dealt with. An attempt was at first made to settle the villages on a permanent basis with a revenue farmer or some other person of note. The Home authorities, however, would not hear of a permanent settlement, and besides in 1819, Holt Mackenzie, as secretary to a commission of inquiry, drew attention to the existence of village proprietary bodies and pointed out that they had to be reckoned with, that the single-landlord ideas derived from Bengal could not very well be applied, that a proper survey and a careful record of all rights whatever were indispensable, and that permanent settlement as a general measure could not be thought of.

The question of settlement in Orissa also came up at the same time as inquiries were set on foot in the North-Western Provinces (now called the United Provinces of Agra and Oudh), and to deal with both cases the famous Regulation 7 of 1882 was passed. This, together with later amendments, is the chief basis for all subsequent temporary settlements with landlords and village bodies.

In Agra, barring a few cases of individual zamindars and Agra talukdars, in the majority of cases there was no person above the village bodies. These were therefore settled with directly in their collective capacity, though a co-sharer of standing and respectability was generally selected to undertake the primary liability in connexion with the payment of the land revenue, and he signed the settlement on behalf of all the co-sharers, who were made jointly and severally responsible for the assessment. As the overlord rights of the Agra talukdars were very much inferior to those of the proprietary rights of the Oudh talukdars, their claims were disposed of by making the assessment payable by village bodies under them just so much higher as was necessary, and 10 per cent of the land revenue was paid as talukdari allowance to them directly from the Government treasury. Returning

to the settlement with the village communities in Agra, we must note that a section of a village or even an individual co-sharer (above a certain limit) can move for what is called 'a perfect partition' of separate and individual revenue liability to take the place of joint liability. The work of settlement is partly judicial and partly fiscal, referring respectively to the ascertainment and record of rights in land on the one hand, and, on the other, the assessment of the revenue demand as well as in some cases the adjustment of tenant rents. As to the settlement, we have the usual stages of demarcation, survey, record of holdings and rights, and lastly, the assessment itself.

§21. **Principles of assessment in mahalwari systems.**—The principles of assessment which we are about to describe must be understood to apply to all the mahalwari systems. After experimenting with several methods, such as the valuation of net produce, etc., the Government adopted the following plan of fixing the assessment. The actual rental value of the lands in the village is taken as the basis, direct or indirect, of the assessment. Revenue is technically said to consist of 'a fraction of the assets' of the estate as annually received. This fraction has varied from time to time. It was very high in the beginning under the East India Company, being over 80 per cent;[1] it was reduced to 66 per cent in 1833 by Lord William Bentinck; under the Saharanpur Rules of 1855 it was further reduced to about 50 per cent; and according to official claims the actual fraction realized in most cases is well below 50 per cent at the present time.

The assets mainly consist of (i) the total rents actually received, which constitute by far the most important determining factor in Agra, (ii) the calculated rental value in the case of lands held by the proprietors themselves or allowed by them to be rent free, and (iii) certain miscellaneous profits, such as those from valuable waste lands, income from grazing, fruits and wild produce, etc. Of these three, the first two, making up the rental assets of the estate, are the principal factors.

This is the general principle of assessment in the different mahalwari settlements in Agra, Oudh, the Punjab, and the Central Provinces, though there are differences in detail in the various provinces. Actual rates of rent paid at the time of settlement are the basis of the Agra plan. In the Central Provinces, the necessity for securing more perfectly an equality of incidence of

[1] For example in Orissa, in 1822, it was authoritatively declared to be 83.3 per cent of the assets; in 1840, 65 per cent, with a permissive reduction to 60 per cent, while at the re-settlement of 1901 it was brought down to 54 per cent (see *Land Revenue Policy of the Government of India*, p. 13).

rents has led to the adoption of a peculiar method to be noted later on. In the Punjab, since much of the land is held by the proprietors or by tenants who pay in kind, a direct process of calculating cash rental cannot be followed. It is therefore necessary to ascertain a fair rate for all land of a given class on the basis of actual cash payments on the specimen holdings; and these representative values are applied to all the lands in the village.

§22. **Mahalwari settlement operations in the United Provinces.**—At the commencement of the settlement operations in the United Provinces, the Settlement Officer inspects the villages and groups them into assessment circles possessing general similarity of soil and physical character. The rent for each class of soil is then determined. The chief guide adopted for this purpose is the cash rental of the lands under ordinary crops held by permanent and responsible tenants who depend for their livelihood upon their holding. The Settlement Officer then determines the rent rate with reference to the ascertained rentals, after taking into account such factors as means of communication, increase of population, crop statistics and increase in the area cultivated.[1] Where there are no cash rents, the Settlement Officer takes as his basis either the rents paid in the village for similar lands or his own circle rates.

The system as applied to Oudh.—The Oudh settlement is practically the same as in Agra in all its features including assessment, except that the settlement is only occasionally with village communities, and in most cases, single talukdars are dealt with in one sum for an estate comprising a greater or less number of villages. The talukdar's revenue payment is based on the aggregate of the sums leviable as rent from each village in his estate. In some cases, as already seen, where the village communities under him have succeeded in preserving their rights, a 'sub-settlement' with these is made, and the payment to the talukdars is fixed so as to allow for the talukdar's profit which is in no case less than 10 per cent of the land revenue.

§23. **Mahalwari settlement of the Punjab.**—Here we have the same system as regards survey, record of rights, etc. But there is a difference in detail so far as the method of assessment is concerned. There is no considerable body of tenants and of such as do exist many pay in kind. The Settlement Officer therefore calculates direct revenue rates per acre for each kind of soil in the village estate, basing them on what the rental assets would be if a cash rent were uniformly paid. For this purpose, there

[1] See *Taxation Enquiry Committee Report*, par. 67.

is a division of the area into circles in each of which broadly distinguishable classes of soil are adopted. Then certain standard rates are fixed after taking a certain number of fair specimen holdings representing each kind of soil and finding out what they actually pay in cash, and failing this, what the cash value of the grain rental is. These standard rates are utilized as a general basis for the assessment. In the Punjab, though theoretically revenue is collected not from individual cultivators but from joint holders of village estates jointly and severally responsible for it, in practice the share of revenue due from each is distributed and can be recovered separately. The cultivators therefore are generally in the same position as peasant proprietors in Bombay and Madras.[1]

§24. **Malguzari settlement of the Central Provinces.**—The system in the Central Provinces, again, is practically the same as the one in Agra so far as the basis of assessment is concerned. There is, however, a difference in respect of one important particular. In the Central Provinces, the revenues of the villages had been farmed out by the Marathas to individuals generally called malguzars. The British Government's anxiety, however, to deal with individual landlords led to the conferment of a proprietary status on these and their recognition as heads of villages, although the villages here were of the ryotwari type as in Bombay and Madras, consisting of aggregates of cultivators each claiming exclusive ownership of his holding. Extensive protection had therefore to be given to them, having regard to the fact that from the position of proprietors they had been degraded to that of tenants of the malguzars. The Settlement Officer therefore has not only to fix the revenue demand to be made from the malguzars but also to determine the rent payable, by practically all classes of tenants, to the malguzars.[2] It is obvious therefore that the method of calculating the rental value must be more accurate than where it merely serves as a general basis for the revenue demand on the part of the Government.

The fixation of rents in the Central Provinces is thus a highly complicated process and is achieved by an elaborate system of grouping and soil classification according to what are called 'soil units', which are intended to be measures of the productive

[1] See *Taxation Enquiry Committee Report*, par. 168.

[2] 'The fixation of rents which is the most important settlement operation is complicated by the general and increasing tendency on the part of malguzars to allow rents to continue at a low figure and to exact *nazaranas* on new leases of surrendered holdings or on the leasing of land for the first time' (*Taxation Enquiry Committee Report*, par. 69).

capacity of the soil. 'The value is assumed to depend on the average net profits of cultivation, and to each class of soil in every position a factor is assigned expressing its value relatively to other soils, so that the soil unit varies, not only with the fertility of the soil, but also with the position of the land.'[1]

§25. **Ryotwari settlement: the ryotwari system of Madras.**—We have already noticed above[2] how the ryotwari system was adopted in Madras after the failure of attempts to introduce the Permanent Settlement. The principles of settlement are not embodied in any statute and are derived from extensive instructions. There is an accurate survey of each village, and a village map with a descriptive register of all holdings is prepared. The lands are classified according to the productive capacity of the soil, which is estimated in terms of quantity of some one of the ordinary grain crops. The grain value is converted into money value at a commutation price, based generally on an average of 20 non-famine years previous to the settlement. From this, the expenses of cultivation being deducted, we get the net produce, of which about one-half is fixed as the maximum land revenue. There are abatements allowed for traders' profits, and for the distance the grain has to be carried to the market, and on account of vicissitudes of season and unprofitable areas. 'After this, soils of similar grain values, irrespective of their classification, are bracketed together in orders called *taram*, each with its own rate of assessment. These rates are further adjusted with reference to the position of villages in which the lands are situated and the nature of the sources of irrigation. For this purpose, villages are formed into groups; in the case of dry lands, with reference to their proximity to roads and markets, and, in the case of wet lands, with reference to the nature and quality of the water supply. This accounts for different rates of assessment being imposed on lands of similar soils but situated in different groups or under different classes of irrigation. The assessment thus fixed represents the commuted value of the Government share of the surface cultivation. But if minerals are discovered in the land, a separate assessment will be levied therefore.'[3]

§26. **The ryotwari system of Bombay.**—Unlike Madras, Bombay possesses a land revenue code which regulates all

[1] *Taxation Enquiry Committee Report*; for further details, see Baden-Powell, *Land-Revenue and Tenure in British India*, pp. 186-8.

[2] *Ante*, p. 431.

[3] Standing Orders of the Board of Revenue, Madras, quoted in *Taxation Enquiry Committee Report*, par. 64.

matters connected with settlement. There are also special Acts to deal with the special classes of estates, such as those of the talukdars in Gujarat, the khots in the Konkan and the few joint villages of the Khera and Broach districts.

In our general historical survey of land revenue, we have made reference to the revenue administration of the Marathas and its deterioration under the last of the Peshwas as a result of the introduction of revenue farming. When the British took over the Deccan from the Peshwas, they decided to put an end to the pernicious farming system and go back to the more equitable system of Nana Farnavis.

After various short-lived experiments and several proposals, including a general village settlement of the mahalwari type, the ryotwari system was eventually adopted. In 1825 Pringle was ordered to undertake a detailed survey of the land. He also tried to introduce an elaborate land classification with extreme accuracy, on the basis of net profits obtained. This required an infinite mass of details, and the whole experiment proved a failure on account of the high pitch of assessment in which it resulted. The intricate nature of the inquiry and the impossibility of supervising the army of subordinates entrusted with the work of collecting data made the apparently scientific investigation altogether unreliable. What was really necessary was a large reduction of the existing assessments, which were universally regarded as too heavy. The failure of the experiment was emphasized by a series of famine years which supervened.

The Government therefore directed that the whole operation should be commenced *de novo*, and in 1836 entrusted the task to two officers, Mr Goldsmid and Lieutenant Wingate. The system introduced by them, as modified from time to time, is essentially the system now in force.[1] In 1840, they submitted their report, in which they laid down the general principles for the basis of a survey settlement suited to the conditions of the Bombay Presidency. They recommended moderate assessment, settlement for 30 years, protection of improvements from taxation during the term of settlement, recognition of property in soil, perfect freedom of management with regard to sale, transfer and rents to be charged to sub-tenants, etc. Later on, Captain Davidson was appointed to collaborate with these officers, and in 1847 they issued a report which is well known as the Joint Report, in which are elaborated the principles underlying the present system.

[1] *Report of the Land Revenue Assessment Committee,' Bombay* (1926), pp. 8-9

According to the system adopted in this Report, the basis of net profits for the classification of land as under Pringle's system was abandoned. The depth and the texture of the soil were taken into consideration instead. The assessment itself was regulated by experimental rates based upon general considerations as to rainfall, agricultural prices, prosperity of the land and so on, the fundamental principle being that no more should be asked from the cultivator than what he could easily afford to pay. The *mirasi* and *upri* tenures of the olden days were merged into a uniform tenure known as the survey or occupancy tenure. The title of the cultivator to his holding was declared to be indestructible so long as he continued to pay the assessment. He was entitled to relinquish any fields or take up others so as to suit the extent of his liability to the means at his command. His position and status have been defined in the Bombay Land Revenue Code on this basis. The tenure so created is known as ryotwari, under which the proprietary cultivator holds his land direct from the Government. Full occupancy tenure is heritable, transferable and otherwise alienable without the permission of the Government. The occupancy is liable to forfeiture for failure to pay the assessment. A guarantee is given that no additional taxation will be levied on account of improvements made by the occupant.[1]

§27. **Main features of settlement in Bombay.**[2]—The ryotwari system of Bombay has the same general features as that of Madras, such as demarcation of boundaries, the determination of survey numbers which once fixed are not altered, and the classification of the soil, but the mode of assessment is different. The relative values of the soils are classified once for all according to their depth, texture, capacity for retention of moisture and other physical properties bearing on fertility, into several groups, and expressed in fractions of a rupee, 16 annas representing the best class of soil. The object of this classification, unlike that in Madras, is not to base the assessment on the net produce but merely to use it as a basis for the distribution of the total revenue demand fixed for the area on general considerations.

Three main steps in the process of fixing the assessment may be distinguished: (i) The first step is the grouping of the talukas according to marked and permanent distinctions such as climate, situation and the general condition of cultivation. (ii) The second step is the determination of the aggregate revenue demand for the

[1] See G. Keatinge, *Rural Economy in the Bombay Deccan*, pp. 20-1.

[2] See *Land Revenue Policy of the Government of India*, ch. viii, for a more detailed description of the Bombay system.

area (usually a taluka) with reference to its revenue and economic history. (iii) The last step is the determination of the revenue liability from aggregate to detail. This, as we have already mentioned, is carried out with the help of the annewari classification of the soil which serves the purpose of a sliding scale. Thus, if the maximum rate be Rs. 3 per acre for the 16-anna field, it would be Re. 1-8 per acre on a field classified as 8 annas.[1] The purely empirical character of the Bombay system is brought out by the fact that the decision of the Settlement Officer as regards the revenue rates depends, 'not upon the formal working out of results based on theory, but rather upon the subjective impressions of local knowledge and experience'.[2] In recent years, however, the rental value, as ascertained by records of leases and sales and other similar factors, is being adopted as the basis for fixing the assessment in practice,[3] though *The Survey and Settlement Manual* directs that 'the arguments for enhancement should be based primarily on the indirect evidence of general considerations . . . and that the rental statistics should be employed only as a check to prevent the enhancements from going too high'.

There are certain restrictions as regards the increase in assessment resulting from a revision, according to which the increase is limited to 33 per cent on the total for a whole taluka, 66 per cent on that of the village, and 100 per cent on that of a single holder. Private improvements are protected, as already stated, being in theory entirely exempted from increased assessment, though for lack of clear specific instructions as to what is to be regarded as an improvement and what is not, it is complained that too much is left to the judgement of the Settlement Officer and improvements do sometimes get taxed. On the other hand, there is no reason, in theory, why all improvements should be permanently exempted. It should be enough if the exemption covers the period required for the improvement to be amortized.

§28. **The Assam system.**—In Assam, the only proprietors were the Permanent Settlement landholders of the older Bengal districts and a few other permanent cultivators enjoying a title, which is called landholder's title, based on occupation of land for

[1] The system of settlement in Berar is precisely similar to that prevalent in Bombay. In Sind, where assessment rates depend on irrigation, and not on rainfall which is negligible, the period of settlement is shorter than in the Bombay Presidency.

[2] *The Bombay Survey and Settlement Manual,* quoted in the *Taxation Enquiry Committee Report,* par. 66.

[3] See Bombay Government's Resolution on the *Land Revenue Assessment Committee Report* (1927).

ten years before the Regulation of 1886, and after the Regulation, on lease or grant of settlement for ten years. A great deal of the land is also held on an annually renewed permit or *patta*, or at least on a lease which is for less than ten years. In Assam, waste land rules are especially important, as hardly 25 per cent of the area of any district is under cultivation.

Tea gardens are held on leasehold tenure for long terms at low rates of assessment. After the expiry of the term of lease the land is liable to be assessed under the laws in force, provided that the rate cannot be higher than that payable on the most highly assessed lands in the district cultivated with any ordinary agricultural crop. The question of how the state should absorb at least a part of the increase in value which these lands are experiencing, is engaging the attention of the Government.[1]

§29. **State ownership versus individual ownership.**—Before entering upon a critical examination of the present land revenue system and the various controversial questions arising in connexion with it, we shall dispose of a controversy which is supposed to be so important that the decision on practically every important question relating to land revenue is taken to depend on the view we take on the matter. We are referring to the question whether the state is the universal landlord or whether there is indisputable private property in land in India. At the very outset, we may say that no clear and unambiguous answer can be given to the question that is thus propounded, and secondly, that, in any case, for all practical purposes, it does not very much matter whether we call the land revenue a rent or a tax.

We shall proceed at first to discuss the question on the usual lines. The specific issues that arise have been stated as follows by the Taxation Enquiry Committee. (i) Did the state claim exclusive proprietary rights over the land (*a*) under Hindu rule, (*b*) under Mohammedan rule? (ii) Did the British Government succeed to any such rights? (iii) Is the state now the proprietor of land held (*a*) on zamindari or (*b*) on ryotwari? (iv) If not, are the zamindars and ryots respectively the possessors of the proprietary right subject to the payment of land revenue? (v) Should the land revenue be described as a tax or rent?

As regards the first two points, the opinion is generally held that the state never claimed exclusive proprietary right over the land before the British era and that therefore the British cannot be said to have *succeeded* to any such claim. In this connexion,

[1] See *Taxation Enquiry Committee Report*, par. 71.

the views of Mountstuart Elphinstone, H. H. Wilson, Baden-Powell, etc., and also an elaborate judgement of the Bombay High Court, in a case from Kanara disposed of in 1875, are quoted. The judgement in question endorses the view of Wilson that the proprietary right of the sovereign derives no warrant from the ancient laws or institutions of the Hindus[1] and is not recognized by modern Hindu lawyers as exclusive or incompatible with individual ownership. Similarly, with regard to Mohammedan law, Colonel Galloway summarized his conclusions as follows: 'The soil was the property of the cultivators as much as it could be. Law gave no power, policy gave no motive to remove him, to disturb him, so long as he paid his taxes. When he did not, his lands could be attached; and so can those of the first peer holding by the firmest tenure of the English law. The right of the Indian husbandman is the right of possession and of transfer; and the rate of his land tax was fixed; often, indeed, the amount. In what respect, then, is his right of property inferior to that of the English landholder?'[2]

What holds good of northern India and the practice of Mohammedan rulers, applies with greater force to the case of southern India, where the existence of private property in land was admitted even more unmistakably, especially in those parts of the country which never came under the Mohammedan yoke.

As regards the first two points therefore the Taxation Enquiry Committee are unanimously of opinion that under both Hindu and Mohammedan rule, the state never claimed the absolute or exclusive ownership of the land and definitely recognized the existence of private property in it.[3]

During the period that intervened between the death of Aurangzeb and the firm establishment of British rule in this country, provincial governors and adventurers seemed to have put forward all kinds of extravagant claims. And the tendency to rack-rent which was the characteristic of this chaotic period, made people less and less inclined to insist on the recognition of their private rights in land, their anxiety being rather to secure for themselves the freedom of relinquishing the land when they liked and thus escaping the revenue burden. The state thus put forward claims of exclusive ownership which the people did not care to contest.

[1] 'Land is his who first cleared away the jungle, as the deer is his who first brought it down' (Laws of Manu quoted by Baden-Powell, *Land-Revenue and Tenure in British India*, p. 123).

[2] *Taxation Enquiry Committee Report*, par. 80.

[3] See also Briggs, *Land Tax in India*, p. 127.

Therefore Baden-Powell is probably right when he says: 'It is hardly possible that Mr James Grant, and Colonel Munro and many others could have been mistaken about the fact that in their time (that is, the time of the Permanent Settlement of Bengal) all Governments did claim to be landowners.'[1]

However, weighing the historical evidence for what it is worth, we come to the conclusion that if we exclude the period of political confusion and disorder which immediately preceded British rule, private property in land was firmly established and acknowledged by the rulers. Of course, we do not forget the fact that at no time was India under a single undisputed ruler, and as the country was split up into a number of small states each with its own history, we cannot assert that in every case the tradition of private ownership was definitely established, and if we are going to decide the claims of the British Government according to the pretensions of all the former rulers whom they ousted, we shall have to say that the British Government have entered into a series of different heritages with regard to their interests and rights in land. But broadly speaking, the position was as we have stated it.

There is, however, no reason why the practice followed by previous Governments should tie the hands of succeeding Governments. From this point of view, we should have to examine the claims put forward by the British Government themselves. But the British claims have neither been consistent nor uniform, although the general trend of their policy can be shown to have been towards admitting private ownership in land. Referring to the cultivated land in villages and estates (not the waste land nor the particular lands of which the Government are admittedly the immediate owners), Baden-Powell observes that the British Government have everywhere conferred or recognized a private right in land, and in large areas of the country (Bengal, Oudh, the whole of northern India, for example) they have expressly declared the proprietary right of the landlords and the village

[1] The property right of the Crown in land is said to have been definitely asserted by Tippu Sultan. On the other hand, Mountstuart Elphinstone reporting on the *mirasi* tenure under the Marathas wrote as follows: 'A large portion of the ryots are the proprietors of their estates, subject to the payment of a fixed land tax to Government; their property is hereditary and saleable, and they are never dispossessed while they pay their tax, and even then they have for a long period (at least thirty years) the right of reclaiming their estates on paying the dues of Government'. (*Report on the Territories Conquered from the Peshwas*).

owners.[1] It is therefore impossible any longer to put up a general claim that what the state has been taking as land revenue is really a rent from the landholders regarded as its tenants.

It is generally agreed that, so far as the zamindari or landlord estates in Bengal and elsewhere are concerned, private property in land is beyond dispute. On the other hand, it is equally beyond dispute that the Government have full proprietary rights on waste lands and over the *khas mahal* estates, such as those in Bengal and Bihar which are under the direct management of the Government. It is with reference to ryotwari lands that opinion is somewhat sharply divided. On the one hand, it is held that the position of the ryot or 'occupant' as he is called in Bombay is not essentially different from that of the zamindar, and that he holds land as full proprietor subject to the proviso that he pays the revenue assessment. The fact that the Government can take the land into their possession if the holder fails to pay the assessment does not prove that he has any the less right of property in it. For this is by no means an uncommon proviso and it applies in the case of all private property, which the Government can attach in the event of default. The utmost that we can say is that the Government regard the land as hypothecated to themselves as security (in the last resort) for the land revenue assessed on it.[2] One of the features which distinguishes ryotwari from zamindari lands, is that the former can be relinquished at the option of the holder. This, however, appears to be too slender a basis for the theory that the state is the real landlord in ryotwari areas. This feature, like the term 'occupant', owes its origin to times when the cultivator, harassed by exactions and oppressions, was reluctant to be tied down to his land and made unconditionally responsible for the payment of the revenue demand. The option of relinquishing the land was a concession to the natural fears of the cultivator and was not due to any intention on the part of the British Government to withhold the right of ownership from him which, in fact, they were anxious to confer. Another point urged in favour of the theory of state ownership is that, in some provinces, agricultural land cannot be

[1] This has, however, been sometimes officially disputed. It is urged that even in Bengal, the zamindars have not been granted complete proprietary rights; that the Permanent Settlement was granted to them as a grace which was considered good policy; that it was not founded on the principles or practice of previous native Governments; and that, apart from the unalterable assessment, the Government still remain proprietors, and the zamindar an agent for collecting revenue, or a tenant under the Government.

[2] See Baden-Powell, *Land-Revenue and Tenure in British India*, p. 49.

put to non-agricultural uses without the permission of the Government and is further liable to revised assessment when such use is allowed. But this may be regarded as one of those restrictions on the use of private property, for example, restrictions imposed in the interests of public health, which are common in all civilized countries. We may therefore endorse the view expressed by the Taxation Enquiry Committee that both the zamindars and the ryots are possessors of proprietary right subject to the payment of land revenue, though in the latter case, it is not possible to arrive at an exact and general definition of the position of the landholder.[1] We may also refer to another view, namely that the Indian conception of land tenure is a compromise between the English theory of absolute property in land on the one hand, and the extreme of state ownership on the other. It is neither wholly the one nor the other, but something betwixt and between. The position may be described as restricted Government ownership or restricted private ownership. The landlord's or ryot's title is acknowledged, but subject to the limitation of the state's joint interest or concurrent right in land, and in northern India subject also to the claim of the tenants to semi-proprietary rights such as that of fixity of tenure.[2]

§30. **Land revenue: a tax or rent?**—If private ownership of land is granted it seems to follow logically that the land revenue is a tax and not a rent. All the arguments advanced for or against state landlordism have by implication the same amount of cogency (or the lack of it) in deciding whether land revenue is a tax or a rent. We may, however, mention some additional points specifically brought forward in connexion with the tax or rent question.[3] It is argued, for instance, that land revenue differs from a tax and is akin to rent in that it cannot be altered according to the exigencies of the state during the long period for which it is fixed, and in the concessions granted to land revenue payers, such as rent-free house sites, the use of common grazing lands, etc. As against this, it may be urged that there is nothing to prevent the state from revising the rent annually except considerations of policy, expediency and economy. Further, it must be remembered that rentals on private lands are not necessarily fixed for a long term of years. In fact, it is notorious that many of the leases are renewable every year. As regards rent-free house sites, common grazing lands, etc., all these concessions do not

[1] *Taxation Enquiry Committee Report*, par. 83.
[2] Sir T. Morison, *The Industrial Organication of an Indian Province*, p. 18.
[3] See *Taxation Enquiry Committee Report*, pars. 44-5

appear to us to be of a very important and decisive character in the present discussion. The Government, in their capacity of an enlightened state, and as concerned with the welfare of the cultivators, may well grant facilities of this kind without thereby establishing the right of landlordship. A further somewhat trivial argument in support of the view that land revenue is a tax is that the process of its assessment and collection is similar to that in the case of a tax.

It is sometimes urged in order to prove that land revenue is not a tax that 'whatever the position was originally, the Government demand has in a great many cases been amortized in the purchase price when lands have changed hands, and no longer operates as a tax on present holders'. We fail to see the bearing of this contention on the nature of the land revenue. It merely shows that the land revenue is amortized without answering the question whether it is a rent or a tax. The process of amortization is familiar in the case of other differential taxes on capital goods where we merely say that the tax has been paid once for all by the seller in the shape of a reduction of price equal to the capitalized value of the tax; we do not say that the levy is therefore not a tax but something else. Besides, complete amortization cannot occur because of the impossibility of foreseeing all future increases of assessment.

Lastly, we may refer to another argument which has been advanced in favour of private proprietorship of land. The Income-Tax Act of 1886 exempted agricultural incomes and this, it is said, amounts to an implicit admission that landed incomes already pay a tax. If land revenue had been a rent, that is a payment to the Government as landlords in recognition of their ownership, a further tax would have been justified.[1]

The above discussion shows that the whole question is highly complicated and does not admit of a categorical answer one way or the other, although the case for private ownership is very much stronger than that for state landlordism. We agree with

[1] We must state, however, that this argument is not conclusive in favour of private ownership, because it is quite possible to argue that agricultural incomes are exempted from taxation, as the number of cultivators in the enjoyment of incomes above the free minimum income-tax limit, after paying the Government land revenue, is comparatively small, and that it is not worth while trying to tax them; or secondly, it is open to the Government to explain that the failure to assess landed incomes to income-tax is a mere omission which they may offer to remedy at any moment; and lastly, it may be pointed out that in England, in addition to the land tax, income-tax on agricultural profits is paid, but this does not render private property in land open to dispute there.

Baden-Powell's verdict that the controversy is a 'profitless war of words'. It is profitless because it is endless. There are arguments for and against each of the rival theories, and some people would be impressed by one set of arguments and others by the opposite set, and this not necessarily owing to any conscious bias on either side. It is also profitless because no important question of actual practical policy at present in debate seems to depend on how it is settled, and it is the practical aspects of the matter that are important rather than the technical juridical position. If land revenue is not so limited as to leave the proprietor something beyond the barest necessaries of life, the full and unconditional admission of the ryot's proprietary right in his holding is worth absolutely nothing to him, just as, if all his present rights in land, of sale, mortgage, etc. are left intact and the Government assessment is moderate, it does not matter to him if the Government formally consider themselves as the universal landlords. Let us illustrate by a few instances the position that the whole discussion is of little practical importance. For example, the question of legislative control on the executive in the matter of land revenue has practically nothing to do with the question whether the Government are the proprietors of the land. Even if the state were the landlord, the state does not mean merely the executive. How far one part of the Government, namely, the legislature, should interfere with the discretion of another part, namely, the executive, is entirely a matter of administrative convenience and efficiency and of political ideas. It may well be argued that, since the land revenue system touches the well-being of millions of people in this country, a more stringent control over it by the legislature is desirable. It is true that in a fully responsible Government all taxes are necessarily voted by the legislature, but this does not mean that no other charges than taxes proper can be voted similarly. The utmost we may grant is that the case for legislative control is somewhat reinforced by, without positively requiring, the hypothesis that land revenue is a tax and not a rent.

Again, it is sometimes said that if we admit state landlordism we would have to admit also the right of the state to exact the full economic rent.[1] But this is a consequence from which we

[1] One of the lessons which V. G. Kale would draw from the Bardoli Enquiry Report is the practical importance of the discussion of the question whether the state or the individual is the landlord (see 'A Lesson from Bardoli', *Indian Journal of Economics*, July 1929). The Bardoli muddle was the result of a perfunctory attempt to apply in practice the rental value and revenue index theory of F. G. H. Anderson, lately Settlement Commissioner

cannot altogether escape, even if we prove that the state is not the landlord, because it is a universally accepted maxim of taxation that theoretically the whole of the economic rent may be absorbed in taxation without in any way hurting the taxpayer, provided we can be quite certain that we have isolated the economic rent (the real unearned increment) and not included in it other elements, namely, wages, profits, and interest. The practical results will not be very dissimilar whether we profess to apply canons of rent or canons of taxation to the assessment of land revenue. This is seen by the fact that the Government, without definitely committing themselves to the view that land revenue is a tax and not a rent, saw no harm in instructing the Taxation Enquiry Committee to study the incidence of land revenue and to point out any defect in the system *from the standpoint of the canons of taxation,* and even to suggest a complete change of system if necessary. As regards arbitrary enhancements of assessment or rack-renting, no civilized state will think of justifying this species of oppression on the ground that it is the landlord and is therefore legally entitled to charge what it likes for the use of land. The state cannot afford to stand merely on legal rights; it must be prepared to be judged by moral standards, and the Government in this country have rarely, if ever, sought to dispose of complaints about excessive assessment merely by taking shelter behind the theory of state landlordism. They have generally tried to argue, whether successfully or not, that the land revenue is not really as burdensome as alleged by its critics. Even supposing that the state is the landlord, we must expect it to behave at least like an enlightened landlord, and therefore, in its own ultimate interest, it should regulate the land revenue in such a manner as not to trench upon the legitimate profits of the cultivator and reduce his incentive to work or lower his efficiency. A benevolent and enlightened landlord would not, for instance, exact a rent from uneconomic holdings. He would rather consolidate the holdings and would charge rent only when they are of such a size as to pay the costs and leave a surplus. The case for exemption of uneconomic holdings can therefore be argued quite as well on the assumption of Government landlordship as otherwise. The policy of a moderate levy receives

of Bombay, and Anderson was a whole-hearted believer in the Ricardian theory of rent. This much may be granted. But the Ricardian theory of rent in no way rests on any assumption regarding the state ownership of land. Anderson himself declares that ' land revenue is due to the state quite independently as to who " owns " the land ' (*Facts and Fallacies of the Bombay Land Revenue System,* p. 142).

further support from the consideration that the state has no interests separate from those of the people. The state serves itself best by serving the people because the state is the people.

In connexion with this controversy, it is worth while pointing out that there is an agreement on certain fundamental matters between people taking different sides in it. For example, although the Government have sometimes coquetted with the theory of state landlordism, their actual policy has been to foster the development of a strong sense of individual ownership, and they have generally been in cordial agreement with the view that it would be dangerous to do anything to disturb it. The average unsophisticated cultivator in India has no doubt whatever in his own mind that, so long as he is free to sell, lease, mortgage and inherit landed property—rights which the most extreme advocates of state landlordism in India are not prepared to disturb—Government landlordship, if he has ever heard of such a thing, is merely an empty name, and he will not tolerate any serious interference with his present rights by the Government.[1] It is also generally agreed that in considering the incidence of taxation, land revenue should be regarded as a tax, and the Taxation Enquiry Committee endorse this view although on the curious ground that land revenue 'forms a deduction from the national dividend'.[2]

Further, all important questions of land revenue policy, such as the pitch of assessment, period of settlement, etc., can be and are being discussed without any sustained reference to the controversy as to whether land revenue is a tax or rent. In these circumstances, we are of opinion that it would be an act of political wisdom if the Government were to declare in unmistakable terms that they fully recognize private property in land and abandon all pretensions to universal landlordism. We believe that, while this would set at rest much futile and embittered discussion and make assurance doubly sure in the minds of the people, the admission need not in any way be inconvenient from the fiscal or any other point of view.

§31. **Permanent versus temporary settlement.**—The great distress from which large numbers of the people suffered in India,

[1] 'The ryot in Mewar is supposed to have ever in his mouth the common though expressive adage "*Bhogra dhanny raj ho, bhoomra dhanny maj ho*"—"the tax belongs to the king, the land belongs to me".'—Briggs, op. cit., p. 90. This attitude is not peculiar to the cultivator in Mewar but common to the ryot in all parts of India.

[2] *Taxation Enquiry Committee Report*, par. 84.

owing to the serious and widespread famines which visited the country towards the close of the last century, attracted attention to the land revenue policy of the Government, which was criticized generally and province by province by the late R. C. Dutt, who, along with certain retired European members of the Indian Civil Service, presented a memorial on the subject to the Secretary of State. A little previously to this (1900) R. C. Dutt had also addressed his 'open letters' to Lord Curzon, whose Government published an important Resolution in 1902 replying to the criticisms and outlining their general policy after considering the reports submitted by the provincial Governments.

One of the points urged by Dutt was that if the Permanent Settlement had been introduced 40 years previously, that is, when its extension was proposed by Lord Canning in 1860, India would have been spared the 'dreadful and desolating famines' of the close of the nineteenth century. He attributed to the Permanent Settlement the prosperity of the Bengal ryots, their resourcefulness and greater resisting capacity in years of bad harvest, the promotion of agricultural enterprise, investment of private capital and its accumulation and devotion to useful industries, public institutions and works. Although the Permanent Settlement does not now count as many adherents as it once did either among officials or non-officials, it is not altogether a dead issue yet. For example, a number of witnesses who gave evidence before the Bombay Land Revenue Assessment Committee (1924-5) declared themselves in favour of permanent settlement. It would not therefore be amiss if we were to set out briefly the arguments for and against it with particular reference to its operation in Bengal.

Those who uphold it contend that it has been brilliantly successful in Bengal. (i) Financially, they say, it has ensured to the state a fixed and stable revenue without the necessity of incurring heavy expenses in connexion with periodical re-assessments and collection. (ii) Politically, it has secured the loyalty of the zamindars. (iii) Socially, it has enabled the zamindars to act as the natural leaders of the ryots and to show their public spirit in a practical manner by helping the spread of education and sound ideas on sanitation, and in other ways. (iv) Economically, it has secured agricultural enterprise and prosperity and a resourceful peasantry, which has shown a remarkable power of resistance in times of scarcity. (v) Lastly, the Permanent Settlement has avoided the evils associated with temporary settlements, such as the harassment of the cultivator at the time of revision, the expensive machinery required for re-settlement, the tendency

of land to deteriorate towards the end of the term of settlement, due to deliberate neglect on the part of the cultivator so as to escape enhancement of assessment, impediments to industry and improvements, and the concentration of arbitrary power in the hands of revenue officials not liable as yet to legislative and judicial control.

(i) The most obvious as well as the most important argument against permanent settlement is that it involves the sacrifice on the part of the state of all prospective increase of revenue from land. The advantage of a fixed and stable revenue is secured at too great a cost. To understand the full force of this contention, it need only be mentioned that, whereas at the time of the introduction of the Permanent Settlement in Bengal the gross rental was approximately Rs. 4½ crores, the estimated figure for 1900 was Rs. 16½ crores.[1] And yet the state continues to derive a fixed amount of revenue in terms of rupees representing, of course, a much smaller purchasing power than in 1793. This is today a tremendous handicap to the Bengal Government and inhibits state activity in many directions in which it is required. The expectation that, as a result of the Permanent Settlement, other sources of state income would grow, has not been realized to anything like the extent hoped for. The community has thus been deprived of its legitimate right to share in the increasing prosperity of the zamindars, which is due not so much to the direct efforts of the landlords themselves as to social factors beyond their control, such as growth of population, improved communications, rise in prices, etc.[2] (ii) The political argument that the Permanent Settlement has secured the loyalty of zamindars has clearly lost whatever value it once possessed in the past. Besides, the present provincial governments are more anxious to secure the loyalty of the masses rather than of the big zamindars. Lastly, it must be remembered that the landlords as a class in the provinces where perpetual settlement was not granted have been thoroughly as 'loyal' as in Bengal. (iii) As regards the hope that was entertained about a powerful class of wealthy and benevolent landlords acting as the natural leaders of the ryots and exerting themselves for their uplift, it is generally recognized that this has not been realized. On the contrary, 'while there are many worthy, liberal-minded and enlightened landlords in Bengal

[1] *Land Revenue Policy of the Government of India*, p. 46.

[2] For a discussion of some consequences of the Permanent Settlement in Bengal, see *Report of the Indian Statutory Commission*, pars. 381-2, and M. A. Huque, *The Man behind the Plough*, pp. 224-67.

—as there are also in other parts of India—the evils of absenteeism, of management of estates by unsympathetic agents, or unhappy relations between landlord and tenant, and of the multiplication of tenure-holders or middlemen between the zamindar and the cultivator in many and various degrees, are at least as marked and as much on the increase there as elsewhere'. (iv) As to the prosperity of Bengal being due to the Permanent Settlement, it is argued that it is due to quite other facts, such as the protection which the tenants enjoy from the operation of special tenancy laws, the comparative immunity of Bengal from uncertainties of climate, the excellent means of communication, the practical monopoly of jute which it enjoys, and the trade and enterprise which flow from Calcutta. This view, however, was vigorously challenged by R. C. Dutt who, while admitting that the tenancy laws were needed to complete and confirm the good work done by the Permanent Settlement, protested against the official suggestion that the Permanent Settlement did no good whatever until the tenancy laws were passed, and cited the authority of distinguished statesmen like Wellesley, Minto, Hastings and others against it. (v) Lastly, as regards the allegation that a revision settlement is attended with much dislocation of village economy and considerable harassment to the cultivator, it is argued that the work of revision is now effected with much greater ease and rapidity than was formerly the case, thanks to the long experience that has been gained. The system of land records (especially, the record of rights prepared at settlement and kept up to date by annual revision until the next settlement), the preservation of boundaries, and a more or less permanent classification of land have greatly reduced the volume of work and fresh investigation at the time of each re-settlement, which, moreover, comes at long intervals generally varying from 20 to 30 years. Therefore, the disturbance in the rural economy is the minimum possible, and there has been latterly considerable economy in the expenditure incurred by the Government. An attempt is also made to eliminate petty underlings and to entrust the major portion of the necessary inquiry to responsible and highly placed officials, who are sympathetically inclined towards the cultivator. Further, private improvements are protected against enhancement of assessment either permanently or for an adequately long period, so that the fear of enhancement of assessment need not deter the cultivator from undertaking improvements. It is also claimed that the rigidity of collection which is almost a corollary of permanent settlements has been avoided in the system of temporary settlements by an increasingly

liberal operation of the rules in regard to the suspension and remission of land revenue. Thus, the present day temporary settlements are claimed to possess many of the good features of permanent settlement without its drawbacks, and to achieve a happy compromise between the legitimate claims of the state and the rights and convenience of agriculturists.

The official view with regard to permanent settlement has been that the question of its extension to the areas temporarily settled is unthinkable. As Lord Irwin said a few years ago, since Cornwallis's time India's place in commerce and the markets of the world and the growing intricacy of her financial and social problems have brought many new factors into the picture necessitating elasticity of public revenue and expenditure. The Government are being constantly asked to undertake new tasks and improve old ones. But this requires greater and greater command of funds, and it would therefore be impossible for the state to forgo its legitimate share of the increment in the value of land. While we hold that the present systems of temporary settlement are by no means perfect, we not only endorse this view, but, with Dr R. P. Paranjpye, would like the Government to make an effort to revise the system of Permanent Settlement in Bengal and elsewhere, to secure fairness in the distribution of the tax burden and elasticity of revenue.[1] If it is objected that this reform would involve the violation of a solemn pledge and contract, it may be replied that, after the lapse of nearly a century and a half, the original contract has lost its meaning and ceased to be equitable, and that vested interests must not be allowed to prevail indefinitely over the common good. 'The promise given was a necessity of the past; the word broken is a necessity of the present.' This is one of Machiavelli's maxims expressed with characteristic frankness, but nobody will deny that it has a core of sound practical wisdom, especially when we reflect that 'the past' and 'the present' we are now thinking of are separated by a long and eventful interval of over a century.

We have referred above (§9) to the strong anti-zamindari feeling prevalent in Bengal and other zamindari provinces, and to the appointment of a commission by the Government of Bengal to examine thoroughly the whole of the existing land revenue system in the province. The commission will be authorized to undertake generally an examination of the existing land revenue system of Bengal in its various aspects with special reference to the Permanent Settlement; to estimate the effects of the system

[1] See *Taxation Enquiry Committee Report*, pars. 87-8.

on the economic and social structure of Bengal, and its influence on the revenues and administrative machinery of the provincial Government, to appraise the advantages and disadvantages of the existing system; and to advise what modifications, if any, can and should be, effected.[1] We welcome this inquiry and the possibility of a modification of the Permanent Settlement which it indicates. It may be added that the Indian constitution of 1935 does not veto the annulling of this settlement should this be found necessary on grounds of public policy. It merely prescribes certain constitutional precautions, viz., the assent of the Governor-General.

§32. **Term of settlement.**—There is a considerable diversity of opinion as to whether the term of settlement should be as short or as long as possible. There are some who advocate as brief a period as 10 years, and others would like to see it extended to no less than 99 years. The argument in favour of a short period is that it enables the state and the community to benefit by absorbing their proper share of any unearned increment which general progress may have brought into existence—an argument particularly applicable to those tracts where the economic resources are fast developing—and that, on the other hand, in the event of declining rents and prices, it makes possible a lowering of the assessment and speedy relief to agriculturists. It has also been urged that short-term settlements excite less discontent by making the people familiar with more frequent but smaller increases than the large enhancements that are likely to come at the close of too long an interval. On the other side it is pointed out that long terms of settlement are less disturbing to the revenue payer and have the advantage of increasing the resources of the people and enabling them to make improvements without fear of having to forgo the benefit from them on account of higher assessment. Assuming a well-conceived and scientific system of assessment, the period of settlement would depend on a balance of these opposing considerations, and it is impossible to say off-hand with precision that a particular period and no other is the ideal period. The general feeling in the country is in favour of a long term, and an increase in the period of revision is popularly regarded as a step in advance. The Bombay Land Revenue Assessment Committee, pleading for the period of thirty years, observe: 'Thirty years is a generation in the life of the agriculturist. If he knows at the beginning of this period that his assessment is subject to an enhancement at the hands of Government, he has ample time to assimilate his expenditure and his mode of living

[1] *The Times of India*, 8 May 1938.

generally to the ratio of assessment he is called upon to pay, while if in the course of the settlement period the value of his land increases, prices show a steady rise, and facilities of markets and communications improve, his economic condition is such that he can prepare himself for a reasonable enhancement of rent at the succeeding revision settlement.' Mr Anderson objects to such a long period as 30 years, because *inter alia,* combined with the 33 per cent enhancement rule, it prevents steps being taken to remedy one of the grave defects of the Bombay system, namely, that it does not take a uniform share of the profits of cultivation everywhere alike. Profits or rents increase faster than the land revenue can increase at the maximum rate of 33 per cent every 30 years.[1]

§33. **Principles of assessment.**—As we have already seen in our survey of the different settlements in India, there is no single system of clearly recognized and consistently applied maxims of assessment of land. The basic principles differ from province to province, and they are further modified by the introduction of a number of miscellaneous factors, and a large amount of discretion is allowed to the Settlement Officer. While, in the United Provinces, the Punjab and the Central Provinces, the theoretical basis of assessment is the economic rent, and in Madras and Burma, the net produce, Bombay until lately did not even profess to have any definite principles of assessment and followed a frankly empirical system depending upon general economic considerations as they impressed the Settlement Officer.

§34. **Rental value as a basis of assessment.**—The practice followed in recent years in Bombay, viz. the use of rental value as the principal basis of assessment, raises issues which are of more than purely local interest. The reliance on rental statistics for affording an indication of profits of agriculture has been advocated on the ground that the method is more definite and precise and that it enables the operations of the Settlement Officer to be checked more effectively than any of the other alternative methods depending upon crop experiments, prices, development of communications, etc.[2]

[1] *Facts and Fallacies of the Bombay Land Revenue System,* p. 109.

[2] 'Tell your Settlement Officer that rents should be "taken into account", and he will languidly collect a few and then in his recommendations rely rather on the other vague and fluffy guides because it is far harder to be caught out so long as you see only vague generalities. But tell him he is to rely mainly on rents and not fall back on general considerations except for corroboration or for guidance where the rents are faint and inconclusive and then you will get a just and sound settlement.'—Anderson, op. cit., pp. 85-6.

But the Bardoli imbroglio (1929) has proved that rental statistics, unless used with great caution, are apt to lead to serious error and intolerable over-assessment. Actual rents may be very much higher than true rental values for a variety of reasons. There may be excessive competition among tenants; the landlord may be the creditor and the tenant the debtor, and the latter may be compelled to agree to an impossible rent; the rent may represent interest on money lent and may have no relation to the productivity of the land; figures of rent may relate to a period of boom and therefore be unreliable as guides for normal times; the rent agreed to may be on the basis of what the tenant can pay in a prosperous year and subject to substantial reductions in bad years; it may be paid largely out of income earned not from the land but from other sources; the proportion of lands leased for cash rents is much higher in the case of industrial crops like cotton than in the case of food-grains and will naturally bulk largely in the rental statistics, and although not typical, they are apt to be treated as such; occasionally fancy rents may be paid by a cultivator for land which has practically nothing else to recommend it except that it is adjacent to his land; only a very small fraction of the total amount of land in the tract under settlement may be leased for cash rents and although rental values may, to some extent, be inferred from sale transactions (provided these are normal and not affected by any disturbing factors), the direct and indirect data thus collected may nevertheless be too inadequate for safe generalization.[1] In the words of the Bardoli Committee, 'a very wide margin must always be allowed for the eccentricities of the raw material,' and the rental figures need to be subjected to a close scrutiny before being used for drawing inferences on which assessment is to be based. It may be conceded that rental data, if collected with proper care, tabulated in a manner which brings out their real significance and used with due reference to the meanings of the underlying transactions, afford almost the only positive evidence that could be used with confidence in revising the assessment. Every effort should therefore be made to collect trustworthy rent and sale statistics and compile them carefully.[2] But the task of judging the suitability of any given body of statistical and other information for the purpose of revising assessment must be entrusted not to the Settlement

[1] For a fuller discussion of these points, see *Report of the Bardoli Revision Settlement Enquiry Committee*, pars. 29-38; also D. R. Gadgil, *Bombay Land Revenue System*.

[2] See *Report of the Bardoli Revision Settlement Enquiry Committee*, par. 28.

Officer or other Government officers but to a competent advisory committee, for which there has been latterly an insistent popular demand. Further, even where the statistics of rental value appear to be fairly satisfactory in quantity as well as in quality, their indications should be tested with reference to other factors such as communications, market prices, economic conditions, crop experiments, etc. on the lines recommended by the Bombay Land Revenue Assessment Committee. It will be in very rare cases that such corroboration of rental data can safely be dispensed with.

§35. **Ricardian theory in relation to the land revenue in India.**—As we have seen above, the principles governing assessment vary from province to province so far as their formal statement is concerned. The general claim of the Government, however, is that, in the net result, the land revenue forms everywhere in British India a certain moderate proportion of the economic rent. This is clearly not the case if we take into account the large number of uneconomic holdings, the existence of which is not disputed by the Government. Here, as Wadia and Joshi remark: 'The land tax is not the appropriation of the unearned increment of the soil, it is the appropriation of the bare minimum of subsistence left to the cultivator.'[1] In other cases, if in actual practice no more than the pure economic rent is taken, this could come about only by accident and not by design, since, in calculating the so-called surplus, not all the elements entering into the cost of production are deducted from the gross value. For example, the labour of the cultivating proprietor and his family is not allowed for in every case. Actual rental values on which the revenue rates are based, for example in northern India, are apt to be very much higher than the true economic rent in a country where agriculture is practically the sole occupation of the people and where there is no competition as between a variety of occupations for the available labour and capital. The cultivator sticks to the land although he may have to pinch and starve in order to pay an excessively heavy rent. 'With alternative occupations in the shape of industry and handicrafts, there can be no doubt that a large number of holdings cultivated under the pressure of necessity today would be thrown out of cultivation.'[2] Rental values are also unreliable as indices of economic rent because the land hunger due to pure economic necessity is further strengthened by the traditional sentiment in favour of investment in land, a sentiment which can weaken only when there arise a variety of alternative openings for the investment of

[1] Wadia and Joshi, op. cit., p. 281. [2] ibid.

capital through the development of industry. The economic rent in the Ricardian sense bears no certain and definable relation to the assessment, though we are not prepared to say that in every case the land revenue impinges on income that is 'earned'. Nor can we accept the contention that merely because land revenue is the first charge on the produce of the soil, it cannot be part of economic rent,[1] which according to the Ricardian theory, is the last charge on the produce. When we say that economic rent is the last charge, we are not thinking of the sequence in time of the different payments but the sequence in the economic analysis of rent. Just as wages, although they ultimately come out of the produce due to labour, are yet paid in advance, similarly the rent charge may be realized before the surplus accrues, although in anticipation of its accruing. The true line of criticism would be to point out that assessment is sometimes charged and exacted when there is no chance of a surplus, and that it is not refunded or excused when the expectation of a surplus, however just, is not actually realized. The system of suspension and remission of revenue cannot be guaranteed to operate, and does not in practice invariably operate, so that the assessment should in no case trench upon any portion of the gross value which is not the true economic rent or unearned income.

§36. **A new basis of assessment.**—The Taxation Enquiry Committee recommend that hereafter a uniform basis of annual value should be adopted in every province, and that the function of the Settlement Officer should be confined to the determination of the annual value under such conditions as may be required by the special circumstances of each province. By annual value they mean 'the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family, and the return for enterprise'. In the case of rents controlled by tenancy laws, or by custom having the force of law, or where the rent is fixed by the Settlement Officer, it is recommended that such rent should be taken to be the annual value. The plan of annual value seems to be an improvement in the right direction, as it will put an end to the vagueness of the principles of assessment prevalent at present. Annual value, as we understand it, is not the same thing as actual competitive rental value which may be either too high—for example, if the competition among the tenants is excessive owing to absence of

[1] Wadia and Joshi, op. cit., p. 281.

other occupations and the tradition and force of sentiment in favour of agriculture—or in rare cases it may be too low where, for example, tenants and landlords conspire and deliberately depress rents in order to escape their proper share of the burden of assessment. The basis of annual value is also more scientific, inasmuch as it allows for the labour of the cultivator and his family and also for return for enterprise.

§37. **Rate of assessment: a recommendation.**—As regards the proportion of the annual value to be taken, in imitation of the example of other countries, the Taxation Enquiry Committee recommend the adoption of a comparatively low standard rate which should not exceed 25 per cent of the annual value. As there would be difficulties about the immediate adoption of this recommendation owing to the absence of definite information as to the percentage of annual value actually taken in the various provinces, they suggest a preliminary expert inquiry for ascertaining the rate at present exacted, before a common rate for each province is fixed by its legislature.

In addition to the standard rate, taxation for local purposes by local bodies is also recommended by the Committee, and it is further suggested that the maximum for the ordinary local rates should be in the neighbourhood of 25 per cent of the land revenue. Having regard to the fact that the local bodies would be composed largely of agriculturists and landlords, and the fact that the proceeds of the local rates would be spent on matters connected with the improvements in the locality itself, it is anticipated that the sacrifice would be less reluctantly made than if it were imposed in the form of an enhancement of land revenue utilized for general purposes by the Government. The system of local rates super-added to a flat standard rate on land has been found to work satisfactorily in most European countries where it is in vogue.

§38. **What should be the limits of enhancement?**—In order to prevent too sharp an enhancement of the assessment, some further limit would seem to be needed. And we approve of the recommendation of the Bombay Land Revenue Assessment Committee to the effect that the limit of enhancement should be a general all-round limit of 25 per cent without distinction between groups, villages or holdings as at present, provided that the talukas in question have already undergone a second revision.

§39. **Application of principles of taxation to land revenue.**[1]—(i) The first canon of taxation, namely, that of certainty, may be

[1] See *Taxation Enquiry Committee Report*, pars. 86-9.

said to be satisfied, land revenue being fixed for the period of the settlement. The cultivator knows exactly what he has to pay, although in so far as the basis of assessment is still vague, there is an element of avoidable uncertainty at the time of the revision of assessment. The introduction of a uniform basis of settlement as suggested above will largely remove this source of uncertainty.

(ii) The next canon is that of convenience. In order to satisfy this, the land revenue is collected, as already shown, in instalments suitable to the cultivator. There is, however, a certain amount of sacrifice of the principle of convenience to that of certainty, because the settlements are based on averages, the actual assessment fixed representing an average of what may be fairly demanded in good and bad years taken together. The assumption is that the agriculturist would save up during years of good harvest in order to meet the deficiency in bad years. This assumption, however, is not true to facts. Consequently, the average assessment is felt to be too rigid and oppressive in years of scarcity. The system of suspension and remission of revenue, as we have already remarked, is not worked with sufficient elasticity, and according to the Taxation Enquiry Committee, the inelasticity of the land revenue system has driven a large number of people to the money-lender during bad seasons. Another source of inconvenience, it may be said, arises from the long term of the settlement. The cultivator adjusts his standard of living on the basis of the land revenue he has to pay during the currency of a settlement, and if the assessment is appreciably enhanced at the next settlement, he finds it difficult immediately to adjust his family budget accordingly, though the long-term settlement is granted on the assumption that he would get enough time to prepare himself for a possible enhancement. An attempt is made to mitigate the hardship arising from this source by the progressive and graduated imposition of large enhancements, and also by limiting their extent.[1] The disturbance due to the process of re-settlement has been, as previously stated, reduced to a minimum by the gradual perfection of the system of land records, though in some cases this process may take years of meticulous inquiry to be completed.

(iii) As to the canon of economy, the heavy expenses on the revenue establishment that is maintained cannot be debited entirely to the work of assessment and collection of land revenue, much miscellaneous work of an important character outside the purview of land revenue proper being still discharged by the revenue agency.

[1] See *Land Revenue Policy of the Government of India*, pp. 38-40.

(iv) As to the canon of ability, the official claim is that it is being increasingly satisfied on account of the progressive reduction in the share of the state. We have already given the figures in support of this contention. One of the results of the discussion about land revenue policy initiated by R. C. Dutt was the conversion of the standard rates into maximum rates.[1] The Taxation Enquiry Committee give figures showing how the tendency for the state's share to diminish continued to operate from 1903 to 1924. During this period, while prices rose by 117 per cent, the land revenue rose by 20 per cent.[2] Besides, part of this rise in revenue must have been due to the increase of about 7 per cent in the area sown.

As regards the incidence of land revenue, owing to the variations in the systems followed between province and province and even between one district and another, it is impossible to obtain any general idea. Five possible criteria may be applied, namely, (i) the ratio borne by the land revenue to the population; (ii) the ratio borne by the land revenue to the occupied area, that is the average assessment per acre; (iii) a comparison of the assessment per soil unit; (iv) the ratio borne by the assessment to gross or net produce; and (v) the ratio borne by the assessment to rents or annual value. The Taxation Enquiry Committee accept the last as the least unsatisfactory method, but, even in this respect, owing to the absence of full and reliable data, they are unable to arrive at any definite conclusion regarding the actual burden of assessment in the different provinces.

§40. **Principle of formal justice.**—This principle is violated under the present system of land revenue because, in the first place, there are inter-provincial, and, as we have remarked, even inter-district disparities, and in the second place, incomes from land are differentiated for purposes of taxation from other sources.

(i) *Inter-provincial disparities.*—Taking the first point, the permanently-settled areas are at present obviously much more

[1] R. C. Dutt suggested that the heaviness of land revenue assessment was one of the most important causes of the famines which visited the country during the last century, especially towards the close. As to the connexion between land revenue and famines, our views are analogous to those advanced in relation to the similar controversy regarding the connexion between land revenue and indebtedness. We hold that land revenue can only be regarded as a minor cause of famines, as it is of rural indebtedness, and for similar reasons.

[2] The heavy slump in agricultural prices in recent years, especially since October 1929, has, however, rudely disturbed the tendency referred to by the Taxation Enquiry Committee.

lightly taxed than those under temporary settlement. As regards the latter, in 11 districts recently settled in the Punjab, the percentage of land revenue to net rental varies from 19 to 36 per cent, within an average of 25. In the United Provinces, it varies from 20 to 42 per cent, with an average of 27. In the ryotwari provinces, in the case of Bombay, the percentage of assessment to rent varies from 17 to 50 in different parts of the Presidency. In Berar, in the case of two cotton talukas recently settled, the average is 10 per cent. In Madras, it is apparently in the neighbourhood of 17 per cent in half of the districts.[1] These figures are not absolutely accurate, but they are sufficiently reliable as indications of the existence of very considerable inequalities in the burden of assessment in the various provinces. The dictates of formal justice would be satisfied if the recommendation of the Taxation Enquiry Committee with regard to the adoption of a uniform standard of 25 per cent of the annual value as the share of the state were carried into practice.

(ii) *Land revenue compared with income-tax.*—Coming to the second point, a comparison between the land tax and income-tax discloses three striking differences as regards the manner of treatment of the two kinds of income. The first is that, in the case of land, there is no tax-free minimum[2] as there is in the case of income-tax, and the second is that the percentage of the tax to the income is very much higher in the case of land revenue. The third difference, the only one in favour of the owner of land, is absence of progression. There are two ways of assimilating the two classes of taxes: one way is to make the income-tax conform in all particulars to the land revenue, and the other is to change the land revenue so that it resembles income-tax in every respect. The first course is not feasible, and would be a retrograde step because it would entail the abandonment of the sound principles of the exemption limit, and of graduation. Let us therefore examine the implications and the practicability of the second course and consider, in the first place, the effect of exempting incomes from land below the income-tax free limit of Rs. 2,000. This must at once be rejected as entirely visionary and impracticable at the present moment, because it would touch the financial solvency of the state; a similar conclusion will be forced upon us as regards

[1] See *Taxation Enquiry Committee Report*, par. 94.

[2] The fact that in theory the land revenue is taken only from unearned income can scarcely be regarded as compensating for the absence of a tax-free minimum. The range of agricultural incomes being generally very small, especially in ryotwari areas, most of them would escape taxation altogether if land revenue were fixed on income-tax principles as they stand at present.

the second difference noted above, and the principle of formal justice will have to be sacrificed to the principle of productivity or practical expediency. Even if the recommendation of the Taxation Enquiry Committee in favour of standardization of the land revenue at 25 per cent of the annual value, with additions in the shape of local rates, is given effect to, the percentage will be higher than in the case of non-agricultural incomes (if we exclude from this category a small number of very high incomes which are liable to pay a very heavy percentage by way of income-tax and supertax). The principle of progression may, however, be applied to land revenue, as in the more advanced European countries and Japan, where agricultural incomes are assessed to the income-tax[1] or are liable to death duties.[2]

On the whole therefore a complete assimilation of land revenue to income-tax is not a matter of immediate practical politics, and for some time at any rate, the former will have to be treated for purposes of taxation as a thing *per se*. This, however, does not mean that it should for ever be allowed to stand outside the normal process of taxation. Land revenue as well as income-tax, which is by no means perfect as it stands at present, must be gradually modified till they both conform to the same principles of taxation. A sound tax must neither (i) remove or imperil any instrument of, or incentive to essential or useful processes of production, nor (ii) remove or impair any essential or useful element of consumption.[3] Obedience to these principles implies that only unearned surpluses, whether they arise from land or other sources, should be taxed, or, if both unearned and earned incomes have to be taxed, the latter should be taxed at a very much lower rate than the former. The whole of the unearned income may theoretically be absorbed by the state, although only a certain percentage may be actually taken, so as to err on the side of safety and to allow for practical difficulties in the way of accurate calculations of the unearned income. The present system of income-tax is faulty because it taxes earned as well as unearned incomes at the same rate. The land tax is faulty in that it taxes the smallest agricultural incomes from holdings which are admittedly uneconomic.

[1] The proposal of Sir Walter Layton, Financial Assessor to the Simon Commission, to levy an income-tax on agricultural incomes, which are at present exempt from it, is discussed in vol. II, ch. xi, §10.

[2] The Taxation Enquiry Committee, accepting the view of Dr Gregory, consider that the land revenue is essentially a tax on things and not persons and that therefore it is not susceptible to the direct application of the doctrine of progression (*Report*, par. 89).

[3] See J. A. Hobson, *Taxation in the New State*, p. 10.

Again, land revenue is paid on all lands whether income is actually derived from them or not. Another difference between land revenue and income-tax is that the latter is levied on each individual on the basis of the income returned by him, whereas in the case of land revenue each single plot is not assessed separately and, owing to the method of average which must necessarily be employed, some plots may be over-assessed and others under-assessed. Further, in theory the land revenue is supposed to be a portion of a surplus, but obviously in the case of uneconomic holdings there is no surplus, and yet they are assessed to the land tax. This raises the question how far it is practicable to exempt from land revenue holdings which are below a certain size. Here again, we are up against the difficulty that an immediate exemption of all uneconomic holdings would involve the Government in great financial embarrassment. There is also another consideration, namely, that people have been used to the land tax in this form from time immemorial, and it is acquiesced in and paid without demur, and thus the injustice is not vividly felt by the taxpayer. At the same time, there is no doubt that if we wish to rationalize our system of taxation, uneconomic holdings will have to be exempted sooner or later,[1] and also earned incomes from land below a certain minimum identical with that which, under an improved system, may be deemed suitable for non-agricultural incomes.

A not very forcible objection against the exemption of uneconomic holdings is that it would encourage subdivision. The proper remedy for dealing with the evil of subdivision is to do so directly by suitable legislation and not indirectly by a manipulation of the land revenue system.

§41. **Legislative control.**—The principle of legislative control of matters connected with land revenue is, it must be remembered, not novel in any sense in India. There has been already, in some provinces like Bombay, an attempt on the part of the legislature to regulate the administration of land revenue by special statute like the Bombay Land Revenue Code (1878). But the present situation is unsatisfactory inasmuch as in some provinces there is no legislative control whatever, whereas in others, where it does exist, it is of the most meagre description, and it is necessary to extend it in order to redeem the land revenue system from the charge of executive arbitrariness which is made against it.[2] In

[1] For an ingenious, though fallacious, argument against the exemption of uneconomic holdings, see Anderson, op. cit., pp. 14-16.

[2] See Government of India Dispatch on the Constitutional Reforms of 1919, Sir Sankaran Nair's Minute of Dissent.

this connexion, the following words of the Joint Parliamentary Committee (1919) are worth quoting: 'The Committee are impressed by the objections raised by many witnesses to the manner in which certain classes of taxation can be laid upon the people of India by executive action, without in some cases any statutory limitation of the rates, and in other cases, any adequate prescription by statute of the methods of assessment. They consider that the imposition of new burdens should be gradually brought more within the purview of the legislature. And in particular, they advise that the process of revising the land revenue assessment ought to be brought under closer regulation by statute. The Committee are of opinion that the time has come to embody in the law the main principles by which the land revenue is determined, the method of valuation, the pitch of assessment, the periods of revision, the graduation of enhancements and the other chief processes which touch the well-being of the revenue payer.' The Committee thought that this reform was a necessary preliminary before the subject was transferred to Ministers after securing adequate representation to the rural classes on the Legislative Councils.

§42. **Progress of land revenue legislation.**—The above recommendation has provoked a good deal of discussion in the provincial legislatures, which are considering measures for closer regulation by law of (i) the principles of settlement and the determination of the standard rate of assessment; (ii) the limitation on enhancement at revision settlement; and (iii) the period of settlement. In 1928-9, bills embodying the principles of land revenue assessment in a statute were passed by the Legislative Councils of the Punjab, the United Provinces and the Central Provinces.[1] The Punjab Land Revenue Amendment Act (1929) fixes the share of the state at one-fourth of the net assets, and extends the period of settlement to 40 years. Legislation has not been considered necessary in Bengal, Bihar, and Orissa, as large territories in these provinces are under the Permanent Settlement. In Madras and Assam[2] attempts to secure legislation regulating the assessment of land revenue have not proved successful. In

[1] *See India in 1928-9*, p. 321.

[2] In Assam a bill was passed in September 1930 fixing the maximum pitch of assessment at 10 per cent of the value of the gross produce as against the 12½ per cent proposed by the Government. The latter figure had been agreed upon as the result of a compromise with the representatives of all the parties in the Council. The bill was returned by the Governor for reconsideration by the Council which refused to accept the higher limit. The Governor therefore withheld his assent to the bill. See *India in 1930-1*, p. 577.

Bombay, the Land Revenue Assessment Committee was appointed in June 1924, in accordance with a resolution passed by the Legislative Council. The non-official members of the Committee strongly recommended that a Standing Advisory Committee of the Legislative Council should be set up to examine all revision settlement proposals and that, if the recommendations of the Committee were not accepted by the Government, the proposals should not be put into force without express sanction of the Legislative Council. Such a committee would be highly desirable in view of the natural bias of the executive towards stressing the financial point of view, to the prejudice of the revenue payer.[1] The Bombay Government, who were opposed to this proposal, later modified their attitude of uncompromising resistance to any form of non-official control and gave an assurance in connexion with the new Land Revenue Bill that was contemplated, that an opportunity would be given, not only to the landholders concerned but also to public bodies and associations, to discuss the Settlement Officer's proposals.

§43. **The Bombay Land Revenue Settlement Bill.**—After a long delay of nearly thirteen years the Congress Government of Bombay has recently (April 1939) introduced in the Legislative Assembly a bill to amend the Land Revenue Code in order to give effect to the recommendations of the Land Revenue Assessment Committee with certain modifications. The bill, which has been referred to a Select Committee, seeks to regulate land revenue assessment in the province by statute. With the passing of the bill, as the Hon. Mr Morarji R. Desai, Revenue Minister, pointed out, the legislature would have the determining voice in orders that might be passed in regard to settlements. Under the bill the term of settlement is not to exceed 30 years except when in the opinion of the Government a revision settlement is inexpedient. The standard rate of assessment with reference to any particular class of land in each group of homogeneous lands is to be so fixed that the aggregate assessment on occupied lands in any group shall not exceed 35 per cent of the amount of rental values of such lands for a period of five years immediately preceding the year in which the settlement is directed. Other fundamental matters connected with the process of settlement, such as the factors which are to be considered in forming groups, exemption of the increase in the value of land due to private improvements from increased

[1] See Government Resolution of 1927 on the *Report of the Bombay Land Revenue Assessment Committee* and the Report by the official members of the Committee.

assessment, the mode of assessment and the limits of enhancement, are also regulated by the new bill. Provision has been made for the publication of the Settlement Report in each village and for inviting objections from any person. Before the provincial Government issues orders on the Settlement Report, it has to be placed —along with objections received, if any—on the table of each Chamber of the provincial legislature. The bill enables the Government to adjust the assessment in accordance with the fall or rise in prices of agricultural products in suitable cases.[1]

The bill, if passed, is expected to effect a reduction of Rs. 40 lakhs in the amount of the land revenue collected in the province. It will give relief especially to those areas where the present assessment is as high as 50 per cent of the rental value.[2]

[1] See *Bombay Government Gazette*, 16 February 1939.

[2] See the Budget speech of the Hon. Mr A. B. Latthe, Finance Minister (14 February 1939), par. 10.

CHAPTER XIII

INDUSTRIES: A GENERAL SURVEY

§ 1. **Industrial history of India during recent times.**—In this chapter we propose to take a general survey of the industrial position of India. Subsequent chapters will deal with more specific problems such as protectionism, large-scale industries and cottage industries. We have already traced the industrial history of India up to about the end of the nineteenth century.[1] And we have seen how she was, roughly till the beginning of the nineteenth century, both a manufacturing and an agricultural country, how her industries had attained a high state of perfection judged by contemporary standards, but how they began to languish from the end of the eighteenth century as a result of several unfavourable influences. Since the eighties of the last century, and more particularly from the beginning of the present century, the backwardness of India in industrial matters had begun to attract the notice of patriots and economists like Dadabhai Naoroji and Ranade, and it was held responsible for the recurrent famines from which the country suffered, and the grinding poverty of the masses of which the famines were a symptom. The Famine Commission of 1880 had hit the right nail on the head in pointing out that one of the main reasons for the recurrence of famine in India was the absence of diversity of industries, and insisted upon this being remedied. A similar diagnosis of the situation was presented by the Famine Commission of 1901 and an identical remedy proposed. The opinion began to gain ground that nature had not destined India to remain for ever dependent on other countries for manufactured goods. Even the few industries that happened to have struck root in the country without the assistance of the Government owed much to foreign capital and enterprise. This was a position which could hardly be regarded as satisfactory from the national point of view. The feverish activity of the Japanese Government, which had brought their country into the forefront of industrial nations within a marvellously short period, stood in painful contrast with the apathetic attitude of the Government in this country. The cotton excise duties imposed towards the close of the last century under pressure from Lancashire lent colour to the suspicion that the Government were

[1] *Ante*, ch. v.

worse than merely indifferent to industrial development in India. In these circumstances, it is not surprising that the economic discontent due to the poverty of the masses and the lack of industrial outlets to educated middle-class youths began to assume a political complexion. The institution of the Indian Industrial Conference in 1905 in association with the Indian National Congress was the first definite sign of the alliance between economic and political discontent—an alliance which was immeasurably strengthened in the agitation for securing the annulment of the partition of Bengal. 'The swadeshi movement was the positive and the boycott the negative expression of the same purpose.'[1] A great wave of industrial enthusiasm overran the whole country. Numerous factories for the manufacture of textiles, hosiery, pencils, cutlery, matches, glass, etc. were started, but most of them came to grief for lack of practical training and even more owing to want of business experience, and lastly, because the state did not so much as raise its little finger to prevent their collapse. The policy of differential railway rates was allowed to continue, to the prejudice of Indian manufactures. Competition from abroad was permitted to run its course unhindered by protective tariffs or other means. This attitude was not entirely due to the *laissez-faire* doctrines which had more or less consistently been the official creed. It was also caused by the association of the boycott with the swadeshi movement which alienated the sympathies, not only of the Government, but also of many private individuals. The failure, to whatever causes it may have been due, undoubtedly emphasized the lesson that, in this country, there was no chance for industries without the strong and vigorous backing of the Government, at least in the initial stages. Thus in the pre-War period Indian industries were very poorly developed. Practically the only large organized industries on a stable footing were the cotton mill industry of western India, the jute industry of Bengal and the coal mining industry of Bihar, Orissa and Bengal. It is necessary, however, to take note of one highly important step in industrial advance under Indian enterprise, namely the inauguration of the Tata Iron and Steel Company at Sakchi (Jamshedpur), which was founded in 1907 and commenced operations in 1912. Other miscellaneous industries such as cotton gins and presses, jute presses, paper mills, rice mills, sugar factories, petroleum refineries, leather works, engineering workshops, etc. had also come into existence, but they were not of sufficient magnitude or importance to deserve more than a passing reference here.

[1] See *Montagu-Chelmsford Report*, par. 335.

§2. **Survey of the policy of the state in relation to industrial development.**[1]—We may, at this point, pause to take a brief review of the various changes which state policy has undergone in relation to industries in India. It has already been noted how the East India Company's commercial instincts made it at first favour the improvement of those industries on which its export trade depended. But this policy had to be abandoned owing to the pressure of vested interests in England, and India came to be looked upon primarily as a valuable source of the raw materials necessary for developing the manufactures of England. This attitude, which was a legacy of the old colonial policy, survived for some time after the Company had ceased to be a trading body, and even after its extinction and replacement by the direct rule of the Crown in 1858. What was at first dictated by self-interest, came later to be fortified by the prevalence of the *laissez-faire* theory about this time both in England and in India. The interest of the state in industrial development did show itself occasionally, but in a very fitful and haphazard manner, and it was ridiculously inadequate to the needs of the situation. For a long time it did not go beyond a very imperfect provision of technical and industrial education and the collection and dissemination of commercial and industrial information. A few industrial exhibitions were held and a certain number of provincial monographs on Indian industries were published, but so far as there was any activity on the part of the state, it was rather due to the energy of a few exceptionally far-sighted individual officers than to any considered and comprehensive policy laid down by the Government. A change, however, was gradually coming over the policy of the Government and the first sign of it was the creation in 1905 of a separate Imperial Department of Commerce and Industries at the instance of Lord Curzon. In the meanwhile, individual provincial Governments, like those of the United Provinces and Madras, had begun to put forward programmes of industrial policy requiring close co-operation, help and guidance from the Government. For example, the Madras Government, encouraged by their successful experiment in the aluminium industry, had committed themselves to an increasingly active participation in industrial development, which had resulted in considerable impetus being given to

[1] For a fuller treatment of the subject, especially relating to the period covered by the War and post-War years, see A. G. Clow, *The State and Industry*, chs. i-iii, *State Action in Respect of Industries, 1928-35*, D. H. Buchanan, *The Development of Capitalist Enterprise in India*, pp. 460-75, and G. E. Hubbard, *Eastern Industrialization and its effect on the West*, pp. 260-5.

handloom weaving, the introduction of the chrome process of manufacturing leather, etc. A special officer was appointed to supervise and stimulate technical and industrial education. But all these creditable efforts, which had already provoked the interested opposition of the European commercial community in India, received a sudden check by the 1910 Dispatch of Lord Morley, then Secretary of State, who, true to his *laissez-faire* creed, deprecated direct attempts on the part of the Government to start new industries, even for the sake of experiment and demonstration and with the object of eventually transferring them to private enterprise. 'The policy, which he was prepared to sanction, was that state funds might be expended upon familiarizing the people with such improvements in the methods of production as modern science and the practice of European countries could suggest. Further than this the state should not go, and it must be left to private enterprise to demonstrate that these improvements could be adopted with commercial advantage.'[1] This dictum of Lord Morley damped the enthusiasm of the Madras Government who, however, later on proceeded to better their instruction and retraced their steps farther backwards than was necessary.[2] Lord Crewe, the successor of Lord Morley, pointed out that the Madras Government had placed too limited a construction upon the dispatch of 1910 by restricting their efforts to the provision of industrial schools. The new Secretary of State declared himself prepared to follow a somewhat bolder policy, but it was now the turn of the Government of India to be oppressed by doubts as to how far they would be justified in sanctioning proposals for demonstration plants, financial assistance and other forms of direct state aid to industries. They were further hampered by the absence of the necessary organization and equipment which, they said, prevented them from giving effect even to the ultra-cautious policy sanctioned by Lord Morley. The obvious retort to this would, of course, be that the necessary organization and equipment should have been created. However, whatever the reasons for it, it is a fact that the Government failed to turn to account the enthusiasm for the regeneration of national industries caused by the swadeshi

[1] See *Industrial Commission Report*, par. 108.

[2] Pandit Madan Mohan Malaviya does not wholly subscribe to the view expressed by the Majority Report of the Industrial Commission with regard to the 'deadening effect produced by Lord Morley's dictum of 1910', and points out that, although Lord Morley deprecated state-managed commercial enterprises, he was in favour of funds being applied to the establishment of well-equipped technical and industrial schools. But the Government failed to do anything substantial even in this direction (see *Industrial Commission Report*, Minute of Dissent, pp. 313-14).

movement, which on its constructive side was a healthy movement, but which fizzled out owing to many factors, of which lack of Government support was not the least important.

§3. **Industrial development during the War.**—Matters drifted in this way till the period of the Great War, which proved an eye-opener in many ways and brought about a more vivid realization of the danger of dependence on foreign supplies even for the necessaries of life. The cutting-off of the enemy countries from the import trade, and the almost complete withdrawal from it of the allied countries on account of their preoccupation with the War, seemed to offer exceptional opportunities for the development of Indian industries. But neither the public nor the Government were ready to take any considerable advantage of this favourable situation, created by the virtually complete, though temporary, elimination of foreign competitiors, and they had the mortification of seeing these opportunities grasped by Japan and the United States, whose participation in the import trade of this country increased enormously during the War. These countries were in a position to obtain a firmer footing in the Indian market because they had already reached a high stage of industrialization. India, on the other hand, was labouring under various handicaps such as the great difficulty of obtaining essential machinery and materials, which she herself had not learnt to produce; the scarcity or total absence of technical experts; the shortage of skilled labour and of railway wagons, coasting vessels, coal and coking plant, etc.[1]

Further, the military importance of developing the economic resources of the country was brought to light by the War. It was realized that, while the services rendered by India in the eastern theatres of the War were valuable, they would have been vastly greater if the country had been industrially developed. 'Nowadays, the products of an industrially developed community coincide so nearly in kind, though not in quantity, with the catalogue of munitions of War that the development of India's natural resources becomes a matter of almost military necessity.'[2] All these considerations resulted in the appointment of the Industrial Commission in May 1916 to examine the whole question of industrial development in India, and to indicate new openings for the profitable employment of Indian capital in commerce and industry and the manner in which the Government could usefully give direct encouragement to industrial enterprise. The Report of this Commission (1918) particularly stressed the importance of

[1] See *Indian Munitions Board Industrial Handbook*, p. 16.

[2] See *Montagu-Chelmsford Report*, par. 337.

the active assistance of the Government in furthering the industrial development of the country with the aim of making India more self-sufficient. To this end, they considered it necessary that the Government should be provided with an adequate administrative equipment and should command reliable expert advice on scientific and technical matters. One of their main recommendations therefore was in favour of the creation of special industrial and chemical services and the establishment of provincial Boards of Industries.

§4. **The Indian Munitions Board.**—In the meanwhile, the Indian Munitions Board had been established by the Government of India in February 1917, 'to control and develop Indian resources, with special reference to the needs created by the War, to limit and co-ordinate demands for articles not manufactured and produced in India and to apply the manufacturing resources of India to War purposes with the special object of reducing demands on shipping.' Although, under the terms of reference, the Board was required to concentrate its energy on its primary object of assisting the prosecution of the War, especially in the eastern theatres, it was able, within the limits set, to foster the development of indigenous industries in various ways, such as (i) direct purchase of articles and materials in India; (ii) the diversion, by means of the priority system and control over Home indents, of all orders from the United Kingdom and elsewhere to manufacturers in India; (iii) assistance to individuals and firms who desired to import plant or engage experts or skilled labour from abroad; and (iv) the dissemination of information and expert advice to persons prepared to establish new industries in India. In this manner, considerable stimulus was given to various industries, notably cotton, jute, iron and steel, and leather as also a number of others, such as engineering industries, manufacture of chemicals, mineral acids, oils, paper, glass, cement, cutlery, fertilizers, paints and varnishes, surgical instruments, etc.[1] The adoption of the system of Home indents and the priority certificate by the Munitions Board was tantamount to the acceptance of the principles of swadeshi, for the time being, by the Government, and these new departures from the traditional policy of *laissez-faire* showed how much could be done in India in the sphere of industrial development with the active co-operation and assistance of the Government. Departments of Industries were started by the end of the War in all the provinces as recommended by the

[1] See S. G. Panandikar, *The Economic Consequences of the War for India*, pp. 103-9.

Industrial Commission, and the Munitions Board was merged in the Imperial Department of Industry and Commerce. The Chemical Services Committee was also appointed as suggested by the Industrial Commission. The plan of an all-India chemical service was, however, subsequently dropped, and freedom of action in this matter was allowed to the provincial Governments, who became responsible for industrial development under the Government of India Act of 1919. Indeed, it may be observed here that the scheme adumbrated by the Industrial Commission, which assumed the initiative of the central Government, could not fit in properly with the Montagu-Chelmsford Reforms of which the keynote was provincial autonomy.[1]

§5. **The post-War industrial boom.**—The cessation of the War was followed everywhere by a short period of boom and feverish industrial activity, caused by the expectation of a strong revival in demand for manufactures which had remained unfulfilled during the War, and of the continuation of the high level of War profits and inflation of currency. In India there was a period of great prosperity for the manufacturing and exporting industries, such as cotton, jute, cement, steel and iron, manganese, oil-seeds, hides and skins, etc. During the War company flotation was slow, owing to the difficulties in the importation of new plant, machinery, stores and technical experts. But after its close there set in a regular mania for company flotation, especially in the years 1919-21. High dividends were declared and the prices of industrial securities rose to unprecedented heights. The figures relating to the registration of joint-stock companies in India during this period are striking. In 1914-15 there were 2,545 companies registered in British India and the Indian States with a paid-up capital of Rs. 80·7 crores. The number of companies rose to 2,789 and the amount of paid-up capital to Rs. 106·6 crores in 1918-19, to 3,668 companies and Rs. 123·2 crores paid-up capital in 1919-20, to 4,708 companies and Rs. 164·4 crores paid-up capital in 1920-1, and to 5,189 companies and Rs. 230·5 crores paid-up capital in 1921-2. The authorized capital of new companies registered in 1919-20 was about Rs. 275 crores and those registered in 1920-1 about 146 crores. The dividends paid by the Bombay cotton mills were 23·7 per cent of the paid-up capital in 1918, 40·1 per cent in 1919, 35·2 per cent in 1920, and 30·1 per cent in 1921.[2] There was a mania of speculation in the share bazaar. As the Native Share and Stock Brokers' Association

[1] See Clow, op. cit., ch. iii.

[2] See *Textile Tariff Board Report*, Table VIII.

said in their representation to the Bombay Stock Exchange Enquiry Committee in November 1923: 'The prices of newly floated companies were fictitious. The shares of the Tata Bank were at Rs. 90 premium with only Rs. 15 paid-up and no reserve fund at all. The Tata Oil Mills share which is of the face value of Rs. 100 was quoted at Rs. 575 premium even before the erection of the machinery for the working of the mill. Owing to this popular hysteria and frenzy to make big fortunes in a week or fortnight numerous new companies, for every conceivable object, rose like mushrooms.'[1] The currency policy of the Government, which caused violent fluctuations in the exchange value of the rupee, aggravated both the boom and the subsequent depression. The sharp rise in the sterling value of the rupee, especially in 1919 and the first half of 1920, served as a great stimulus to imports, though for the time being the export trade was not seriously affected owing to the keen demand for Indian exports abroad.

§6. **The trade depression.**—The boom was, however, short-lived, though its duration varied in different industries. The tide definitely turned about the middle of 1920 and a prolonged period of economic depression set in. India, like many other countries, showed all the familiar symptoms of a trade cycle. The expectations of a firm demand and high prices were not fulfilled owing to the exhaustion brought about by the War, and the deflation of currency which was now started in England and various other countries. Moreover, in India the big slump in the exchange value of the rupee in 1920-21 embarrassed the importers, who had counted on the exchange remaining high, while the exporters now felt the full force of the previous high level of exchange. The extension of old industries and the establishment of new ones planned during the boom period at inflated prices, now began to weigh on the market and aggravated the depression. There were heavy liquidations of companies and firms and the outlook for those who survived the crash was far from bright. The subsequent rise in the exchange value of the rupee from 1924 further prolonged the period of trade depression, intensifying as it did the force of foreign competition in the Indian markets at a time when the depreciated currencies abroad had already placed that competition at an advantage. The Tariff Board thus felt constrained to allow for this handicap in making their recommendations for protection to the iron and steel and the textile industries, which, with the swing of the pendulum, had now to face heavy losses or had to content themselves with such paltry

[1] See *Bombay Stock Exchange Enquiry Committee Report*, p. 51.

dividends as 4·9 per cent of the paid-up capital in 1923 and 2·2 per cent in 1925 and 1926. In these circumstances the stock exchanges became extremely unsteady and showed a marked bearish tendency. The New York crisis (1929) and the world slump in prices further intensified the trade depression in India, which being mainly an agricultural country has suffered more than industrial countries like Great Britain.[1] The decline in the purchasing power of the agriculturist brought about by a big drop in the prices of agricultural products adversely affected the fortunes of Indian industry. The agricultural depression abroad reduced the demand for Indian jute manufactures in the foreign markets. Further, the depression in the industrial countries and the depreciation of currencies practised by some of them intensified the competition of foreign-manufactured goods in the Indian market, and served to accentuate the depression of prices of industrial products.

§7. **Industrial recovery and recession.**[2]—As in most countries which suffered from the effects of the great depression, particularly in the sterling group, the first definite signs of an upward movement in industrial conditions made their appearance in India during or after 1932. Production in all industries except coal recorded considerable increases. The largest increase was in the case of sugar, its production more than trebling itself during the period 1929-30 to 1936-7. The next largest increase was in the case of cotton piece-goods, where the yardage produced was nearly doubled in the same period. Cement, steel and iron, paper and jute manufactures also registered substantial increases.[3] This remarkable increase in industrial production despite the reduced purchasing power of the agriculturist is explained by the stimulus given partly by the protection enjoyed by several Indian industries, especially sugar, textiles, steel and iron, and partly by the imports of cheap machinery and stores which have shown a striking expansion in recent years. The funds released in the money market by the sale and export of large quantities of gold since September 1931 has made a larger amount of capital available, thus facilitating the floating of a large number of joint-stock companies in India.[4] Finally, the swadeshi spirit encouraged by the Indian National Congress has also considerably helped the expansion of Indian industry in recent years.

[1] For a discussion of the causes of the recent world economic depression and its effect on India see vol. II, chs. vi and ix.

[2] See *Review of the Trade of India* (1932-3).

[3] For further particulars regarding these industries, see vol. II, ch. ii.

[4] See vol. II, ch. viii. &c.

The year 1937-8 witnessed a sudden and rapid change from boom to relative depression popularly called 'recession'. At the beginning of the year there was great activity in the various commodity and share markets and optimism and confidence pervaded the business community, leading to speculation and over-trading. The recovery in agricultural prices and increase in the world trade in agricultural products and raw materials in the early months of 1937 had meant a growing income for India's large agricultural population.[1] This increased purchasing power in the hands of the agriculturists brought about a better demand for the products of Indian industries, the position of which consequently became much better than for many years past. Further advance in industrial production was made especially in the first half of 1937-8. Production of sugar increased the most. The cotton mill industry attained a new record, as also the production of steel manufactures. The coal industry also had a larger output to its credit. The output of the jute industry increased abnormally after the breakdown of the Agreement regarding working hours. But the tide turned and the prices of primary commodities and share values declined sharply. India in common with other countries experienced a reversal of conditions in the course of the year 1937-8. Industries resisted the downward movement for some time, but after October 1937, when world conditions following in the wake of the recession of American origin deteriorated still further, the resistance of most Indian industries gave way and they succumbed to the general depression in the commodity and share markets. In recent months there has been some rally, but industrial profits and security values still remain below the peak attained in 1937.[2]

§8. **Introduction of protective tariffs, etc.**—A large part of the stimulus received by Indian industries during the War was, however, necessarily temporary in character and ceased to operate with the cessation of the War purchases of the Government and the re-appearance of normal trading relations with other countries, after the Armistice in November 1918. Indian manufactures were again subjected to the full force of foreign competition helped by the absence of any protective tariff barriers, apart from enhanced import duties imposed for revenue purposes under the financial stress caused by the War. In these conditions, the long-standing demand for a revision of tariff policy again became more vocal and insistent than ever. The subject of tariff policy had been

[1] See vol. II, ch. §8.

[2] See *Review of the Trade of India* (1937-8), pp. 24-30.

excluded, much against popular wishes, from the terms of reference of the Industrial Commission, on the ground that it was not desirable at that juncture to raise any question of the modification of India's fiscal policy. The support lent by the distinguished authors of the Montagu-Chelmsford Report to the view that, since the theoretical free trader hardly existed in India, considerations of justice and fairness required that Indians should have full liberty of deciding their own tariff policy and that the Government had no right to force their free trade convictions on them, strengthened the hands of the protectionist party in India. Of similar tenor and significance was the recommendation of the Joint Select Committee on the Government of India Bill of 1919, that a convention in favour of fiscal autonomy should be established. This was subsequently accepted by the British Parliament. The question of regulating inter-imperial fiscal relations on the basis of a system of preference in favour of goods of Empire origin, which the War had brought into prominence, threw into relief once more the general question of the tariff relations of India with other countries. The Committee of the Imperial Legislative Council appointed by the Government of India in February 1920, to report on the feasibility of Imperial Preference and the future fiscal policy of India declared its inability to make any definite recommendations on the latter question and suggested a special commission of inquiry for the purpose. This eventually led to the appointment of the Fiscal Commission in October 1921 under the presidency of Sir Ibrahim Rahimtoola. The policy of discriminating protection, to be administered through an expert body called the Tariff Board recommended by the Commission, was accepted by the Government of India early in 1923. In accordance with that policy, a Tariff Board was instituted to examine the claims for protection of several industries. On its recommendation protection has been granted to steel and iron, cotton textiles, paper, matches, sugar and other industries.[1]

The indifference of the state towards industrial development which has so long seemed to lie as a blight on the economic aspirations of the country has thus been definitely abandoned, and instead of repeating the barren formulæ of free trade and *laissez-faire* in the sphere of industry, the Government is putting forward positive efforts to help industrial development to proceed along sound lines.[2] Non-official opinion, however, would favour even

[1] See vol. II, ch. ii.

[2] See vol. II, chs. i and ii for the various measures adopted by the Central and Provincial Governments to encourage the growth of large-scale and cottage industries.

greater activity than is being displayed by the Government, in order to bring about more rapid industrialization.[1] We believe that with proper guidance on the part of the state, substantial progress in industrialization may be achieved within a comparatively short time. We do not agree with Calvert's opinion that 'little but failure and disappointment will result from any attempt to compress six hundred years of the industrial history of Europe into a short period of state-subsidized activity'.[2] The rapid industrialization of Germany and Japan in the nineteenth century proves the unsoundness of such a contention. A similar argument is often advanced in the sphere of politics, and it is suggested that what took England a thousand years of constitutional evolution, cannot be achieved in India in a generation or two. But surely one may profit by the experience of other countries, and this ought to shorten the period of evolution in economic as in political matters.

§9. **The Congress move for industrial planning for India.**— A significant development in the recent industrial history of India is the Congress move for industrial planning for India. During the last nineteen years the Indian National Congress was wedded to the policy of reviving and encouraging cottage industries and was generally opposed to industrialization in the modern sense of the term, involving the development of large-scale mechanized industries. The only constructive contribution of the Congress on the economic side of its activities was the establishment of the All-India Spinners' Association and the All-India Village Industries Association. This policy is now to be modified, thanks to the able lead given by Mr S. C. Bose, the ex-Congress President, who was responsible for convening a Conference of Industries Ministers from the 'Congress' provinces at Delhi in October 1938. The Conference came to the conclusion that the problems of poverty and unemployment, of national defence and of economic regeneration in general could not be solved without industrialization. As Mr S. C. Bose in his opening remarks at the Ministers' Conference at Delhi pointed out, the principal problem India has to face today is industrialization, and in order to solve it the country must be ready to pass through the throes of industrial revolution. A community which resists industrialization has little chance, in the world as it is constituted today, of surviving inter-national competition.

As a step towards such industrialization the Conference drew

[1] See Dr V. K. R. V. Rao, *What is Wrong with Indian Economic Life?* pp. 83-94.

[2] *Wealth and Welfare of the Punjab*, p. 176.

up a comprehensive scheme of national planning. The scheme emphasizes the urgency of taking steps to start key industries of national importance, such as the manufacture of machinery and plant and tools of all kinds, manufacture of automobiles,[1] manufacture of electrical plant and accessories, manufacture of heavy chemicals, power generation and supply, etc. For preliminary work the Conference appointed a National Planning Committee under the chairmanship of Pandit Jawaharlal Nehru. The Committee was formally constituted at Bombay about the middle of the December 1938 and has recently (January 1939) issued a comprehensive questionnaire relating to the entire economic life of the country, including large-scale, medium-scale and cottage industries, agriculture, transport, and trade. The Committee tentatively desires so to prescribe the standard of achievement and the period within which that achievement is to be made as at least to double the standard of living including not only the absolute necessaries but also the amenities of civilized existence within a definite period of 5 (or 10) years at most. The responsibility of preparing a complete plan of industrialization of the country will devolve on the National Planning Commission which will be established later, the Hon. Mr V. V. Giri, Minister of Industries, Madras, being its convener. The Commission will be representative of all India, including British Indian provinces and Indian States.

While we are conscious of several difficulties—constitutional, political, administrative, technical and financial—in carrying out the programme of national planning we welcome the new Congress move for planning. It is reassuring that the Central Government—as might be gathered from the speech of His Excellency the Viceroy on the occasion of the official Industrial Conference held in January 1939 in Bombay—virtually all the provincial Governments and some of the Indian States like Mysore and Baroda have lent support to the idea of planning.

The experiment of national planning initiated by the Indian National Congress will be watched sympathetically by the people and by students of Economics.

§10. **Industrial backwardness of India.**—That the present position of India as regards industries is backward, needs no labouring. There is a limited development of industries, but in the first place it is very uneven, being restricted only to those

[1] The Conference favourably considered a scheme of establishing a factory in Bombay for the manufacture of automobiles drawn up by Sir M. Visvesvaraya.

industries which have appeared to offer safe and easy profits. Generally, commerce has been preferred to new industrial ventures as a profitable mode of investment. In the second place, as the Fiscal Commission observe, 'the development has not been commensurate with the size of the country, its population and its natural resources'.[1] Even as regards those industries which have been established in the country firmly, for example the textile industries, there has been an almost exclusive reliance on foreign imports for the supply of accessories, stores and machinery, etc. The facility with which they could be imported on account of the anxiety of industrially advanced nations to secure the Indian market, combined with the policy of free trade, made the establishment of these industries a matter of very great difficulty. The Government's policy of placing indents for their miscellaneous stores with the India Office, encouraged by the absence of a Stores Purchase Department in India, was not calculated to improve matters in this respect. India thus found herself without the basic equipment necessary for a stable industrial organization in the form of the metallurgical and chemical industries. Iron and steel and the engineering industries existed on a negligible scale. India could not boast of so much as 'a machine to make nails or screws; though she could build a locomotive or a marine engine, provided most of the necessary parts were obtained from abroad'.[2] Chemical industries for the manufacture of acids and alkalis of industrial importance were practically non-existent and thus severely handicapped such indigenous manufactures as paper, matches, oils, explosives, dyes and textiles, which were compelled to depend on foreign chemicals. The position today is somewhat better than it was before the War, but not very much so. Another serious industrial deficiency has been the scarcity of foremen, engineers, technical and chemical experts, owing to the unsatisfactory nature of the facilities for industrial training in India, and the consequent dependence on foreign skilled labourers, technicians and experts.

§11. **Potentialities.**—There are thus many gaps to be filled and strenuous efforts to be made in order to remove the numerous handicaps which we have mentioned. The task, however, is not an impossible one, especially if the state comes forward and assumes a more venturesome role than hitherto. India, as we have already seen, possesses immense natural resources—vegetable, animal and mineral—as was illustrated by the part she

[1] *Report*, par. 41.
[2] *Industrial Commission Report*, par. 81.

played during the War by supplying manganese, tungsten, mica, jute, copra, lac, etc. Her sources of power have already been described, and we have seen that, although her position with regard to coal, wood-fuel or oil for the purpose of generation of power is not so favourable as is sometimes imagined, there are great possibilities of utilizing her large rivers and watersheds and harnessing them to industrial uses. Her forest wealth is immense, and the development of modern means of transport and research in forest products, together with a larger investment of capital are likely to result in a stimulus to industries based on the great variety of the forest products of the country. So far as man-power is concerned, it is true that compared with European labour Indian labour is inefficient, intermittent and floating in character, but it is abundant in quantity and is capable of improvement in quality under a proper system of theoretical and practical technical training, better housing in industrial areas, welfare work, trade union organization and so on. As regards the paucity of competent managers, as Calvert observes, 'the best training for the future manager is to be acquired in the mill and amongst the men he is to manage. The art is picked up in the atmosphere of industry'.[1] Since the atmosphere does not exist at present on any appreciable scale, the country will have to follow the example of Japan and import foreign managers when necessary, and, more important than this, send out young men to foreign lands to receive the requisite experience and training. A time will surely come when the required atmosphere will be created in the country and recourse to either of these methods will be superfluous. Indian capital has long enjoyed the reputation of being too shy, but it may be confidently expected to be less and less timorous if reasonable assurances are forthcoming that it can be invested with security and profit. The striking success of the loan operations of the Government in the Indian money market during and after the War and the successful flotation of a considerable number of joint-stock companies in the post-War period, together with the fact that recently considerable investment of Indian capital in sterling securities has been brought to light, are additional proofs that the shyness of Indian capital is gradually disappearing. The improving banking organization of the country, the assurance of a large home market and the post-War enthusiasm for the industrial renaissance of India should further help in drawing out the savings of the people for purposes of productive investment in modern

[1] *Wealth and Welfare of the Punjab*, p. 168.

industries. The differential rates policy followed by the Indian railway companies—an evil, the existence of which was admitted by both the Industrial and the Fiscal Commissions—has long been a grievance of the Indian industrial and commercial community, but the gradual transfer of the principal railway systems to state management and the creation of the Rates Tribunal are calculated to remove this grievance and make railway administration more sympathetic and helpful to the progress of industrialization. The problem of improving inland road communication, which is extraordinarily defective at present, especially in rural areas, is being tackled; Road Boards have been created in some provinces, and the Indian Road Development Committee (1928) has made some useful recommendations, the adoption of which by the Government of India has given some stimulus to road construction which, it is hoped, will be further accelerated in future.[1] The constitutional reforms have inevitably brought about a change in the attitude of the state, which, as we have noticed above, will make it more and more zealously helpful in the promotion of industrial advance. The advent of Congress Ministries in several provinces and the recent Congress move for industrial planning for India referred to above are expected to stimulate the industrial development of the country.

§12. **Benefits of industrial development.**[2]—The benefits which will accrue to India from industrial development are so obvious as scarcely to need formal statement. We have had many occasions for commenting on the great poverty of the Indian masses and the many weaknesses in our economic system to which it is due.

(i) One of these weaknesses is the excessive concentration of the productive energies of the people on one single occupation, namely, agriculture. An adequate development of industries will remedy this situation. It will make for a more even distribution of the population among a variety of occupations and bring about a more stable national economy. It will thus make the problem of famine much less serious than it is at present, by drawing off a certain proportion of the surplus numbers at present engaged in agriculture.

(ii) Secondly, the establishment of industries will lead to an increase in the national dividend and will enable the masses to raise their standard of living, which in its turn will increase their

[1] See vol. II, ch. v.

[2] See *Fiscal Commission Report*, ch. iv.

efficiency and hence their productive capacity. A beneficent circle of action and reaction will thus be set up.

(iii) Thirdly, industrial development will improve the taxable capacity of the people through the increase in the national dividend and will enable the state to finance schemes of national regeneration which are at present held up for want of funds. It is also clear that a diversification of industry will make the system of taxation much more elastic than at present, for taxes on agriculture like land revenue are incapable of ready expansion, but taxes on other sources, of which the income-tax is the most outstanding instance, are to a large extent automatic and bring additional money into the state coffers without much difficulty.

There is no reason therefore to suppose that a policy of industrialization, as prophesied by Sir Thomas Ainscough, His Majesty's Senior Trade Commissioner in India and Ceylon, in his Report for 1937-8, will adversely affect the central revenues owing to reduced receipts from import duties on foreign-manufactured goods. Moreover, while some of the existing imports may dwindle, other imports will take their place as the standard of living in the country rises. Altogether on a balance the public revenues will gain in consequence of the industrialization of the country.

(iv) Another important advantage of industrialization is its favourable reaction on national character and the scope it gives to diversity of aptitude and talent. It supplies an antidote to the intellectual inertia and conservatism which characterize a predominantly agricultural country, unless agriculture also is organized on industrial lines as in the United States and Denmark. Generally speaking, an industrial population is intellectually more alert, and towns have therefore always been the centres and radiators of civilization and culture. As Maitland says: 'There be thoughts which come to men when they are tightly packed.'[1] Industrial training will also offset that absence of a sufficiently practical grasp of affairs which characterizes the products of the too literary system of education which prevails at present, and will generally enable the people to shoulder better the new responsibilities which the next step in political advance must place on them.

(v) Industrialization will further go a long way towards supplying a solution for the serious problem of middle-class unemployment which today exists on a distressingly large scale in India. The young men will be relieved from the necessity of depending

[1] Quoted by A. M. Carr-Saunders, *The Problem of Population*, p. 425.

exclusively on Governmnt service or a few overstocked professions such as law, medicine, etc.

(vi) We have already referred to the military importance of greater economic self-sufficiency to India as well as to the Empire. An industrial India with its resources properly exploited will be a tower of strength to the Empire, not only from an economic but also from a political point of view, quite apart from any system of Imperial Preference (which it may not suit India to enter into).

(vii) Further, the unprofitable habit of hoarding which, although it is generally exaggerated, must all the same be admitted to exist, is likely to give way with the greater opportunities for investment and the prospect of making handsome profits, which industrial expansion will open out. The joint-stock organization of modern industry serves to utilize small amounts of individual savings which would otherwise lie dormant. There is the further consideration that wealth which is accumulated in industrial enterprises is more readily available for further employment as capital than similar amounts acquired, say, by way of agricultural profits.

(viii) Lastly, an extension of industry, by increasing the output of national wealth will increase the resources of the people in general, and more particularly, of that section of the people which is engaged in industrial production, as wages and profits in industry are generally higher than in agriculture.

§13. **Reactions of industry on agriculture.**—The reactions on agriculture would be almost wholly beneficial. One reason for the languishing condition of Indian agriculture is, as we have seen, a deficiency of capital. This shortage of capital is likely to be remedied by the accumulations in industry being made available for investment in agriculture. We may recall in this connexion that the great advance of English agriculture during the period of the Industrial Revolution was financed by the profits made by the commercial and industrial magnates. The strong sentiment in favour of investment in land is sure to attract a considerable portion of the earnings of successful business in much the same way as this happened in England, owing to the great political and social status attaching to the possession of land.

The effect on agricultural wages will be to raise them, especially in areas adjoining centres of industrial activity. One of the consequences of industrial advance would be a multiplication of towns and cities, and we have already noted that the propinquity of urban areas has a stimulating effect on rural populations, making them more progressive. Again, agriculture in its capacity of provider of raw materials needed for industry, is sure to receive

an impetus to enhanced production to meet the ever-increasing demand of the expanding industries. This is no mean gain to Indian agriculture having regard to the diminishing and uncertain foreign markets for the products of Indian agriculture.

It is sometimes argued that the development of industries, by drawing off the population from the land, will lead to a diminished food supply. However, having regard to the fact that at present the industrial workers are less than two per cent of the agricultural workers, it does not seem likely that even with a very rapid development of industries this distribution of population will be seriously altered in favour of industry and against agriculture. Secondly, the belief has been widely held since the time of the Famine Commission of 1880, that there are more people on the land than are really required for its thorough cultivation, and their partial withdrawal should therefore have little effect on the actual volume of the food supply. Lastly, we are looking forward to an era of improved agriculture which will enable a smaller population, not only to maintain production on the present scale but to increase it considerably by the adoption of up-to-date methods. We must further remember that a curtailment of food supply will in some measure bring its own remedy; a smaller supply will mean higher prices which in their turn will stimulate production. The fear therefore that is sometimes expressed that agriculture may come to occupy a subordinate place as a result of industrialization is without any foundation. In any case, we must not make a fetish either of agriculture or of industry. Whether agriculture occupies the first or second place is after all immaterial so long as the nation divides its labour and capital between the two in such a manner as to maximize the national dividend; as a matter of fact agriculture is so much suited to the conditions of this country that it will never be a sound business proposition to neglect it altogether in favour of industry, and there is no reason to doubt that it will always retain its importance in India. This will be even more so if we allow weight, as we very well might, to the non-economic arguments in favour of agriculture, namely, that it helps to maintain a sturdy and prosperous yeomanry, which is the strongest bulwark of the state, making for political stability and acting as a counterblast to the radical and revolutionary ideas likely to prevail in a country with a purely commercial and manufacturing population.[1]

[1] 'What all countries now require are not more town-dwellers but more land-bred folk. They require them for defence. They require them for purposes of national health; they require them for steadfastness in the midst of the shifting development of a neurotic age. Without an adequate supply

Sir Thomas Ainscough in his recent (1937-8) report on the trade of India with the United Kingdom has given expression to an apprehension that the policy of industrialization contemplated by the present Congress authorities and Provincial Governments must inevitably lead to a serious clash of interests with the agricultural element, which constitutes nearly 70 per cent of the population. In view of what has been said above, it is, however, clear that there is no antithesis between agriculture and industry and that they should be regarded as complementary to each other and not competitive.

The controversy of agriculture versus manufactures is thus pointless and unreal. We have seen that agriculture stands to benefit vastly by industrial development, and it is equally true that the prosperity of industry is bound up with that of agriculture if only because the agriculturist in India will be the principal customer for the products of Indian industries.[1]

§14. **Capital for industries.**—This may be discussed under two headings: indigenous capital and external capital.

Indigenous capital.—We have remarked above that the indigenous capital supply of the country is tending to improve both in point of adequacy and venturesomeness, especially since the period of the War. This is evidenced by the increase in Government rupee loans from Rs. 146 in 1913-14 to Rs. 460 crores in 1935-6 and, in the paid-up capital of joint-stock companies registered in India, from Rs. 80 to about Rs. 303 crores between 1913-14 and 1935-6.[2] Although the position thus revealed is gratifying, there is still great scope and need for further improvement as regards the increase and employment of the indigenous capital resources of the country, without which industrial development in India will be greatly retarded. This question has assumed great importance in view of the fact that industrial activity is no longer restricted to a few channels, such as those provided by the cotton and jute mill industries, but is in quest

of land-dwellers to replenish and support their city population, people must deteriorate and in due course fall' (Rider Haggard, quoted by B. G. Sapre in his *Economics of Agricultural Progress*, p. 40). The ideas expressed here have a particular application to countries like England which have gone too far for national safety in the direction of urbanization. In India, safety at present depends on more and not less urbanization.

[1] 'It is not a question of agriculture versus industry, but of the two great occupations expanding side by side, with agriculture always necessarily taking the lead.' (H. Calvert, *Wealth and Welfare of the Punjab*, p. 186.)

[2] See the *Budget of the Government of India* (1936-7), *External Capital Committee Report*, par. 8; and *Statistical Abstract for British India* (1935-6), Tables 176-7.

of other numerous fields, as exemplified by the establishment of the Tata Iron and Steel Works, cement factories, paper mills, sugar and glass factories, and the contemplation of a large number of ambitious schemes: for instance, in connexion with the greater utilization of the water-power possibilities of the Western Ghats; the additions to the existing steel works; the creation of a group of subsidiary concerns to convert the output of the steel works into manufactured products; the production of machinery, automobiles, mill accessories, etc.[1] All these schemes require vast amounts of capital, and it is necessary to take proper steps to tap all the dormant capital in existence at present. In order to understand how this might be done, we must undertake a preliminary examination of the nature and extent of the capital available (i) in the mofussil and (ii) in the bigger commercial towns, and the manner in which it is employed.[2]

(i) In the mofussil there is hardly any organization of capital owing to the practical absence of suitable banking facilities. The extension of commercial joint-stock banking presents special difficulties, although the position in this respect has been eased to some extent by the establishment of a number of branches of the Imperial Bank at the principal district towns. The Post Office Savings Banks, and latterly also co-operative banks, have been able to tap a portion of the rural savings, but on the whole, the village money-lender remains practically the only supplier of capital for the local needs of the agriculturist, artisan and petty trader. It is very rarely that he employs his capital in new enterprises. Some local enterprises have, indeed, been started with local capital, especially flour mills, ginning presses in cotton tracts, and rice mills on the Coromandel coast. These have, however, been multiplied to such an extent that the profits derived from them can scarcely be called attractive from the business point of view. A large part of the savings of the well-to-do agriculturist is locked up in jewellery and hoards, as shown by the fact that the net imports of gold and silver into India between 1913 and 1924 amounted to Rs. 482 crores of rupees.[3] Government officials and professional classes favour investment in land either by way of purchase or mortgage, though the banking habit is growing

[1] See *Industrial Commission Report*, par. 280, also vol. II, ch. ii.

[2] For a recent comprehensive and interesting survey of the existing financial facilities for the various types of industries, rural and urban, cottage and organized, in the provinces, the Reports of the Provincial and of the Central Banking Enquiry Committees may be consulted.

[3] *External Capital Committee Report*, par. 8.

very much faster in the case of these classes than among agriculturists.

(ii) In the Presidency and commercial towns, the situation is somewhat more satisfactory. There are better banking facilities and greater readiness on the part of the people to invest savings in industrial and commercial enterprises, and, generally speaking, a well-considered and sound business proposition promoted by men of standing and technical knowledge does not fail to attract the necessary capital. But even here, difficulties are not altogether absent. The existing banking system is too inelastic from the point of view of industrial finance. The Imperial Bank is precluded from supplying long-term finance to industries and extending loans against mortgage of immovable property under the existing law which has remained unchanged in this respect even after the establishment of the Reserve Bank of India in 1935. Moreover, the Imperial Bank keeps a margin of 30 per cent or more in extending loans against the security of liquid assets. Other banks have followed this practice, which causes great inconvenience to industrial concerns. The exchange banks carry on a lucrative business in foreign exchange to which all their capital is devoted, and, moreover, most of them are foreign in management and capital. This precludes them from coming to the assistance of Indian industrial enterprises for lack of the necessary contact with indigenous industries and knowledge of Indian conditions; nor can they be expected to be very sympathetic to the needs of industrial development in this country. The Indian joint-stock banks have generally shown a tendency to adhere to orthodox commercial banking resting on short-term finance,[1] and the experiments made by some of them (for example by the People's Bank of Lahore which went into liquidation in 1913) in the opening years of the present century to combine ordinary commercial banking with industrial banking proved a failure owing to the locking up of short-term deposits in long-term business which it involved, and also to the mistake, which was too commonly made by the banks, of sinking an excessive proportion of their funds in a single industry.

Owing to the difficulties of industrial finance, many of the large industrial concerns have at present to depend upon managing agents for the supply of both block (initial) and working capital. For example, in October, 1930, the Bombay cotton mills obtained as much as 21 per cent of their total finance from this source,

[1] See *Report of the Central Banking Enquiry Committee*, pars. 339-40, also P. S. Lokanathan, *Industrial Organization in India*, ch. v.

the percentage being 24 in the case of Ahmedabad. The managing agents also purchase large blocks of shares and debentures of the mills controlled by them, and it is mainly on their credit that banks lend to industrial companies.[1] 'The managing agency system is the Indian substitute for a well-organized capital market and an industrial banking system of western countries, and has come into existence by the sheer force of economic circumstances.'[2] It is by no means a perfect arrangement and has many serious drawbacks.[3] Another source from which mills in Bombay, Ahmedabad and Indore obtain finance consists of deposits from the public, which in October 1930 contributed as much as 39 per cent to the total finance in the case of Ahmedabad. This is, however, a very unsatisfactory and precarious source of finance and has been aptly called a 'fair-weather friend'. When times are bad, these deposits are liable to be withdrawn from good as well as bad concerns, thereby aggravating the position at a time when all the resources are required to carry over what may be only a temporary period of depression. Lack of a recognized method by which the general public can obtain advice and assistance as regards investments and the failure of many of the smaller industries started in India, which has shaken public confidence in industrial investments, are other difficulties which prevent a free flow of capital for industrial development.

We thus reach the conclusion that even in towns there is no adequate provision for the long-term finance required by industries. A few industrial banks were started, but the most important and the one which at first appeared to hold out the brightest prospects, namely, the Tata Industrial Bank, after a somewhat ineffective and inglorious career, soon abandoned the industrial side of its work and contented itself for a while with ordinary commercial banking and foreign exchange business, until it was eventually (1923) merged in the Central Bank of India, which is a purely commercial bank. The short career and failure of the Tata Industrial Bank may, among other reasons, be attributed to the fact that the Bank was started during a boom and had an extraordinarily difficult period to face. Moreover, it committed the blunder of becoming more or less the promoter

[1] See *Report of the Central Banking Enquiry Committee*, par. 350.

[2] See S. G. Panandikar, *Banking in India*, p. 215.

[3] A short account of the origin and working of this system is given in vol. II, ch. ii.

and financier of concerns associated with one firm of managing agents.[1]

The difficulties of financing industrial enterprises operate with special force in the case of small middle-class entrepreneurs who, unlike the big industrial magnates and joint-stock corporations, cannot furnish the security of stocks or approved names. Co-operative credit is not suited to their case, being useful only in the case of small artisans like the weavers. In these circumstances, there has been an insistent demand for some financial assistance on the part of the state directly or indirectly by some such means as guaranteed dividends, direct loans, purchase of finished products and so forth. The subject of industrial finance was reviewed at length by the Industrial Commission (1916-18) and more recently by the Central Banking Enquiry Committee (1930-1).

The chief method that commends itself to the Industrial Commission is the establishment of special industrial banks in India. They consider that the establishment of such banks, working on approved lines, is of sufficient national importance to justify Government assistance. They point out that what is required is a bank which can keep in touch with small industrialists, is able to estimate the prospects of a fairly extensive range of industries, and possesses funds which it can afford to lock up for a time in securities not readily realizable. They further recommend the appointment of a special expert committee to lay down a definite scheme in this connexion and to define the methods of state assistance to such banks. They contemplate that, whatever other assistance the Government might give, they should supply expert advice to industrial banks through the Departments of Industries in order that the banks may be in a position to estimate the prospects of industrial projects seeking their assistance. The industrial banks would not themselves be able to enlist the services of experts, and the Government would do well to supply the need.[2] Problems in connexion with the constitution of industrial banks, as also the recommendations made by the Central Banking Enquiry Committee in favour of the establishment of Provincial Industrial Corporations and an All-India Industrial Corporation will be discussed in volume II.[3]

Pending the establishment of such banks, the Industrial Commission suggest that the existing joint-stock banks should finance

[1] See P. S. Lokanathan, op. cit., pp. 258-9.

[2] See *Industrial Commission Report*, pars. 287-92.

[3] ch. x; see also *Report of the Central Banking Enquiry Committee*, pars. 401-9.

middle-class industrialists by advance of loans to them, subject to a guarantee by the Government, after an investigation by the Director of Industries and his expert staff into the financial standing of the applicants and the prospects of their business. The Commission further recommend that the Government should always provide direct financial aid in a few cases, such as public utility enterprises or those of national importance. Such assistance might take the form of a guarantee of dividends, loans of money, an undertaking given by the Government to purchase the output, or state contributions to the share capital. All these forms of aid must be subject to suitable precautions in order to safeguard the financial interest of the Government and to prevent the concessions from being exploited by foreign capitalists. It is not yet in evidence that the Government have so far set about earnestly carrying out the more important recommendations regarding industrial finance made by the Industrial Commission. The financial stringency of recent years is probably one of the reasons for the indefinite postponement of vital proposals, such as the establishment of industrial banks. It is true that State Aid to Industries Acts have been in operation in the Punjab, Madras, Mysore, Bihar, Orissa and Bengal since 1923.[1] But these Acts have not been very helpful to industrial finance, and in the aggregate only small amounts have been advanced under their provisions.[2] The establishment of separate industrial banks therefore is still a desideratum. The comprehensive survey of Indian banking recently conducted by the Central and Provincial Banking Enquiry Committees has served to emphasize further the need for a satisfactory solution of the present difficulties of industrial finance. In the questionnaire issued by the Central Banking Enquiry Committee special prominence was given to the subject of industrial banks and credit facilities for India's main industries, and its recommendations, if given effect to, are calculated to place industrial finance on a progressive basis. It is gratifying that

[1] The Bombay (par. 177), and Central Provinces (par. 1312) Banking Enquiry Committees strongly recommend that State Aid to Industries Acts should be passed without further delay in order that the policy of assisting industries may be pursued more systematically than at present. The Central Banking Enquiry Committee (par. 311) have fully endorsed this recommendation.

[2] For a detailed review of the working of these Acts in the various provinces see *Proceedings of the Fifth Industries Conference* [*Bulletin No.* 50, *of Indian Industries and Labour*].

state-aided industrial credit corporations were recently (1936-7) established in the United Provinces and Bengal.[1]

§15. **External capital.**—The problem of external capital has come into special prominence since the adoption of the policy of protection in 1923. It is generally felt that the advantage of protection to the nation would be largely cancelled if foreign capital and enterprise were allowed, without let or hindrance, to take shelter behind the tariff walls. Even under the regime of free trade a considerable number of companies with foreign capital had established themselves in the country as will be seen from the table below. Indeed, as we have already seen,

TABLE I[2]

Class of company	1914		1934-5	
	Number	Paid-up capital	Number	Paid-up capital
		£	...	£
Banking and loan	13	24,551,108	29	94,246,370
Insurance	89	28,065,738	143	72,562,470
Navigation	12	15,001,865	20	42,642,053
Railways and tramways ...	18	80,811,915	18	25,094,909
Other transit and transport ...	...	.....	12	2,110,257
Trading and manufacturing companies	113	114,254,333	365	237,952,951
Tea	166	17,573,284	174	26,430,537
Other planting companies ...	22	1,165,844	29	3,300,259
Coal mining	6	139,134	4	240,000
Gold mining	3	389,830	...	.....
Other mining and quarrying companies	13	5,030,999	30	24,044,404
Cotton mills	3	400,000	4	200,000
Jute	9	2,428,894	5	2,752,450
Cotton ginning, pressing, bailing, etc.	1	100,000	2	150,000
Estate, land and building ...	...	.....	5	372,774
Sugar (including jaggery) ...	2	306,656	1	280,000
Other companies	9	554,451	30	40,679,355
Total (British India)	479	290,773,871	871	573,058,789
Total (Indian States)	38	7,627,326	46	13,360,473
Grand Total	517	298,401,197	917	586,419,262

[1] This question is discussed further in vol. II, ch. i, §17 and ch. x, §63. See also N. Das, *Industrial Enterprise in India*, pp. 138-40.

[2] See *Statistical Abstracts for British India* (1923-4 and 1935-6). Tables Nos. 180-1.

modern industrialism in India owes its inception to foreign capital. The question of the right policy to be adopted with reference to foreign capital was examined both by the Fiscal Commission (1921-2), and by the External Capital Committee, which was appointed in 1924 in connexion with the debates on the Steel Protection Bill in the Assembly.

§16. **Amount of foreign capital.**—It is difficult to form an accurate estimate of the amount of external capital invested in India, but there is enough statistical material for a rough estimate. In the first place, we may notice the returns of joint-stock companies working in British India but incorporated elsewhere (see Table I overleaf).

The figures for joint-stock companies registered in India (including Indian States) during the year 1935-6 are as follows.

TABLE II[1]

1914-15		1935-6	
Number	Paid-up capital	Number	Paid-up capital
	Rs.		Rs.
2,545	80,78,81,572	10,627	3,02,62,72,180

Several interesting facts are brought out by the above figures. In the first place, the great predominance of foreign capital and enterprise in India is clearly revealed. The aggregate foreign capital is very much larger than the indigenous capital, and the fact that in the former case the number of companies is smaller shows the more substantial capital basis and economic power of the individual foreign concern. As against this, we see evidence of a definite tendency for the volume of Indian capital employed, as well as the number of Indian concerns, to increase at a more rapid pace than foreign capital and foreign concerns since 1914.

Although the indications of the foregoing statistics are broadly reliable, they are subject to certain reservations which it is as well to mention here. (i) Firstly, only the paid-up capital of joint-stock companies of both classes has been taken into consideration. To this must be added the debenture capital, which, in the case of companies registered outside India but working here, has been estimated at over a hundred million pounds. On

[1] See *Statistical Abstracts for British India* (1923-4 and 1935-6). Tables Nos. 176-7.

the other hand, it must be remembered that, in the case of many external companies, especially banking, insurance, trading and navigation companies, only a portion of their total paid-up capital, as shown in the above table, is engaged in their Indian branch of the business. (ii) Secondly, though the registered domicile of a company may be taken as a rough index of the origin of the capital, some of the capital of foreign companies may be held by Indians and vice versa. As the External Capital Committee point out, Indians hold a large and increasing share both in external companies and in companies with rupee capital under non-Indian management, for example, in the jute mills. Similarly, as implied above, companies with rupee capital registered in India may have a large number of foreign shareholders, and the control may be in non-Indian hands. Cases in point are the jute mills of Calcutta, the Buckingham and Carnatic Cotton Mills, Madras, and the Cawnpore Woollen Mills.[1] (iii) Again, the above tables take into account only the capital of joint-stock companies and not the capital of private firms, foreign or Indian. (iv) It is further necessary for purposes of forming a more accurate idea of the amount of foreign capital employed in India, to take into consideration sterling loans raised in England on Government account for Indian railways, irrigation works, etc. These amounted to £377 millions on 31 March 1936 and may be regarded, along with the London-enfaced rupee debt of the Government of India, as held almost entirely by foreign investors.

Apart from any question of an accurate computation of the amount of foreign capital in India, there is no doubt about the broad fact with which we are mainly concerned here, namely, that the total amount of foreign capital engaged in this country in some form or other is very considerable. Many of the large-scale business enterprises in India, such as banks, shipping companies, railways, insurance companies, tea and coffee plantations, mining companies, tanneries, etc., are carried on with the help of foreign capital, though in recent years Indian capital is striking out new paths for itself and also increasing as regards the aggregate amount. Apart from the cotton mill industry of western India, which is mostly financed by Indian capital, the Tata Iron and Steel Works, and the Tata Hydro-electric Works in the Western Ghats, Indian capital is making headway in the jute, cement and sugar industries, banking, steam navigation, tea plantations, etc.

[1] In recent years there has been a remarkable increase in the number of joint-stock companies affiliated to a nominally Indian concern, e.g. by adding the words '(India) Ltd.'.

The Government's own borrowings are also tending to rely in an increasing measure on the Indian money market, as is seen from the fact, noted above, that the rupee loans raised by the Government of India advanced from Rs. 146 crores on 31 March 1914 to Rs. 460 crores on 31 March 1936 exclusive of Treasury Bills and Postal Cash Certificates.

§17. **Foreign capital in India: main issues.**—The present predominance of foreign capital in India and the prospect of its increasing under a system of protective tariffs and high import duties for revenue, raises the question of how far it is desirable any longer to follow the policy of the open door with reference to it. Foreign capital may enter the country either as loan capital or as investment capital. It is generally agreed as regards the former that, while every endeavour should be made to mobilize the internal capital resources of the country, so long as indigenous capital is not forthcoming sufficiently rapidly and in adequate quantity, there is not only no objection to borrowing capital from abroad but it is positively advantageous to do so.

Other countries like Japan[1] and the United States of America, although intensely nationalistic in feeling and policy, have encouraged the use of foreign capital in this form. Similarly, educated non-official Indian opinion has not opposed the use of foreign capital in this sense. R. C. Dutt, for instance, regarded the policy of raising capital abroad to finance state railways as sound and well-advised. The foreign investor is in this case merely entitled to the stipulated rate of interest and acquires rights of control only in the event of default. Instances of this class of foreign capital are furnished by the various state and municipal loans, bonds of port authorities, bonds and debentures of private companies and bank loans.[2] As Dr Slater puts it, 'as no foreign control enters into the question, the main matters for consideration are . . . (i) can a new asset be created by means of an external loan which will yield a net annual return, directly or indirectly, to the people of India, exceeding the stipulated rate of interest; and (ii) can the money be borrowed abroad on the

[1] cf. 'India's position with regard to foreign capital is very different from that of Japan. Japan borrowed abroad to finance her industrial development, but retained control of capital in her own hands and eventually evolved from a debtor to a creditor nation. . . . But India in comparison with Japan has suffered from the limitation that her use of imported capital has carried with it outside control over the choice of investments, and hence over the general trend of economic development.'—G. E. Hubbard, *Eastern Industrialization and its Effect on the West*, p. 273.

whole to greater advantage than in India? If both of these questions are answered in the affirmative, obviously the use of external capital is advantageous.' The External Capital Committee, however, introduce a reservation to the effect that, in the case of Government and quasi-Government loans, the rate of interest should not be the sole consideration between an external and an internal loan. They suggest that, apart from considerations of exchange, resort should be had to rupee loans as far as possible rather than to external loans, even though the rate of interest on the former may be somewhat more unfavourable, the idea being to foster habits of saving and investment, and furnish first-class security in the form of Government scrip and well-secured bonds as cover for bank accommodation to industrial enterprises in India.[1]

Foreign capital, however, normally seeks entry into the country on a speculative and profit-sharing basis and involves foreign control and management. It is against this class of capital that objections are generally urged.

§18. **Objections to foreign capital.**—The principal points against foreign capital have been stated as follows.[2] (i) The first obvious objection is that the profits go out of the country. To some this objection appears so overwhelming that, rather than allow the natural resources of the country to be developed and exploited principally for the benefit of foreigners, they would like to see a complete ban on external capital even though this might result in an indefinite postponement of the industrial development of the country. This feeling is particularly strong with regard to 'key industries' or industries important from the point of view of national defence, and those natural resources of the country, such as minerals, which once exhausted cannot be replaced. (ii) The second objection is that foreign firms prefer to choose as directors persons of their own nationality, a partiality which is extended to the selection of members of their superior staff, so that Indians have no reasonable chance of rising to positions of responsibility. They are also unwilling to train Indians as apprentices, so that one of the main advantages claimed for foreign capital is usually missed. (iii) Lastly, there is the political objection against foreign capital, namely that it gives rise to vested interests which are usually antagonistic to the political and economic aspirations of the country. Foreign

[1] See *External Capital Committee Report*, par. 17.

[2] See *Fiscal Commission Report*, par. 290, and Minute of Dissent, pars. 54-8; also *External Capital Committee Report*

capital may, in course of time, be compelled, in sheer self-defence and for purely economic reasons, to identify itself more and more with the Indian standpoint. But this is a symptom which it has not developed as yet to any appreciable extent.

§19. **Uses and advantages of foreign capital.**—There are, however, several grounds on which, in spite of the disadvantages noted above, it may on the whole be necessary and desirable to welcome foreign capital subject to certain reservations. (i) One of the advantages of foreign capital is that, with its help, the process of industrialization and consequently of the enrichment of the country is expedited. The country gains from the beginning, because the industries, although dependent on external capital, cause an increase in the national wealth at least in the form of the wages paid to the labour that is employed. There is no invariable rule governing the proportion which profits bear to wages, but in many cases wages constitute a considerable item in the gross earnings of an industrial enterprise. However that may be, if the alternative lies between no industrial development and industrial development with the help of foreign capital, it is clear that the latter is to be preferred from the purely economic point of view. No doubt, the country would benefit most if profits as well as wages remained in the country, and it is of the utmost importance that indigenous enterprise should come forward as quickly as possible to undertake the task of the industrial development of the country, and everything should be done to encourage it to do so. But in the meanwhile, so long as the people of the country are not ready to take up the work, it may be advantageous to allow foreign capitalists to do so. The wages, whether they bear a small or a large proportion to the gross earnings, undoubtedly constitute a net gain to the country.[1] But the more important gain, apart from that which comes by way of an immediate increase of national wealth to the extent of the wages earned, is that the foreign capitalist imports into the country the technical knowledge and the organization which are needed to give an impetus to industrial development. But this advantage can only be reaped fully if facilities are provided by the foreign firms to train the people of the country in matters of industrial organization and technique. In this connexion it must be noted that although European capital has been active for a long time in the field of Indian industry, its presence has not resulted in any appreciable advantage of the character described above. This shows that merely allowing unrestricted entry to foreign capital is not auto-

[1] See T. Morison, *Economic Transition in India*, p. 220.

matically followed by the advantages claimed for it. It seems necessary to impose such conditions on foreign companies as are calculated to hasten the industrial education of the country. No useful purpose is served by denying that Indians are, at present, lacking in the qualities of industrial leadership and in industrial knowledge. But they are capable of learning the lessons which the West can teach them in these respects, provided they get proper opportunities and facilities for so doing. And if they fail to get the necessary initiation into up-to-date methods and new ideas at the hands of foreign industrialists, the main object of allowing foreign capital to establish industries in the country will be defeated. While all this indicates the necessity of taking special steps in order to derive the fullest benefit from foreign enterprise, it does not deny its utility. As a matter of fact, in certain circumstances, foreign capital affords the only solution of the problem of economic development. This is why many countries, far from having a prejudice against it, find it profitable to go out of their way to take special measures for attracting it. This is also the reason why protection is sometimes supported on the ground that it induces foreign capital to seek investment in the country erecting tariff walls.

Another advantage claimed for foreign capital is that it bears the initial cost of development and smooths the path of indigenous enterprise.[1] This leads us to remark that, in considering the huge profits made by foreign capitalists in India (estimated at 16 million pounds per annum)[2] we must allow for the initial losses sustained by them. At the same time it should be borne in mind that it is a sign of weakness if a country always depends upon foreigners for taking the risks attendant upon industrial enterprise.

§ 20. **Proposed restrictions on external capital.**—On a consideration of the advantages and disadvantages of foreign capital, we come to the conclusion that, although we must not receive it too freely and with an excess of compliment, it has an important role still to perform in the industrial development of the country, provided its operations are brought under suitable regulation and it is subjected to certain restrictions. The restrictions have to be devised so as to reconcile two conflicting sets of considerations. On the one hand, foreign capital must be attracted in just the required quantities and of just the required kind. If the

[1] The history of European enterprise in India is briefly dealt with in D. H. Buchanan's *Development of Capitalist Enterprise in India*, ch. iii.

[2] See *External Capital Committee Report*, par. 7.

restrictions are too rigorous, external capital is likely to be scared away, to the detriment of the country. On the other hand, the total absence of restrictions or excessive leniency in imposing them carries with it the danger of foreign capital occupying the whole field of remunerative industry without any corresponding advantage to the country. The kind of restrictions proposed are as follows:

(i) Foreign companies should be incorporated and registered in India with a rupee capital so as to offer facilities for investment to Indians and to identify the management with Indian national interests. The objection that this restriction is likely to be evaded by the formation of private instead of joint-stock companies is met by pointing out that the large capital necessary for modern industrial enterprises cannot ordinarily be raised by private firms and that, in any case, if such an evasion is seen to occur on a large scale, special legislation might be passed to prevent it.

(ii) Secondly, a proportion of the shares of such companies should be reserved for Indian investors in order to ensure sufficient Indian control on the management. A less extreme variant of this is that this proportion should be reserved for Indian subscribers in all new flotations for a definite period of time. It has been objected against this provision that it would be utterly useless, unless restrictions were placed on the free transferability of shares subscribed to initially by Indians, but if the free transferability were impeded, the Indian shareholder would be penalized as the result of a restricted market for his shares and the consequent loss in their value. On the other hand, the reservation of a certain proportion of the shares for Indians would so far limit the amount of capital in the industry, and by lessening competition would increase the yield to it, but this in its turn means that the capitalist would gain at the expense of the consumer. Lastly, it is objected that it would be practically impossible to prevent the evasion of all such restrictions.[1]

(iii) Thirdly, it is proposed that a certain percentage of the directors should be Indians, preferably chosen by the Indian shareholders. The objection that this restriction savours of a narrow racial communalism, which is, moreover, fatal to businesslike and efficient management, has been met by the counter-argument that the very idea of imposing certain disabilities on foreign capital because it is foreign, is a kind of communalism which, on other grounds, is nevertheless regarded as necessary. Even England has not been free from the taint of communalism, meaning thereby

[1] *External Capital Committee Report*, pars. 21-3.

a certain amount of discrimination against the foreigner. In illustration of this, Pandit Malaviya points to the provision of the English Overseas (Credit and Insurance) Act 1920, restricting the grant of credit only to such firms as possess a predominantly English character. Similarly, in India, even under the free-trade regime, the Government had already accepted the necessity of such restriction whenever concessions were granted to private companies.

(iv) Fourthly, it is proposed that all companies, Indian and non-Indian, should provide facilities for the training of Indian apprentices and that penal taxation should be imposed for non-compliance.

It is more or less generally agreed that some such restrictions on foreign capital are necessary for minimizing its disadvantages and maximizing the advantages. Such restrictions have actually been legalized in the Indian Steel Industry Protection Act of 1924. There is, however, a difference of opinion as to the cases to which they should be applied. The Majority Reports of the Fiscal Commission and the External Capital Committee, for example, would prefer to impose these restrictions only when a definite concession or pecuniary assistance, such as a bounty, has been granted by the Government to companies, their general objection to the wholesale imposition of these conditions in all circumstances being that they would be too onerous and would therefore be evaded, or, if not capable of being evaded, would frighten away foreign capital almost completely. The Minority Report of the Fiscal Commission, on the other hand, argues that protection in itself constitutes an important concession and that logically no distinction can be made between favouring an enterprise by definite concessions like bounties and favouring it by admission to the benefit of a general system of protection, and it opines that the restrictions proposed above should be applied in all cases, whether particular concessions are granted or not.

The general conclusion that emerges from the above discussion is that, in the first place, external capital is in some measure necessary in the present circumstances for the purpose of hastening industrialization and shortening the period of the consumer's sacrifice (which will continue so long as protective tariffs are maintained) and for providing it with the modern equipment of industry. In the second place, however, the inflow of external capital must be controlled so as best to fulfil the objects specified above. How exactly and in what circumstances this control should be exercised is a matter more of detail than of principle. The difference of opinion between the Majority and Minority Reports of the Fiscal Commission, to which we have referred, arises from

the fact that the Majority have a very limited faith in the efficacy and wisdom of the proposed restrictions, whereas the Minority entertain a positive bias in favour of them. But there is a fundamental agreement between them as regards the national end to be achieved by the regulation of foreign capital.

How far the methods of regulation suggested will be effective in attaining the aims kept in view, can only be decided by a process of trial and error. If a particular type of control is found in practice to be injurious, it is always possible to withdraw it or supply a corrective to suit the circumstances of each case. We do not think that irreparable injury will result from beginning with comparatively stringent regulations on the lines recommended by the Minority Report; if they are found unsuitable, they can be changed and moderated as may be demanded by circumstances. We do not believe that capital, that may be scared away as a result of restrictions which prove by experiment to be too severe, cannot be coaxed back again by relaxing them if and as necessary. A certain initial bias, however, in favour of restrictions on foreign capital would be in consonance with non-official Indian opinion and would be interpreted as a friendly gesture on the part of the Government and a sign that they were prepared whole-heartedly to pursue a policy of encouragement and support to Indian industries.

One of the points urged in favour of exercising great circumspection in the matter of controlling the inflow of external capital is that foreign capital (in Europe) is no longer so easily available as before the War. The amount of capital in India that is at present lying infructuous is, however, so great that, if proper means are found to attract it, India will be in a position to forgo the use of foreign capital altogether. There is even justification, according to the late Sir Basil Blackett, for the optimistic view that India will before long be in a position, not only to dispense with foreign capital, but to lend to other countries a considerable surplus that will be left after fully satisfying her internal needs.

§21. **Position of foreign capital under the 1935 constitution.**— Grave doubts have been expressed as to how far it would be possible, under the new constitution, to control in the national interest the operations of British capital. The Government of India Act of 1935 contains the following provisions with respect to discrimination, etc.

Section 111 lays down that a British subject domiciled in the United Kingdom is to be exempt from the operation of so much of any federal or provincial law as (*a*) imposes any restriction

on the right of entry into British India; or (*b*) imposes by reference to place of birth, race, descent, language, religion, domicile, residence or duration of residence, any disability, liability, restriction or condition in regard to travel, residence, the acquisition, holding or disposal of property, the holding of public office, or the carrying on of any occupation, trade, business or profession.

Section 112 prohibits the imposition of discriminatory taxation against British subjects domiciled in the United Kingdom or Burma or companies incorporated there, whether before or after the passing of the Act.

Under section 113, a company incorporated in the United Kingdom, whether before or after the passing of the Act, and the members of the governing body of any such company and the holders of its shares, stock, debentures, debenture stock or bonds, and its officers, agents, and servants, shall be deemed to comply with so much of any federal or provincial law as imposes in regard to companies carrying on or proposing to carry on business in British India, requirements or conditions relating to or connected with (*a*) the place of incorporation of a company or the situation of its registered office, or the currency in which its capital or loan capital is expressed; or (*b*) the place of birth, race, descent, language, religion, domicile, residence or duration of residence or domicile, residence or duration of residence of members of the governing body of a company, or of the holders of its shares, stock, etc., or of its officers, agents or servants.

Any concessions with regard to taxation depending on compliance with conditions as to any of the matters mentioned above will be enjoyed automatically by companies incorporated in the United Kingdom and carrying on business in India.

Under section 114, a British subject domiciled in the United Kingdom shall be deemed to comply with any law in British India imposing, in regard to companies incorporated in British India, any requirements or conditions relating to, or connected with, the place of birth, race, descent, language, religion, domicile, residence or duration of residence of members of the governing body of a company, or of the holders of its shares, stock, debentures, debenture stock or bonds, or of its officers, agents or servants.

In so far as, in the case of any such companies as aforesaid, any total or partial exemption from, or preferential treatment in respect of, taxation imposed by or under any federal or provincial law depends on compliance with conditions as to any of the matters aforesaid, then, so far as regards such members of its governing body and such of the holders of its shares, stock,

debentures, debenture stock or bonds, and such of its officers, agents and servants, as are British subjects domiciled in the United Kingdom, any such company shall be deemed to satisfy those conditions and be entitled to the exemption or preferential treatment accordingly.

Under section 115, no ship registered in the United Kingdom is to be subjected by law in British India to any treatment affecting either the ship herself, or her master, officers, crew, passengers or cargo, which is discriminatory in favour of ships registered in British India.

This section applies to aircraft also.

Under section 116, companies incorporated in the United Kingdom and carrying on business in India are to be eligible for any grant, bounty or subsidy for the encouragement of any trade and industry to the same extent as companies incorporated in British India.

An Act of the federal or provincial legislature may, however, require in the case of a company, which at the date of the passing of that Act was not engaged in British India in that branch of trade or industry which it is the purpose of the grant, bounty or subsidy to encourage, that the company shall not be eligible for any grant, bounty or subsidy under the Act unless

(*a*) the company is incorporated in India, and

(*b*) such proportion, not exceeding one half, as the Act may direct are domiciled in India; and

(*c*) the company gives such reasonable facilities as may be so prescribed for the training of British subjects domiciled in India.

For the purposes of this section a company incorporated in the United Kingdom shall be deemed to be carrying on business in India if it owns ships which habitually trade to and from ports in India.

Sections 113 to 116 are subject to the proviso that no company incorporated in, and persons domiciled in the United Kingdom are to receive any benefit under them unless the law in the United Kingdom confers reciprocal benefits there on companies incorporated and persons domiciled in India. Section 117 explains that nothing in the above provisions is to affect the operation of any existing Indian law.

Section 118 lays down that, if after the establishment of the Federation a convention is made between His Majesty's Government in the United Kingdom and the Federal Government whereby similarity of treatment is assured in the United Kingdom to British subjects domiciled in British India and to companies

incorporated in British India, and in British India to British subjects domiciled in the United Kingdom and companies incorporated there in respect of matters with regard to which provision is made in the preceding sections, His Majesty may, if he is satisfied that all necessary legislation has been enacted in both the countries for the purpose of giving effect to the convention, by Order in Council declare that the purposes of those sections are, to such extent as may be specified in the Order, sufficiently fulfilled by that convention and legislation and while any such Order is in force, the operation of those sections shall to that extent be suspended.

Besides the statutory provisions indicated above, the Instruments of Instructions of the Governor-General and the Governors give wide discretionary powers to them in the matter of assenting to bills, enabling them to withhold their assent from any measure which, though not in form discriminatory, would in their judgement have a discriminatory effect. In case of doubt as to whether a particular bill does or does not offend against the intentions of the Constitution Act in the matter of discrimination, the Governor-General and Governors are required to reserve the bill for the signification of His Majesty's pleasure.

In view of all these provisions it is clear that under the new constitution the country will not enjoy complete fiscal autonomy in the sense of full freedom to use tariffs, bounties and subsidies for the encouragement of Indian trade and industry. The principle of reciprocity by which no restrictions will ordinarily speaking be imposed on British enterprise in India unless similar restrictions are imposed on Indian enterprise in the United Kingdom is meaningless, and has little value in practice when we realize that there is no Indian enterprise in the United Kingdom competing with British enterprise. To invest this principle with any real meaning it would be necessary to secure the rapid advance of Indian industry and trade until they become comparable to British industry and trade in point of strength and vigour. On a literal reading of the provisions against commercial discrimination any action that may be felt to be necessary in the national interests and in self-defence against the competition of powerful British concerns operating in India will be attended with the most extraordinary difficulties. Whether the position under the new constitution will be better or worse than before will depend on whether the new legislatures will be more progressive in their outlook than the old legislatures. It will also depend on the manner in which the wide discretionary powers vested in the Governor-General and Governors are used.

§22. **Need for developing internal capital resources.**—It is obvious that the greatest advantage will be realized when the country is in a position to satisfy her requirements for new capital almost entirely from internal rather than from external sources. As the External Capital Committee remark: 'The real solution of the problem of external capital lies in the development of India's own capital resources.' In order to draw out the 'vast store of dormant capital' in existence in India, 'banking facilities must be increased and extended'.[1] The important subject of the development and reorganization of Indian banking, as also the recommendations of the Central Banking Enquiry Committee and the Provincial Banking Enquiry Committees, will be pursued in a separate chapter on Banking.[2]

The replacement of foreign by indigenous capital implies that industries should not only be financed by Indians but also owned and managed by Indians. This latter point, however, has already been dealt with earlier in the chapter.

[1] See *External Capital Committee Report*, Summary of Recommendations.
[2] See vol. II. ch. x.

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