GOVERNMENT OF MADRAS.

REPORT OF THE ECONOMIST FOR ENQUIRY INTO RURAL INDEBTEDNESS

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RAO BAHADUR DR. B. V. NARAYANASWAMI NAIDU,
M.A., PH.D., B.COM., Bar.-at-Law.

PRINTED BY THE SUPERINTENDENT
GOVERNMENT PRESS
MADRAS
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REPORT OF THE ECONOMIST FOR ENQUIRY INTO RURAL INDEBTEDNESS.

CHAPTER I.

INTRODUCTORY.

The Economist for Enquiry into Rural Indebtedness was appointed in G.O. No. 5327, Development, dated 16th December 1944.

The circumstances leading to this enquiry may be briefly mentioned. In their letter, dated 5th August 1943, addressed to the Provincial Governments, the Reserve Bank of India, Agricultural Credit Department, Bombay, argued as follows: We observe that the problem of Rural Indebtedness which, along with a few others, had practically monopolized Government and public attention and evoked considerable legislative activity during the last depression, appears to have been relegated to the background almost to the point of being forgotten with the easing of the situation brought about by the recent rise in prices. When the conditions assume normality, debtors' difficulties will begin to show themselves and should there be another depression, they will be accentuated once again, unless the future is anticipated now and timely and suitable action taken. Under the conditions created by the war, agricultural incomes must have considerably increased and the burden of debt become much lighter. The present, therefore, seems to us to offer unique opportunities for a positive action for tackling the problem, which, if exploited to the full, might ward off the resurgence in the post-war period of many of the debtors' difficulties . . . We suggest that while planning action, Government must make sure of the ground by having sample enquiries conducted rapidly in typical areas with a view to finding out the extent of indebtedness on the eve of war; how it has been affected by the subsequent developments; how agriculturists and money-lenders have reacted to them; what are the tendencies at work for and against the utilization of incomes for the liquidation of old debts, etc.

The necessity for a comprehensive enquiry into rural indebtedness was later pointed out to the Provincial Governments in a letter, dated 29th February 1944, by the Government of India at the instance of the Reserve Bank.

2. I was appointed with the following terms of reference:—

(1) To find out the extent to which cultivators are repaying their debts to co-operative societies and others as a result of the present rise in the price of agricultural produce;

(2) to investigate and report on the extent of the remaining agricultural indebtedness.

3. I was asked to draw up immediately a detailed scheme as to how the enquiry should be conducted, in how many villages and through what agency, etc., and to forward it to the Government through the Board of Revenue. After indicating the broad outlines in my letter, dated 10th January 1945, I submitted on 8th February 1945 a comprehensive and detailed scheme with all the schedules and questionnaires.

4. Staff, consisting of one Personal Assistant, one Chief Investigator, and twelve Investigators, one stenographer and two peons, was sanctioned for work connected with the enquiry. Mr. K. S. Sonachalam joined duty as my Personal Assistant on 18th May 1945. After interviewing about sixty candidates on the 29th May, I selected the twelve Investigators and one Chief Investigator who joined in June and July respectively.

5. The field work of the Investigators commenced in the middle of June 1945 They were appointed originally for a period of six months. As this period was found to be too short and inadequate, Government extended the period by

three months. Some of the Investigators returned from the various districts in which they worked in the last week of January and others in the first week of February 1946 and were engaged throughout the latter month in tabulating the huge mass of data they had collected. Yet some amount of tabulation remained to be done and most of the Investigators volunteered to work on the materials for about three weeks in March even after the expiry of their term of appointment. Additions, subtractions and divisions involved in reducing the immense data into convenient statements had been very great and I was able to get this done by a comptist with a mechanical calculator.

6. In the meantime questionnaires were issued to officers of the Revenue, Agricultural and Registration departments as also to non-officials, particularly landholders and money-lenders who have transactions with agriculturists, and numerous Agriculturists, Ryots, Kisan and Mirasdars' Associations. Schedules were sent to the Co-operative department and all civil courts in the Presidency to be filled up and returned to me before 30th November 1945. Answers to questionnaires, especially from non-officials, were received as late as February 1946. However out of 800 only 247 persons and associations responded by sending memoranda. Between August 1945 and May 1946, I visited almost all the district headquarters and interviewed more than 600 witnesses consisting of representative landholders, tenants and labourers, money-lenders, non-officials connected with the co-operative movement—presidents of co-operative societies and land mortgage banks—and officers of the Agricultural and Co-operative departments. I also inspected 32 out of the 160 villages selected at random and checked the work done by my Investigators. In these villages, I met all classes of villagers—big and small landholders, tenants and landless labourers. I always took particular care to avoid officials during my inspection visits to the villages and discussed freely in their mother tongue with the villagers. All the vital aspects of the problems confronting them were thrashed out and these discussions proved to be of considerable value in gauging the real situation in the various parts of the Province. It may be noted that the villagers, in general, were frank in expressing their opinions regarding the effects of war-time prices of agricultural produce and war-time rise in the cost of cultivation and cost of living; however I was able to detect a tendency to minimize the effects of the former and exaggerate those of the latter.

7. The mainstay of my investigation into the problem of indebtedness is the enormous amount of figures carefully gathered by my field workers in 16 schedules each of about 9,000 family questionnaires. They contain facts and figures concerning population, land owned and held on lease, livestock and implements, savings and investments, loans and borrowings, sales and purchases, income and expenditure, insurance and extravagance of each of these families. The results obtained therefrom are compared with the data supplied by the various Government departments and opinions given by the non-official bodies and private individuals. It is of interest to note that they tally to a considerable extent.

8. To furnish the figures required by me, the Co-operative department asked and obtained the sanction for the appointment of a special staff consisting of one Co-operative Sub-Registrar and one Junior Inspector of Co-operative Societies, who worked for about three months and forwarded to me an abstract statement showing loans, interest payments and advance repayments of capital of the primary as well as land mortgage banks.

9. I also issued an elaborate questionnaire to over 600 Sub-Registrars in the Presidency through the Inspector-General of Registration to elicit their considered opinion on the following issues: frequency of sales and mortgages in the war years compared with the pre-war years, the trend of land prices during war time, the fluctuations in the rates of interest and last but most important on the various kinds of loans the average duration of a mortgage loan. It is gratifying to note that there was a cent per cent response. The opinions of these experienced officers of the Registration department cannot be lightly set aside.

10. Before concluding this chapter, I would like to acknowledge my debt of gratitude to my Investigators—Messrs. S. Chidambaram, M.A., N. V. Gopalakrishnaswami, M.A.,* P. S. Gopinathan Nair, B.A., P. Gurusironmani, B.A., B. K. Jayarama Rao, M.A., T. S. Krishnamachari, B.A., K. Mohanarangam, M.A., C. V. Munuswami, M.A., M. Narasimha Rao, B.A. (Hons.), A. Narayana Rao, B.A. (Hons.), G. Santhana Babu, B.A. (Hons.), and S. P. Subbiah, B.A., who have faithfully followed my instructions in all detail in collecting the data. They had to visit a number of villages in the remotest parts of the Presidency bearing all difficulties cheerfully. I have nothing but praise for their work. My thanks are due to non-officials who came forward to give both written and oral evidence at various district headquarters. I am thankful to the various officials, Board of Revenue, particularly to the three successive Joint Secretaries, Messrs. R. Galletti, I.C.S., S. M. Hasan, I.C.S., and K. N. Anantaraman, I.C.S., and I must acknowledge with thanks the various suggestions given to me by Mr. R. Galletti in connexion with this enquiry which were of immense benefit. This elaborate enquiry required information from various sources, particularly from the Registration, Judicial, Revenue, Co-operative and Agricultural departments. My thanks are due to all the heads of the departments, particularly to the Registrar of Co-operative Societies who placed unreservedly the service of the officials of his department at my disposal.

Throughout this enquiry, I received considerable help from Dr. D. Bright Singh, M.A., PH.D., and Mr. V. Anjaneyulu, M.A., M.LITT., Chief Investigator.

I am particularly thankful to Mr. K. S. Sonachalam who has spared no pains in collecting the necessary data and information for this report. Owing to my other preoccupation he has been virtually in charge of the administrative side of my office. As a teacher of economics of considerable experience, he brought to bear his mature sense of criticism and helped me a great deal in drafting this report.

My thanks are also due to my stenographer Mr. R. Venkatanarayanan and my typist-clerk Mr. C. Sundaram.

Finally, I am extremely thankful to the Government of Madras for having acceded to my request that I would be an honorary, instead of a paid full-time, Economist for conducting this enquiry.

* Left in the middle of September 1945.

CHAPTER II.

General Description of the Madras Presidency.

11. The Madras Presidency is diverse in its physical characteristics, in its regions and resources and in its geographical patterns. Situated in the southernmost part of the Indian peninsula, it has a coast line on the east extending from Vizagapatam in the north down to Tinnevelly district in the south. Facing the Bay of Bengal it covers a distance of nearly 1,200 miles. The West Coast begins with the outskirts of North Canara in the Bombay Presidency and sprawls down South Kanara, Malabar and Cochin comprising a distance of 450 miles and washed by the Arabian Sea. Surrounded by sea on three sides, it has as its boundary on the north a zig-zag land line separating it from the adjoining Orissa Province in the north-east and the tableland of Central Provinces. The River Kistna and its tributary Tungabhadra mark it out from the Nizam's Dominions. On the extreme north-west its territory is delimited by the North Canara district of the Bombay Presidency. The Native States of Mysore, Coorg, Pudukottah and Travancore lie within or adjacent to the boundaries of the Madras Presidency.

12. Standing on the pre-eminent peak of Doddabetta in the Nilgiris one can have a panoramic view of hills and dales, lakes and water-falls, plains and highlands; one can also discern, if distance is no bar, that this variegated physical structure is the creation of the rugged fastnesses of the Eastern and Western Ghats. They run counter to each other along either coast at a distance of 50 to 100 miles from the sea. These ranges of mountains frequently shoot up to 3,000 to 4,000 feet. The Eastern Ghats stretch across the Presidency in the south-westerly direction and touch the Western Ghats at the Nilgiris upheaval. The great rivers of Godavari, Kistna and Cauvery as also the various rivulets force their way through Eastern Ghats and glide across the broad expanse of low land beyond and empty themselves into the sea. The Western Ghats—a steep rugged mass—run almost parallel to the sea coast southward without any break, except for the sixteen-mile-wide Palghat Gap. Rising steeply as they do to a height of 5,000 and 8,000 feet at a distance of 10 to 15 miles from the Coast, they obstruct the rain-bearing clouds and precipitate rainfall. These twin mountain ranges have outliers scattered all over the Province, known by different names in different regions like Sheveroys in Salem, Anamalais in Coimbatore and Palni Hills in Madura.

13. The three vital rivers of Godavari, Kistna and Cauvery have their origin in the remote recesses of the Western Ghats in the Bombay Presidency. Neither for navigation nor for irrigation are they useful in their upper reaches; but in the plains they lend themselves to be dammed up and regulated to irrigate the alluvial deltaic regions. These arterial rivers which flow for hundreds of miles at a stretch have extensive basins. There are also rivers of secondary importance like Pennar, Palar, Vellar, Vaigai and Tambraparni which all flow eastward. Rivers on the eastern side of the Western Ghats traverse wider sweep of land and from ancient times some of them have been harnessed for agricultural purposes. On the contrary, rivers on the western side, after a torrential flow waste their waters into the sea.

14. There is considerable divergence in climate, rainfall and soils from region to region. The variations in climate and agricultural production as among the different areas is to a great extent due to the Western Ghats. These steep spurs of hills act as a barrier to the low rain-laden clouds of the south-west monsoon and cause precipitation of excessive rain on the narrow coastal strip of the west to the disadvantage of the districts that lie on the eastern side of

the hills. While the regions of the West Coast enjoy a copious rainfall of 100 to 150 inches, the Central districts derive at the most 20 inches of rainfall a year from this monsoon, constituting thus a rain-shadow region. At those points where the Western Ghats are of a lower altitude, the monsoon clouds cross these hills resulting in uncertain rainfall over the country to the east of the ghats. The Northern districts too derive measurable benefit from the south-west monsoon. The regions in the south-east of the Presidency have heavy rainfall only during the period of north-east monsoon, while the West Coast enjoys clear weather due to the obstruction of the Western Ghats. The West Coast with its abundant rainfall and more salubrious climate throughout the year is in striking contrast with the East Coast and the interior tableland with their low rainfall and excessive heat in summer. Almost the entire East Coast is exposed to cyclones and storms which do considerable damage to low-lying regions.

15. The presence of numerous irrigation works of all kinds on the eastern part of the Presidency is due to precarious rainfall. The districts on the West Coast do not require such water storage facilities as tanks, wells and canals because of the regularity of seasons and abundance of crops. Thus only two districts have the unique advantage of copious and timely rainfall. Fairly regular showers supplemented by canal irrigation protect the districts in the northern coast from drought. The central regions and the uplands of the south get only moderate rainfall which is at times freakish. The precarious rainfall of the Deccan plateau spells not infrequently famine in those areas. It has to be noted that in all these districts deficient rainfall is erratic in amount and distribution as well, while in the Deccan and in the Central districts the arid weather accentuates this deficiency.

16. The areas of scarce rainfall usually suffer from soil deficiency. The rich alluvium of the hilly and undulating country is washed away and deposited in deltas and river reaches so that vast tracts of the tableland are left only with the residuary black cotton soil. In general, the soils of the Presidency are composed of light gravel or sandy surface with hard sub-soil of gravel. The black cotton soil wherever it is formed is mostly of the inferior type.

17. The physical and geographical factors varying greatly from region to region, wield considerable influence on the character of the people. In the deltaic areas of the Northern districts the easy certainty of a crop has blunted the edge of husbandry and the cultivators are not industrious. The dour lands of the Deccan with their shaggy wildernesses of stone and the consequent stubbornness of nature compel the cultivating classes to be very enterprising and diligent. The ryot of Tamilnad has infinite capacity to do unremitting hard and useful work which yields him fairly good returns, since the land he cultivates is not only better but also has ample irrigation facilities. The cultivator on the West Coast has plenty of rainfall which makes the country rich in resources; but abundant rainfall and heat cannot be described as an unmixed blessing.

18. There is a contrast between the rural areas of the East and the West Coast. On the East Coast one finds in the rural parts straggling heaps of huts situated close to one another, the villages looking congested and squalid. The snug and solid structure of homesteads, dispersed at a distance on the West Coast, are in refreshing contrast to the huddled huts in the rural parts of the East Coast.

19. *Area and population.*—The total area of the Presidency is 126,160 square miles out of which 6,791 square miles fall under Agency tracts in the districts of Vizagapatam and East Godavari. With the formation of the Orissa Province there is a diminution in area as a result of realignment of district boundaries. In area, the Madras Presidency is one and one-third as big as England and Wales put together. In population Madras with its 49,841,810 according to the 1941 census is by nearly eight millions greater than the United Kingdom. The

growth in the total population as also in rural and urban population of the Province is indicated in the following table:—

Year.	Total population.	Rural.	Urban.
1911	41,405,404	36,512,778	4,892,626
1921	42,318,985	37,040,280	5,278,705
1931	46,740,107	40,402,815	6,337,256
1941	49,341,810	41,476,927	7,864,883

20. *Urban and rural population.*—Over a period of thirty years the population has grown by 18·96 per cent approximately. The process of urbanization has been proceeding at a quick pace, though a predominant section of the population is still rural. While in 1911 there were 36·51 million people dwelling in 53,835 villages, in 1941, 41·48 millions forming 84 per cent of the population inhabit only 35,430 villages, thus showing a reduction of no less than 18,405 villages. As against this fall in the number of villages, it is obvious that there is a growth in their size.

21. *Density.*—The distribution of population over the different regions is determined by the productivity of land and other environmental factors. Density is generally the index of the economic condition of the areas, even though many variables enter into it. As Madras is mainly an agricultural province, the inter-regional variations in population have necessarily a bearing on the condition that govern agricultural economy. While the density of population is very high in the districts of the West Coast, it is very low in the Agency Areas and in the arid Ceded districts. Areas of infertile soil, scarce rainfall and interior tablelands, are marked by sparse population, but as one approaches the coastal belt the density of population tends to increase. The deltaic areas of Godavari and Kistna in the north and those of Cauvery in the south are densely populated owing to the low level of the plains, the rich alluvial soil and the good canal irrigation.

22. *Occupational distribution.*—Agriculture is the mainstay of the rural population, since a great proportion are engaged in the production of raw materials. Here it is necessary to make a distinction between rural and agricultural population. Agricultural population may be defined to include all persons actually occupied in agriculture and it may also comprise the dependent members of their families in a liberal sense of the term. But rural population cannot so simply be ascertained without some arbitrariness. For instance, in the Census reports of 1921 and 1931, all those residential areas inhabited by more than 5,000 persons and possessing some characteristics of urban life were considered as towns, and a village was taken essentially to be a unit of revenue administration which may or may not be inhabited. It is also the case that there are nucleus villages which have a number of hamlets around them. The administrative criterion which distinguishes rural areas from urban areas mostly on the basis of population is crude. It is both feasible and desirable to make such a distinction on the basis of the proportion of the total population dependent on agriculture in a particular area.

23. According to the census of 1921, 71 per cent of the population were occupied in agriculture. In 1931, it was estimated that 50 per cent or over were actually employed in agriculture and when the dependants were taken into account it was calculated that the figure would work up to 71 per cent. Only 13 per cent of the population were engaged in industrial pursuits in 1921 and this stepped up by 3 per cent in 1931.

24. The occupational statistics of 1931 reveal that there was a marked reduction of those employed in cultivation—especially non-cultivating owners and tenants along with actual cultivators and those employed in raising special crops—compared with the census figures of 1921. But this decrease was attributed to more accurate censusing. The number of agricultural labourers showed an increase in 1931. An analysis of the occupation figures would show that the proportion of non-cultivating tenants is low. This is a pointer to the growing pressure of population on land.

25. The special significance of agriculture in this context is that a great proportion of the population are engaged in it. Out of the total area of 79·88 million acres, 31·89 million acres constituting 39·9 per cent of the total area was under cultivation in 1943. But in spite of its importance, agriculture is inextricably tied to monsoons and this excessive dependence exposes the economy to operations which are a gamble in rain.

26. *Seasons.*—The cycle of monsoons is of basic importance to the agriculturists of the Province. The agricultural year commences with the last week of June. The south-west monsoon brings rain between June and September, while the north-east monsoon spreads itself over October to December. The dry season extends from January to March and it becomes hot from April to May. It is the south-west monsoon blowing from the Indian Ocean that is important as a rain-bearing current.

The calculations of the peasants are upset by the vagaries of the monsoons and agriculture is rendered a deficit economy.

27. *Land tenures.*—The systems of land tenure temper the conditions of agricultural production. In the Madras Presidency, apart from the well-known systems of land tenure, the methods of holding and cultivating land manifest a bewildering variety differing from region to region. The existence of such a variety of relationships between the owner and the actual cultivator has complicated an already complex problem. The rigidities inherent in the tenures retard the efficiency of primary producers and clog the progress of agriculture.

There are three principal land systems known as the ryotwari, zamindari and inam tenures. The tenures on the West Coast have some distinct characteristics of their own, though so far as the Government is concerned they do not differ from the ryotwari system.

28. *Ryotwari system.*—The ryotwari system is the principal tenure of the province. The system defies precise definition. It is best described in its actual working. Under this system the peasant is the proprietor and tax-payer of the land and the Government deals with him direct without the intervention of a middleman or a tax-farmer. He is held responsible for the payment of the entire land revenue on his holding unless he happens to be a joint pattadar. The ryot who is often a small holder is entitled to remain in possession of land acquired by him so long as he pays the land revenue. In case of default his land is liable to be put to sale for realizing the revenue demand. But he is not dispossessed on any other account. Even assessed waste land can be occupied by any ryot with impunity so long as no one else with more reasonable claims takes possession of it by a resort to a Court of Law.

The ryotwari lands, assessable for a term not exceeding thirty years, are held by the owners on a simple and perfect title subject to the payment of fixed assessment. The landholder has absolute discretion to sell, mortgage, gift or lease his holding.

The patta granted to the ryot when he acquires possession of land is not to be ranked with the title-deeds of the zamindars. It is not a muniment of title but only a document listing the fiscal relations that should subsist between the Government and the ryot.

29. *Zamindari system.*—Next in importance to the ryotwari land system comes the zamindari tenure. Some estate-holders, in early times, were recognized as the proprietors of both waste and cultivated lands. Of these estates, some were in existence even before 1802 with a title-deed from the Government vesting proprietary rights in the zamindars on two conditions; that an assessment fixed in perpetuity was paid regularly and that they gave written pattas to their tenants. The inheritance of these estates is restricted by primogeniture. The

estates which came into existence after 1802 are similar in all respects except that they are not subject to the impartibility of the Estates Land Act and the operation of the law of primogeniture. There are also some estates to which the Government did not grant title-deeds on specific terms of tenure. Even though there are no 'sanads' these estate-holders enjoy the same security of tenure and their revenue unwritten, but bound by convention is really fixed in perpetuity.

The estates which are divisible are also alienable according to the law of transfer of property. Hence the process of subdivision is bound to result ultimately in the parcellation of such estates.

30. While the relationship between the zamindars and the Government is explicit and well-defined in the title-deeds, there is no such statute which lays down in clear terms the rights of the cultivators. This land system is the upshot of revenue-farming according to which the revenue collection of a particular region was put out to tender during the Moghul period. With the lapse of time, the zamindars who were originally tax-collectors acquired hereditary rights over such land as was in their charge. The British administrators misconstrued the system as analogous to landlordism of the English type whereas the Moghul inventors of the system had definitely no idea of conferring on the zamindars a landlord property in the soil. The system of permanent settlement led to a good deal of friction on account of illegal exactions from and rack-renting of their tenants. The substitution of village leases was mooted at one time to curb rank abuses. The Estates Land Act Enquiry Committee set up by the Ministry under Provincial Autonomy has gone into this question mainly with a view to correcting the inequities of this tenure.

31. Nearly one-third of the total area of the Presidency is under the zamindari tenure. It obtains most in the northern districts, less in the south, and is non-existent in the Ceded districts, South Kanara and Malabar. While the zamindar pays "peshkash" on his estates to the Government, his tenants pay him a fixed revenue assessment. The tenant in the permanently settled areas has occupancy rights. He can also alienate his land without any restriction. But his lands can be sold up by the zamindar for default of payment of rent, he can be evicted, too, for non-payment of rent and for predatory cultivation or similar abuses of land.

32. *Inams.*—A large number of holdings are under the inam tenure. These "inams" or "manyams" are gifts made mostly by the earlier Governments on specific conditions that they should not be alienated without the prior consent of the Government, that they would escheat to the Government in the absence of male heirs in the direct line and that they would be annulled for lapses. In the case of some inams the Government would resume them after a certain number of successions by inheritance. Inams were given for religious and State services. In such a way there were a variety of inams which greatly varied, in size, character and content. Lands are given away as inams in some cases while in certain other cases the inam pertains only to land revenue. In 1858, the Inams Commission enfranchised those inamholders who were willing to pay nominal quit-rent which was to serve as a commutation of the rights of the Government. These inamholders who did not take advantage of the terms offered continue on the old lines of the inam tenure which are definitely inferior to the tenure of the enfranchised inamholders and even to that of the ryotwari-holders.

33. *Malabar and South Kanara.*—The land systems of the West Coast are peculiar and a little different from those of the other parts of the presidency though that difference is not basic and exclusive. The variation in land tenures on the West Coast is the result of physical structure and local customs. The tenancies here are more permanent since the lands are leased out for a longer period.

34. The land system in Malabar is popularly known as the janmi tenure. The janmi has a special right in the soil and he leases out land to the cultivators by taking money advances from them for a specified period which usually extends over a term of twelve years. The acquisition of the land by the cultivator is connoted by the term "kanam" which means "possession." The rent is paid to the janmi after deducting interest on the amount advanced and the revenue assessment of the land. If the janmi wants to resume possession of the land after the lease term expires he has to compensate the kanamdar for the permanent improvements effected on land. In the case of renewal of the deed the janmi can impose additional levy on the amount originally advanced in the form of renewal fee which will neither be shown in the deeds nor be returned to the tenant. The janmi is entitled to compensation before the lease term is over if the land deteriorates due to the neglect of the tenant.

35. There are also other types of tenure called panayam, kulikkanam and verumpattam. Under panayam tenure, possession of land is made over as security for money loaned. Rent is paid to the janmi after deducting the interest on the amount advanced at the rate prescribed in the deed, and the amount of land revenue in certain cases wherever it is conditional that the mortgagee should pay it to the Government. The janmi can take possession of the land after the repayment of the amount advanced at any time he likes, if the period is not specified in the deed. Usually the mortgagees are not allowed to make improvements on land, and as such, the question of compensation does not arise.

36. Lands which are unoccupied wastes are leased out on what is known as "kulikkanam" right for a period of twelve years or more for plantation purposes. At the time of the return of land, the value of improvements made will have to be paid to the tenant. In the case of kanam, panayam and kulikkanam systems, the tenancy rights are transferable and the leases are not affected by the death of the contracting parties provided there are surviving members on either side. The verumpattam deed is a simple one generally lasting for a year. The tenant pays rent commuted in terms of the specified share of the produce. When the lease is for over one year, the landlord gets in advance rent for not less than one year while the tenant receives no interest on the amount so advanced. But at the end of the lease the amount is either returned to the tenant or adjusted towards the payment of rent. A different kind of lease is Untaruti, according to which, the landowner is paid rent in advance for a number of years and the tenant is under no obligation to pay any further rent. At the end of the lease term, the landowner takes possession of the land. This system of lease is generally met with in the case of plantations.

37. The roots of the janmi system lie in the distant past. Though the tenure problem perplexed them to the extreme, the British recognized the janmis as landlords in 1792–93. The revenue assessment was not fixed equitably enough to leave an adequate margin both to the janmi and the kanamdar with their wonted shares or profits which, with the upsurge in prices, hit hard the tenants. The janmis who received greater income with the rise in agricultural prices realised it advantageous to insist on the upgrading of fees, at the end of the lease term for purposes of renewals. The lessees had to consent to the dictates of the landlords lest they should be evicted. This led to considerabe friction since there was a strong belief among a certain section of the tenants that they were mulcted. Attempts were made to remedy the inequities of the system through legislation calculated to control eviction and recognize the rights of tenants. Thus the land system in Malabar has at its apex the janmis, and the kanamdars who hold diversified forms of mortgage rights and under them the actual tenants who cultivate the land. Some of these tenants have their right to be compensated for permanent improvements and this protects them from eviction and stepping-up of rent.

38. *South Kanara.*—While the system of land leases in South Kanara has affinity with the Malabar land system yet it differs from it. Here the unit of holding is called "warg" and the landholder as "wargdar" or "mulwargdar." The "mulwargdars" are hereditary landholders with two classes of tenants under

them, one having stable occupancy rights in land so long as they pay rent, and the other being mere tenants-at-will. The "mulgenis" are permanent tenants under "mulwargdar" paying a fixed rent. They can sublet the lands, pledge them, and are also entitled in some cases to sell their interest in them, except where the title reverts to the landlord in the absence of any heir. But lands leased on this tenure are subjected to some restrictions, for instance, the lease would become null and void if the rent falls into arrears. The mulgeni tenant, just like the kanamdar of Malabar, may pay in advance a year's rent and appropriate a proportion of the usufruct as interest on this advance, and can also leave the land after he is reimbursed for any improvements made by him. The "chalgenis" on the other hand, are tenants under the "mulwargdars" or "mulgenis", working on year to year lease or even at will. The rents can be raised by the landholders in regard to these tenants who are liable to be evicted at any time whenever the period of lease is not specified, provided they are compensated for any improvements made to land. But in practice these tenants are rarely evicted unless they are heavily in arrears. The rentals of both the mulgenis and the chalgenis are paid in cash or in grain but there is no system of share-tenancy as it obtains in other parts of the Province.

39. *Yield and distribution of crops.*—A complex of interacting factors at work in every region, ranging from climatic fluctuations to land tenures, influence the rate of agricultural production, which is definitely low compared with that of other countries. The average yield of paddy per acre in Madras is 1,892 lb. while it is 3,920 lb. in Japan and 2,352 lb. in the United States of America. As for industrial crops like cotton and sugarcane, the average yield per acre in Madras is 161 lb. and 6,305 lb., respectively, but it is 207 lb. in the United States of America and 540 lb. in Egypt in regard to cotton; and 49,625 lb. in Canada and 85,447 lb. in America in the case of sugarcane. The low unit-yields of the staple crops are due to the tiny uneconomic holdings, the oscillations of climatic factors and indifferent cropping by ryots.

40. The distribution of cultivated area among the different crops indicates the structure of agricultural production. The following figures give the acreage under food and non-food crops with the total area under cultivation and percentages thereof from 1925 to 1945:—

Year.		Total sown area. IN ACRES.	Food crops. IN ACRES.	Percentage.	Non-food crops. IN ACRES.	Percentage.
1925–26	..	38,290,340	30,034,010	77·5	8,754,486	22·5
1930–31	..	39,193,201	30,470,033	78	8,723,168	22
1935–36	..	36,628,827	28,396,484	77·5	8,232,342	22·5
1940–41	..	37,343,724	27,826,422	74·5	9,517,302	25·5
1944–45	..	36,999,372	27,968,197	75·6	9,031,175	24·4

41. It is clear that non-food crops have been steadily gaining ground. In spite of the fact that food-production still overweights crop cultivation, a definite upward trend in the area under money crops like groundnut, cotton, tobacco and sugarcane has established itself. This gradual shift from food to non-food crops has been brought about by the profitability of the latter owing to the pull of external markets for them in the decade prior to 1935. In periods of shrinking international trade, the prices and profitability of the commercial crops begin to droop. They are most susceptible to the vagaries of world markets.

42. *Subdivision of holdings.*—The dependence of the bulk of the population on agriculture has reduced the average size of the holding; the process of slicing-up has been spread over time. The laws of inheritance, applicable to all the major religious groups in India have also actively helped the splitting up of land property with the growth of population. The result is excessive subdivision of holdings. The pace of this process of subdivision among the different classes of agriculturists with respect to the size of their holdings is not precisely known.

It is seen from the Settlement Reports that the average extent of land per patta in 1900–1901 was 6·85 acres and that it was reduced to 4·13 acres by 1940–41. But this does not reflect the exact position of the small holders as it includes both the big landlords owning extensive estates and the small peasants with a few cents of land. The classification on the basis of assessment shows that over a period of forty years, from 1900–1901 to 1940–41, the number of pattas have more than doubled. In 1900–1901 the number of pattas bearing an assessment, which ranged from one to thirty rupees, was 29·66 lakhs out of an aggregate of 32·99 lakhs; in 1940–41 their number has shot up to 62·76 lakhs, the then total being 66·89 lakhs.

43. The inference is that the pressure of population has reduced itself to a low man-land ratio. It is evident that the rural population of the presidency depend either directly or indirectly on agriculture. Hence the rural population may be taken into account for finding the man-land-ration in Madras. The extent of the net cultivated area per head of the rural population in 1943–44 was only 0·769 acre, on the basis of the recent census figures.

44. This brings into bold relief the ever-growing preponderance of small and medium-sized holdings. Even though the Hindu Law of Succession gives a direct impulse to partition and "morsellement" of land, prior to 1875 some regulations restricted the splitting up of fields marked off by the Survey department. But these checks were lifted in 1875 and at present the Government do not even set any limit to the size of a holding for the issue of a patta.

45. Subdivision, unchecked by the Government and accelerated by the laws of inheritance, gathers in due course momentum and reduces the land unit to a pitiably uneconomic size. When this tendency goes to indiscriminate lengths, it is bound to upset the balance between arable and pasture land, so essential to good farming and will ultimately undermine agricultural economy. It renders impossible a full use of modern agricultural implements on 'Lilliputian' holdings. The uneconomic size of the holding impels a certain section of cultivators to tap rapaciously the land-resources to eke out subsistence, which brings about soil-depletion and a decline in the acreage yield. Although it is claimed that intensive application of labour from the points of view of output and quality, is the forte of a small holding, excessive subdivision and dispersion of individual holdings in small parcels has made the problem acute; below a certain limit these land strips are neither sufficient for subsistence, nor adequate for economic operation. Excessive subdivision must be halted if Indian agriculture is to be saved. Subdivision has become a great economic menace to agricultural prosperity.

46. *Symptoms of population pressure on land.*—Land morsellement apart, other general symptoms of population pressure on land are a high proportion of cereal crops, a relatively low proportion of feed crops, low unit-yields of cereals and, at times, low density of cattle population. But these indices are not invariably direct pointers in all regions to over-population because regions vary in their set-up. Highly valuable as symptoms though they are, they are not always infallible tests. As ancillary guides, great reliance may well be placed upon them.

The following table gives the proportion of cereals and feed crops to the total cultivated area once in every five years from 1925–26 to 1944–45:—

Year.		Total sown area. ACS.	Cereals. ACS.	Percentage.	Fodder-crops. ACS.	Percentage.
1925–26	..	38,290,340	25,560,272	66	388,284	1·01
1930–31	..	39,193,201	25,666,722	65	449,865	1·14
1935–36	..	36,628,827	23,827,282	65·1	463,530	1·26
1940–41	..	37,343,724	23,342,927	62·5	459,455	1·23
1944–45	..	36,999,372	23,304,499	63·0	459,653	1·24

If instead of cereals, all the food crops are taken into consideration the proportion will be very high. The high proportion of cereals and the low proportion of feed crops denote that staple food-production for the growing population has been so geared up as to make an incursion into the cultivation of fodder crops.

Judged from the symptom of low unit-yields of cereal, the average yield of staple crop like paddy per acre in Madras is only about one-third of that in Japan and only a little over half of that in the United States of America.

However, the density of livestock is high in Madras but the quality of the cattle is so poor and decrepit that mere numbers signify nothing, because a "high" density of cattle population is not accompanied by a high percentage of fodder area. Cattle live and multiply in this country, not due to any positive cattle policy, but due to entirely non-economic reasons. With but slight variation, cattle density because of its poor qualitative aspect may be taken to corroborate the impact of growing population on the structure of agricultural production.

47. *Classification of the rural population.*—The glaring inequality in the distribution of land property which is met with in all the countries of the world presents itself in an accentuated manner in India. It is needless to look into the causes for this state of affairs and apportion the blame among them. But the fact of a huge inequality is clearly evident. Madras Presidency truly reflects the conditions obtaining in the whole country better than the Punjab or Bengal. Big zamindars, mostly found in the northern part of the province, come under a different system of landownership. Excluding them from our present study, the size and number of other holdings may be considered. Size varies from holdings of hundreds of acres owned by a few very rich farmers to small patches or narrow strips of land held by a multitude of petty ryots. Though their main pursuit is agriculture, the conditions and lot even in normal times of these farmers, big, middling and small are divergent in almost all vital respects—in capital resources, outturn marketing facilities, livestock and labour. Slumps and booms affect them not uniformly but in different degrees; in certain situations, the incidence of these cyclical fluctuations is different not only in degree but also in kind. War and war-time factors induce changes akin to those of booms in the economic conditions of these agriculturists. No study of the financial and debt position of the ryots which disregards or ignores these differentials can claim to be scientific or thorough. The aggregate effects of war upon the entire agricultural population will show only a rough picture of the altered conditions of agricultural economy due to war. On the other hand, an analysis of the chequered fortunes of the various classes of landholders and of those dependent on land for their livelihood will shed more light on a cross section of agricultural economy with all the intricate and ramifying effects of better prices, higher costs, war-time shortages and transport bottle-necks. But a classification of the rural population directly dependent on agriculture in the Madras Province is no easy task. Hard and fast lines cannot be drawn separating the large farms from the medium sized and the latter from the small ones. Soil fertility, climatic conditions and irrigation facilities change from district to district and in many cases from taluk to taluk. A farm of 10 acres in the Cauvery delta is quite different from that in Anantapur district. However bewildering these differences may be, the attempt to make a workable classification should not be abandoned; for without it the prime object of our investigation will not be fully achieved; results may be obtained but they will be vague and nebulous generalizations, inapplicable to particular types of holdings. The classification given below and adhered to throughout this enquiry has been made with a full knowledge of all the pitfalls and handicaps in any such attempt.

48. Registered landholders may be divided broadly into three classes—the big, the medium-sized and the small. It has been the convention in the past to treat all those paying an assessment of Rs. 100 and over as owners of big farms. Except in the Punjab where the Board of Economic Inquiry has done valuable

investigation, no other Province has undertaken this kind of approach to the classification of holdings. In the absence of official data, I had to rely on the oral evidence of representative agriculturists in the various districts in formulating a basis for classification. The first class or the large farm may, then, be defined as one of 25 acres or more regardless of its being wet or dry or both mixed together. In the dry central districts as well as in the Rayalaseema, persons having 25 acres are deemed well to do—not to mention those in the Circars or Tanjore or Tinnevelly in the South.

The medium-sized farm may be defined as land which is less than 25 acres but more than 5 acres and is owned by a single individual. Farms of less than 5 acres may, then, be assigned to the third class of small holdings.

49. Apart from the registered landholders, there is a considerable number of rural folk who cultivate land without owning it; they are landless tenants, making a living by tilling the soil. To this group may be added others who own less than one acre but hold on lease at least twice as much land as they own. These persons take land on lease to supplement their meagre income derived from their owned land which is too low even for bare subsistence. Hence despite their legal ownership of minute holdings, they are *de facto* lessees. Their livelihood hinges on holding land on lease in the absence of which they, having no *raison d'tre* to stay on in the villages would have drifted to urban and industrial centres. Due to these reasons, the latter class of people have also been clubbed together with pure and simple landless tenants. Both of them constitute the fourth class of tenants in the hierarchy of our classification. Last of all, there is a large section of rural population who neither own nor cultivate land held on lease. Due to lack of capital or enterprise or both, they remain mere wage earners in the agricultural sector. They are the agricultural proletariat, whom we may call the fifth class of landless labourers.

This chapter has been devoted to a descriptive but critical account of the twin factors—environmental and institutional—which affect the economic condition of the agriculturists. The former factor, as has been shown, is closely bound up with natural forces and the prevailing resource patterns while the latter is determined by land tenures, inheritance laws, and the systems of tenancy. Though not exhaustive, a study of this nature is essential to gain a proper perspective and understanding of the agriculturist and his means of living.

CHAPTER III.

HOMOGENEOUS ECONOMIC DIVISIONS.*

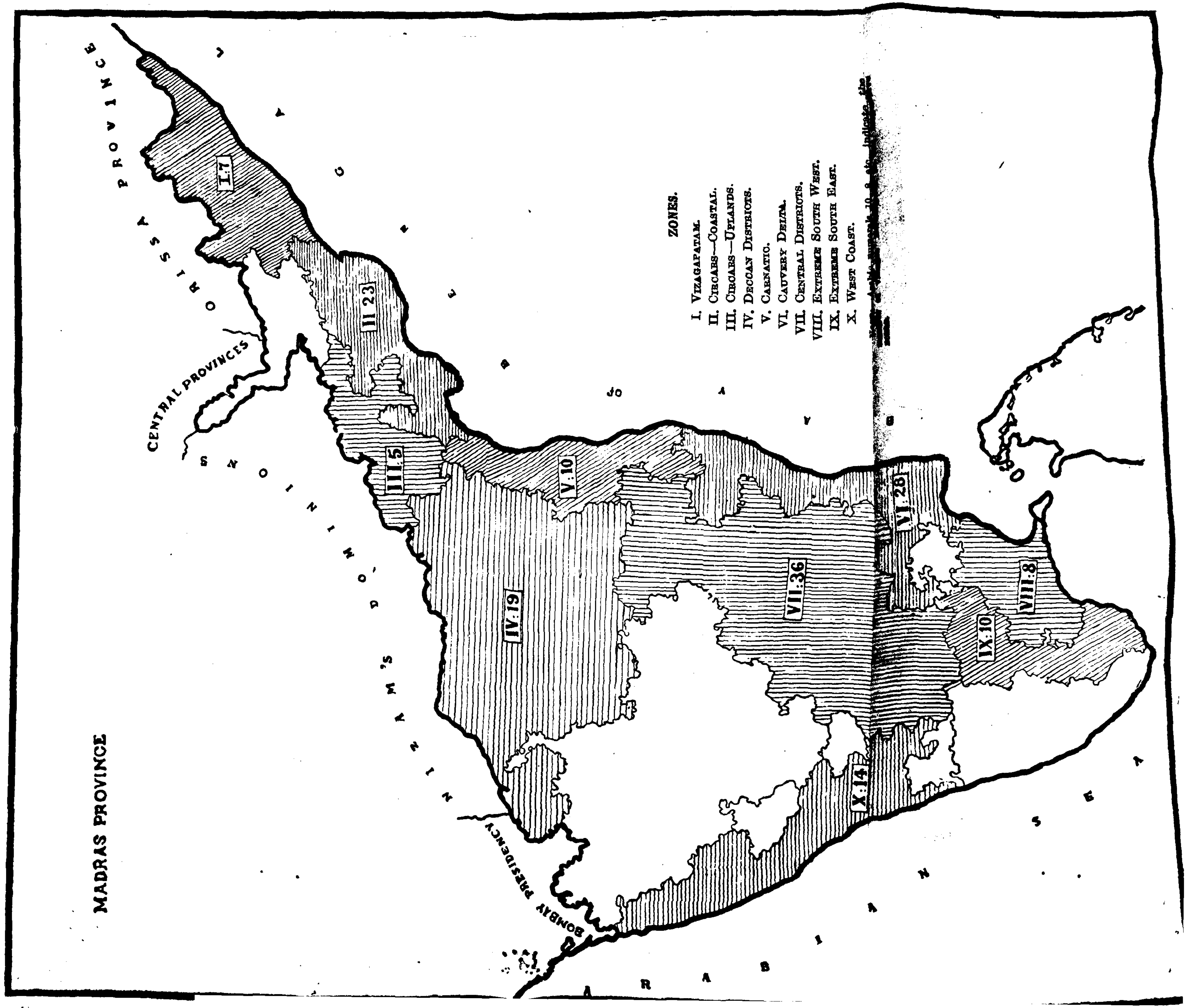
50. The Province of Madras, one of the three most populous in India, ranks first in point of area. It has a vast, complex, heterogeneous population and linguistic groups in all stages of civilization ranging from the highly advanced mirasdars of Tanjore to the backward people of the Agency tracts, still adhering to wasteful, predatory and shifting cultivation. As regards physical features, differences are no less cardinal; the fertile deltas of Cauvery, Godavari and Kistna stand in striking contrast to the bleak and infertile soil of Anantapur and Bellary. The salt marshes in the south of Tanjore, the dry uplands of the Central districts, the dense verdure of the tropical jungles of Wynaad and Pothigai and the dry, treeless, and vast expanses of the black cotton belts have only to be cited to bring to vivid light the bewildering variety in physical features. The diversity witnessed in the implements of agriculture and the apparatus for lift irrigation underlines clearly the heterogeneous character of agricultural practices. The human factor too changes from region to region; believing in Kismet, reluctant to migrate, lethargic and indifferent in cultivation, the ryots of Anantapur differ radically from the strenuous, resourceful and more prosperous peasantry of Coimbatore and Salem who are not dismayed either by the depth of sub-soil water or by the inimical soil they have to cajole and coax to supply them with the sinews of life. Viewed from any of these angles, the differences are immense. However this endless and impressive diversity is clothed and hidden from the superficial observer by the universal traits of appalling poverty of the rural masses, minute subdivision of holdings, scrub cattle, primitive implements and precarious dependence on the vagaries of monsoon. It will not be possible for our purpose, to remain satisfied with the outward facade of rural economy of this province but penetrate and probe further into the dynamic causes determining local prosperity or adversity. For this purpose, instead of being content with " a bird's-eye view of the province as a whole ", following the lead of Darling, " I propose to examine it tract by tract in the hope that by narrowing our view we may sharpen our sight and finally arrive at conclusions based upon ascertained fact." The necessity for such a procedure has also been emphasized when the Board of Revenue, in their communication, dated 20th January 1945, suggested that the results of my enquiry " should eventually be tabulated not by districts, but by homogeneous geographical divisions, which should take account of important economic factors."

51. The need for a scientific division of the province into homogeneous economic units is easily appreciated but a rational basis of classification is hard to choose. The present district boundaries have been the result of historical accident, political expediency or administrative convenience. Districts in this province have been formed when patches of territory were conquered or annexed from and ceded, gifted or pawned by local potentates. Bigger districts have been split up in the past as at present Vizagapatam district is going to be. Taluks are sometimes taken from one district and incorporated with another as in the case of Vayalpad and Madanapalle taken from Cuddapah and fused with Chittoor district. It will then surely be unscientific to base our regional division on these shifting district boundaries.

52. The authors of the Census reports have followed a traditional system of classification of the province into Northern, Deccan, Central, Southern and Western districts. Though this method has the merit of simplifying the issue, it fails to serve our purpose; for there is clearly no justification for clubbing

* I am indebted to the authors of various District Gazetteers and Statistical Atlas for apt descriptions of the salient characteristics of certain regions which I observed and found to be true.

MAP SHOWING THE TEN HOMOGENEOUS ECONOMIC UNITS IN THE PROVINCE OF MADRAS



the alluvial plains of Cauvery with the arid elevations of Dindigul and the land-locked districts of Salem and Coimbatore, nor the deltaic region of Nellore with its own drier western taluks. Classification on linguistic basis may have greater appeal to emotion than to reason. Economic and geographic factors seldom synchronize with linguistic areas. Thus it will be evident that economic divisions cannot be made except on economic grounds. Topography, rainfall, temperature, soil conditions, irrigation facilities, density and character of population, cattle wealth, methods of cultivation, etc., may form the criteria for grouping the different areas into well-defined units or zones. It is not to be hoped that in the zones thus demarcated, there will be complete homogeneity. Taluks will have to be grouped together on their satisfying the largest number, not necessarily all, of the aforementioned criteria. Nor is it to be hoped that the zones will be equal in size. The merits of such zonal divisions of the Province are obvious; they will be useful in assessing the causes of agricultural backwardness or progress, in evolving schemes for redressing the former and accelerating the latter and in applying similar remedies to similar regions. Adopting this general principle, the whole Province of Madras has been divided into ten zones.* The two largest and driest of them are alike land-locked; one of them, the Deccan zone consisting mainly of the famine ridden Ceded Districts is a triangular wedge running between the two great Indian States of the Peninsula; the other comprising the Central districts, is an ill-defined belt, hanging like a necklace round the State of Mysore. The two smallest zones lie in the southernmost end and are extremely dissimilar to each other; the western strip stretching from the valley of Tamraparni to the basin of Vaigai is green with paddy fields while the eastern, though a little broader, is dark with black-cotton soil. The richest zones are also two occupying the fertile deltaic regions of Cauvery in the south and the Godavari and the Kistna in the north. Connecting these two alluvial regions runs a fertile corridor which may be called the Carnatic zone extending from Ponneri in the south to Ongole in the north. At the tip of the north-eastern arm of the province lies the single district zone of Vizagapatam while the north-western arm conveniently falls into a separate zone comprising the twin districts of Malabar and South Kanara. The last of these ten zones is composed of the drier taluks of West Godavari, Kistna and Guntur districts, perching on the uplands leading to the Eastern Ghats.

53. These zones are not mutually exclusive with peculiar characteristics of their own. On the other hand, these ten zones may be classified under three heads. Some of them enjoy greater natural and man-made blessings while some others lack either or both; these two types may be called the advanced and backward zones respectively; the third class consists of the West Coast districts unique in many respects and therefore *sui generis*.

54. A glance at the map marked with all the zones will indicate that only in two cases, the economic units coincide with district boundaries and in the rest they are governed by geographical divisions. Vizagapatam, the northernmost of the districts, is the largest in India and the most populous in the Province. Historically it has formed part of the Northern Circars but economically it differs, in some vital respects, from the fertile deltas of Godavari and Kistna. The rivers in this zone group themselves into two sets, one flowing eastward through the coastal plain and the other, draining the Ghats and the country west of them, flow westwards into the basin of Godavari. The former are more or less torrents from the hills; however they fill Komaravolu ava and Kondakarla ava, two of the very few fresh water lakes in the presidency. "The basins of these streams are occupied by almost continuous stretches of rice fields and in the cultivation season the country has an air of exceeding prosperity." As the hills are

* This zonal division is based on a thorough analysis made by me of all the economic factors pertaining to them. The figures collected by me in this connexion are given in the appendix.

running parallel to the coast, the district consists of an open land facing the shore and two large areas of hilly country flanking north and west of this. These hills are for the most part covered with jungle and inhabited by backward people to whom it is considered inexpedient to apply the whole of the ordinary law of the land. They are accordingly administered as "Agency". Hence the richer tract of rice fields forms only a small proportion of the hilly and undulating land of the district, the hills are covered with stunted forests, " whale-backed in outline and seamed with black rocks ", the undulating part somewhat treeless and unlovely. The landscape in the higher red soil region is composed of dry fields, palmyra palms, and date palms in the farther west. " Wells are of relatively small importance; tanks are mostly small, only two of them having an ayacut of over 1,000 acres. On the hills, the paddy is practically all of it rainfed though on the 300-feet plateau some are raised in the beds of nullahs and irrigated with their water." Thus this region cannot favourably compare with the other districts of Circars (except Guntur) in fertility of soil or assured water-supply.

55. A significant characteristic of this district is that nine-tenths of the area consists of Zamindari land and of the remaining tenth, a fifth is whole inam and they have been never surveyed by Government. Hence agricultural statistics are available only for about 8 per cent of the area of the district for the ryotwari and minor inam land in the three Government taluks of Golgonda, Palkonda and Sarvasiddhi. " In the Zamindari areas, the general insignificance of irrigation works and the refusal of remissions in bad seasons moreover render wet cultivation less profitable than it might be and force the ryots to carry out repairs to irrigation works which in ryotwari areas he would calmly leave to Government to effect. The result of the system seems to be that the Zamindari ryots in the plains of Vizagapatam as a body, are much less prosperous than their fellows in southern ryotwari districts of equal fertility."

56. The cattle of the district belong to no special local variety and no particular care is taken to improve them by judicious breeding. Two varieties of buffaloes, indigenous and kasi, are remarkable animals of " great size, bone and power." They are exceedingly useful for cultivation in the heavier soils.

Methods of cultivation in Vizagapatam also differ from those of the south. " Rice fields are often left unmanured for years together but the seedlings are given a good start by plentiful supplies of fertilisers to the seed-beds. Dry land, on the other hand, which in the south is often neglected, is here usually plentifully manured especially with tank silt. Ragi and cumbu (and sometimes cholam) instead of being sown are transplanted in dry fields from seed-beds after rain. The crops are often stacked, instead of being thrashed directly after harvest, in the fields for months until the ryot has nothing more emergent to do." Except in Palkonda, in ordinary times, the wet fields are not used for double crops of paddy but only for growing gingelly, greengram, garden crops, etc., with the help of wells. This clearly illustrates the insufficiency of tank irrigation and of seasonal rains. The agriculturists are poorer and their standard of dress is far lower than in the southern districts. The staple food of the masses is either cumbu or ragi. Rice is the food, generally, of the rich and upper classes.

As the district lies on the frontiers of Orissa, Central Provinces and Hyderabad State, the languages here are many and the diversity of tongues constitutes an immense hindrance to agricultural education and propaganda.

Thus dominated by Zamindari system, inhabited by poor peasantry, denied of good irrigation facilities and rich soil, the district of Vizagapatam stands alone and separated. It deserves to be treated as an independent zone.

57. It is needless to devote so much space to the delineation of the second zone as to that of the first for very good reasons. The deltaic regions of Godavari and Kistna have been famous for a considerable length of time for their rich soil, ample irrigation and more prosperous farming community.

One departure that has been made in my delimitation of the second zone must be explained. As in Vizagapatam, the Agency tract has been excluded; moreover, the uplands in the west forming a submontane belt and consisting of the taluks of Chintalapudi, Nandigama, Gannavaram, Tiruvur, Palnad, Vinukonda and others have been carved out of the districts of West Godavari, Kistna and Guntur and formed into a third zone. Economic conditions of this belt of land, lying away from the coastal strip of plains, are so basically different as to justify this bifurcation of the districts of circars, generally viewed both by administrators and the public as one homogeneous entity.

58. Returning to the second zone, this remarkably fertile deltaic region resembles closely the Cauvery delta system in the south. The latter, comprising the whole of Tanjore district (except the dry Arantangi taluk), portions of Trichinopoly district which are in the alluvial valley of Cauvery, and the rich basins of the rivers Coleroon and Vellar, Pennaiyar and Gadilam, Palar and Cortelliar, Cheyyar and Ponne, forms the sixth of the ten zones. In their fertile alluvial soil, adequate water-supply, and even in their landscape, the deltaic regions of the North and the South are extremely alike. The Cauvery and its branch Coleroon are perennial like Godavari and Krishna in the north. Both these zones present a vast expanse of rice fields dotted with gardens of plantains and betel and groves of coconut and other fruit-bearing trees: numerous rivers, canals and streams full from bank to bank pass onwards to the sea at frequent intervals. " For only four months in the year, some of the streams are dry and their swirling currents form a delightful contrast to the sandy wastes which occupy for such long periods the rivers in so many other districts."

The Grand Anicut " the bulwark of the fertility of the Tanjore country " a marvel built by the Imperial Cholas has its proto-type in the north in the Dowlaiswaram anicut, one of the greatest triumphs of British engineering skill in all India. Both these anicuts or dams have an immense system of canals and channels leading off from them. The Cauvery system, to-day fed by the Mettur reservoir, is the modern elaboration of the ancient native enterprise.

In both these regions paddy is grown year after year on the same land. Various kinds of manure—chiefly the dung of sheep and cattle penned on the fields, village sweepings, ashes and oil cake—are applied. Preparations of the field, transplantation, care of the crop, methods of raising seedling and breeding in the second zone are similar to those in Tanjore and Tinnevelly; but the second crop does not follow so close on the first as in Tanjore. In certain parts in both these zones a third crop is often grown. It is interesting to compare the " Lankas " of the northern with the " Padugai " of the southern zone. The former are islands in the course of the two giant rivers, rich with silt and highly fertile, cultivated with tobacco and paddy while the latter are strips of lands between the beds of the river and the embankments built to prevent them from overflowing, annually submerged for some days by silt-laden water, generally coveted " for plantain cultivation and more rarely for tobacco and bamboos." Again problems of drainage are similar in both zones; the whole of the tail end of the delta, in each case, tends to become water-logged and liable to submersion. Grazing ground being scarce in both areas, cattle are more or less stall-fed and in the unwanted months driven into the uplands in the northern zones and into the South Arcot forests in the southern zones.

59. Although these are the primary characteristics of these most fertile belts, regions lying adjacent and are alike in most respects have been thrown into these zones. For instance, while the alluvial valleys of Ponniar and Gadilam in the centre of South Arcot district and of the Coleroon and Vellar in the south of it resemble exactly the nuclear circle, most of Chidambaram taluk has legitimate claims to be absorbed by this zone, " thanks to the elaborate network of irrigation channels, the work of man rather than nature." During the cultivation season, the rich lands in Cuddalore and Villupuram and the irrigated areas of Chidambaram have at least the charm produced by a prosperous, even if not romantic,

landscape. Also included in the sixth zone are the southern taluks of Chingleput lying in the fertile coastal region and the basins of Cheyyar, Palar and Ponne in the North Arcot district. Both these districts, although fed by capricious and uncertain rivers abound in tanks. North Arcot, one of the great tank districts of the Presidency, has " many reservoirs which might almost be styled as lakes. The waterspread of Kaveripak and Mamandur tanks is some seven or eight miles and they are hardly ever dry." Substantial anicuts, thrown across the three rivers, feed a large number of tanks. As in Tanjore, paddy, sugarcane and betel are the main crops in the wet lands of North Arcot and Chingleput.

60. Agriculturists in both these regions enjoy on a larger scale the advantages both nature and man can confer. Except for the drainage operations rendered necessary in the coastal fringe, they have hardly any of the handicaps to successful cultivation which beset their brethren in less happy climes. They are also well-versed in rotation of crops, utilization of various kinds of manure and are ready to learn new methods and use improved seeds. In both these cases land values have increased manyfold during the last few decades and the less thrifty among them have sudden inrush of unexpected fortune. Such people have run into debts. Unfailing irrigation and the accompanying prosperity have lured them into extravagant ways of living and spending on ceremonial occasions. Yet they should be reckoned as the backbone of the prosperous peasantry in this Province.

61. There are two zones equally famous as rice growing regions but much less in spread; the Carnatic zone and the Vaigai-Tambraparni valley. The Carnatic zone stretching from Ponneri taluk in the south to Ongole taluk in the north generally exports the famous Nellore rice to the City of Madras and the dry districts of Salem, Coimbatore, Chittoor and Cuddapah. The coastal region forming the bulk of this zone, is " marked by every evidence of prosperity; the villages are of a fair size, with several tiled houses; handsome topes are planted in the neighbourhood and land available for cultivation is largely taken up and the eye ranges with pleasure over the rice plains of Nellore, Kovur and Ponneri and the luxuriant crops of cholam growing on the rich red soils of Kandukur." Nellore district, which forms the core of this zone is nearly one-half zamindari. The Nellore breed of cattle had a wide reputation throughout India and had once been in great demand overseas; but it has degenerated within the last 50 years, perhaps due to the introduction of commercial crops such as groundnut, tobacco and chillies. The kinds of crops and the methods of cultivation do not vary much from those of the Godavari or Tanjore districts. But manure is applied in ample measure to all lands. " Irrigation in this zone is supplied by rivers and river channels, river-fed tanks and reservoirs, spring channels, jungle streams, spring ' doruvus ' and by wells." The chief productive and protective works in this zone are the Pennar Canal system and the Mopad reservoir system, respectively.

62. The remarkable resemblance of this zone to the more fertile zones to its south and north would apparently point to the need of grouping it with the other two and making all the three into one long coastal zone. That it has to be treated as separate and at best only as a connecting corridor will become evident on deeper consideration. Each zone must be independent and self-developing and improvements made in the chief economic arteries of its life should be reflected in every cell of its existence. Great irrigation projects either in the Godavari river system or Cauvery valley will hardly touch the lot of peasants living in this zone. Similarly it may be shown that the Carnatic zone does not live a life rhythmic with that of zones whether in the north or south. Hence it should form an entity by itself and developments within itself alone will really matter.

63. The next of the zones lies in the far south running from the narrow but extremely rich strip on either side of the Tambraparni river and its tributary Chittar to the fertile wet land irrigated from the Vaigai, the Suruli and the Periyar. These two river basins are connected by the submontane tracts of Srivilliputtur, Sivagiri and Vatrap which derive their irrigation from mountain streams. " In the southernmost district of Tinnevelly, each of the mountain streams, after reaching the plains, is crossed again and again by small stone anicuts for the direct supply of small patches of irrigation near the foot of the mountains and further out, to fill innumerable tanks with which the surface of the plain country is studded." In Madura district, the level tracts of rice land, mainly irrigated with the water of the Periyar project, cover both Nilakottai and Madura taluks and the northern half of Melur which receives a high rainfall. " The long Cumbum valley, with its perennial streams and cool winds from the western hills, is the greenest and pleasantest part of the district." Though small in area, cultivation is intensive, ryots are mellowed by rich experience and traditional knowledge, and agricultural practices are amazingly similar to those in the famous deltas.

64. We have, by now, traversed the entire length of the riverain and most fertile country in the province to the east of the Western Ghats. The dry lands in the interior offer a study in contrast. But for the intervention of Mysore plateau, the Deccan and the central zones might well combine into one gigantic unit. However they differ in certain respects, the former is the most blazingly hot part of the province. Its economic salvation lies in the construction of the long overdue Tungabhadra Project whereas the prosperity of the central zone is dependent on entirely different sources. Other points of difference are the character of the agriculturists living in these two zones respectively and the minor soil variations thereof. Apart from these differences, these two zones are remarkably similar in appearance and touching each other on Chittoor frontier.

65. The Deccan zone has a characteristic landscape of flat almost treeless expanse covered mainly with black cotton soil diversified here and there by the rocky hills which arise out of it " like islands out of the sea." A brief description of Bellary will serve to illustrate the conditions generally prevailing in this zone. " Less land is under irrigation in Bellary than in any district of the Presidency except the Nilgiris, Malabar and South Kanara. Bellary possesses fewer tanks than any district except Coimbatore, there being only some 280 of them all. Only seven of them have an ayacut of over 500 acres; only two of them are riverfed and many of them are greatly silted up, some of the smaller ones having been entirely put out of action from this cause." These statements apply equally well to the other districts as also to the western taluks of Nellore district included in this zone. It will be appropriate here to understand the nature of the last mentioned taluks. As we go west in Nellore district " the country rises, comprising wide stretches of low scrub jungle diversified with rocky hills and stony plains. The villages are poor, topes rarely gladden the eye of the traveller and pure water is almost an unknown luxury. Small tanks obtaining an uncertain supply of water from local drainage, irrigable land constantly thrown out of cultivation, and the stunted crops reared on a hungry soil mark the diffiulties against which the ryot strives to gain a precarious livelihood." This description of the western dry taluks of Nellore clearly shows how far they are akin to the nuclear circle of this region. Further Darsi, Kanigiri and Podili are great producers of cotton.

66. The central taluks of Anantapur are also made up of arid treeless expanses. Much of the soil is so poor that it will not stand continuous cropping—more often fallow than under cultivation—giving a poverty-stricken appearance. " Over a great part of these taluks, the poverty of the upland soil beggars description. If the ground is not covered with rocks and boulders it most resembles the surface of a road newly laid with stones and not rolled ". The rainfall is less than in any other zone and averages under 28 inches annually. The degree of infertility of the soil in these parts will be evident from the peculiar practice obtaining in Anantapur villages. " Ryots are reluctant to take land on patta as

it would involve the payment of the assessment, whether it was cultivated or not. They crop it at irregular intervals whenever there happens to be good rain and after it has lain fallow for some time and then relinquish it. Theoretically the land so relinquished is available for assignment to any applicant but the unwritten code of honour gives the relinquisher the prior claim at the end of the next period of fallow. A dry field is lucky if it gets a scanty manuring once in two or three years."

67. The river channels are very different from those of the southern districts. They have neither anicuts nor head sluices and the rivers in the districts are seldom in flood for more than a few days. It is suggested that the freshes in these few days may be caught up by dams and diverted into well-repaired tanks. To this endless tale of woe and natural disadvantages, there are a few cases of exceptions like Siddhout and Rajampet taluks in Cuddapah, the " garden taluks " of Madakasira and Hindupur in Anantapur, and the tracts irrigated by the Tungabhadra channels in Bellary. However conditions are most inimical to agricultural safety as well as prosperity.

68. A description of this zone will be incomplete without some reference to the human factor and agricultural practices. It is said that " cultivation is too generally of a casual description. The ryot is often content to tickle the soil with the " guntaka " instead of ploughing it. He hardly ever hedges his fields to break the winds which howl across them or to provide himself with fuel or his cattle with fodder. He never thinks of selecting the seed. In the collection and preservation of manure his system could scarcely be more ineffectual. His cattle are too few in number and they are purchased at great cost from elsewhere instead of being bred locally. He is unaware of the possibilities of emigration. Money lenders are few and credit is not cheap. " When population is sparse, the agricultural conditions are adverse and famine periodically eats up any little savings which may have been put by, capital is naturally scarce." The bigger landholders are fewer than in other zones. The most numerous class among the agriculturists consists of the owners of small holdings who are only one stage removed from the landless farm-servants. Thus the agricultural economy of this land of famines and relief operations is to-day as ever before at a low ebb. The prospects are a shade better in view of the Tungabhadra Project. This zone has got much leeway to make up.

69. The central zone comprises the whole of Coimbatore, Salem and Chittoor districts together with the drier portions of North and South Arcot, Trichinopoly and Madura districts which lie interspersed with or adjacent to them. (Vide appendix for the detailed list of taluks included in this zone). The general character of the major part of this land is a little superior to that of the Deccan districts while in the north-west corner of this zone, land is fertile, gardens with wells abound and agricultural yield is appreciable. The people of this zone are decidedly superior to their fellow agriculturists in the sister zone particularly in their enterprise, energy and perseverance. A greater optimism runs in their veins; more resourceful, they dig very deep wells to reach the subsoil water. Their garden lands are patterns of the highest type of industry and meticulous care bestowed upon the soil by men, women and children. The smallest pebble or hard gneiss is hand-picked and removed from the seed beds. Nowhere is the maxim that the magic of property turns sand into gold more appropriate than in certain parts of Salem and the whole of Coimbatore; everywhere there is perceptible an earnest desire on the part of the peasants to grow two blades of grass where one grew before. Improved cotton seeds, fertilisers, better sort of implements and superior cattle are evident in most of this zone; all the marks of a peasantry with a stout heart and great initiative as well as adaptability are found here whereas in the Deccan zone they are woefully absent and in the fertile tracts, easier conditions and greater prosperity have blunted the edge of husbandry. In the last quarter of the last century in the drier areas of the Arcot districts when the exotic groundnut was introduced its cultivation rapidly spread

and helped to clear the debts of so many ryots that this crop came to be significantly known as " Chitukilichan " nut (the term literally means " tearing to pieces pro-notes and mortgage documents "—the new crop was such a wonderful money crop as to liquidate most of the debts).

70. Lying mostly in the trap enclosed by the two ghauts, the land is drier and higher than the coastal strips. Dry cultivation preponderates and paddy is cultivated only on the lands irrigated by big rainfed tanks. Elsewhere as in Udayarpalayam, Karur and Perambalur taluks, paddy is grown as a dry crop without the aid of any irrigation source; in the last-mentioned taluk paddy is also grown on the tank-beds, a custom usually met with in the district of Anantapur. In certain places, paddy seed is mixed with cumbu in the proportion of two to one. Geographically the western portion of North Arcot is an elevated plateau, quite different from the eastern plain, forming a natural part of the central zone. " The higher and drier expanse of red soil which spreads across the north of Melur taluk, all Dindigul and Palni strongly resembles in its general features, soils and products, the adjoining areas in Coimbatore district." The western and northernmost taluks of South Arcot district form, by geographical configuration and soil fertility, an integral segment of this zone. " The most uninviting parts of all this uninteresting side of this district are perhaps the barren lands, covered with dwarfed date palms and stunted thorn bushes, which stretch to the north of Tindivanam." Kallakurichi taluk records the highest percentage of cultivable waste and the soil cannot be described as anything but indifferent. Rainfall is higher than anywhere else, good irrigation sources are rare and the population is most sparse than in any other taluk.

71. The similarity between the Deccan and the central zones is nowhere more marked than in the Gingee taluk. " The Gingee hills resemble those of the Ceded districts in possessing a jagged sky line and in consisting, for the most part, of a central core of gneiss, surrounded on all sides by great impassable screens of huge, rounded boulders, bare of any sort of vegetation which have been split off them by the action of the weather and tossed about by earthquakes into the wildest confusion. Up their grim sides climb patches of green jungle.

Partly tableland and partly plain, Chittoor district is also partly zamindari. Upland taluks are marked by poor and thin soils. So far as dry crops go, the rainfall is not precarious while wet cultivation is not always safe. " This has been recognized by ryots and in a bad year, a large increase of dry crops accompanies a fall in the area of wet cultivation." Groundnut commands the largest area among the industrial crops. Mango topes have brought reputation to Chittoor. Major part of the soil is of the red variety. That portion of the district lying above the ghauts is vulnerable to famine.

With a quite satisfactory human factor, this zone will have a brighter future if greater irrigation facilities are provided. Salvation seems to be in the repair of the existing " Manavari " tanks, sinking of innumerable wells and if possible by a strenuous search for artesian wells, a few of which in South Arcot district are a source of delight to any well-wisher of Indian agriculture.

72. Closely akin to these two major zones but a little far removed from them is the eighth zone according to my classification. It covers the black cotton soil "extending from the Madura boundary southward for about 60 miles and having an average breadth of 40 miles. This soil varies in quality. In some places it is equal to the best black cotton of the northern districts but elsewhere is mixed with gravel and sand and of very inferior quality." This is the land that produced in the olden days the famous Tinny cotton, a long staple variety. Surrounded on the west and north-west by the ninth zone and in the north by the Cauvery delta, it is flanked by the Gulf of Mannar in the east. Stable and well-established methods of cultivation like rotation of crops are met with in almost the whole region except in the taluks which are the home of the " Kallar " sect. This zone is one of the smallest. Yet it has to lead a life of single blessedness distinct from those of the zones to its west or north.

73. To leave behind the fierce hot weather and the flat arid plains of the Deccan and central districts and step into the West Coast with its heavy downpour and its long spurs, deep ravines and tropical jungles is delightfully refreshing. The tenth zone comprises the two districts of Malabar and South Kanara, nestling close " to the majestic mountains of the Western Ghauts which keep watch over the favoured land at their feet." It is a land so glaringly in contrast to the pleateau and plains on the eastern side that any visitor would feel that he had entered into a land both rich and strange. All the rivers here, except the three tributaries of Cauvery (Kabbarni, Rampur and Bhavani) flow from east to west; none of them exceeds 100 miles in length. There is scarcely any public or Government irrigation work. " In the warm wet air vegetation runs riot and many of the exotics, which grow hardly under glass in the hot houses of Kew, here flourish in the open air in the wildest confusion. Most of Indian botanical orders are strongly represented and in the monsoon months the glorious beauty of the vegetation beggars description." The coastal line is swathed in the blue sea, white foam, backwaters, creeks and arms of the sea; the coastal strip has recent formations of alluvium. As we go inland, the landscape unfolds at first, range after range of low red laterite hills with paddy flats fringed with coconut gardens winding in and out of their recesses " and in the distance the jungle-clad Western Ghauts. Only 20·5 per cent of the total area being under regar and alluvium, the soils of the West Coast cannot be classified as rich but their fertility is due to unfailing rainfall, ample green and cattle manure. Suffering from no lack of fuel, agriculturists do not burn as fuel cowdung; the rich foliage of the forest serves as an inexhaustible source of green manure.

74. This zone is about 300 miles long running from north to south with an average width of about 35 miles which varies from 5 miles in the extreme south of the Ponnani taluk to 70 miles in Palghat taluk. Though linguistically different, there is a remarkable similarity between the two districts constituting this zone. Both the Malayalee and the Kanarese seem never " to have lived in villages of the East Coast type marked by houses built in streets. Each house, even of the humblest, stands in a little compound or garden which is usually thickly planted with areca and coconut palms, jack trees, plantains, betel and peppervine and the like."

75. Both the districts are densely populated with vast tracts of sparsely inhabited mountain slopes, malarial areas and jungle country. The "Aliya Santhana " or " Sister's son's lineage " system of inheritance of South Kanara is analogous to that of the " Marumakkattayam " of Malabar. The latter district has many social peculiarities like tarwad, " stanams " (separate estates set aside for the enjoyment of senior members only), " tavazhi " karnavans and anandiravans, talikattu kalyanam, many of which have had their influence on the social structure of Kanara. In both the districts there is a " rigid and elaborate caste hierarchy with its roots in the ancient past. Even in the designs of their dwellings, peculiarities are discernible as in the case of " nalupuras " and " muttams ".

76. Most characteristic of all the features of this zone is the relationship between the landlord and tenant which is extremely complicated by the elaborate system of land tenures. Dealing with this problem in 1883, Mr. Logan says in his famons report " the cultivators must be rapidly degenerating into a state of insolvent coteriesm, a result mainly due to three crying evils, rack-renting, extortionate renewal fees and inadequate compensation for improvements " (page 235). In spite of Tenants Improvement Acts since passed, this remark made more than 60 years ago is still largely true of the landlord-tenant relationship. Though not so rampant as before, not infrequently one hears still of evictions, social tyranny of janmis and the unscrupulous actions of kariastans or land agents. It must also be noted that land is distributed much more unevenly in this zone than in most of the eastern districts.

77. Distinct from other parts of the Presidency in its physical appearance, climate, rainfall, social systems and agricultural practices, the West Coast stands aloof on a solitary eminence. It would have been completely shut out but for the easy means of transport by rail, sea, backwater, canal and road. The wide Palghat gap in the south and the many passes that cut across the Mysore and Coorg peaks have formed the highways of traffic between this sequestered strip and the rest of the country. The general prosperity of the country is undoubted. Rainfall, being very heavy, famine is unknown. Soils are not infertile. Facilities for manuring are ample. Population, generally non-migratory, is too much for the land and is sufficient inducement for intensive cultivation. Though implements are rude and cattle undersized and unhealthy due to the invariably damp atmosphere, the traditional system is most adapted for the " puddle " cultivation of this country. But the greatest obstacle to agricultural progress is the concentration of a large proportion of land in the hands of a small class. Incentive to improve the land is utterly absent in the present context when the toiling tenant cannot be quite sure of enjoying the fruits of his labour.

The different characteristics of the various zones differently affect agricultural prosperity. It is presumed that the financial condition of the ryots as well as their debts will show the effects of these environmental and physical factors. In tackling the debt problem of the entire province, a knowledge of the regional characteristics will be useful. Apart from province wide drive against indebtedness, local or zonal approach will be of immense value. It is proposed to study, in this report, the spread of indebtedness in the various zones and suggest appropriate remedies for each.

CHAPTER IV.

Debt Surveys—Past and Present.

78. The agriculturist in every country has been plagued for far too long a period by vast accumulations of debt, productive and otherwise. Agricultural returns are always fluctuating due to diverse natural causes but interest payments continue as fixed charges on land income. It is this rigidity of the debt that constitutes a menace to agricultural health and prosperity.

79. If the position of the Indian ryot differs from that of his confreres in the Western countries, the difference lies in his debt being more heavy and more deadweight. However, it is incorrect to assume that his debts were as chronic and ample in the past as in the last hundred years. The Indian peasant was not immune from contracting debts in the past but his burden was bearable; in the institutional framework of the olden days, it never became a millstone tied round his neck. Both borrowers and lenders had to labour under severe but wholesome limitations. The continuance of the joint family system denied individual rights to any morsel of the common property and deprived the prospective borrower of any assignable asset that could function as security. Again the virile village community of those days exercised a healthy vigilance over the ways in which a loan was spent. Chances of dissipating a loan were at the minimum. As an integral part of the village community, the money-lender could not extort unconscionable rates of interest, exploit the distress of his client, enforce payment according to his pleasure or attach the property of his borrower and turn him out into the street. Further he had no well-defined and clear-cut property to obtain as security for his loans from the borrower. In short, public criticism—the ozone of public life—imposed definite checks upon the cupidity of the money-lender as well as the extravagance of the borrower. Joint family system, village panchayat and the corporate life—the striking facets of the pre-British rural life—rendered difficult the emergence of chronic debt.

80. The first half of the 19th Century witnessed drastic changes in the institutional set-up of rural India. The impact of western ideas of individual rights undermined the joint family structure. Establishment of civil courts drained away the sap out of village panchayats. The effulgence of and the sanctity attached to freedom of contract blinded the courts from looking behind the letter of the law and rendered administration of justice a mechanical process. Thus the disintegration of all the customary and social set-up of the past unleashed strange forces and a new order gradually emerged which proved to be a paradise for greedy sowcars and improvident, wastrel sons of landholders alike. A clear appreciation of these new forces is an indispensable precondition of diagnosing the ills of agricultural economy of the present day. Without it, any attempt to launch upon new reforms will miss the mark. The robot-like decisions of the civil courts, the conferment of alienable, individual rights over landed property and the disappearance of the spirit of public service contributed to usher in this new era. As could be easily expected, this era was marred by greedy squeezing of the debtors by hard-hearted money-lenders, murderous uprisings of the debtors against creditors as evidenced by the Deccan Riots, enforced sales of numerous holdings and the degradation of peasant-proprietors to the level of landless labourers as also the steeply mounting debt of the rural population.

81. It is needless to enter into an elaborate analysis of the causes that led to this rapidly mounting debt; the causes of indebtedness have been rendered familiar to everybody by both publicists and economists on the one hand and Government reports on the other. However, certain observations on these well-known causes appear to be called for in view of their changed character under the altered circumstances of a global war. Past enquiries into debts have been

generally undertaken when the burden of debt began to smother agriculture. Depression with its unmarketable surpluses and crumbling prices aggravates certain causes and stifles agricultural debtors. But war with its short supply and skyrocketing prices will have naturally an opposite effect upon the familiar causes of indebtedness. It will then be appropriate to study at least in brief outline the effects upon them of wartime factors.

82. Agriculture in India has been aptly described as a deficit economy; tiny parcels of land, over-strained soil, vagaries of the monsoon and insecurity of harvests have combined to keep down the majority of agriculturists on the brink of, if not below, the subsistence line. These environmental and physical factors have continued to be the same during the years of war. Improvidence and extravagance, the twin vices associated with the Indian peasant, have been under some check in recent years due to many of the old familiar avenues of spending being closed by wartime controls. Most of the demand has been pent-up, spending truncated and expenditure on ceremonies and pilgrimage severely abbreviated. The only avenue of expenditure that still lay open has been buying of land. A characteristic trait of the Indian farmer is his unappeasable land-hunger. Hence in the absence of alternative ways of spending, a considerable volume of the forced savings has flowed into the field of land purchase. Whether this purchase can be described as investment will receive consideration in its appropriate place.

83. In the decade prior to the war, unremunerative prices operated as a potent source of increasing indebtedness; and for several decades usurious rates of interest have directly contributed to swell the volume of indebtedness. Similarly, the natural growth of population has produced a more than proportionate rise in its pressure upon land owing to lack of alternative employments with the consequence that agriculture, already a depressed industry, was still further depressed. Litigation was no inconsiderable factor influencing debt in the past. However all these factors were inoperative in the last five years due to wartime high prices and easy money market conditions coupled with the fact that in a period of ascending spiral of prices, resort to court appreciably diminishes since creditors are willing to wait for collection of their dues and the debtors are more regular in the payment of interest and repayment of capital. This is undoubtedly a welcome change; but such a happy state of affairs will not last for ever. With the gradual wearing out of wartime influences, these factors, now existing as it were in suspended animation, would revive and reassert themselves.

84. It is, then, possible to divide the causes of indebtedness into two classes; first, consisting of those which persist through slump or boom, war or peace and are determined by basic conditions of agricultural economy like monsoon, soils and subdivision and fragmentation of land; the second class subsumes those factors, likely to be modified or annulled by adverse artificial circumstances. In the foregoing two paragraphs an analysis of these two sets of causes, which may be called basic and alterable, has been made. However it must be added that this distinction is not fundamental but convenient, for even basic causes can be modified or annulled by protective irrigation works or legal reforms affecting ownership, inheritance and bequeathal of land property. But alterable factors can be reduced in their intensity by indirect action, for instance, monetary and financial devices.

85. It may be observed with a considerable degree of truth that in the history of rural indebtedness in India, no radical cure had been sought to be applied to restrain or nullify the influence of either of these sets of causes. Notwithstanding the few irrigation works undertaken in the last 50 years, fickle monsoon still holds agriculture in its tyrannical grip. Practically no headway has been made in agrarian reform. Much too orthodox monetary and financial policy, pursued up to the present time, has failed to confer upon agriculture even the little indirect benefit that would have been possible by a more liberal, if not

Keynesian, policy. On account of all these, no purposive action has been taken to counteract and neutralize the baneful effects of the causes, basic or alterable.

86. The upshot of this kind of a colourless policy was that rural debt has been growing with accelerated momentum. The oppressive load of agriculturists' debt was increasingly felt in the last quarter of the last century. Before taking any remedial action, the Government wished to know the magnitude and character of the debt. It was this desire that led to the appointment of Mr. (later Sir Frederick) Nicholson for the purposes of enquiring into the rural debt position in the Province in 1895. Two more surveys of a similar nature were made in 1930 by the Madras Provincial Banking Enquiry Committee and in 1934 by Mr. W. R. S. Satthianadhan. It is proposed to give here a brief and critical outline of these surveys to be followed up by a clear sketch of the scheme I have adopted for the purpose of the present enquiry.

A study of the methods and findings of the past debt-surveys will not only throw light on how far they have been scientific but also incidentally show at what rate indebtedness has grown in this Province during the last half a century.

87. There are two ideal methods of computing the aggregate rural indebtedness in any Province or country. One is to tap information from all the debtors living within the area; the other is to obtain figures from all the creditors. Both these methods are too ideal to be practical in a world of realities, doubts and misgivings. Assuming it to be possible to reach every individual debtor, difficulties will crop up due to the shyness of certain debtors to wash dirty financial linen in public and to the psychology of many debtors of the lower order to exaggerate their burdens. Documentary evidence being seldom available or difficult to obtain in most of the transactions involving small amounts, this ideal method will be hard to follow. Similarly creditors being extremely suspicious of disclosing in all their nakedness their ledgers and account books, cannot be approached for our purpose with any certainty of success. In both these methods, our assumption that all the creditors or debtors can be approached without any exception, is not valid especially in areas with huge populations.

Climbing down from the ideal plane, calculations of indebtedness may be made by an analysis of official figures supplied by the Registration department, credit agencies, official and non-official. The official and other data thus brought within the scope of study will but cover only a small segment of the whole field of indebtedness. Estimate of the uncovered sectors of indebtedness will tend easily to become, to use an expression coined by the E.H.L. Department of the Government of India, "guestimates." In short accurate calculation of aggregate debt is beset with innumerable difficulties. In reviewing the methods and results of past surveys, the late development and perfection of statistical science should be borne in mind in order to temper our judgment with a sympathetic understanding of the several hardships the pioneers in the field of debt investigations have suffered from.

88. *Sir Frederick Nicholson's Report.*—Pioneer in the field of debt enquiry, Sir Frederick produced a report which still remains a great classic. Although his primary objective was to reach a fairly accurate estimate of the volume of agricultural debt, he was no less interested in finding out the prevailing rates of interest on different kinds of loans; for he was deputed to enquire "into the possibility of introducing into this Presidency a system of Agricultural or other Land Banks" (Order—15th March 1892, No. 173, Public, Madras Government). His Excellency Lord Wenlock, the then Governor, was desirous of "assisting the organization of rural credit through Land Banks in view to the replacement of the individual money-lender" (Report p.v.). Therefore, at the first stage, Nicholson tries to find out the different rates of interest on mortgage debts of higher and lower order as well as on simple bonds and on loans on good personal security. The problem of interest rates has lost to-day much of its former importance in view of the recent measures of debt legislation.

89. Nicholson's method of guaging the debt position rests upon finding out the total secured debt. He then lays down a formula for the calculation of unsecured debts. This formula is based upon "expert opinion expressly consulted." To these sums he adds small loans, grain or cash, taken by most of the agriculturists on the eve of sowing and repaid partially or fully after the harvest.

90. Secured debts on immovable property are found out from the statistics of the Registration Department. They are classified into mortgages with possession and simple mortgages; a further distinction is made into debts of Rs. 100 and upwards and those below Rs. 100. The total number and value of all the mortgages registered in 1890–91 are found out. The value thus arrived at is multiplied by three in order to calculate the mortgage debt of the Presidency existing at the time. The multiplier, three, is significant as it represents what Nicholson computed to be the average duration of a mortgage loan. This figure as is shown by him, represents the mean between 5 years taken as the average duration of possessory mortgages and 2 years taken as that of simple mortgages. On this principle, the value of all mortgages in 1891 was just 6½ crores and the total mortgage debt of the presidency is 18 or 19 crores, allowing necessary deductions to be made for urban registered transactions. This amount is verified by another method of calculation which is as follows:—All the mortgages of 1890–91, are classified on the basis of the number of years of duration specified in each of them. By multiplying the documents by the number of years specified in them and by adding up the products of the number of documents in each year-group, the total number of documents current in a given year is found out. This number is used to multiply the average value of mortgages to reach the gross mortgage debt of the presidency. This method, in spite of being complex in the extreme, is not error-proof. It is also admitted to have certain defects. It does not pay due consideration to the number of mortgages paid off before due date; because of the simple fact that this number is not only unknown but unknowable. Again debts need not be repaid only on their anniversaries; they may be liquidated in any part of a year which fact is not given due allowance. Further, mortgages without any specification of the duration are numerous and their duration can only be arbitrarily fixed. In view of all these defects admitted by Sir Frederick himself, the calculated average duration of 3 years cannot be held infalliable. A small fraction added to or deducted from this key number of three will distort the total figure.

91. Just as the secured debt hinges on this keystone of the average duration of mortgages, the unsecured portion is poised on rough estimates. An intensive study of the grain loans taken by agriculturists of Anantapur district and the registered small loans extensively indulged in in Tinnevelly district, supported by amounts deemed probable by numerous correspondents and calculated or guessed at in the roughest way constitute the data for the computation of the non-mortgage cash and grain debts to be about Rs. 25 crores at the beginning of harvest or 18 crores annually borrowed in this form at about 12 to 24 per cent interest. Working through such labyrinthine paths, Sir F. Nicholson concluded that the amount of rural indebtedness at the beginning of any harvest was about Rs. 45 crores.

92. As the earliest attempt at breaking new ground and focussing attention on the staggering stature of the problem, Nicholson has done yeoman service to agricultural economy of this Province. But his figures, as he has himself more than once averred, are only the roughest estimates. Looking at his survey and findings from this distance of time, we are concerned only with one aspect of his assessment. It is the average duration of the mortgage debt which forms a vital corner stone of the whole fabric of his calculation. If it can be proved that this corner stone is shaky, the entire edifice will begin to totter.

93. *The Madras Provincial Banking Enquiry Committee Report.*—That this committee took much pains to calculate the rural indebtedness of the Province is evident from their elaborately laid-out scheme which is characterized by

six salient features. Canvassing of responsible and correct information from officials and non-officials alike occupies a prominent place; to this end, they distributed about 6,000 copies in English and 200 in vernacular of questionnaires prepared by the Central Committee, with of course minor modifications to suit local conditions. It may, in passing, be noted that in all only 277 replies were received, apart from the eighty-two who also gave oral evidence. Next comes direct investigation in rural finance by two specially appointed investigators in three villages *chosen for this purpose* in each of the four typical districts of the Presidency, viz., the districts of East Godavari and Bellary in the north and Madura and Coimbatore in the south. Investigations are also made by a tahsildar of each district in the Presidency into the outstanding debts in two or three villages in his jurisdiction. Utilization of the statistics of the Registration Department pertaining to mortgage and pro-note debts for computing the total secured debt forms the central plank of their plan. Special research into the crucial point of the average duration of mortgage debts is taken up with commendable zeal. An attempt to evolve, rather discover, a ratio between secured and unsecured debts is another cardinal point of the scheme. It may be noted that in this six-fold approach the two basic lines of enquiry—analysis of the Registration Department statistics and striking the average duration of mortgage debt—are the old familiar Nicholsonian devices, while the rest are novel and fresh at the time so far as this Province is concerned.

94. Although it will not be possible to go deeply into every one of these devices, it is necessary to assess their merits and defects. The response to the very large number of questionnaires issued has been extremely meagre. The villages taken up by the special investigators are deliberately chosen in what are characterized as typical districts. This method is quite the antithesis of random selection. With regard to the enquiries conducted by the tahsildars, it may be pointed out that the figures given by them in three districts are considered unreliable by the committee. Results of the direct field investigation conducted by the Committee's own investigators in a dozen villages do not agree with one another. The divergence is greater when the findings of these investigators are juxta-posed with those of the tahsildars. Finding it difficult to reconcile the differences between these two independent sources of information, the committee have turned to settlement reports of Bellary, Anantapur and Tanjore districts for the purpose of ascertaining two important points, viz., the ratio between the secured and unsecured debts and the per capita debt. Instead of resolving the conflicting data, the settlement reports offer a new set of figures. Most strange of all is that according to these settlement reports (1920 and 1921), the total debt on the population basis is Rs. 214 crores while on the acreage basis, Rs. 153 crores—average per capita debt and average debt per acre being respectively Rs. 51 and Rs. 33. These divergent results arising from disagreement in figures point to a moral. The committee must have thought at the outset that they were on surer grounds by having more than one string to their bow but at the end no string proved to be tough enough to be serviceable. It appears that concentration upon a single method, elaborately planned and efficiently executed, would be more fruitful of benefit than plural methods, improvised hastily and carried out weakly.

95. In attempting to find out the correct figure of the average duration of a mortgage debt, the committee laboured long and hard but in the traditional Nicholsonian way. They assumed that mortgages run for periods specified on the deeds themselves without a proper and due consideration of the possibility of a few being redeemed before the time-limit and the majority being redeemed, if at all, only after several years. Two thousand three hundred and seventy-six documents relating to thirty villages registered in Sub-Registrar's office of Srimushnam and 5,900 mortgages in that of Ellore between the years 1924 and 1929 have been examined for this purpose. The average duration in

these two specimen cases has been found out to be 2·75 and 2·95 years respectively. To fortify this conclusion, the committee also examined 184 documents superseding prior mortgages with a view to calculating the average term of existence of prior mortgages. The period of 3·76 years arrived at by this process, the committee argue, will be longer than the real average of mortgage debts because documents are renewed only some months after the stipulated period of the document. Although by these various processes, the figure of three years is blessed to be a correct indicator of the average duration, as one of the members of the committee pertinently observes in his dissenting minute, no reliable conclusions can be drawn unless detailed enquiries into the history of mortgages in typical regions are undertaken. Hence it is risky to pin our faith too much upon this figure of three. The Madras Banking Enquiry Committee, no less than Nicholson, have shown a weakness for simplification of issues by taking this figure without thoroughly thrashing out the issue.

96. Having satisfied themselves with the correctness of this average duration, the committee proceed to study the aggregate value of all the instruments of mortgage in each of the ten years between 1919 and 1928. The average value of the mortgage debts per year being Rs. 20 crores, it is multiplied by 3 and a subsisting debt of Rs. 60 crores is arrived at. To this sum is added double the average value of bonds executed per year, viz., 7 crores in order to compute the outstanding registered debt. After deducting Rs. 2 crores for urban loans from the total 67 crores, the registered secured debt of the rural population is estimated to be Rs. 65 crores.

97. A relationship between secured and unsecured debt is then sought to be established. Although Nicholson in Madras and Darling in the Punjab have had reasons to maintain that secured debts will be about 45 per cent of the whole, the committee are not able to easily fix this ratio due to conflicting results of their investigation which vary from 70 per cent at Periyakulam in Madura district to 29 per cent at Yelpikaggal in Bellary district. On the other hand, analysis of settlement reports produced equally discordant figures ranging between 70 per cent in Tanjore upland and 30 per cent in 40 villages of Anantapur district. From out of this conflicting evidence, however, the Committee emerged with the decided opinion that " the secured debt is about half of the total debt when the latter is at its maximum just before the harvest." Applying this ratio, they computed the total of secured and unsecured debt as Rs. 134 crores to which sum was added unpaid interest at 12 per cent amounting to Rs. 16 crores. Thus the debt-cum-interest burden is reckoned as Rs. 150 crores for the Province.

98. The data collected by their investigators as well as the figures culled out from Settlement Reports have been utilized in a number of ways to calculate the aggregate rural indebtedness. It is of interest to know the degree of disparity among the results thus got by adopting diverse methods. The average per capita debt of Rs. 38, as derived from the tahsildars' enquiries yields a total debt of Rs. 160 crores while that of Rs. 61 arrived at by special investigators, a total of Rs. 256 crores (Report page 76, paragraph 95). Tahsildars' figures of debt per acre, viz., Rs. 48, give a total debt of Rs. 126 crores whereas on the basis of the tahsildars' and investigators' per acre debt put together, will give Rs. 149 crores. From this welter of totals, the committee finally 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.

99. From the foregoing it will be known that the two assumptions of pivotal significance in the estimate of the Banking Enquiry Committee are concerned with the average duration and the ratio between secured and unsecured debts. The correctness of their estimate will vary directly with the correctness of these assumptions. Further, a tendency to reject the inferences from the data of their own special investigators is perceptible wherever these inferences are at variance with their first calculation of debt to be in the neighbourhood of 150 crores. One more point to be noted, stressed by Mr. W. R. S. Sathianathan,

relates to their multiplying the debt per acre of Rs. 51 by the total acreage under ryotwari holdings only without including also the area under zamindari tenure held by occupancy tenants. Here again the temptation of the committee to stick to their first calculation of Rs. 150 crores can be detected.

100. A caveat is needed before this survey of the method and findings of the Banking Enquiry Committee may be concluded. The committee may be said to have suffered from three pre-possessions; the first two relate to the average duration and the ratio between secured and unsecured debts and the third arises from their fond attachment to the figures based upon these two assumptions. Hence their findings cannot be taken at their face value unless the first two assumptions can be put to the crucible and examined afresh and found legitimate and flawless. This is but to say that their findings are to some extent, vitiated by assumptions, excusable in the case of Nicholson, but not so easy to overlook in the case of a committee that sat more than 30 years after the former.

101. *Sathianathan's Report on Agricultural Indebtedness*, 1935.—The most striking features of Mr. W. R. S. Sathianathan's survey are concerned with the time and method of the enquiry. In point of time, it was undertaken in the immediate post-depression period. The worldwide depression was more acute in the agricultural than in the other sectors of economy; it was, more prolonged in India than in many other countries. So much so, his terms of reference resolved primarily on an examination of " how the present depression in value of land and the fall in prices have affected the position of agriculturists." With regard to his procedure, he made a departure from the multi-method of the Banking Enquiry Committee and pinned his conclusions on the single method of direct investigation. It was carried out in accordance with a detailed plan by official agency; all Assistant Collectors and selected Revenue Divisional Officers and tahsildars enquired into one village each. Of the 160 village reports actually received 19 were rejected after scrutiny for various reasons. From an analysis of these 141 village reports, he concluded that the per capita debt of population was Rs. 38, debt per family Rs. 194, debt per acre of occupied land (ryotwari, inam and zamin) was Rs. 63 and debt per rupee of assessment was Rs. 21. He deemed the per capita debt of Rs. 38 to be an under-estimate in view of the fact that the non-resident larger landholders of the villages could not be included in the survey. So he increased it by 10 per cent to Rs. 42. By multiplying this revised per capita debt by the estimated population of the province in 1935 he calculated the total debt to be Rs. 204 crores. Similarly by multiplying the average debt per acre by the total occupied area and the debt per rupee of assessment by the total assessment for the province including the rental in zamindari and cesses in both ryotwari and zamindari, he arrived at Rs. 207 crores and Rs. 193 crores respectively. From these results calculated by these three methods, he finally estimated the total agricultural debt in the presidency at the time at about Rs. 200 crores. He also added a proviso that this estimate did not include petty loans entered in katha accounts and loans in kind as the detailed enquiries were made in February, March and April of the year.

102. In order to find out the distribution of the debt, among different classes of the agricultural population, he made a personal investigation of about 564 families scattered throughout the presidency. For this purpose he divided the population into (1) farm labourers owning no lands and paying no assessment or rent; (2) registered landholders and tenants paying land revenue or rent of Re. 1 to Rs. 100 and (3) those paying Rs. 100 and above. The results of this investigation clearly proved the dictum that debt follows credit; for, while the farm labourer's debt was only Rs. 15 per head, that of the small landholder was Rs. 211 and that of the larger, Rs. 918.

103. A few aspects of this enquiry call for our consideration. The agency utilized was almost completely official except for non-official witnesses examined by the special officer. It is a widely recognized fact, as Bowley and Robertson observe that " intimate and confidential information needed could not be obtained by Governmental authority." Hence the data gathered by Mr. W. R. S. Sathianathan are susceptible to errors likely to arise from this cause. Prone to both exaggeration and extenuation as the Indian public are, they will resort to the former or the latter according to their sizing up of the investigators and to the atmosphere in which they are interrogated. Further, the method of selecting the villages in which enquiry should be conducted is a matter of great import. In this respect how the selection was made is not clearly stated. If the so-called typical villages were chosen, the choice suffers from the difficulty of definition: even with the best of definitions, the officials employed may not pitch upon the right type of villages, if the selection of the villages had not been made by the Special Officer himself. If any method other than random sampling had been adopted, it cannot be described as scientific. Again the distribution of villages has not been quite even. For instance only one village was chosen for enquiry in East Godavari while seven were chosen in West Godavari; 16 villages were selected in Kurnool and only 2 in Bellary; 12 villages were chosen in North Arcot and only 5 in South Arcot. If official agency and apparently arbitrary selection of villages are unsatisfactory and unscientific, the scheme of enquiry has the merit of having concentrated upon a single well-drawn out method. In conclusion it may be pointed out that the prime objective of this enquiry was to assess the effects of an unprecedented depression upon the agricultural population and of the catastrophic fall in prices and the consequent foreclosures, forced sales of land property, the transfer of lands from agricultural to non-agricultural population.

104. *The scheme and methods of the present enquiry.*—At the outset it may be pointed out that just as Sathianathan's enquiry aimed at assessing the effects of a worldwide economic depression, the prime objective of my enquiry, as set forth in my terms of reference, is to estimate how far the boom in commodity prices induced by the emergency of a total war has reacted upon the rural indebtedness of this province. My predecessor was asked to find out the aggregate indebtedness of the agriculturists at the time of his enquiry and suggest methods for affording relief to the indebted including the appropriateness of setting up Debt Conciliation Boards. The scope of my task has been extended by the fact that I have to estimate not only the total indebtedness outstanding at present but also that which had existed in the pre-war year 1939 and by comparing one with the other I have to calculate the difference in the debt burdens in the two different periods. Further, if there is any reduction of debt during war years, I have been asked to calculate how much of this reduction may be attributed to wartime rise in prices. Hence I have been entrusted with no easy or simple task as it involves delving into the past and analysing the position in the pre-war year.

105. My scheme of enquiry is based on the statistical principle of random sampling. It is the second best because over-all, door-to-door enquiry in this case is ruled out although suitable in intensive urban enquiries as has been adopted in Great Britain for studying the economic conditions of depressed areas. As Bowley and Robertson aptly remark, " It is impracticable to make direct investigation in the circumstances of each of the half-million villages in British India in any reasonably short-time, even if the expenses could be met or a sufficient number of investigators found. It is, therefore, necessary to proceed by sampling." Following this principle, I selected 160 out of the 35,982 villages in the province by taking a list of all these villages arranged in geographical order of districts and by marking in the list one in 225.

106. As the results obtained from examining one family in a thousand for the entire province would give results accurate to within 3 per cent, my sample contains 8,530 rural families. This figure of 8,530 was arrived at as follows. According to the census of 1941, the total rural population was 41,879,982. Assuming that population increased from 1941 to 1945 at the same rate as from 1931 to 1941, there must be a rural population of 42,650,000 in 1945. Taking

the average size of a family to be five, the total number of rural families would be 8,530,000.

Since the examination of all the families in the selected 160 villages would be beyond the capacity of the investigators and exceed the time-limit set to my work, I once again adopted the method of sampling—but now what is known as stratified sampling—as it would give the advantages of both random sampling and purposive sampling, while reducing the fluctuations of chance due to random sampling and the bias that may arise from purposive sampling. For this purpose the families in each village were divided into 5 strata consisting of 3 classes of landholders, tenants and landless labourers; landholders were divided into 3 classes on the basis of area of their holdings. Within each stratum, one-fifth of the families was selected so much so the total selected would reflect truly the same proportion of the different strata as found in the total number of families in the village.

107. In so far as the family and not the village is the true unit for indebtedness, it will be found that my sample is in terms of families while the villages remain only in the background. It was a recognition of this fact that induced me also to instruct my investigators to include both assets held and debts contracted outside the selected villages before evaluating the financial position of any family.

108. I drew up 16 schedules for direct investigation into families, one questionnaire for data concerning the villages, a questionnaire for the use of officials and non-officials. Besides, schedules to be filled in by the Co-operative Department, Civil Courts and Registration Department were drafted and issued to the respective departments. I took care to include supplementary enquiries in addition to the questions directly relating to the debt position of the families. These supplementaries were calculated to elicit information on livestock, jewels, investments, improvements in land and special and extraordinary items of expenditure.

109. On my representing that honorary investigators would not be of much use, the Government sanctioned and authorized me to appoint twelve expert investigators for direct field work and one chief investigator to help and aid the rest. A clear understanding of rural economy, high academic distinctions, previous experience in research or enquiry work and above all enthusiasm for this kind of work coupled with a high integrity of character are essential qualifications of investigators. On the basis of these, I made the selection, which, *per se* difficult, was rendered much more so by language considerations as I required 5 Tamilians, 5 Telugus, 1 Canarese and 1 Malayalee. After the selection was over, the investigators were trained in the method of investigation as well as the meaning and significance of each of the various schedules. They were specially instructed to maintain a strictly non-official character except for necessary contacts with officials for getting access to official records, etc. Each investigator was assigned about 13 villages and about 750 families in a compact area which usually covered two adjacent districts or so except in the case of the Malayalee investigator.

110. Thus the scheme suggested by Bowley and Robertson was rigidly followed. Before the selection of villages, the agency tracts of Vizagapatam and East Godavari district, the whole of Nilgiri district and the Laccadive and Maldive islands were excluded as these areas were non-representative of the province, with peculiar traits of their own. It should be mentioned that random sampling of villages led to the selection in certain cases, of remote, inaccessible as also sparsely populated villages. Even before the selection of villages, it was decided to omit very small villages with less than 30 families and if they should occur, the immediate next village must be chosen. This modification of the principle was necessitated by the short space of time given to me to complete the enquiry. The greatest difficulty expected and actually experienced by the investigators, related to conveyance especially away from the rail roads.

Tiny hamlets, that would have been included but for my slight modification of the general principle, would have increased the number of villages to a needless extent in order to reach the target of 8,530 families as also the difficulties of travelling of my investigators.

111. The data collected by the investigators supplied the debts of the selected families in 1939 and 1945, the area of land owned in both the years, and the sale and purchase of lands. In fact 8,900 families were closely examined and more than 350 were rejected as unsatisfactory owing to irreconcilable figures, etc. The total debt of 8,530 families was multiplied by 1,000 in order to arrive at the aggregate rural indebtedness of the Province. The total debt divided by the total number of persons in the 8,530 families gave the average *per capita* debt; the same divided by the area of occupied land held by all the 8,530 families gave the debt per acre of occupied land. Similarly with these materials, the total value of sales effected and purchases made by the agricultural classes were derived.

The data supplied by the Co-operative and Registration Departments were used to verify the results independently obtained from the information supplied by the investigators.

In short it may be claimed that the present enquiry is the first of its kind based strictly on " A Scheme for an Economic Census of India " by Bowley and Robertson.

112. Judged by theoretical standards of perfection, the past debt surveys might have been a little defective in some respect or other. But their estimates are valuable in so far as they indicate the accelerated growth of rural indebtedness in this Province. Nicholson's estimate of Rs. 45 crores had more than tripled within 35 years when the Banking Enquiry Committee surveyed the position. And in another 4 years Sathianathan found out that it had jumped up to Rs. 200 crores. Debt in this Province has been growing snowball fashion in the inter-war period due mainly to the postwar boom which enormously raised the credit of the ryots and to the world economic blizzard which suddenly pricked the bubble of their credit and made their debt, bad and chronic. It is widely believed that the recent war years had witnessed a change in the tide; it is held that the debts should have crossed the peak and would have moved downward owing to a preponderance of congenial conditions. The purpose of my enquiry is to find out how far this popular belief is correct. The results of my enquiry will be set forth in all their details in the succeeding chapters. In view of the gravity of the problem, certain suggestions for strengthening the favourable factors inducing a reduction of debt, for mitigating, if not eliminating, all those adverse factors aggravating indebtedness and finally for conserving the benefits realised during wartime will find a place at the end of the report.

CHAPTER V.

DEBT POSITION IN 1939 AND 1945.

113. This chapter is devoted to the presentation of the results of my enquiry. Direct investigation, even among the educated people, is beset with certain difficulties; distrust of the *bona fides* of the investigators, reluctance to disclose the actual conditions and in certain cases, active hostility to answer questions pertaining to financial matters are ever present among the rural people. These were found in an exaggerated degree at present owing to some abnormal wartime factors. As in the last war, agriculturists expected during this war, uncontrolled prices for their products. But the imposition of price control and the setting up of procurement machinery with the concomitant movement control, licensing of dealers, and restriction of free market conditions led to a large measure of annoyance and caused not a little chagrin especially when the consumption goods and necessary agricultural requisites recorded huge rise in prices; even after the institution of the over-all price control, the flow of necessaries into villages was neither regular nor adequate. These were sufficient to irritate the rural masses. The situation was aggravated by the announcement by the Madras Government of their intention to explore the feasibility of a tax on agricultural income. Thus price control, procurement, movement control, paucity of consumers' goods and agricultural implements and the shadow of an impending agricultural income-tax and also the savings drive contributed to create an unfavourable atmosphere for my investigators. Yet they approached the people in a strictly non-official capacity and according to my instructions, tried to befriend them and to pierce through the veil of secrecy they usually draw against prying eyes. In many cases, notwithstanding their friendly and sympathetic attitude, my investigators had to verify the data against details gathered from other sources—generally these being co-villagers. As far as possible, accurate information concerning the selected families has been obtained and my conclusions are based on them.

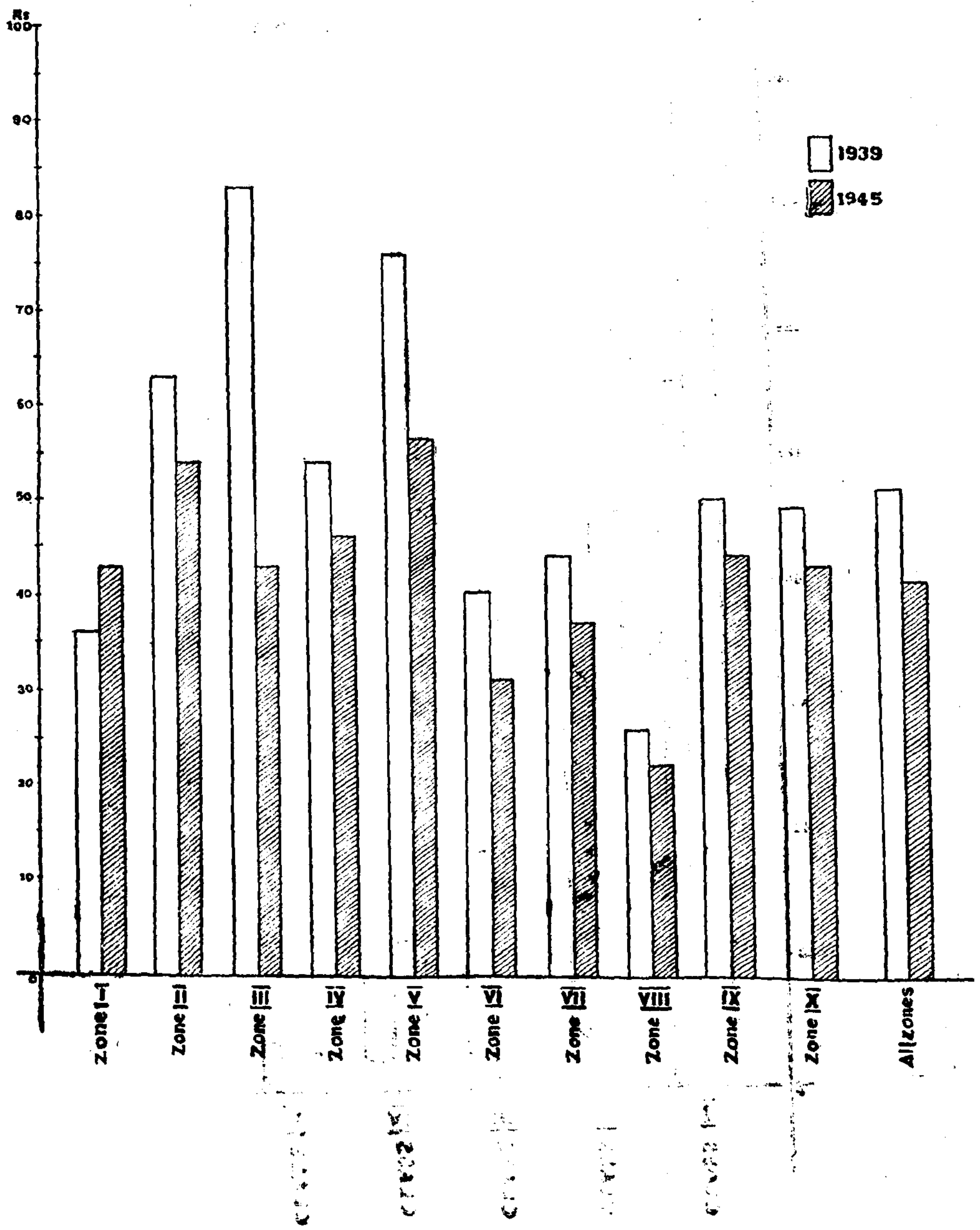
114. In presenting the results, unlike my predecessors, I have a double task of estimating the debt position in two different years, 1939 and 1945 It is easier to ascertain the financial position of the present than that of a few years ago in guaging which greater caution will have to be exercised. So I have devised a formula to verify how far my estimate of the debt in 1939 is reasonable and correct. Further, apart from the usual analysis of the distribution of debt among the various classes, I have also been directed to study the distribution of debt among well-defined economic divisions. With these preliminary observations regarding the arduous task ahead, I shall now proceed to set forth my findings in detail.

115. The number of families examined in the whole Province is 8,530 which were chosen according to the principle of stratified sampling. Statement No. 2 in the appendices shows the distribution of these classes, in the ten zones as also in the whole Province. An abstract of that statement is given below:—

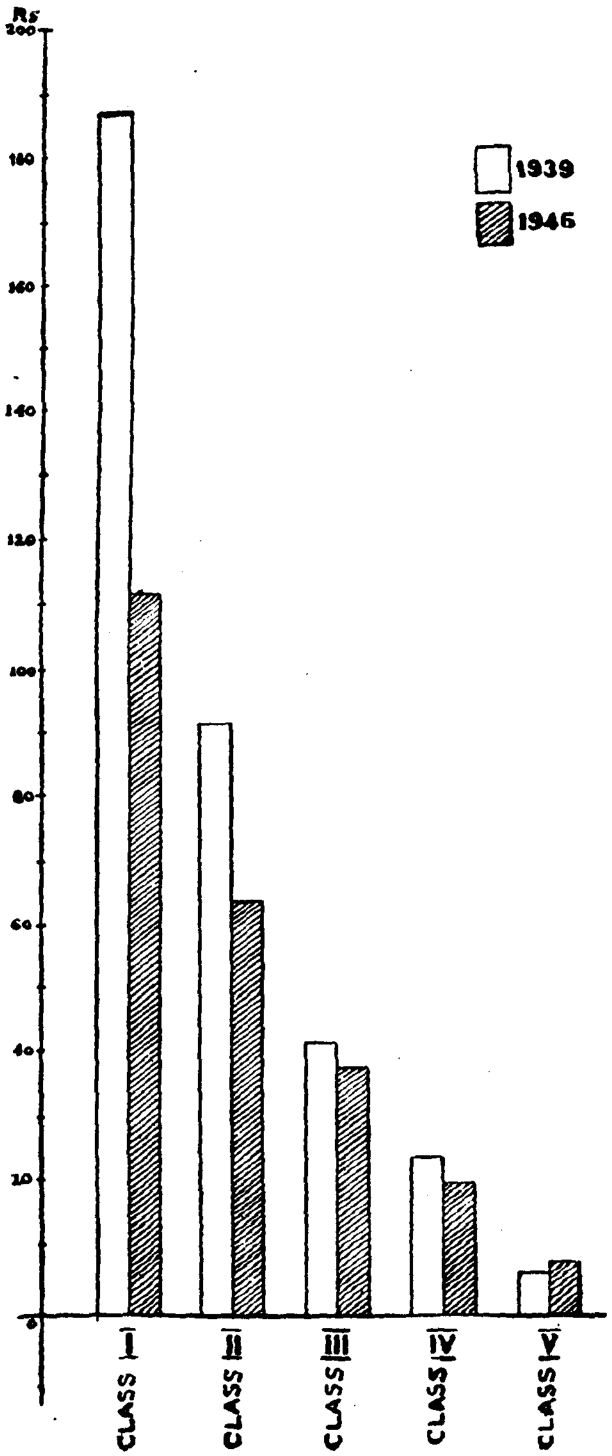
Extent of land wet and dry owned.	Classes.	Number of families.	Percentage to the total.
25 acres and above	(1) Big landholders	240	2·9
Between 5 and under 25 acres	(2) Medium landholders ..	2,097	24·6
Under 5 acres	(3) Small landholders ..	3,784	44·3
Nil. ..	(4) Tenants	1,130	13·2
Nil. ..	(5) Landless labourers ..	1,279	15·0

The largest group is that of small landholders forming 44·3 per cent and the smallest group is that of big landholders constituting only 2·9 per cent. Leaving

PER CAPITA DEBT IN 1939 AND 1945 IN THE TEN ZONES.



PER CAPITA DEBT IN 1939 AND 1945 FOR THE FIVE CLASSES IN THE PROVINCE



out the tenants and landless labourers, the percentage of the number in the three classes to the total number of landholders works out as follows:—

Landholding classes.	Percentage.
Big landholders	4·05
Medium	34·25
Small	61·70
All classes	100·00

116. These results of stratified random sampling may be compared with the classification of landholders on the basis of assessment.* The following figures are taken from the report on the settlement of land revenue in the Madras Presidency:—

Assessment rate.	Number of pattas, single and joint.	Percentage to total number of pattas.
RS.		
100 and over	59,670	1·4
10 and 100	1,512,043	22·6
10 and less	5,118,111	76·0
Total ..	6,689,824	100·0

117. It may be noted that the general pattern of distribution of the three landholding classes according to the above two classifications is the same although the percentages do not exactly tally. Perfect agreement of percentages cannot be expected, for, my classification on the basis of the size of holdings does not distinguish wet from dry lands. Hence the higher percentage of 4·05 in table 2 compared with 1·4 per cent in table 3 should be accounted for by the inclusion of a large number who may own more than 25 acres but will be paying an assessment of less than Rs. 100. Similarly persons in the second group owning more than 5 acres of (dry) land but paying less than Rs. 10 will be placed in the third class if the classification is based on assessment instead of on the size of holdings. This explains the higher percentage of 76 in the above table as against 61·7 per cent in the previous table.

118. *Debt in* 1939 *and* 1945.—Direct investigation into the debt position of 8,530 families living in 160 villages selected at random and therefore scattered all over the Province was made both for the prewar year 1939 and the year of enquiry, 1945. The aggregate debt of all these families in 1939 stood at Rs. 27,19,164 but in 1945 has fallen to Rs. 21,77,115. As has been already explained these figures were multiplied by 1,000 (because one in 1,000 families has come within the survey) in order to arrive at estimates of the total provincial rural debt in both the years. In 1939, the aggregate rural indebtedness of the Province should have been about Rs. 2,71,91,64,000 and in 1945, about Rs. 2,17,71,15,000. The following table shows not only the total indebtedness but also per family and *per capita* debt in the Province for both the years:—

Total debt of the Province.

	1939.	1945.	Difference.	Percentage reduction.
Total debt ..	2,71,91,64,000	2,17,71,15,000	— 54,20,49,000	19·9
Per family ..	318·8	255·5	63·3	19·9
Per capita ..	51·0	40·8	10·2	19·9

The diagram on the opposite page shows the *per capita* debt in 1939 and 1945 in each of the ten zones.

119. *Formula for verifying the debt in* 1939.—It is reasonable to assume that the figures for 1945 will be more accurate than those for 1939, because people have short memory and their financial conditions six years ago may not be

* It is important when comparing the figures for pattas with the figures for holdings to draw attention to the fact that pattas correspond only roughly with holdings because (1) many holders have several pattas or interests in several pattas and (2) many pattas are joint covering bits of many holdings.

correctly recalled to mind. This difficulty was anticipated even at the outset and the investigators were required to take pains to obtain correct figures. For this purpose, all the six years between 1939 and 1945 were marked in schedules to record all the year-to-year changes in debt and financial position of the families. In addition to these precautions, I evolved a formula to verify whether the figures for 1939 are correct. In this connection I made full use of the data supplied by the Co-operative Department. I found out the ratio between loans granted by all the rural institutions of the Co-operative Department and the total rural indebtedness of the Province in 1945. Similar ratio for the year 1939 was also worked out. If these ratios are in fair agreement, it may be stated with confidence that my estimate of the debt in 1939 is satisfactory. This method is based on the assumptions that agricultural borrowers have not suddenly developed either a new taste for or deep aversion to taking loans from co-operative societies or land mortgage banks and that the department itself has not made rapid strides in the period between the two years. The remarkable growth of co-operative stores during war years does not affect our position.

The following table gives the relevant figures:—

Number and details.	1939–40.	1944–45.
	RS.	RS.
(1) Total estimated debt	2,71,91,64,000	2,17,71,15,000
(2) Principal lent by Co-operative Land Mortgage Banks	42,57,000	24,81,000
(3) Loans outstanding at the primary Agricultural Societies	3,50,05,000	2,60,77,000
(4) Items (2) + (3)	3,92,62,000	2,85,58,000
(5) Percentage of items (4) to (1)	1·44	1·31

Official figures show that debt owed to primary agricultural societies and land mortgage banks in 1944–45 is Rs. 2,85,58,000 or 1·31 per cent of the total rural debt. Using official figures again, the percentage for 1939–40 is 1·44. The Co-operative Department has been complaining in recent years, about advance payments, complete liquidation of debts, a steep fall in the number of borrowers and a general reluctance to borrow. These conditions are reflected in the fall in the ratios of the 2 years, from 1·44 per cent to 1·31 per cent. In view of the changes in borrowing from co-operative institutions, the disparity between the two ratios confirms my conclusion that this estimate of the aggregate debt in 1939 is a reasonably close approximation to fact.

120. *Debt in* 1939 *compared with previous findings.*—The estimated debt of nearly Rs. 272 crores in 1939 is indeed a staggering figure, never reached in the past in any Province of India. Without a clear knowledge of the forces at work in the last decade, it may not even be possible to reconcile oneself with this huge figure. And for this knowledge, reliance has to be placed mainly on the two reports of the Madras Banking Enquiry Committee and Mr. Sathianathan as also on the general theory of slumps and their effects on agricultural prosperity. As a critical appraisal of the findings in the two reports has already been made, it is hardly necessary to traverse the ground again; but what the Madras Banking Enquiry Committee had to say should be remembered; " figures arrived at from enquiry in a smaller number of villages by the Committee's Investigators work out at 61 per head. This would give a total figure of Rs. 256 crores " (Report of the Madras Provincial Banking Enquiry Committee, paragraph 95, page 76). Again in paragraph 97, page 77 of the same report, " according to settlement reports of Bellary, Anantapur and Tanjore (1920 and 1921) the total debt of the Presidency on the population basis (average Rs. 51 per head) is Rs. 214 crores." With respect to Mr. Sathianathan's estimate of Rs. 204 crores, he has explicitly stated that " this estimate obviously excludes petty loans entered in *katha* accounts and loans in kind " (paragraph 43, page 41). According to Nicholson's calculations there was an ordinary borrowing of

Rs. 30 or Rs. 36 worth of grains for a ryot family of ten persons. It would be a modest estimate if we fix the value of grain loans per family at Rs. 70 nearly 40 years later at the time of Mr. Sathianathan's enquiry; on this basis, a sum of about Rs. 25 crores must be added to his figures to include loans entered in katha account and loans in kind which will give a grand total of about Rs. 230 crores. Apart from the errors mentioned in the last chapter, we have on the basis of internal evidence, sufficient justification for pitching the estimates far above the final figures given by both the committee and Mr. Sathianathan. It may then safely be assumed that the rural indebtedness of the Presidency ranged between Rs. 230 and Rs. 250 crores, say about Rs. 240 crores, in the period 1930–35. This view is reinforced by a study of the answers to questionnaires issued to sub-registrars. More than 250 out of the 420 who furnished information hold that the average duration of mortgage loan will be above three years. In that case, the final figures of the Madras Banking Enquiry Committee will be nearer 240 crores than Rs. 150 crores. If this argument is accepted, there is still the need to explain the increase from this order of magnitude to the very high level of Rs. 272 crores the debt has reached in 1939. There is a rise of about Rs. 32 crores in the space of 5 years; at an average rate of 6 per cent interest, a debt of about Rs. 240 crores would have swelled up by about Rs. 72 crores and touched Rs. 312 crores, if no interest had been paid throughout this period from 1934 to 1939, no fresh borrowing had taken place, nor any repayment of capital had been effected. In this period of five years, whatever might have been the degree of economic recovery in European countries and the United States of America the clouds of depression had not lifted in India. Even in 1937 and 1938, some relief was deemed urgent and many Provincial Governments passed debt relief measures. Agriculture continued to be a losing proposition and agriculturists were generally unable to meet interest charges while repayment, partially or fully, of the loans was outside the pale of practical achievement. Fresh borrowings would not have been indulged in; since money-lenders were extremely reluctant to advance loans on the security of rapidly depreciating assets. It is contended that in times of depression, when agricultural assets collapse in value, creditors grow panicky and force debtors to repay their loans. Mere threat or actual resort to courts of law, this school of economists say, will bring about forcible liquidation of a considerable portion of debts. The truth contained in this theory cannot be gainsaid. But, in this Province during the period under consideration, enforced repayment, legal or otherwise, did not take place to any appreciable extent mainly due to the working of debt conciliation boards. By suspending all court proceedings and even execution of decrees, these boards helped to postpone the evil day but did not achieve the main object of scaling down debts by means of persuasion and conciliation. What invariably happened was that, after a temporary relief for one year from the distress of legal action and auction of the assets of chronic debtors, no amicable settlement ensued. The creditor would become hardened after these " evasive " tactics of his debtor, add interest to the principal for the duration the matter was in the hands of the debt conciliation boards, and insist upon the " pound of flesh."

121. Thus the process of forced liquidation, painful to individual debtors but profitable to society as a whole, had been more or less held at bay by the ill-drafted Debt Conciliation Board Act of 1934. However, the effects of the Agriculturists' Relief Act of 1939 were relatively beneficial but the benefit had not been as much as was expected either by its sponsors or the general public; a more detailed examination of this piece of debt legislation is deferred to a later chapter. In the present context, it will be enough to say that by 1945, it would not have contributed to scale down, on a liberal estimate, more than Rs. 10 crores. Taking into consideration all these factors pertaining to this Province, about Rs. 272 crores will be a reasonable estimate of the rural debt of the Presidency in 1939.

122. *Debt in* 1945–46.—No argument is needed to show the correctness of my estimate of rural indebtedness in 1945 since there is no time-lag between the

date of my investigation and the year taken up for study as in the case of the debt-position in 1939. My figures show that the aggregate rural debt of this Province at the present time is about Rs. 218 crores. Notwithstanding the favourable conditions produced by war, rural indebtedness is widely prevalent. Only 23·3 per cent of the rural population has been free from debt in 1939 and 1945. The following table which is an abstract of the detailed statement given in the Appendix, will be of interest in this connexion:—

Abstract statement showing the number of families which have partially or fully cleared their debts and families which have incurred or increased their debts between 1939 and 1945.

Classes.	Free from debt.	Completely cleared debt.	Partially cleared debt.	Newly incurred debt.	Increased debt.	Maintained same debt.	Total.
I	80	40	52	23	25	20	240
Percentage to total number of families.	33·3	16·7	21·7	9·6	10·4	8·3	100
II	479	311	538	333	271	165	2,097
Percentage to total number of families.	22·9	14·8	25·6	15·9	12·9	7·9	100
III	851	435	817	903	503	275	3,784
Percentage to total number of families.	22·5	11·5	21·5	23·9	13·3	7·3	100
IV	288	93	189	314	172	74	1,130
Percentage to total number of families.	25·5	8·2	16·7	27·9	15·2	6·5	100
V	287	139	216	327	198	112	1,279
Percentage to total number of families.	22·4	10·9	16·8	25·5	15·5	8·9	100
Total for all classes.	1,985	1,018	1,812	1,900	1,169	646	8,530
Percentage to total number of families.	23·3	11·9	21·2	22·3	13·7	7·6	100

123. It will be seen that the first class of big landholders has the largest number of families free from indebtedness, the percentage being 33·3. The number of families free from the incubus of debt is the smallest in the third class of petty landholders and the fifth class of landless labourers forming only 22·5 and 22·4 per cent, respectively of the total number of families in each group. Families which have completely cleared their debts, thanks to favourable wartime factors, form 11·9 per cent of the total; it is significant to note that the percentage of this category of fortunate people is 16·7 in the first class while it is only 8·2 in the fourth class of tenants. Partial clearance of 1939 debts has occurred in 21·2 per cent of the families, the second class of medium landholders registering the highest percentage of 25·6 and the tenants group again giving the lowest percentage of 16·7. It is also revealing to find that about 27·9 per cent of the tenants and 23·9 per cent of small landholders have incurred fresh debt in the war years, a clear evidence that wartime conditions have been adverse to their welfare and prosperity. Only 9·6 per cent of the big landholders starting with a clean slate have contracted debts. These people had no debts in 1939 but before the end of the war, they were forced into the ranks of debtors. The war period has also witnessed a certain number of agricultural families running into greater debts. 15·2 per cent of the tenants and 13·7 per cent of all classes belong to this category. With regard to another section of the population, the war has brought about hardly any change in their debt position; their debts have been static all through the war years; 7·6 per cent of the population remain in this unenviable position. All these figures provide only a rough indication of the general character of the effects of war on the financial position of agriculturists. It is quite likely that these percentages may hide real facts; it will be unscientific and misleading to take them at their face value. For instance, in that section of people who have for the first time incurred debt during war years, there will be some who might have bought lands or other forms of property and increased their assets more than proportionately

to their newly contracted debts. Again among those who have maintained the same debt position in 1939 and 1945, some would have gone into greater debt in the intervening years and cleared the excess borrowing before 1945. Circumstances vary from individual to individual as the 8,530 family investigation schedules eloquently speak. Provided this point is borne in mind, the calculation of percentages of families which have been free from debt, and the families which have cleared, partially or fully, maintained the same, incurred, or increased debt will be greatly useful for the purpose of analysis.

124. *Fall in debt during war period.*—The figures in Table No. IV will show that there has been a fall in rural indebtedness to the tune of Rs. 54,20,49,000. This sums up the final position, but it is necessary to have a clear knowledge of the trend in the intermediate years. For, debt has not uniformly and continuously declined in all the six years of war. Debts must have fallen to a greater extent towards the close of 1943 than at the end of 1945, owing to certain factors which may now be considered.

125. It is well known, that the effects of the outbreak of war in Europe on the price structure in India were only short-lived, causing a temporary spurt in the prices for about four months. By January 1940, prices began to decline and quickly reached the pre-war level. Until the Pearl Harbour disaster and the spread of war to the Pacific and the Far East, and the fall of Burma and other countries in South-east Asia, the temperature of Indian economy had not shown the symptoms of activity in the military sector. In one sense, Indian agriculture was in a worse rather than better position in the first two years of war owing to the closure of European markets to most of the export commodities of India like groundnut. So long as these conditions persisted, Indian agriculture did not derive any benefit. But in 1942 and 1943 Indian economy felt the full impact of war and prices soared up; currency was rapidly expanded; refugee capital flowed in; conditions of insecurity prevailed; all people with liquid resources wished to invest in reality. The most popular of the immovable properties was land; feverish buying of lands at fancy prices was the order of the day; blackmarkets flourished; procurement and rationing of grains was yet to come; agriculturists were able to reap enormous profits. Till the establishment of the full panoply of controls by the end of 1943, agriculturists profited by the rise in prices of both agricultural produce and land. It was a golden period for liquidating their debts. All classes of registered landholders were, to some extent or other, benefited. In the subsequent years of 1944 and 1945, stimulated by the higher profit margin in agriculture, the richer classes of landholders have been impelled to borrow for the purchase of more land. Figures showing purchase of land and productive investments with borrowings are given below:—

Debt incurred for the purchase of land (including productive debt).

Class.	Families. Numbers in each class.	Numbers which have incurred debt.	Percentage of 3 to 2.	Amount.
(1)	(2)	(3)	(4)	(5)
				RS.
I	240	20	8·3	29,584
II	2,097	219	10·4	1,32,706
III	3,784	308	8·1	1,00,610
IV	1,130	43	3·8	10,655
Total ..	7,251	590	8·1	2,73,555

126. The above table does not include the fifth class of landless labourers for obvious reasons. The total for all the four classes, viz., Rs. 2,73,555 must be multiplied by 1,000 to arrive at the total borrowings in the Province by agriculturists for these purposes. So calculated, the debts contracted for the purchase of lands and productive investments will amount to about Rupees 27,35,55,000. It must be noted that these loans were of very recent origin, incurred generally in the latter half of war period. This debt of about Rs. 27 crores may be characterised as recent productive debt. That it is recent is

obvious; that it is productive is true at the present when prices are high. This debt may be contrasted with pre-war, unproductive debt. The latter was undoubtedly incurred in pre-war years and, carried through the depression years should have become mainly unproductive. Assuming that the recent productive debt of Rs. 27 crores had not been contracted, the debt in 1945 would have been less by this amount. It will be Rs. 217 crores minus Rs. 27 crores, i.e., Rs. 190 crores. In fact this sum of Rs. 190 crores may be said to represent the debt subsisting since 1939. Looked at this way, the gross reduction of debt during the war years is about Rs. 82 crores. The following table gives all the figures necessary for this conclusion:—

	RS.
Total debt in 1939	2,71,91,64,000
Total debt in 1935	2,17,71,15,000
Debts contracted since 1942 for purchase of land for productive purposes.	27,35,55,000
The balance of pre-war debts in 1945	1,90,35,60,000

127. A distinction may be made between gross and net reduction of debt during wartime. According to the foregoing argument, the gross reduction of debt is Rs. 81,56,04,000 while the net reduction is Rs. 54,20,49,000.

128. Although the net reduction of debt at the end of six years of war in 1945 is only Rs. 54·2 crores, the same would have been far greater in size in 1943. In the last two years of war—1944 and 1945—agriculturists had a very bad time. Rayalaseema had been continuously under more or less famine conditions. Failure of harvests due to drought was widespread in the southern districts. Northern Circars and the East Coast north of Madras city were swept over by a cyclone of unprecedented severity which destroyed not only the standing crops but also stocks of grains in storehouses and peasants' homes. This triple calamity of famine, drought and cyclone had deprived a large section of agriculturists of their produce income for two consecutive years. All their labour and capital applied to cultivation had hardly borne any fruits. Need for "distress" loans to tide over these bad years became urgent. Such borrowing should have increased the total debt. It has not been possible to determine exactly how much can be attributed to this "distress borrowing" from the data collected. But it is definite that a portion of what has been described as pre-1939 debt of Rs. 190·35 crores is due to post-1943 borrowing by ryots in these critical years.

129. One point here requires elucidation. It has been argued that since 1943, there has been purchase as well as improvement of land by agriculturists. The circumstances leading to borrowing by ryots in distress have been emphasized. The apparent contradiction between these two statements can easily be reconciled; the unfortunate peasants of the areas afflicted by these natural calamities were forced to borrow for subsistence while the landholders, especially bigger ones in more favoured places, were appeasing their land hunger by purchase of fresh land property and were also investing capital for making the old land yield larger crops. All these points indicate clearly that somewhere in 1943, the total debts would have been very much below the 1945 level. It may then be said that the present enquiry is about two years post-dated if its sole object were to calculate the maximum reduction of debt caused by wartime rise in prices. However there is a clear advantage in having investigated the debt position now, instead of, in 1943. Many forces, that would have been very dimly noticed a few years ago, have now come to the surface and clamour for recognition. Among these forces, the effects of natural calamities and the tendency towards land-grabbing at any price are important and they are discussed in this section.

130. *Incidence of debt in* 1939 *and* 1945.—Huge figures are apt to confuse the mind; a clear appreciation of the debt situation can be had only when the burden and incidence of this debt is subjected to further analysis.

The debt per acre of occupied land has recorded a fall from Rs. 66·6 in 1939 to Rs. 53·8 in 1945. These figures were arrived at by dividing the aggregate rural debt of these two years by the area under ryotwari holdings together with areas held by occupancy tenants in zamindaris. The following table gives the necessary details:—

Debt per acre of occupied area.

Year.	Total debt.	Occupied area.	Debt per acre of occupied area.
	RS.	ACS.	RS.
1939	2,71,91,64,000	40,847,571	66·6
1945	2,17,71,15,000	40,496,415	53·8

131. The debt per rupee of assessment is calculated by dividing the total rural debt by the aggregate land revenue including ryotwari assessment, rental on zamindari land, water-rates and cesses of all kinds. The subjoined table shows the reduction in debt from Rs. 28·2 in 1939 to Rs. 22·5 in 1945.

Debt per rupee of assessment.

Year.	Total debt.	Assessment.	Debt per rupee of assessment.
	RS.	RS.	RS.
1939	2,71,91,64,000	9,65,61,297	28·2
1945	2,17,71,15,000	9,96,57,746	22·5

In the above table total assessment consists of ryotwari assessment, rentals in zamindari, inam payments and miscellaneous levies like water-rates which are separately shown below:—

Detailed table of assessment.

Nature of assessment.	1939.	1945.
	RS.	RS.
Ryotwari ..	6,41,37,739	6,56,91,512
Zamindari ..	2,05,52,703	2,06,05,981
Inam ..	7,34,674	7,37,598
Miscellaneous ..	1,11,36,181	1,26,22,655
Total	9,65,61,297	9,96,57,746

132. Per capita debt is of pivotal significance in any study of the burden of indebtedness. The debt per head of population is derived by dividing the total debt of the 8,530 families investigated, by the number of persons in all these families; the average debt per head of all classes has fallen from Rs. 51·0 in 1939 to Rs. 40·8 in 1945.

It will be useful to examine the per capita debt of the five classes into which the agricultural population has been divided. The fall in the per capita debt of the first class of big landholders from Rs. 188·5 in 1939 to Rs. 113·8 in 1945 is marked, registering a percentage fall of 39·9. The second and third classes come next with a reduction of 24·6 per cent and 12·3 per cent, respectively. The debt per head of the fourth class of tenants has risen by about 4 per cent clearly showing that war years have hit relatively hard the tenants, as against the registered landholders. The case of landless labourers is even worse with a rise of 45·6 per cent. Since wages have risen nearly three times, the burden is not as heavy as it appears at first sight. Further, due to the scarcity of man power, employers of agricultural labour are more willing to advance loans to them with a view to tying them down to their work. This tendency may contain a germ which is likely to develop, given certain circumstances into something like indentured labour. Loans of this kind are found mostly among regular than casual labour.

The following table will show the per capita debt classwar:—

Per capita debt for each class.

Class.	1930.	1945.	Difference.	Percentage fall or rise.
	Rs.	Rs.		
I	188·5	113·3	— 75·2	— 39·9
II	78·8	59·4	— 19·4	— 24·6
III	42·8	37·6	— 5·2	— 12·3
IV	20·5	21·3	+ 0·8	+ 4·1
V	5·7	8·3	+ 2·6	+ 45·6

133. *Income and debt.*—The proportion of debt to income is of primary importance in measuring the gravity of the debt burden. So provision was made for the inclusion of data relating to agricultural income of the families investigated. My findings are tabulated below:—

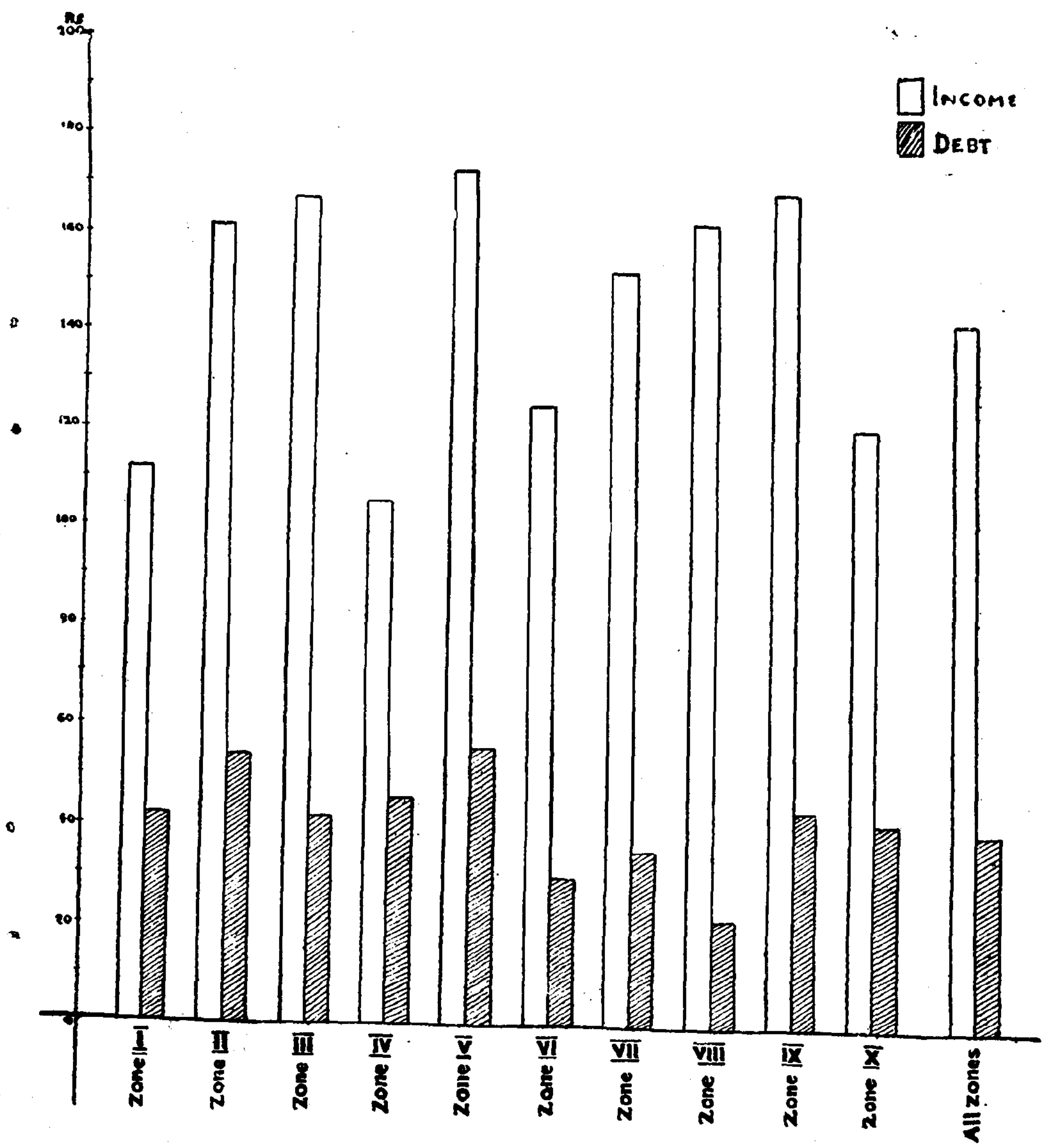
Agricultural income—averages for each of the five classes and for the whole population of the Province in 1945.

Class.		I.	II.	III.	IV.	V.	Average for whole population.
(1) Income per family	..	4,332·1	1,339·6	687·5	686·1	477·7	902·3
(2) Income per capita	..	347·7	201·7	116·1	108·9	91·7	144·4
(3) Debt per capita	..	113·3	64·1	37·6	21·3	8·3	40·8
(4) Percentage of 3 to 2	..	32·5	31·8	32·4	19·5	9·0	28·2

134. The ratio between the average per capita income of Rs. 144·4 and the average per capita debt of Rs. 40·8 for the whole rural population works out as 100:28·2. The first three classes constituting registered landholders have debts approximating to about 32 per cent of their incomes while the tenants and landless labourers have only 19·5 and 9 per cent. A higher percentage of debt among the landholding classes and a lower one among the tenants and landless workers prove the dictum that debts are conditioned by credit. The latter two classes lack assets on the security of which creditors grant loans. These figures are represented in a diagram on the opposite page.

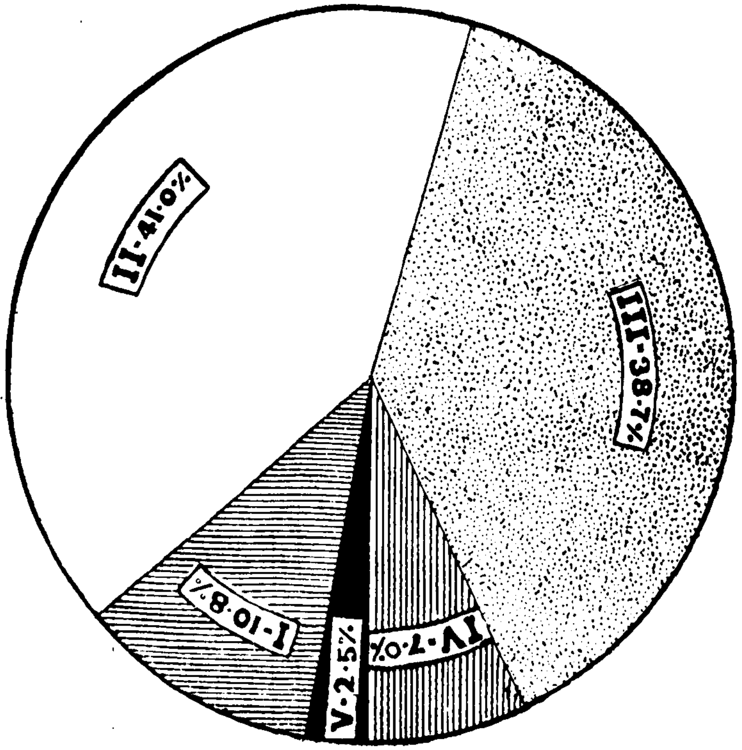
135. *Futility of certain comparisons at present.*—Generally a distinction is made between long-term debts and short-term debts. The former are usually larger in size and contracted for a longer period while the latter are raised to meet the expenses of current agricultural operations or to bridge casual deficits in the family budgets. Although this distinction is theoretically sound, in practice, ryots do not distinguish one from the other. As the Madras Provincial Banking Enquiry Committee says (paragraph 82, page 35), "It is not suggested that the ryot himself differentiates between the long and short-term debts or that he pays interest and principal separately; he actually pays at the harvest or at other times what he is obliged to pay from such resources as come to him." I agree with their argument and would go further and say that conditions during the last six years have obliterated even the little differences that would have existed at the time of the Committee's survey. Owing to war conditions windfall income has helped ryots to make advance repayments of long-term loans, thus converting them into *de facto* short-term loans. Most of the long-term debts are incurred by the mortgaging of immovable property. The rise in prices and the increased demand for land are sufficient incentives to the redemption of landed property and the improved finances of the ryot have placed him in a position to repay the loans before time. On the other hand money market being fairly easy, creditors do not press for repayments of short-term loans but prefer to extend the term. The difficulty of investment at a profitable rate of interest is very real in recent times. Hence the short-term debts subsist frequently for long periods. On account of these changed conditions, the

PER CAPITA INCOME AND DEBT IN EACH OF THE TEN ZONES IN 1945.

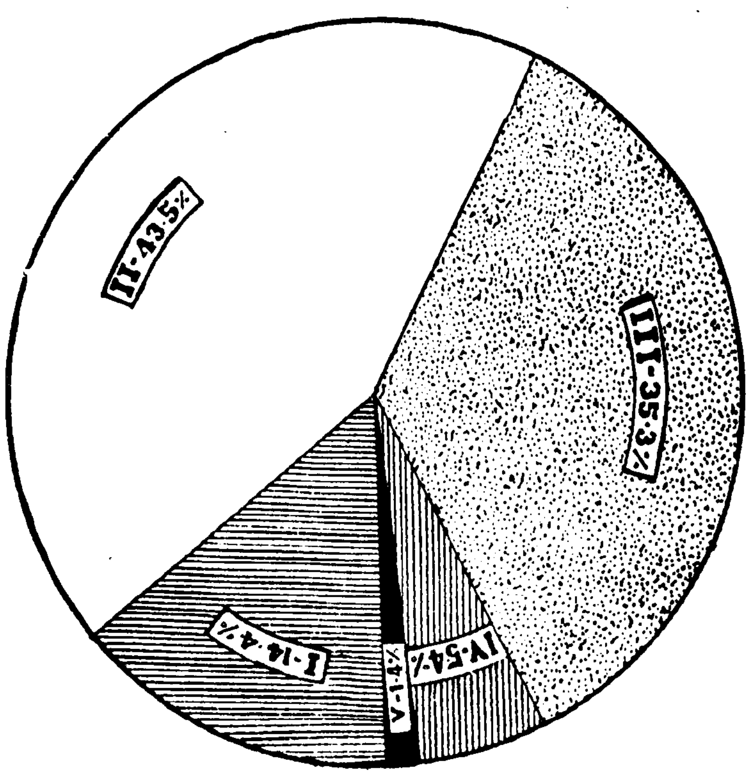


DISTRIBUTION OF THE DEBT BURDEN AMONG THE FIVE CLASSES IN 1939 AND 1945

1945



1939



distinction between long and short-term debts has been almost rubbed out. Similarly, there is no great insistence upon security. Secured loans are on the down grade. This is but natural in a period of surplus money knocking out for investments and of rapidly rising land values. My investigators have supplied me with data on these two points but they clearly indicate that conditions are abnormal and conclusions drawn from them will not be applicable when things return to normalcy.

136. Correlation of debts to assets is usually done to assess the magnitude of the debt burden. But in war time assets—from lands to ploughshares—have shot up in value. They will never be able to maintain their present values for more than a couple of years. Any comparison of debts with the swollen values of agriculturists' assets would be misleading if not mischievous two years hence. I have omitted this method of examining the debt problem. Therefore the most important requisite for any attempt to solve the debt problem is a knowledge of the distribution of its burden among the various classes. Some idea has been gained in this direction from our analysis of the incidence of total debt per head of the rural population taken as a whole and per head of each class. It will be of great value to understand the volume of debt owed by the five classes; for debt relief legislation can be directed to confer the greatest benefit upon the worst sufferers. The following table is intended to give a clear picture of the position from our present standpoint:—

Total debt of the five classes in 1939 *and* 1945.

Class.	I.	II.	III.	IV.	V.	Total.
(1) 1939.	3,91,335,000	11,84,052,000	9,59,500,000	1,45,907,003	3,83,70,000	27,19,164,000
(2) 1945.	2,35,291,000	8,93,059,000	84,18,23,000	1,51,945,000	5,49,97,000	21,77,115,000
Percentage of five classes in 1939 *and* 1945.						
(3) 1939.	14·4	43·5	35·3	5·4	1·4	100
(4) 1945.	10·8	41·0	38·7	7·0	2·5	100
(5) Percentage of 2 to 1	60	70	88	104	143	80·1

It will be seen from the foregoing table, that the second and third classes consisting of medium and petty landholders share each 41 and 38·7 per cent and together 79·7 per cent of the total rural debt; their aggregate debt amounts to Rs. 173·5 crores out of a total of about Rs. 217·7 crores in 1945. No measure of debt relief or liquidation will be worthy of its name unless it touches most effectively these two classes. The position of the tenants has already been clearly brought out in my study of per capita debt of each class. In so far as the land owned by this class is negligible in extent and can never warrant a large debt; the security for their present debt of about Rs. 15 crores is not real property but only their capacity for toil and their integrity of character. The debt of the landless labourers has increased more than that of tenants. Any aggravation of their debt position will be fraught with serious consequences to agriculture, for discontented and grossly indebted farm labourers are the most combustible material and can easily set agricultural labour on fire. The diagrams given on the opposite page illustrate the distribution of debt among the five classes both in 1939 and 1945. Quantitatively, the rich landholders have greatly benefited because their debt has diminished from Rs. 39,13,35,000 to Rs. 23,52,91,000. The rate of reduction declines as we proceed from the first to the third class of registered landholders but in the last two classes of tenants and landless labourers, there is a rise instead of a fall. These figures clearly show that the wartime benefits have ben realized by the big landholders to the greatest extent. Their share of the total debt has fallen from 14·4 per cent in 1939 to 10·8 per cent in 1945. The medium landholders were bearing 43·5 per cent in 1939 and 41·0 per cent in 1945 of the respective aggregate debt for these years. This marks a fall of only 2·5 per cent compared with a fall of 3·6 per cent in the case of the big landholders. With respect to the petty landholders, placed in the third class, their share of the debt has risen from 35·3 to 38·7 per cent (i.e.), by 3·4 per cent. It is, then clear that wartime effects have been more beneficial to the big than to the medium landholders while the small landholders have actually suffered. Benefits varied not according to the need but with the size of holdings.

137. *Distribution of debt among the ten zones.*—The geographical and economic differences in the ten zones into which the whole province has been conveniently divided in Chapter III are corroborated by my findings. Per capita income and debt are not uniform throughout the Province. The table below gives figures needed for an examination of these differences:—

Agricultural income and debt—Average for each zone in 1945.

Zone.	Per family income.	Per capita income.	Per family debt.	Per capita debt.
I Vizagapatam	754·8	112·1	289·2	42·9
II Circars Coastal ..	1010·5	161·8	336·4	53·9
III Circars Upland ..	1064·4	168·5	268·5	42·5
IV Deccan Districts ..	623·5	107·0	269·7	46·3
V Carnatic	1017·8	174·5	327·9	56·2
VI Cauvery Delta	774·1	125·6	191·9	31·1
VII Central Districts ..	954·0	153·7	231·2	37·2
VIII Extreme South West ..	1030·9	164·0	140·1	22·3
IX Extreme South East ..	969·8	169·9	253·8	43·9
X West Coast	880·3	121·8	307·6	42·5
Average for all zones ..	902·3	144·4	255·2	40·8

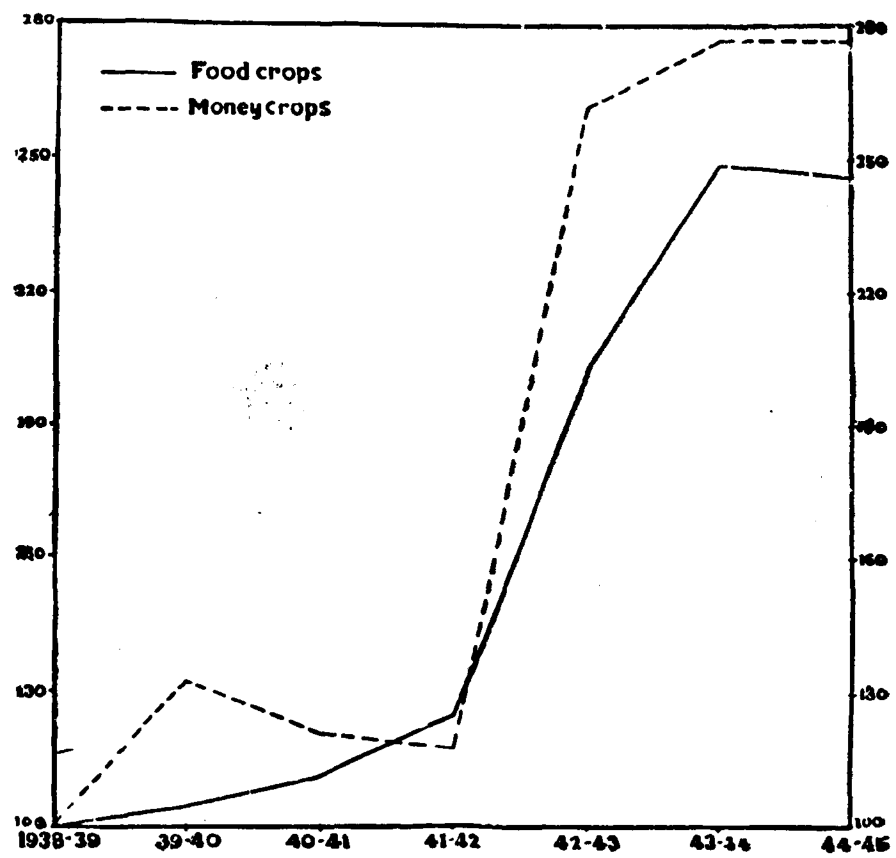
138. The per capita income in Vizagapatam is Rs. 112·1 per annum in 1945 as against Rs. 161·8 in the Godavari and Kistna deltas. The differences in agricultural practices, soil, climate and irrigation facilities have caused a variation in per capita incomes. The per capita income figures in the second, fifth and ninth zones are Rs. 168·5, Rs. 174·5 and Rs. 169·9, respectively. The per capita income of Rs. 125·6 in the Cauvery delta is the only discordant figure. This may be explained by the fact that this zone depends mainly on a single crop, viz., paddy, whereas more crops are raised in the other zones. Paddy cultivation has not been very profitable because the price of paddy has been more effectively and from an earlier date, controlled than the prices of other crops. The fourth zone comprising Rayalaseema, has the lowest per capita income of Rs. 107·0. The superior economic condition of the central districts is borne out by the higher income per head of Rs. 153·7.

139. The lowest per capita debt of Rs. 22·3 occurs in the eighth zone; the dry taluks of Ramnad and Madura districts offer no good field for money-lenders. Next comes the per capita debt of Rs. 31·1 in the Cauvery delta. The people in Rayalaseema seem to be more heavily indebted, the per capita debt being Rs. 46·3. The second and the fifth zones comprising the northern districts in the East Coast have per capita debts of Rs. 53·9 and Rs. 56·2, respectively.

Income and debt per family and per head in each of these zones for each of the five classes are given in Tables Nos. XXVI, XXVII, XXXI, and XXXII in the appendix. A close study of them will show how the differences mentioned in Chapter III have led to variation in income and debt.

140. *Real burden of debt.*—The figures given in the foregoing paragraphs indicate only the changes in the money burden of debt in 1939 and 1945. In combating the real burden of the debt on the rural population two important factors have to be borne in mind. The more significant is the heavy depreciation of the rupee which is worth only a third of what it was in 1939. In 1939, a

GRAPH ILLUSTRATING CHANGES IN THE PRICE LEVEL OF FOOD AND MONEY CROPS IN THE MADRAS PRESIDENCY BETWEEN 1939 AND 1945.



person who had a debt of Rs. 75 would have to sell 30 maunds of grain, assuming the price per maund to be Rs. 2–8–0. To-day at the price of Rs. 7–8–0 per maund, he can clear his debt with the sale-proceeds of 10 maunds of the same grain. In real terms, the burden of the debt of 1945 is only one-third of the same money debt in 1939. On the strength of this argument it may be said that the real burden of the present day debt of Rs. 218 crores is only that of a debt of Rs. 72·6 crores in 1939. The high degree of inflation, experienced in the war years, has robbed away two-thirds of the weight of the debt burden of each individual.

It is sometimes contended that any increase in debt, if it is productive, need not be considered a bad symptom. Debt incurred during recent years for purposes of investment on productive schemes cannot at all be considered as a burden for the economic consequences of such a debt are entirely different from those of a debt incurred for purposes of wasteful expenditure for meeting the deficit of an unbalanced family budget. But it must be noted that a debt which is productive under the aegis of high prices may be turned into unproductive debt with the fall in prices. Productive debt would continue to be so only when prices and costs of cultivation are stabilized with an eye to afford a reasonable profit to agriculturists. According to the figures, recent borrowings mainly productive in character is about Rs. 27 crores.

In short, though the money value of the debt in 1945 is above Sathianathan's figure, the real burden has been considerably reduced. Repayment of capital and clearing of arrears of interests are rendered much more easy than in the difficult days of depression. On account of these causes, the figures in this chapter have to be properly evaluated in the context of a depreciated currency; without exercising the caution, one may be led to wrong interpretation of the real situation and to take an unjustifiably gloomy view.

One more point of advantage is that the recent borrowings calculated to be about Rs. 27 crores are mainly productive in character. Increase in agricultural debt due to productive investment must be encouraged rather than discouraged. Under-investment has been the bane of Indian agriculture. On the whole, this sum of Rs. 27 crores will not weigh as a burden; the only safeguard required in this connexion is that the investments should not be allowed to become bad ones by a steep fall in prices of agricultural produce.

Real burden of the present debt of Rs. 218 crores is considerably less than what these figures will convey to the mind of the uninitiated owing to these causes of inflation and productive borrowing. The change in the composition and weight of the rural debt has been brought about by the adventitious causes of an abnormal period. It is a welcome change which must be strengthened by deliberate attempt on the part of the Government to wipe out the unproductive portion of the debt, altogether.

141. The reduction in debt between 1939 and 1945, shown in this chapter, might have been brought about by many causes like sale of land, the operation of the Agriculturists' Debt Relief Act and the rise in prices. The next chapter will be concerned with finding out how far each of these factors has contributed to this reduction.

CHAPTER VI.

WAR-TIME PRICES AND INDEBTEDNESS.

142. The prices of agricultural products, consumption goods and industrial materials rose steeply but not uniformly during war time. Imported consumption goods became very scarce, sometimes not at all available and always recorded huge rise in prices. Export goods lost their oversea markets and their prices sagged until alternative uses for them within the country were discovered and demand was stimulated. Iron, timber and other requisites for making agricultural implements were in extreme short supply. Prices of foodgrains raced up particularly after the fall of Burma and other rice-producing countries of the Far East; but towards the fall of 1943 their prices came under rigid control. Acute shortage was felt with regard to necessaries like clothes causing great hardship to villagers and townsfolk, alike. The economic health of the agricultural community was profoundly influenced by these violent fluctuations of war-time prices.

143. The principal foodgrains grown in this Province are rice, ragi, cholam and cumbu. The rise in their prices since 1938–39 is shown in the following table. The figures shown in it are based on the data of the harvest and market prices in all the districts given in the Season and Crop Reports.

Average prices of food crops per maund expressed in annas.

Number.	Foodgrains.	1938–39.	1939–40.	1940–41.	1941–42.	1942–43.	1943–44.	1944–45.
1	Rice ..	69·6	69·7	75·9	87·8	136·3	152·9	152·2
2	Ragi ..	36·8	43·8	44·3	46·9	81·5	114·9	144·8
3	Cholam ..	42·1	45·0	45·0	51·6	95·2	126·6	115·5
4	Cumbu ..	43·0	48·0	46·3	51·2	88·0	129·3	130·3
	Index number of the total. *	100·0	104·6	109·9	124·9	203·7	250·8	247·1

* Rice is given a weightage of three.

144. From the harvest or forecast prices of the four foodcrops given for the various districts, the average price of each foodgrain per maund of 82-2/7 pounds for the whole Province is derived. Weightage of three is given to rice due to its larger output and greater importance in the provincial diet; and taking 1938–39 as the base year, a general index number of prices for the four major foodgrains is constructed. It has mounted up to 247–1 in 1944–45. The increase in the price of rice is the lowest, being only 118·6 per cent above the level in 1938–39. On the other hand, the prices of the so-called "inferior" grains have climbed to greater heights; ragi, cholam and cumbu have shown an increase of 212, 174 and 208 per cent respectively during the same period. Increase in the price of rice is less than the average increase for all the four grains.

145. The relatively smaller rise in the price of rice has affected the income of agriculturists in the primarily rice-growing zones; for instance, the per capita incomes in the sixth zone (Cauvery delta) and in the tenth zone (West Coast) are only Rs. 125·6 and Rs. 121·8 in 1945. Growers of rice in general have not benefited as much as those of other foodgrains. However the general rise in prices to 247·1 in 1944–45 has been a great and welcome relief to agriculturists, especially as it occurred after a prolonged period of slump.

146. Commercial or non-foodcrops have assumed considerable significance in the agricultural economy of the Province in the last thirty years. The course of their prices during the war period can be understood from the data in the following table collected from the Season and Crop Reports:—

Average prices of non-food crops per maund expressed in annas.

Crops.	1938–39.	1939–40.	1940–41.	1941–42.	1942–43.	1943–44.	1944–45.	Percentage of 8 to 2.
(1	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Cotton	283·8	414·3	356·0	337·5	797·9	655·8	677 2	238·6
Groundnut ..	39·3	48·9	53·9	70·0	125·2	185·9	156·2	397·4
Castor	70·3	95·3	74·0	76·8	177·0	214·6	191·8	272·8
Gingelly	92·6	92·5	100·5	103·1	188·9	290·6	321·4	347·1
Coconut (per 62) ..	30·6	33·3	32·0	36·8	74·6	90·7	89·8	293·1
Total ..	516·6	684·3	616·4	604·2	1,363·6	1,437·6	1,436·4	278·0
Index number ..	100·0	132·5	119·3	116·9	263·9	278·3	278·0	..

Among the money crops, coconut, being of vital importance in the economy of the West Coast, has also been included. None of these crops has been given any weightage. The price of groundnut recorded the greatest increase of 297·4 per cent above its pre-war level of price. Although the closure of the European market threatened to depress its price, artificial aids in the form of governmental intervention and the constitution of the groundnut fund averted collapse of prices within a short space of time; local consumption was also stepped up by the setting up of numerous Vanaspati factories. The growers of this crop have reaped ultimately considerable profits. Next comes gingelly with an increase of 247·1 per cent in its price in 1944–45 compared with its price in 1938–39. It is followed by coconut, with a rise of nearly 200 per cent. But for this subsidiary crop, the financial condition of the people in the tenth zone would have deteriorated further. The general index number of all these commercial crops has moved to 278·0 in 1944–45. This shows that the cultivators of non-foodcrops have enjoyed a wider margin of profits than those of food-crops. A reference to the table showing the per capita incomes will indicate that in zones, where these money crops are raised, the income per head is appreciably higher than in zones mainly under foodcrops. The per capita income in the Circars uplands is Rs. 168·5 as against Rs. 161·8 in the Circars deltaic regions. The eighth zone comprising the black cotton tracts in the extreme south is generally under cotton and commercial crops. The income per head is Rs. 164·0. Cotton and groundnut experienced a sharp fall in prices in the earlier half of the war period. There are certain other commercial crops like tobacco and chillies which have had a rapid rise in prices and have yielded very high profits. Cultivators of such crops have been the most fortunate during the war; their prices were not promptly or rigidly controlled since they are not necessaries. The largest reduction of per capita debt from Rs. 88·1 in 1939 to Rs. 42·5 in the third zone may be attributed to the fact that tobacco, chillies and other very profitable money crops are raised on a definitely fertile soil.

The trend of prices of food and non-foodcrops during the years 1938–39 to 1944–45 is represented in the form of curves on the opposite page.

147. *Increase in the cost of cultivation.*—The upswing in the prices of agricultural commodities has been accompanied by a general rise in the cost of cultivation. Agriculture being not mechanized in this Province, cattle supply all motive power required for ploughing the land and for lifting water. In the war period, price of cattle has soared to unexampled heights. A pair of scrub bullocks used to be bought for about Rs. 25 in 1939 sell at Rs. 100 or Rs. 120 in the southern districts. The price of a strong plough team, used in the Ceded districts to break the tough soil, has risen from Rs. 150 or Rs. 200 to Rs. 900 or Rs. 1,000. This steep rise in the price of cattle is experienced all over the Province and has thrown a heavy burden on agriculturists who wish to buy fresh pairs or replace old or dead cattle. In the earlier years of war, cattle diseases were rife and the loss of cattle necessitated their purchase at fabulously high prices. Even assuming that replacement of worn-out cattle takes place once in five years, the extra expenses involved would have been considerable. Apart from

the high price of cattle, their maintenance has become a very difficult problem. Straw, cotton-seed, oil-cakes, bran, pulse-husk and other forms of cattle-feed have risen three to seven times in prices. The cost of green and cattle manure artificial fertilizers, bonemeal, etc., has also enormously increased. The ryot requires every year some iron and timber to renovate his implements. Without iron tyres for his carts, the fields will remain unmanured and without plough-shares, unploughed. In regions of lift irrigation where peasants use buckets made of leather, the rise in the prices of hides and skins has rendered their renewals very costly. Yet they have to be renewed annually, if not at shorter intervals. In some cases, acute shortage of these essential requisites has driven the agriculturists into the black markets where they have been quickly shorn of their war-time profits got from the higher prices of primary products.

148. There is a general rise in the price of all the requisites of cultivation; however, the problem of labour has been more serious than any other in almost all the zones. Owing to manpower mobilization for war and war-time auxiliary industries, the general scarcity of labour has been felt throughout the Province. A good number of the able-bodied, the enterprising and the efficient have got absorbed in war-time employment. Wages sharply rose. The wage rates in each of the ten zones in the year 1939 and 1945 are given in the table below:—

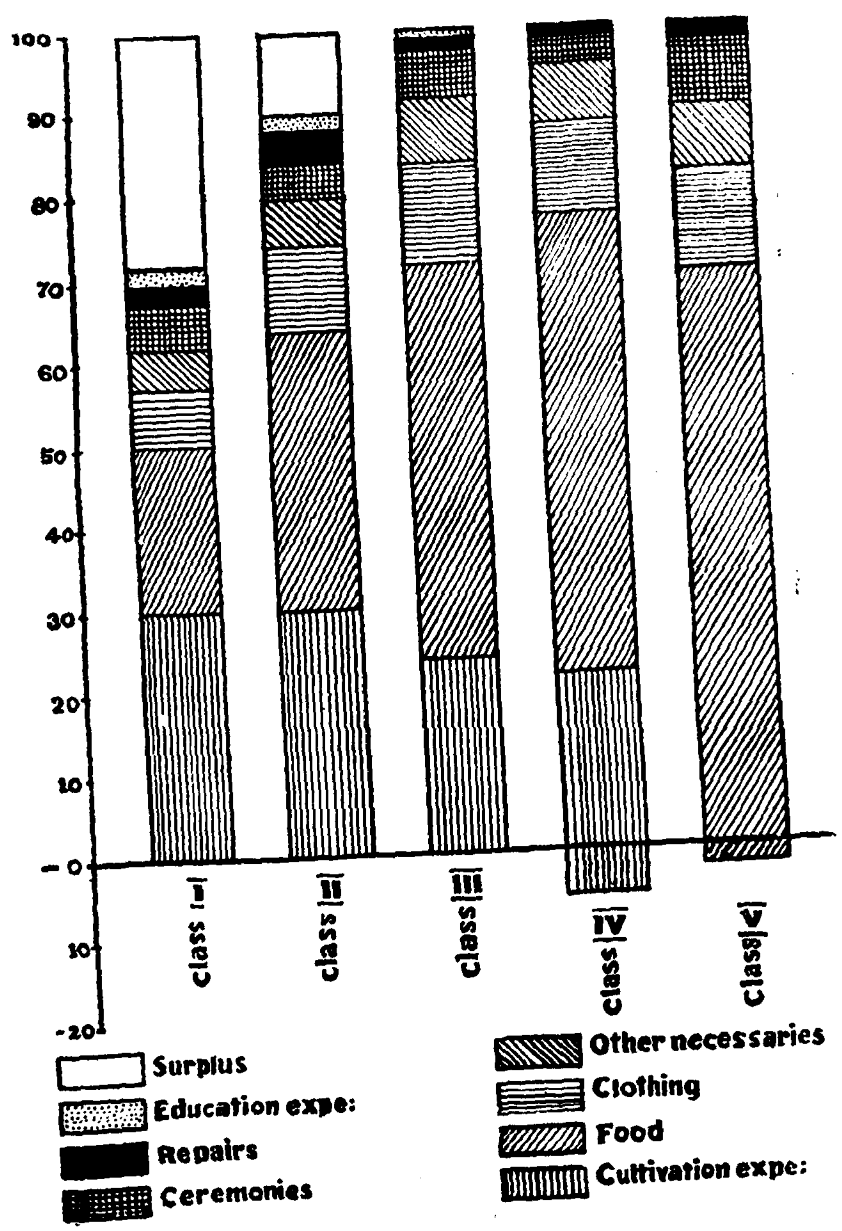
Wage rates in 1939 *and* 1945.

Zones.	Male.				Female.				Boy.			
	1939.		1945.		1939.		1945.		1939.		1945.	
	AS.	P.	AS.	P.	AS.	P.	AS.	P.	AS.	P.	AS.	P.
I	6	6	12	0	3	0	6	6	3	0	6	6
II	7	4	19	0	5	2	13	4	3	6	12	6
III	8	0	16	0	6	0	12	0	4	0	10	0
IV	4	3	14	6	3	0	11	0	2	3	8	0
V	7	0	17	0	7	0	13	0	7	0	11	0
VI	5	4	13	6	3	0	7	0	2	7	5	6
VII	5	5	15	8	3	2	9	7	2	4	6	9
VIII	12	0	22	0	6	6	11	0	4	6	9	0
IX	5	0	13	0	2	9	8	6	2	9	7	6
X	4	6	17	0	3	0	9	0	2	3	7	0

149. The figures in the above table are taken from the memoranda submitted by the Deputy Registrars of Co-operative Societies; they generally conformed to the figures supplied by my investigators. In the fourth and tenth zones, the wages have risen threefold or more in the case of male, female as well as boy labour. Nowhere is the rise less than 100 per cent. High wages mulcted the agriculturists of a portion of their profits. Again they had to pay high wages in many cases to inefficient workers always trying to shirk work. Agricultural labour has also exhibited a peculiar attitude towards employment. Taking advantage of the high level of wages, the labourers prefer to work for less number of days and to take more days off. One important consequence of this change in the psychology of labour is that agriculturists are not able to get the required number of labourers at times when they need them most. Delay of a day or two in agricultural operations, particularly in dry districts, affects the yield. Due to all these factors, cost of cultivation has risen by about 100 per cent above the level in 1939.

150. *Rise in the cost of living.*—The cardinal trait of total war economy is universal scarcity of goods in the civilian sector. This scarcity is further aggravated by transport bottle-necks which choke up effective and equitable distribution of the available goods among all the regions in a country. Consequently prices soar up. From the beginning of 1942 to October 1943 when the Hoarding and Profiteering Prevention Ordinance was promulgated, the condition of consumers was extremely pitiable. They were seldom able to get the commodities they

PROPORTION OF EXPENDITURE ON DIFFERENT ITEMS TO TOTAL INCOME AMONG THE FIVE CLASSES.



wanted; even when the goods were available, they were forced to pay unconscionable prices. The issue of this order of "blanket" control did not eliminate but only mitigated the consumers' difficulties. Ever since the Japanese war, consumers in India have passed through great tribulations and their expenses of living attained a peak level.

151. Among the necessaries of existence, agriculturists generally produce whatever staple foodgrains they need. But years of drought, famine or cyclone affect their self-sufficiency in this respect and make them look for outside help. In deficit regions, like the West Coast, rural population depend upon imports of foodgrains. It is usually found that agriculturists grow their staple foodgrain, rice, cumbu, cholam, or ragi as the soil and climatic conditions permit. They are, in many cases, unable to produce pulses, chillies, spices and other necessary food substances except in dry zones where multiple crops are raised. Even on the most suitable lands, all the food articles are not raised. Consumption of other necessaries like nutritive foods like pulses, meat and meat products, clothing, building materials and footwear cannot be given up or drastically reduced without detriment to health and efficiency. The purchase of these articles to satisfy the primary wants of food, clothing and shelter has imposed a severe strain upon the finances of agriculturists. Prices of pulses, chillies and spices have risen four or five-fold. Mill goods have become rare; price of handloom goods was not effectively controlled. The poor peasants were thus driven to buy the latter at very high prices. An analysis of the family budgets of the five classes will be instructive in finding out the effects of war-time prices on their ability to save and invest or liquidate their debts. The following table gives the results of an examination of 150 family budgets in each of the five classes. These 150 families are selected from all the ten zones.

*Family budgets : Per family figures for the five classes in the Province.**

Class.	Cultivation expenses. 1939.	Cultivation expenses. 1945.	Living expenses. 1939.	Living expenses. 1945.	Living expenses. Percentage of 5 to 4.
(1)	(2)	(3)	(4)	(5)	(6)
I	506·3	1,236·1	766·1	1,711·8	223·5
II	166·1	381·8	348·1	751·9	216·1
III	84·8	175·6	305·8	575·6	188·2
IV	91·2	183·9	254·0	536·0	210·2
V	..	..	173·5	369·8	213·1

Class.	Total expenses. 1939.	Total expenses. 1945.	Total income. 1939.	Total income. 1945.	Surplus or deficit. 1939.	Surplus or deficit. 1945.
	(7)	(8)	(9)	(10)	(11)	(12)
I	1,272·4	2,947·9	1,925·1	4,066·0	+ 652·7	+1,118·9
II	514·2	1,133·7	635·6	1,250·9	+ 121·4	+ 117·2
III	390·6	751·2	398·5	750·3	+ 7·9	− 0·9
IV	345·2	719·9	343·3	675·8	− 1·9	− 44·1
V	173·5	369·8	182·4	359·2	+ 8·9	− 10·6

* Vide Statement No. XXXIV in the Appendix for details.

152. The average living expenses per family of the first class derived from a study of 150 families show that they have risen from Rs. 766·1 to Rs. 1,711·8. The increase in the cost of living varies from 88·2 per cent in the third class to 123·5 per cent in the first class. All-India cost of living index number has been ranging between 230 and 240 in the last year. Cost of living index number calculated from the data supplied by my investigators ranges between 210·2 and 223·5 if that of the third class of petty landholders is omitted. The cost of living index for the rural populations will be lower than that of the All-India index because, the rural people are in a greater measure self-sufficient. With respect to the petty landholders, the rise has been the lowest, perhaps, due to

their very low income. The tenants will have more produce, necessarily not their own, passing through their hands, and the quantum of consumption would not have been much restricted. The labourers, in their turn, have had high rates of wages and greater purchasing power. The small landholders maintain a status which is too high for doing manual labour and supplementing their income; only the outturn from their fields reaches or passes through their hands. They have very little surplus left over to be sold in the market for cash. Their purchasing power has not increased due to war-time high prices. They have had to stint themselves in the consumption of even necessaries. With their severely constricted purchasing power, they have spent less.

153. Although the cost of living has risen, more or less uniformly among all the classes (excepting of course the third, the reason for which has just now been explained) the surplus of income over expenditure has not shown any uniform change. The big landholders, with considerable surplus of their agricultural produce for sale at enhanced prices have acquired the largest surplus income. From an average of Rs. 652·7, it has gone up to Rs. 1,118·1. The second class shows slight decrease, the average surplus falling from Rs. 121·4 in 1939 to Rs. 117·2 in 1945. On the other hand, the surplus of 1939 has been turned into a deficit in 1945 with regard to the third and fifth classes. The greatest deficit is experienced by the tenants in whose case the slight deficit of Rs. 1·9 in 1939 has grown to Rs. 44·1 in 1945. The capacity to save and liquidate debt obviously hinges on this surplus element which is diagrammatically illustrated on the opposite page.

154. The capacity to save and liquidate debt has been strengthened only in the case of big landholders. The second class has just managed to scrape through with a slight loss of about Rs. 4 in its surplus. This study of the family budget and cost of living reveals that the ability to save and repay debt has been mainly enjoyed by the richer landholders; therefore the benefits of the rise in prices have accrued only to the richer classes and they have varied with their disposable margin.

CHAPTER VII.

Reduction in Debt and its Causes

155. The volume of rural indebtedness is influenced by two different sets of causes, one of which tends to make it grow while the other helps it to shrink. For several decades in the past in this Province debt had been steadily growing and the first set of causes had been in the ascendant. Previous debt surveys have enumerated them exhaustively. They are dominant particularly during and after slump. Mr. W. R. S. Satthianadhan's enquiry into agricultural indebtedness in the immediate post-slump period naturally refers to these causes. (*Vide* his report, page 42, paragraph 46.) Borrowing for the repayment of prior, mainly ancestral, debts has formed the highest percentage of the volume of debt. Expenses on religious and social ceremonies come next, closely followed by wasteful expenditure upon litigation. In a period of depression, payment of land revenue has driven many an impecunious ryot into the parlours of money-lenders. Relief of distress and agricultural expenses are described by Mr. Satthianadhan as the next important causes of growth of debt. When prices sink to lowest depths as in depression, costs of cultivation usually far exceed sale proceeds, rendering agriculture a hopelessly deficit economy; even for bare maintenance of life, the agriculturist is forced to borrow. Sometimes the peasants strenuously struggle against steeply declining prices of their produce by undertaking improvements to land with the object of augmenting the yield and making a profit. This is another reason for contracting additional debt. Interest payments fall into arrears and swell up the volume of debt. These factors leading to aggravation of indebtedness are typical of slump conditions. Losses due to failure of harvests, cyclone havoc, death of cattle on account of pestilence have always been potent causes of indebtedness which have operated during the recent war period too. A reference to them has already been made in the previous chapter. The effects of a steep rise in the cost of living and cost of cultivation have also been examined. Productive investments such as improvement to land, sinking of wells and fencing in conjunction with purchase of new landed property contribute always to increase the debt. This aspect of the problem has been discussed in detail in Chapter V. When everything is duly considered, this first group of causes had not been very active during the war years.

156. The second set of causes inducing a decline in indebtedness deserve a more elaborate and careful consideration since during the war period they have exerted a preponderant influence. The most significant among them are debt relief legislation, sale of land, supplementary income due to wartime causes and wartime high prices for agricultural produce. These factors have acted individually as well as collectively on the entire mass of debt and have brought about a reduction. An attempt will be made to assess the share of each of these factors in the total reduction of debt between 1939 and 1945.

157. Legislative measures to protect the indebted agriculturists from the rapacity of oppressive creditors as well as to redeem them from the heavy burden had been in vogue long before the Great Depression. The Land Improvement and the Agriculturists' Loans Acts, the Co-operative Societies Acts, the Land Mortgage Banks Act, the Insolvency Act, the Debtors' Protection Act and the Usurious Loans Act were all calculated to achieve these twin objects. In the post-depression years, the serious plight of debtors called for further legislation. The Agriculturists' Loans Amendment Act of 1935 tried to liberalize the provisions of the earlier Act. However, mere palliative measures were found to be ineffective in solving the problem. The Debt Conciliation Act of 1936 was passed with great hopes, but it lacked realism. Its success hinged on persuasion and conversion of the creditors into a more reasonable attitude towards liquidation of indebtedness. As a member for some years of the Debt Conciliation Board of Chidambaram division, I have had an insight into the practical difficulties in the satisfactory working of this Act. The machinery for conciliation was very complicated and relief could be granted only in those cases where an application was

made either by a creditor or a debtor. Creditors seldom resorted to the Debt Conciliation Board and resented whenever debtors dragged them before it. A majority of the creditors with more than 50 per cent of the debts owed to them by the debtor-applicant should signify their approval of the award of the Board, if it should become effective. They could easily sabotage all the efforts of the Board by choosing to remain adamant and disagreeing with the award. An award rejected by the majority of creditors conferred little benefit on the debtors. The agency set up by the Act was not vested with any coercive powers; if a large number of applications had been made, the agency would not be able to cope with the volume of work. Further the creditors were offered no incentive to accept the award since the Act contained no provision for enabling the debtor to pay immediately the scaled down debts. Prompt repayment of the debt according to the terms of the award would have induced many a creditor to willingly submit themselves to the decisions of the Board but no financial facilities for the immediate clearance of debts were provided in the Act. After existing for about 7 years, the Debt Conciliation Boards were abolished as not having been of any considerable practical utility. Their contribution to the reduction of rural indebtedness had been negligible. The chronic debtors, in dire need of help, found the boards almost impotent in the face of creditors' stubborn opposition while the solvent debtors had no need to rush to them for succour.

Statement showing reduction of debt through Debt Conciliation Boards.

Particulars.	1939–40.	1940–41.	1941–42.	1942–43.	1943–44.	Totals.
(1) Number of suits filed for conciliation.	14,148	5,827	3,032	1,229	228	24,464
(2) Number successfully conciliated.	1,981	887	177	63	5	3,113
(3) Amount involved in all the suits.	Rs. 2,31,03,085	1,44,21,629	1,02,85,427	44,09,055	5,13,910	5,27,38,106
(4) Amount of debts in which conciliation was effected.	Rs. 17,27,943	14,88,451	6,69,960	1,88,179	5,127	40,79,660
(5) Amount scaled down by conciliation.	Rs. 7,43,701	8,29,370	2,95,281	80,779	2,044	19,51,175
(6) Percentage of 5 to 3	3·2	5·8	2·9	1·8	0·4	3·7

158. The truth of these remarks is borne out by the data in the above table. This table is based on figures supplied by 43 Debt Conciliation Boards in the Province. In the period of five years from 1939–40 to 1943–44, the amount involved in all the suits referred to these boards is only Rs. 5,27,38,106. In most of the suits, the boards have not been able to effect any conciliation. The amount of debts in which conciliation has been effected is Rs. 40,79,660 and the amount scaled down is only Rs. 19,51,175. The data supplied by the 43 boards may be taken to be fairly representative of all the boards in the Province. The amount scaled down by all the boards will be proportionately larger. Even liberally estimated, it will not exceed Rs. 50 lakhs; it is 1/500 of the total rural indebtedness in these years which may be put down as Rs. 250 crores. Thus the results of direct investigation into the statistics of Debt Conciliation Boards show only a reduction of about *half a crore*. It is too small an amount to be taken seriously. It must also be noted in this connexion, that even out of this small amount, about Rs. 15·78 lakhs have been scaled down in the two years, 1939–40 and 1940–41; much of this is due to the operation of the Agriculturists' Relief Act rather than to the efforts at conciliation. The steep decline in the amounts scaled down in the subsequent years from about Rs. 3 lakhs in 1941–42 to Rs. 2,044 in 1943–44 lends support to the view that the effects of the Agriculturists' Relief Act were quickly realized. Thus the reduction of Rs. 50 lakhs was not due to the intrinsic merits of the Debt Conciliation Act but due to the coercive clauses of the Agriculturists' Debt Relief Act.

159. The Madras Agriculturists' Debt Relief Act of 1938 stands entirely on a different pedestal. It incorporates for the first time in the annals of debt legislation the much-needed principle of compulsion. The object of the Act was to rehabilitate agriculture, the basic industry of the Province, by relieving the producers of food from the blight of indebtedness. There was no intention of

helping individual debtors out of awkward financial embarrassment. This act applied the principle of *damdupat* to pre-depression debts contracted before the 1st October 1932, cancelled all arrears of interest outstanding on such debts on the 1st October 1937, fixed the rate of interest at 5 per cent for all debts incurred between 1st October 1932 and 1st October 1937 (defined as post-depression debts) and fixed for the future a maximum rate of interest of 6¼ per cent for all agriculturists' debts. All these are cardinal features of the Act suggesting a radical cure for rural indebtedness. The actual figures of scaled down debts are given below:—

Statement showing the working of the Madras Agriculturists' Relief Act, 1938, *during the quarter ending* 30*th September* 1945 *and during the* 91 *months ending* 30*th September* 1945.

Particulars.	Quarter ending 30th September 1945.	91 months ending 30th September 1945.
	RS.	RS.
Amount involved in applications under sections 8, 9, 13, 19, 19-A and 21.	6,71,254	9,54,66,104
Amount as scaled down during the period	4,01,994	4,57,12,593
Amount of reduction by scaling down and percentage reduced.	2,69,260 (40 per cent)	4,97,53,511 (52 per cent)
Number of cases disposed of during the period	988	2,03,874
Number of cases pending at the close of the quarter	654	654

NOTE.—Cases voluntarily settled by parties without going to Court are not covered by this statement.

Source: Press Note

160. It will be seen that the amount involved in applications under the Act is less than Rs. 10 crores in a period of 7 years and 7 months. Even assuming the total indebtedness at the time of the promulgation of the Act to be Rs. 250 crores, this sum works to only about 4 per cent of the total indebtedness. As stated in the Press Note, this statement does not cover cases voluntarily settled by parties without going to Court. Voluntary settlement out of Court can take place only in those few cases where there is not even a shadow of doubt regarding the amount to be scaled down; on the slightest suspicion that this amount is a little too much on the part of the creditor or that it is a little too low on the part of the debtor, resort to the court of law would have been a certainty. So an amicable settlement without going to court would have been rare.

161. The Agriculturists' Relief Act encountered a great deal of opposition. Creditor interests questioned the validity of the Act. The decisions of courts on the Act have also whittled down the benefits intended to accrue to the ryots. For instance, a decision of the High Court of Madras lays down as principle of interpretation that the Act being expropriatory in nature, must be strictly construed. The right to get the debts scaled down is denied by other decisions to all those against whom decrees are passed after the Act came into force on March 22, 1938; right to relief has also been lost by the delay caused by resorting to wrong courts for redress and it was no easy task to find out which the right court was. Unsuccessful action by a member of the joint family has been set up as a bar to applications for scaling down by the other members of the family. To pre-partition debts renewed after partition and renewed promissory notes, the benefit of scaling down has been denied. The Federal Court had held that legislation affecting promissory notes must be by the Government of India and the provisions of the Madras Act were *ultra vires* in so far as they affected obligations under promissory notes. However the ordinance of 1945 extended the application of the Agriculturists' Relief Act to promissory notes. Owing to these and other loopholes, the Act failed to confer upon the debtors that amount of benefit expected from it. At present it is suggested in some quarters that the Relief Act requires immediate revision but the present time with its higher level of prices is not suitable for debt relief legislation. In a period of rising or high prices, it is the creditors who suffer in real terms. On the other hand, this is the most opportune time for a bold policy of attempting complete liquidation of indebtedness. It is an Act of liquidation and not of relief that is now urgently wanted. In the years following the passing of this Act, the creditors were in an

uncompromising mood and they even tried to torpedo the entire reform with a constitutional question-mark disputing the competence of the Provincial Legislature to enact such a measure. In these circumstances, it will not be unreasonable to suppose that the amount of reduction with regard to the cases voluntarily settled will not exceed that relating to cases settled in the Court. According to the Press Note, the amount of reduction by scaling down is Rs. 4,97,53,511 up to 30th September 1945. Adding an equal amount with respect to cases voluntarily settled, the Agriculturists' Relief Act of 1938 would have contributed to a total reduction of Rs. 9,95,07,022 or in round figures Rs. 10 crores.

162. It must be added that the benefits that would hereafter accrue from this Act would be inconsiderable because being a relief measure, all the potential beneficiaries under the Act would have hardly failed to derive the full benefits at the earliest opportunity. By its very nature, a relief measure is remedial in its action and as soon as the symptoms of the malady for which it is proposed vanish, the remedy is no longer in need or in use. A relief measure, by the very logic of its introduction, must be followed by further measures of more enduring benefit.

163. *Sale of land.*—When an opportunity presents itself for freeing himself from the yoke of debt, no debtor will willingly miss it. Such an opportunity occurred with the staggering wartime rise in the price of land. It is true that no peasant is prepared to sell all his land to pay off his debt. But when he can sell a moiety, or a small parcel, of his land to cancel his debt and retain the rest for his use without the encumbrance of debt, his native shrewdness counsels him to do so. From 1942 even up to the present time, the price of land all over the province has reached unprecedented heights.

164. The following data are collected from the figures in the family investigation schedules relating to sales of land effected with the definite object of liquidating indebtedness. The investigators were instructed to make a distinction between sales of land for this purpose and for other objects like celebrating a marriage or setting up a handloom or opening a shop. A detailed statement giving figures for each of the ten zones may be seen in the Appendix*.

Abstract statement of sales of land by different classes between* 1939 *and* 1945 *for liquidating indebtedness.

Class.	Amount.	Percentage to the total of sales.
	RS.	
I	57,016	12·2
II	1,97,788	42·2
III	1,98,528	42·3
IV	15,365	3·3
All classes ..	4,68,697	100

165. The fifth class of landless labourers, having no land to sell, do not figure in the above table. As these figures relate to 8,530 families investigated, the estimate of the value of sales effected in the whole province must be derived by multiplying the total for all classes, as has been done before, by one thousand. Hence the reduction in the total rural indebtedness of the province effected by sales of land may be estimated at about Rs. 47 crores.

166. The data available throws light also on how far each class has sold land to relieve itself of indebtedness. The class of tenants have very little land to sell; only 3·3 per cent of the total value of sales has been made by this class. The big landholders have also sold lands only to a limited extent, their proportion of the total sales being 12·2 per cent. It is but natural because many of the rich landholders have been enabled to clear most of their debts with the higher income enjoyed during the war years. Only those, whose debt burden was too heavy to be removed otherwise, have resorted to sales of small portions of their property. The reaction of this class is very peculiar to the rise in the

* Vide Table XXXVIII in the Appendix.

prices of agricultural produce. Some of them have actually borrowed money, as has been already noticed, to buy adjacent lands or long coveted patches at very high prices. On the whole, these richer landholders have sold less but bought more land and consolidated their position than any other class.

167. The bulk of the sales of land, exceeding 84 per cent of the total, has been effected and equally shared by the medium and small landholders. The effects of these sales may be easily understood; the medium sized farms would have dwindled in size. The small holdings would have become still more diminutive. This phenomenon is the least welcome as it would tend to place the agricultural economy of this province definitely on a lower level than before the war. This trend has got to be arrested and counteracted.

168. *Non-agricultural supplementary incomes.*—The war years witnessed in India a near approach to full employment. Apart from the recruitment to the Defence Forces, there was an evergrowing demand for labour in the munition as well as auxiliary industries. Public works of strategic and military importance like aerodromes offered employment to hundreds of thousands of people. This high tide of employment swept over the rural as much as the urban population. Recruitment from villages to the Armed Forces meant a regular flow of remittance from the theatres of war to the country parts. Owing to these causes, a larger income accrued to the rural masses. How far this excess income had been utilized for the liquidation of indebtedness is of immediate concern to us. It has not been possible even to approximately estimate this inflow of money into villages. But it should be noted that this "extraordinary" income came only in small monthly instalments. Very few of the recipients would have exercised sufficient foresight to accumulate these driblets of income and canalise it to the clearance of debt. On the other hand, the "unearned" income accruing to the dependents of soldiers and war workers easily came and was easily spent. It is not, therefore, correct to attribute to this sort of supplementary income arising from conditions of military economy any considerable reduction of rural indebtedness. The amount so diverted would have been insignificantly small.

169. It has ben already calculated in Chapter V that there has been a gross reduction of about Rs. 81·5 crores between 1939 and 1945. Of this about Rs. 10 crores may be ascribed to the operation of the Agriculturists' Relief Act and about Rs. 47 crores to sales of land. No other factor has actively helped to any substantial reduction except wartime rise in prices. The reduction due to this factor will be gross reduction minus the amounts attributed to the Relief Act and sales of land.

	RS.
(1) Gross reduction between 1939 and 1945	81,56,04,000
(2) Reduction due to the operation of Agricultural Relief Act ..	9,95,07,022
(3) Reduction due to the sales of land	46,86,97,000
(4) 1 — (2+3) Reduction mainly due to wartime rise in prices.. ..	24,73,99,978

170. Before concluding this Chapter, it is necessary to refer to the reduction of debt owed to co-operative societies in this province. Two statements containing data collected by a special staff are included in the appendices. One of them deals with primary agricultural co-operative societies. There has been a slight decline in the number of societies from 11,097 in 1939–40 to 10,792 in 1944–45. In the former year debts outstanding were Rs. 350·05 lakhs while in the latter year they amounted to only Rs. 260·77 lakhs, showing a reduction of Rs. 89·28 lakhs or about 25·5 per cent. Interest outstanding at the beginning of each of the six years from 1939–40 to 1944–45 has steadily declined from Rs. 45·51 lakhs to Rs. 29·65 lakhs or by about 65 per cent. During 1942–43, recovery of debts and interest has been most brisk, reaching the highest combined total of Rs. 284·17 lakhs for the six years under study. Advance recoveries also reached the highest figure of Rs. 24·72 lakhs in the same year. Debts recovered have

shrunk in size in the subsequent years of 1943–44 and 1944–45, confirming the conclusion already arrived at, viz., that the lowest level of indebtedness would have been reached in some intermediate year, perhaps 1943. The rapid decline of overdues from Rs. 163·21 lakhs in 1939–40 to Rs. 77·17 lakhs in 1944–45 indicates that there has been some measure of agricultural prosperity in recent years. This fact is reinforced by the steady growth in the deposits by members from Rs. 9·05 lakhs to Rs. 15·48 lakhs between the two years. The total deposits by non-members has also increased from Rs. 17·54 lakhs to Rs. 27·61 lakhs. These clearly show that membership of primary co-operative societies is not decreasing although the number of societies has fallen by 305, which might have been due to the withering away or weeding out of the weak and inefficient. One more point of interest is that loans issued in any year have reached the nadir in 1943–44 and in the next year have looked up. Rising from Rs. 167·16 lakhs to Rs. 189·67 lakhs they have registered an increase of no less than Rs. 22·51 lakhs. These figures bear testimony to the general feeling expressed by the agriculturists and others whom I interviewed in different district headquarters in the province. They stated that a wave of borrowing has started again in recent months, the cause for it being the rise in cultivation expenses in most of the places.

171. The second statement gives data pertaining to the 119 land mortgage banks in the province. Once again the figures testify to the fact that 1943 had seen the climax of wartime prosperity. The principal lent has declined from Rs. 42·57 lakhs in 1939–40 to Rs. 18·31 lakhs in 1943–44 whereas in the next year it has moved up to Rs. 24·81 lakhs. According to the Deputy Registrars and others, the recent tendency to borrow from these banks is for productive investments. Advance repayment has also reached the maximum in 1943–44, recording a sum of Rs. 22·61 lakhs. With regard to the character of borrowings from these banks, a wholesome change has come about during the war years. Prior to war, loans were generally taken to discharge old debts while loan applications of recent months state their object to be productive.

172. These two statements pertaining to the co-operative primary agricultural societies and land mortgage banks show, especially at the beginning of the year 1943–44, gratifying reduction in debts and interest outstanding. With respect to primary societies overdues have steadily fallen from Rs. 163·21 lakhs to Rs. 90 lakhs reaching a still lower figure of Rs. 77·17 lakhs in 1943–44. Advance recoveries have reached a maximum of 24·73 plus 25·39 lakhs or Rs. 50·12 lakhs at the beginning of the same year 1943–44. The shrinkage in outstanding debts, the mounting advance repayments and the steep fall in overdues were interpreted to mean a substantial reduction of rural indebtedness. One common mistake committed in this kind of ratiocination is that what applies to borrowers from co-operative institutions applies equally well to all kinds of borrowers. It is overlooked that the former class of debtors are a superior class of solvent debtors whose solvency has been sifted and assayed by the authorities of the Co-operative Department. The very fact that they have been lent these loans speaks high of their assets and repaying capacity. But a majority of agricultural debtors in this province are steeped too much in debt to derive any substantial benefit from co-operative institutions, particularly land mortgage banks. Without a proper study of what this class of heavily indebted people have done during the war years of high prices, it will be too sweeping to generalise on the data provided by the Co-operative Department. But such a deduction has been made and the public have been led to expect vast reductions in the total rural debt of the province. A little too optimistic a note has been struck regarding reduction of debt in 1944–45 when the present enquiry was mooted. It must also be noted that in the subsequent months many people have begun to borrow again either for productive purposes or maintenance. Owing to these causes, the hopes raised from a study of the working of the co-operative institutions have not been fully realized. The actual reduction of debt, according to my enquiry falls short of what had been expected by those who were guided solely by Co-operative Department statistics.

CHAPTER VIII.

General Observations and Recommendations.

173. Notwithstanding favourable war-time factors, the rural debt of this Province has stubbornly stayed at the high level of about Rs. 217·7 crores which is about Rs. 14 crores in excess of what Mr. W. R. S. Sathianadhan had computed in 1935. The decade that has elapsed since then was a period of economic recovery culminating in war-time boom. More congenial circumstances for the clearance of debt have hardly occurred at any time in the past. Yet the debt has not shown any substantial fall; that it is still 22·5 times as much as the Government assessment is a matter for serious consideration. The change in distribution of this burden among the five classes in the course of the war years argues a sad state of affairs. The tenants and the landless labourers, the lowest among the agricultural hierarchy, have run into greater debt and their economic position has seriously deteriorated. The small landholders, in greatest need of relief, have received the least benefit. The big landholders have experienced a higher rate of reduction of debt (39·9 per cent) than the medium landholders (24·6 per cent). In brief, the termination of hostilities has not found any uniform reduction of debt among all the classes of the agricultural population. This vast load of debt is a scourge on agricultural prosperity. Indebted peasantry are notoriously inefficient in cultivation and they slide deeper into the slough of debt. Backwardness of agriculture leaves the farmer with little or no profit and lands him frequently in loss and makes him borrow. Thus debt is both the cause and effect of inefficient agriculture. Even supposing the entire mass of rural debt is wiped by the sweep of a magic wand, debt will re-emerge so long as agriculture and rural economy are not placed on a sound and prosperous footing. Debt has a debilitating effect upon agriculturists. It casts its shadow upon and corrodes all the activities of the peasant. It has a profound and ramifying influence affecting all the phases of agricultural occupation. At the same time, the poor economic condition of the ryot predisposes him to contract debt. Any attempt at the eradication of this blight of debt, therefore, must not be superficial, concentrating solely on the financial aspect, but broad based and so well devised as to transform every adverse economic condition into a factor of utmost advantage. No half measure can ever wipe out the whole debt, and no more opportune moment can be found than the present because the onset of delayed post-war depression will come sooner or later and is bound to render the solution of this problem insuperably difficult. Simultaneously with a comprehensive measure for complete liquidation of debt, agricultural backwardness must be attacked on all fronts with a view to making agriculture a "surplus" economy. Indian agriculture is labouring under several difficulties and handicaps without removing which no scheme of debt liquidation will ever be successful.

174. *Subdivision and fragmentation of holdings.*—By far the most pernicious defect of agriculture in this country is the minute subdivision and fragmentation of holdings. It is hardly necessary to recapitulate the various disadvantages resulting from this cause nor is it necessary to detail the legal and customary practices from which this evil springs. As already noted there are at present, more than 6,276,000 pattas bearing an assessment which ranges from one to thirty rupees. The net cultivated area per head of the rural population in 1943–44 is only 0·769 acre. The most deplorable feature of this curse of endless subdivision is the consequent fragmentation. It is not rare to find that a farm of 10 acres of land may be split up into 20 or more scattered fragments. This process of splitting up must be halted, if agriculture should prosper. Economists and land reformers in the West may harp upon the advantages of small farms,

For example A. W. Menzies Kitchin says that the small farm (*a*) has a greater resistance to low prices, (*b*) produces twice the value of produce per acre, (*c*) provides employment for approximately twice as many men per acre, and (*d*) contributes in a greater measure to the social output than the large farm.* But these observations are appropriate only in the context of the bonanza farms of the new world. In this Province, as elsewhere in India, the farms are so extremely diminutive and scattered that the slogan of land reformers for many more decades to come should be consolidation of fragmented holdings and larger and ever larger farmers.

175. *Scheme for consolidation of holdings.*—Sir M. Darling has described clearly in "The Punjab Peasant" how co-operative societies for consolidation of holdings have attained a high degree of success. In one Jullundur village an owner who had his land scattered in 200 different fields now has it in one and five more have single plots where before each had over 100.† Consolidation is the direct remedy for morcellement, but the time is well nigh past to base it on voluntary methods in which case even a generation hence the problem will remain as bad as it is to-day. I recommend two pieces of legislation to speed up this work of consolidation and to render the beneficient effects lasting. There must be one co-operative consolidation society for each village or group of villages in this Province and membership of this society must be made obligatory on the part of every landholder in the village. Without giving up the democratic principles, it should be laid down that on the approval of more than 50 per cent of the members or that number of members who own more than 50 per cent of the occupied land in the village, consolidation of holdings must be proceeded with. There will be difficulties of classifying the innumerable parcels of land which constitute the land property of the members of the society; most of the difficulties may be overcome if the secretaries of these societies have experience of work in the Revenue department or if the boards of management refer matters in dispute to a tribunal of experts in soil fertility, yield, etc., of all the grades of land in the village. A time-limit should be set for the completion of the work of consolidation once it is started. In this connexion, the Government may offer an incentive to the villages by announcing that a remission of half of the land revenue for one year will be granted to those villages which effect consolidation of holdings within a stipulated period, say 9 months or one year. Obligatory membership of every landholder, final decision vested in a simple majority of members of the society or in those who own major position of land in the village, expert guidance of revenue officials in evaluating the various pieces of land and finally the monetary inducement of a remission of some land revenue will go a long way in implementing this much-needed reform. So much has to be done for bringing together pieces of scattered holdings. This must be supplemented by a legislative enactment prohibiting any further splitting up of land beyond a specified acreage; otherwise while attempts are earnestly being made to consolidate fragmented holdings, splitting up of bigger holdings will continue unabated.

176. *Economic holdings.*—Consolidation is a cure only for fragmentation. It will not, except incidentally, help to create economic holdings. The average size of land per patta in this Province has reached the low figure of 4·18 acres in 1940–41 from 6·85 in 1900–01. In the space of 40 years the size has shrunk by about 65 per cent. Contrary to the dictum quoted above that small holdings give greater employment, the tiny farms in this Province are not able to utilize even the meagre resources of the poor peasants. Both men and cattle are not worked to their full capacity. These small holdings fall far below the optimum size. The conversion of the innumerable pigmy plots of land into convenient optimum holdings is as imperative as it is difficult. It may be feasible to fuse together small bits of land into comparatively larger farms by legislative compulsion but it may be attended by the serious problem of providing employment to the owners of little parcels of land which might have gone into the making of economic holdings; these people will be deprived of the last tender link which had been binding them to the soil. No one can deny that these people constitute the extra burden on land and that they should be drawn away from agriculture and provided with other occupations. It is quite possible to retain some of them in agriculture by transferring them from the congested areas to recently developed or project areas where new colonies may be set up. Whenever such "transplantation" of population is attempted it will be better to avoid movement of people over very long distances. Outside agriculture, this superfluous population must be provided with some capital equipment to engage themselves in useful cottage industries which should be started as part of the post-war reconstruction programme, the development of hydro-electricity and that of grids to cover the whole province will help the growth of many new cottage industries. It would be ideal to develop them on Swiss and pre-war Japanese lines. Only by these methods can the present excessive pressure of population on land be reduced and a trend towards balanced economy be initiated. The newly created optimum holdings may be jointly owned, wherever suitable, by the old proprietors of the quondam bits. This arrangement can be adopted only as a transitional measure until the superfluous hands are gradually absorbed in other productive occupations. It is essential that the economic holdings must be created under the supervision of the Co-operative Consolidation Societies. An Act must be passed defining the size of an optimum holding which may vary with regional, soil, crop and other differences. The zonal division of the map of the Madras Province will be of great help in fixing the size of an economic holding. For example in the wet irrigated area of Tanjore, the optimum may be 5 acres while in the Rayalaseema or the Circars—uplands, it may be easily 30 acres. A rigid definition of an economic holding is extremely difficult and may even be misleading. The Floud Commission say with reference to Madras Province: "We were told that the minimum economic holding can be put down as 5 acres, of which between 2 or 3 acres must consist of "wet" land. As four-fifths of the cultivated area consists of "dry" land it is evident that average holding is barely sufficient to maintain the average family " (page). An optimum holding is that under the given circumstances and technique of agriculture, a certain area is necessary to give full employment to the available resources of an average agricultural family and to produce the crops at minimum cost per unit. Hence with alteration in circumstances or technique, the size of an optimum farm may change. It should be the function of Special Zone Officers, working under a Provincial Rural Development Board, to advise the village societies regarding the optimum size and other allied matters. On the lines indicated by these zone officers, the societies should proceed in this work of creating optimum farms. It must be added that in this as in consolidation, the decision of a simple majority should set the reform in motion. It will also be evident that this kind of reform will be nullified very soon if subdivision of property below a specified minimum is not prohibited by law.

177. *Tenancy system.*—Evils of tenancy system seriously hamper agricultural progress in this country. They are found in their worst form under the zamindari tenure; the ryotwari system is not free from them, most of the big landholders let their lands and live on rent payment. These big ryots are almost as much a rentier class as the zamindars under the permanent settlement of land revenue. While describing this particular defect the Land Revenue Commission of Bengal (1940) state that "the margin between the fixed land revenue and the economic rent of the land has permitted the creation of a number of intermediate interests between the zamindar and the actual cultivator which in some districts has reached fantastic proportions." The Report of the Simon Commission pointed out that in some cases as many as 50 or more intermediate interests have been created between the zamindar at the top and the actual cultivator at the bottom. This has resulted in dissipating the responsibility

* Economic Journal, 1934.

† M. Darling's. "The Punjab peasant pp. 273–74."

for the best use of the land in the national interest among a host of rent-receivers, all of whom have to be supported by the labour of the cultivator, and none of whom have either the incentive or the power to exercise any control over the use of land. Agriculture in these circumstances finds itself enmeshed in excessive sub-infeudation. The outcome is that not only agricultural advancement is arrested but agriculture itself is stunted and maimed.

178. The data collected by my Investigators show that about 13·2 per cent of the rural population or about 5,629,800 are pure tenants including their dependants. To this figure must be added another 15,012,800 representing half the third class of agriculturists, who are petty landholders cultivating more leased land than owned land, but who are not classified as tenants. This large section of the rural population are the actual tillers of the soil but not owners thereof. They may be tenants of ryoti landlords or 'zamindars'. It is a common but erroneous view that the problem of tenancy exists only under the zamindari tenure. Letting and sub-letting of land are not the exclusive features of the zamindari system. However it must be noted that the evils of tenancy are more pronounced in the zamindari areas than elsewhere.

179. *The zamindari system.*—The permanently settled area covers one-third of the Province of Madras. In the words of the Floud Commission "the level of rents, according to the evidence we gathered, is considerably higher than in the ryotwari area. The rate for 'wet' land is generally between Rs. 10 to Rs. 12 per acre and the general average is about 50 per cent more than in the ryotwari area." The majority of the members of the same Commission have come to the conclusion that "State acquisition is the only satisfactory solution." It is needless to catalogue all the defects of the Permanent Settlement such as financial loss to the Government, absence of contact with the actual cultivators, lack of agricultural improvement and evils of sub-infeudation. No argument is now necessary to show that the system has become obsolete and out of place in the present day economic set up. On consideration of evidence and other facts and law the Estates Land Act Enquiry Committee (Madras, 1938) came to the conclusion that the ryot is the proprietor of the soil and the zamindar has no right to it, not even to the possession of it, because he is only a collector of revenue within the meaning of section 4 of the Estates Land Act and under common law of the land. The Privy Council also held that he was only a collector of revenue within the meaning of section 4, and that he is not entitled even to possession of ryoti land. Then this Committee recommend that a few Land Revenue Bill be introduced for permanently settled estates declaring the ryot the owner of the soil and fixing the land revenue at that level existing prior to the Permanent Settlement. After the unequivocal recommendation of the Floud Commission, the issue is not reform of the Permanent Settlement but its abolition. In what manner it may be abolished has of course raised a controversy. Expropriation of the zamindars' estates is too revolutionary and is bound to result in a social upheaval. The principle of compensation is now widely accepted, but immediate payment in cash would present a stiff financial problem to the Government. Taking 20 years' net revenue as a fair compensation, I recommend that the following scheme may be adopted for the complete abolition of the permanent revenue settlement. The Government must, after evaluation of all the estates to be resumed, issue bonds to an equivalent amount bearing 3 per cent interest; compensation to zamindars should be in terms of these bonds. The estates must, then, be converted into ryoti lands, and the occupancy tenants transformed into 'ryots'. The land revenue in these villages or estates should be collected on the same lines as in the ryotwari villages. The total of such collection from each estate minus the peshkash payable by the zamindar will constitute a net addition to Government revenues; this is the profit arising from the nationalization of the estates. The entire profit accruing from this after deduction is made for the annual payment of 3 per cent interest on the bonds may be accumulated in a sinking fund and earmarked for the final redemption of these bonds. It is expected that the required fund will be built up in a shorter period than twenty years, after which time the profits may be included in general revenues. The question of the date of redemption will have to be decided. It is quite likely that many of the zamindars would prefer to have the bonds rather than get the cash lest it should be frittered away by their heirs. If a majority of these bondholders are averse to convert them into cash, the accumulations in the sinking fund may be invested by the Government and held as a backing for these bonds. It is necessary to declare that these bonds are non-transferable but heritable. A declaration to this effect is beneficial in two ways. The large number of bonds issued for the nationalization of the estates will not become marketable and thus will not tend to depress the prices of other Government stocks by increasing the total supply; the stock exchange will be left undisturbed. Further by making them the exclusive property of the former estate-holders and their heirs, this class will be preserved and saved from rapid disintegration. The interests of social stability in the present age of flux require this safeguard. This kind of protection to this class in the nature of things will not be extended for all time. A future Government may take a different view and adopt a different policy which need not be our concern at present.

180. I should now explain why I fix 3 per cent interest for these bonds. In normal years, convention and custom fix the net income from land at or near 3 per cent; this income is assured by this scheme to the estate-holder. There is of course a great disparity between the rates of profit from agricultural and industrial investments. But the dividends drawn from industry are relatively very high in India. These high dividends will be lowered if the programme of post-war reconstruction outlined in the Bombay plan or that of the Government of India is carried out. As a bridle will be applied to industrial profits in the future, the holders of these bonds carrying 3 per cent interest cannot have any cause for grievance. It may be finally noted that this scheme of issuing bonds steers clear of all financial embarassments to the Government.

181. *Non-cultivating landlords under ryotwari tenure.*—The abolition of the zamindari tenure will not solve the problem of tenants unless letting of land by ryotwari landholders is also forbidden, but any legislation calculated to prohibit leasing of land will be too much for the present. The time is not yet for such a reform that will usher in an era of direct relations between the Government and the actual cultivating-proprietors of the soil without the intervention of middlemen; these intermediaries who lead a parasitic existence on the land do not play any useful role in the agricultural economy of the country. Although their "unearned" profits do not justify their continuance, their wholesale elimination will have to overcome several practical difficulties. There will be individuals who have invested their life earnings on land; they would not be fit, either by habits or temperament, for actual cultivation of the soil. They would have treated land as one of the many forms of investment. Any legislation aimed at curtailing or closing altogether their anticipated profits will make an invidious distinction between investors on land and those on other forms of property. The crucial difficulty is here to separate such hard cases from the pure rentier class. Again, the method of tenant cultivation cannot be dispensed with in the case of widows, minors, convicts serving their sentences and the like. In this Province, non-cultivating landholders form a high percentage of the agriculturists and they are drawn from the more intelligent and vociferous section of the people. The best method of putting an end to absentee landlords will be to make it compulsory on their part to cultivate directly a fixed proportion of their owned land; failure to abide by this condition may be made punishable by forfeiture to the State of a certain proportion of the land which is put out to lease. Thereby a tendency towards direct cultivation by all owners, big as well as small, will be initiated and this trend may be accelerated by progressively raising the percentage of land to be directly cultivated by the owners. The scheme, however, will not be easily

practicable except in a socialistic state. Under the existing conditions the Government will have to be satisfied with a less radical policy of weaning them from their uneconomic ways of cultivation by making absenteeism as unattractive as possible. To achieve this object, the share of the tenants must be statutorily fixed at a high level and lands let out should be subject to a surtax. Thus absentee landlordism, the pernicious evils of which are comparable with those of pestilence and sword may be abolished within a measurable distance of time.

182. *Agricultural labour and stabilization of wages.*—Agricultural labour, unlike the industrial, has received scant attention in the past. The recent appointment by the Government of India of an officer on special duty to enquire into the conditions of agricultural labour marks the beginning of a new outlook. Labour in the agricultural sector is unorganized and ignorant. What is expected of the labourers is not mere unskilled job. The dependence of agriculture upon manual labour in India is more prominent than in advanced western countries where agriculture is being increasingly mechanized. Under normal conditions, there has been, generally, no dearth of labour but it is the war that has served to focus attention upon the problem of labour. As has been already mentioned, wages have gone up by 100 to 200 per cent in the course of the war. The rise in labour-cost has cut into the agriculturists' profit margin. Wherever I have interviewed the landholders—employers of labour—they have lamented over the abnormal rise in wages and the inefficient type of labourers they get. Many of them also pointed out the slight rise in the standard of life of the labourers. As has been shown in Chapter VI, despite higher wages, the landless labourers and farm servants have run into greater debts between 1939 and 1945. With regard to the rise in their standard of life, it must be welcomed as it was at a sub-human level before the war. The real issue is how far it is possible to maintain, if not improve, this slightly enhanced standard of life in the future. Nobody would desire that these labourers should once again recede to the deplorably low level of pre-war life. Labour occupies a pivotal position in Indian agriculture. A contented labour force will be a valuable asset to agriculture and an enlightened, organized and well-paid labour corps will be conducive to agricultural prosperity. It would be, therefore, a retrograde step to obstruct measures intended for their betterment. At the same time labour should realize that any undue rise in wages will be detrimental to agricultural progress and that its prosperity cannot be at the expense of but should form a part of general prosperity in agricultural sector.

183. Data collected by the Investigators show that about 6,397,500 of the rural population are landless labourers and their dependents, constituting about 15 per cent. During the war years wages have steeply risen but the rise in the real wages was inconsiderable. The material well-being of labourers has not shown any substantial improvement; but as they have now become highly conscious of their position, the problem of agricultural wages will hereafter loom large. A satisfactory readjustment of wages to the new post-war conditions is an indispensable step to a better order in the agricultural sphere. This naturally leads to a consideration of the vexed question of stabilization of wages. Stability of wages cannot be independent of price-changes in the case of agricultural produce. A purposive raising of wages should not lead to an artificial rise in the prices of the basic commodities of agriculture, lest they should impinge upon the cost of living of the consumers of foodcrops and upon the cost of production of manufactured goods processed from agricultural raw materials. Hence wage stabilization should take into account the reasonable profits of agriculturists, the legitimate interests of consumers and the requirements of manufacturers using agricultural commodities. Again this problem cannot be strictly viewed as a provincial one. Higher wages in one province may induce immigration from at least the contiguous districts outside. Most difficult obstacle in the way of stabilising agricultural wages is the lack of any

standard measure of labour. Neither piece wages nor time wages can be applied as readily to field labour as to factory labour. The whole problem bristles with difficulties but some sort of solution is essential to bring about class harmony and co-operation. After carefully analysing the wage bills and sale-proceeds of agriculturists, I am inclined to recommend the following *measures*: if the prices are stabilized at 2 times the pre-war level, wages must be stabilized at $2\frac{1}{4}$ times that of pre-war average. For example, suppose that the price of paddy per maund was Rs. 3 and wage for an adult male worker was 6 annas in 1938. In future, if the former were fixed at Rs. 6, the latter should be fixed at As. 13–6. The rise in the wages should be $12\frac{1}{2}$ per cent higher than that of the prices of agricultural produce. It must be so fixed as to encourage the labourers prices of agricultural produce. It must be so fixed as to encourage the labourers to raise their standard of living. The wages as well as the prices cannot be rigidly fixed for all time. Stability means in this context only the avoidance of violent fluctuations; wages will have to go up or down along with prices. Slack or inefficient work on the part of labour receiving the statutory minimum wage will be the greatest thorn on the side of agriculture. Hence education and propaganda must be directed towards making the farm labourers honest, diligent and efficient workers. All this requires the passing of a statutory Minimum Wage Act which should incorporate the levels of wages in different zones and soils as well as the minimum quantity of work to be done to earn the full wage, wherever the nature of work lends itself to measurement. Wherever the workers are able to finish more than this minimum, they should be paid a bonus which must not be less than proportionate to the minimum wage. In this connexion, the provisions contained in the bill drafted in January 1946 by the Government of India Labour Department are to be welcomed as one more step in the right direction.

184. It must however be observed that the passing of a Minimum Wage Act will not satisfy some sections of agricultural labourers who cherish the ambition of one day or the other attaining the status of cultivating proprietors. Some scope for the fulfilment of this ambition can be afforded even now by recruiting the best specimens among this class and settling them on newly established colonies in the project areas. The ultimate aim of reform in this field should be to transform as many of this class as possible into cultivating proprietors and transferring as many as possible to urban or cottage industrial occupations. It must be recognized that manufacturing industries can never dispense with factory hands but agriculture can; because in a planned agricultural economy every worker can also be the owner of a farm.

185. *Subsidies.*—Indian agriculture is supported by the lowest capital equipment as compared with the other great agricultural countries of the world. The primitive plough in use even to-day is a symbol of the poverty of the ryot. Agricultural progress can never be achieved unless his capital equipment is considerably increased and improved. He is innocent of many new implements, superior seeds and the accessories for processing his goods for the market. His activities are not only limited by ignorance but also by lack of capital. Even if holdings are consolidated and zamindars as well as absentee landlords are abolished, agriculture will hardly become a paying proposition due to the backwardness of agricultural technique and outmoded equipment. In order to rescue ryots from running into deficit, the most urgent duty of the Government will be to increase the capital intensity in agriculture. The advantages of using improved varieties of seeds, implements, etc., can be effectively demonstrated by running model farms, one at least in each taluk. Agriculturists in this province are not so obtuse as to ignore such object lessons but they are handicapped by scarcity or lack of funds. Government should initiate a courageous policy of granting ample subsidies to enable the agriculturists to equip their farms with the most modern implements available. Agriculture is recognized as the most important industry in this country supporting as it does more than three-fourths of the population, but it has been allowed to be a Cindrella among

industries. Much capital has been applied ungrudgingly to soap factories, chrome industry or to pencil making. On the other hand urgent improvements in agriculture have been held up for want of funds and subsidy has not been deemed to be suitable for agriculture. However the present food shortage has contributed to bring agriculture to the forefront as the most deserving of subsidies by Government. In the dry districts of this province agriculturists are granted subsidies for sinking wells which cover half the cost, the rest being met by the Government loan. This scheme must not be confined to a few districts but extended to the whole province without any delay if maximum benefit should accrue to the ryots. The policy of subsidization should not stop with this. Subsidy must be granted for the purchase of leather buckets, waterlift, and electric motors for pumping water wherever they may be used. Further, seed stills, flat blade and tine-tooth hoes, pure seeds, fertilizers, etc., should be sold at subsidized prices by the Agricultural department. It is more profitable for the agriculturist to sell his goods after some processing than straight from the field. Paddy may be husked with handmills and sold as rice; groundnut may be decorticated and sold; gingelly, castor and other oilseeds may be pressed and oil and oil-cakes separately sold; sugarcane may be crushed and converted into jaggery before sale. The sale of semi-manufactured goods instead of raw produce would be doubly blessed as it would yield a larger profit besides giving more work to the underemployed agriculturist. To enable the realization of these advantages, Government should undertake to sell handmills, oil presses, decorticating machine, cane crushers, etc., at subsidized prices or on "hire purchase" system, the full payment being spread over 10 or 12 years; the instalments may be collected with land revenue. I recommend this as an important measure to make agriculture a paying proposition which is the *sine qua non* for keeping the ryot away from debt. There need be no hesitation to adopt a policy of generous subsidization of agriculture on the prosperity of which depends the nutrition of the population and the adequate feeding of manufacturing industries like cotton, jute and vanaspati. No consideration of the cost of following such a policy should deter the Government from undertaking it, for higher income and greater purchasing power among the agriculturists will have beneficient reactions upon the entire national economy, bringing over all prosperity.

186. *Crop and cattle insurance.*—Natural calamities like drought, cyclone, floods and pests play havoc on the fortunes of the agriculturists and convert all expectations of profits into actual losses. Frequent outbreak of cattle diseases such as rinderpest and foot-and-mouth disease inflict disastrous financial losses on ryots who are otherwise spared of natural visitations. These constitute two of the major causes of indebtedness even among the prudent and toiling peasants. Their immediate consequences are partial or complete failure of crops and debility or death of cattle. Losses from these causes are not an annual feature but occur at such regular intervals as to plunge the ryot again and again into debt for no fault of his. Without some device to absorb the shock of these periodical visitations, it will not be possible to save the agriculturist from debt. The Famine Relief Fund is primarily intended to keep alive men and beasts during years of famine. This fund will not be sufficient to compensate the peasants for their losses; its use is narrowed down mainly to running free kitchens, relief operation and to granting free medical help. After the years of drought, the ryots recover as it were from a fell fever broken in health and fortune. The Famine Relief Fund is preventive in character, warding off mass unemployment, stark poverty and death due to starvation. It is not capable of repairing the losses sustained by the victims of famine. Hence some scheme to make good the losses suffered from famine and to put the ryots on their feet again is needed. To this end, I recommend a crop insurance scheme on the lines of Federal Crop Insurance in the United States of America. "The broad purpose of crop insurance is to protect the individual farmer against the hazards of drought, floods, hail, fire, excessive rainfall, winds, plant diseases

and insects. This protection helps to establish stability of farm income for the individual and for farm communtities." Although Crop Insurance in the United States of America covers wheat, cotton and flax, I would suggest that a beginning should be made in this province with rice and the major cereals. A crop insurance premium of one anna per acre of land under cereal crop may be collected with land revenue in all the districts except in dry areas susceptible to famine where a higher rate of premium may be charged. In 1944–45, there were 23,304,490 acres in this province under cereals. On the basis of the premium I have suggested that about Rs. 20 lakhs may be collected. Protection may be given as follows: Complete failure of crops may be compensated with the value of eight anna crop (vide price stabilization in paragraphs 209 and 210); where only less than four-anna crop has been harvested, the yield should be brought up to the level of eight-anna crop. This scheme is on a cash basis. It is better in some respects to put the scheme on a "kind" basis. This ryots must be made to pay a certain premium consisting of a specified quantity of grain per acre to the Government. All these premium payments in kind will be gathered and garnered in Government taluk and district granaries locally. Keeping a decent reserve, the rest may be sold and the proceeds credited to an earmarked fund for crop insurance. In cases of crop failure, the crop insurance policy holders will be paid so much in kind, as to give them an eight-anna crop. The merit of this latter scheme is that there will be a grain reserve built up by the Government to serve a very useful purpose in the years of scarcity. This scheme will go a long way in implementing one of the recommendations of the Foodgrains Policy Committee, viz., the building up of a Central Foodgrains Reserve as an insurance against food famine. This scheme is not claimed as a panacea for all the troubles caused by famine. Unless it is supplemented by a vast development of irrigational facilities of a protective nature, the scheme will not be attended by a cent per cent success. In the initial years, it may even happen that the premiums would not cover the losses due to famine. Without being dismayed by such a contingency, if the Government persevere in it and simultaneously intensify their irrigation campaign, they may find the crop insurance premiums steadily accumulating. At a later stage, the insurance scheme may be extended to cover commercial crops too.

187. Similarly with regard to losses sustained by the enfeeblement or death of cattle, a scheme of cattle insurance must be devised. In this province some attempts made in this direction in the past have been a failure. What I would suggest for the successful operation of the scheme is that its working must be entrusted to the Veterinary department. It should be a Government and not a private insurance scheme. The advantage of making the Veterinary Department responsible for it is that it will help the department to get into closer touch with the peasants to effectively prevent the outbreak or spread of any epidemic. As in the case of crops, a start may be given to the scheme by limiting its operation to the bovine cattle; sheep, goats and other animals may be brought under the benefits of the scheme at later stages. The premiums and the degree of protection will have to be fixed by local advisory committees of non-officials presided over by the District Veterinary Officers. Certain auxiliary measures are necessary to make the scheme of insurance a success; vigorous action must be taken to combat all the cattle diseases; beter breeds of cattle should be multiplied; scrub cattle must be gradually eliminated. Livestock Importation Act must be rigidly enforced and prevention measures must be passed to stamp out diseases altogether. The castration of all male species except the selected breeding bulls should no longer be delayed.

188. The Committee on Co-operation (Madras, 1939–40) have made a reference to practical difficulties in the working of crop insurance. It is true that even in America, initial attempts of private insurance companies at over-all crop insurance failed because they insured both price and crop outturn; there was no adequate data about crops or soils so as to measure correctly the risks involved; administrative machinery necessary to make local contacts with

individual farmers was unwieldy as well as very expensive; lastly private companies lacked sufficient capital to bear the brunt of losses in the first few years before reserves are built up.* These causes of failure of private enterprise in this field clearly show the advantages of Government undertaking. In introducing any progressive reform, difficulties will have to be encountered; detailed production data on individual farms or at least in every village are essential for measuring the risk. At present agricultural statistics is not only meagre but defective. The District Agricultural Officers are already given functions connected with crop cutting experiments. The expert services must be made greater use of and crop forecasts and the like must be done by them. Data regarding cattle may be collected by the officers of the Veterinary department. These two departments can take to this kind of new work with great enthusiasm. Within a few years, farm maps, records of yields, livestock statistics, which are necessary for a successful working of insurance schemes, may be got ready. The benefits of insurance would justify any amount of labour or money spent in gathering ample data. As R. H. Green says "crop insurance is organically connected with farm credit supporting and benefiting it. As a social measure it is considered as a protection that tends to reduce the number of borderline farmers, who because of unavoidable losses may otherwise tumble down into the class that must have protection against want. Socially crop insurance is a kind of preventive measure rather than a relief measure. Crop insurance through the stronger medium of a joint reserve, accomplishes what any prudent farmer does who can, when he carries something in reserve against adverse crop conditions." Insurance helps the agriculturist to enjoy security of income and thus releasing his mind from anxiety about the next crop, makes him think and act on constructive lines.

189. Both crop and cattle insurance schemes must be undertaken directly by the Government and necessary legislation should be made. Working of these schemes even by institutions on the pattern of Public Corporations in Great Britain will not prove to be a success, for compulsion is a necessary part of the scheme. Ryots steeped in time-honoured tradition may not voluntarily join the scheme. Hence I recommend crop and cattle insurance on a compulsory basis to be worked by the Government.

Rural Credit.

190. The majority of agriculturists are leading a hand to mouth existence, without any financial reserve. For every little operation in cultivation, the ryot stands in need of credit. The central figure in the agricultural credit mechanism is still the private money-lender who may be a sowcar, a grain merchant or an affluent big ryot. The system of money-lending is the same whether the creditor is a non-agriculturist or a landholder. In the post-depression year, the money-lenders came in for a great deal of criticism. They were accused of charging usurious rates of interest, keeping accounts in a fraudulent manner and of machinations to drive the debtor to the wall. Whether these charges were applicable to all the money-lenders or not, legislation was invoked to protect the indebted agriculturist from exorbitant rates of interest and extortion. The outcome of such legislative activity was the fixation of a maximum rate of interest and scaling down of debts according to certain fixed principles. These measures have led to the contraction of credit and/or evasion of law. When the private money-lender has a lion's share of agricultural financing, it would be a short sighted policy to launch a frontal attack on him. Other measures enacted in this period, as well as in the past aimed at compulsory registration of money-lenders of all classes and regulation of their accounts. Agricultural operations depend entirely upon adequate and timely credit and the credit needs of the agriculturists are both enormous and insistent. In these circumstances, mere restrictive measures will result only in the serious

* R. H. Green; Evaluation of Crop Insurance.

curtailment of credit. It may be argued that easy credit is a dangerous temptation to improvident agriculturists, but more dangerous is the drying up of the very springs of credit. The co-operative credit institutions, the only alternative agency, have not sufficiently developed as to serve as an effective substitute. It will be a futile task to reform the ways of the private money-lender without setting up powerful parallel financing agencies to supply to the needy ryots adequate credit.

191. The credit requirements of the agriculturists may be classified under three heads—short-term, medium-term, and long-term. Certain basic principles governing a sound system of rural finance, may be laid down. Too easy credit will encourage extravagance and accumulation of unproductive debt. Delay caused in granting credit for urgent and legitimate needs is sometimes worse than denial of credit. Strict scrutiny of application for loans is a prime necessity but machinelike rigidity in the collection of dues regardless of the circumstances of the debtor should be discouraged; for in many cases pressure for repayment applied at wrong moments will ruin a debtor. Finally an agriculturist may require all the three kinds of credit; unless there is effective co-ordination among the various agencies supplying them, his creditworthiness may be wrongly estimated and bad loans may be given. The most glaring defect of the present rural money market is its utter lack of co-ordination. The private money-lender plies his trade silently and alone. The co-operative societies and even the land mortgage banks are not in touch with each other while the Government grant Takkavi loans independent of other agencies. Any system of rural financing must avoid all these defects if it should prove to be satisfactory.

192. *Short and medium-term credit.*—At present the co-operative primary societies make a distinction, which is none too clear, between short-term and long-term credit. The former is granted to agriculturists for meeting the legitimate and necessary cultivating expenses prior to the beginning of agricultural operations and recovered after the harvest; its duration is limited to one year. The latter is granted to the agriculturists for improvements to his land such as sinking of well, fencing and terracing, buying of bullocks and implements as also for maintenance in bad years. This medium-term loan is repayable in easy monthly instalments within three years. The Rayalaseema Co-operative Enquiry Committee of which I had the privilege to be a member, have suggested ten years as the maximum period for the repayment of a medium-term loan. This term appears to me too long. Even in the case of short-term loans, repayment in instalments is not prohibited, nor the purpose of the loan severely scrutinised. It is essential either to draw the line between these two kinds of credit distinctly or rub it out altogether. I recommend that short-term credit may strictly be confined to productive purposes connected with the annual agricultural operations and be repaid in a lump sum immediately after the harvest without carrying it over to the next year or succeeding years; even if a portion of this sort of debt is not paid off within the year, it will seriously restrict the agriculturist's borrowing power in the following year and consequently lower his agricultural efficiency. Only in years of drought and consequent partial or complete failure of harvests, linience to the necessary extent in collection may be shown. It should be made the first principle of short-term loans that they are repayable within nine or twelve months according to the local variations in crops and seasons.

193. It is sometimes contended that medium-term credit as a species may be abolished, but from my interviews with numerous persons connected with the co-operative primary societies, I find that there is a desire on their part not only to continue it but also to extend the period of repayment to five years. In my opinion, there is a necessity for granting medium-term loans. Loans for improvement of land fall into two classes; some of them require relatively smaller sums than the others. For example, the sinking of a well or purchase

of bullocks will not involve more than Rs. 1,000, which may be lent to agriculturists after a careful consideration of their assets, repaying capacity and their integrity of conduct by the village societies. Similarly failure of harvest due to natural calamity may leave the agriculturist without food, seed or money when financial help is urgently required but repayment of any loan granted can hardly be expected before the end of that year. All these circumstances warrant the grant of medium-term loans which should be made repayable, both capital and interest, in monthly instalments spread over five years. The system of granting medium-term loans by primary societies will not, in any way, encroach upon the function of land mortgage banks specialising in long-term loans, necessary for undertaking costlier improvements of land or for the discharge of prior debt. It is also obvious that the agriculturist cannot be exhorted to approach the land mortgage banks for what has been described here as medium-term loan without putting him to great inconvenience. Because the necessity for medium-term loan arises more frequently than for long-term loans. Again the land mortgage banks themselves will find it difficult to cope with the work or financial responsibilities implied in any arrangement in which medium-term loans are issuable only by them. Thus it will not do good either to the land mortgage banks or to the agriculturists to deprive the co-operative societies of the function of granting medium-term loans and entrusting it to the land mortgage banks. If the foregoing argument is accepted, the responsibilities of the co-operative credit societies are heavy indeed. It is, therefore, necessary to discover some means of enabling them to discharge their responsibilities to the satisfaction of their members. To this end, the primary need is adequate, if not ample, supply of finance.

194. Lack of finance has been the most powerful obstacle to the full growth of co-operation. Despite four decades of its existence, co-operative credit has only touched the fringe of the problem of rural finance and the reign of the private money-lender is still unaffected, if not unchallenged. It was piously hoped that the money-lender would be sooner or later brought into the co-operative movement and made the cornerston of co-operative finance. This hope has been shattered in most cases; where sowcars have entered the society, they have done so to torpedo it or make use of it for gaining their selfish ends. Persuasion and propaganda have been tried all these years and found wanting. The money-lender had stood firm and refused to be converted; hereafter there is no alternative except compulsion. In this connection the necessity for harnessing the financial resources of the money-lender—" an oasis of thrift in a desert of extravagance "—to serve the needs of the peasant through co-operative channels requires no elaboration. For it is impossible for the Government to spoon-feed the ryot for everything he does to sow and reap. Money and credit available in the rural part must be ploughed there itself for the enrichment of agriculture. As will be shown presently, the Government have other long-term financial aids to give; for short-term and medium-term credit facilities agricultural economy should become self-reliant and self-sufficient without looking up to the Government for ' paternal ' aid.

195. I shall now proceed to give a brief outline of my scheme to utilise to the full the funds of money-lenders for the betterment of agriculture and rural economy. It should be made obligatory for all the money-lenders in each village or group of villages to become members of the local co-operative society, the setting up of which is already taken for granted. They should be forbidden by law from lending directly, without the intervention of the local co-operative society, to any agriculturist. They should open accounts with the society and maintain a minimum of deposits. As a transitional measure for a period not exceeding ten years, all the co-operative credit societies must be bifurcated one part of which must consist of its usual old self and the other must consist of money-lenders whose membership is made obligatory. The accounts may be kept separately. A prospective borrower, then, will have two ways of getting a loan; he can simply follow the usual procedure of applying for loan to the

society or he can meet any money-lender he likes and negotiate for a loan and then submit an application to the society mentioning the amount he wants, the person who is willing to accommodate him, the rate of interest charged and the other considerations regarding repayment. A copy of this application is immediately posted on the notice board so that other money-lenders, who are members of the society, may know the full details of this proposed transaction. If any one of them comes forward offering easier terms to the borrower, the new offer may be accepted in the place of the old one. This kind of publicity given to a proposed transaction enables the borrower to get the best of terms. (Combinations of money-lenders should be prohibited by law and evasions of the law will be reduced to a great extent if the suggestions given to augment the financial resources of pure co-operative societies and to reduce the opportunities to the money-lenders of more profitable investment of their funds are implemented.) Because the debtor is contacting the money-lender outside the co-operative society, unhindered by any sort of red-tapism, he can fix his terms quickly and the loan will be sanctioned earlier than in the " pure " branch of the society. This procedure obviates delay in getting loans and the paucity of co-operative finance is made up by inflow of money-lenders' credit. But to direct them through co-operative societies and to irrigate financially agriculture, mere compulsion of money-lenders to become members of village co-operative credit societies will not suffice. Certain inhibitions are necessary to prevent or discourage money-lenders from evasive tactics and alternative lines of investment; promissory notes or other documents of credit which are not transacted through some co-operative society or other should be made invalid in the eyes of law. This involves an amendment of law affecting promissory notes; it may be opposed on the ground that it is a direct assault upon individual freedom to invest or spend one's money as one likes. Critics of this proposal will have to be reminded that the spacious days of laissez-faire are gone; for instance, capital issue control has put freedom of investment into a straight-jacket. Without a complete prohibition of all direct transactions between money-lenders and agricultural borrowers, it will be impossible to check the activities of the former and the victimisation of the latter. Measures like compulsory licensing of money-lenders and regulation of accounts are too feeble to effect the desired change. Hence, I recommend that private money-lending except through authorised institutions like the co-operative societies should be absolutely prohibited. The societies must meet the incidental administrative expenses from the common good fund. It is expected that when all the recommendations regarding interest, etc., are implemented the money-lenders will have gradually become full members of the co-operative societies which they might have treated as registering houses at the beginning. The need for bifurcation will no longer exist and the two branches, then, may be merged.

196. In spite of the legal prohibition, private money-lending may pass through all formalities but money-lender would have offended against every provision of the law. To illustrate, a needy agriculturist may contact a money-lender, who is a member of the co-operative society and ask for a loan of Rs. 300. The latter may be willing to accommodate him with a loan only when the borrower agrees to pay in advance Rs. 50 before the actual payment takes place in the co-operative society under the nose of the society officials. This will tantamount to lending Rs. 250 and receiving a pro-note for Rs. 300. This kind of evasion is supported by the borrower because his need is great and the supply of credit is inadequate. The only way of eliminating such malpractice is to augment the supply of credit and fundamentally shake the monopolistic position of the money-lender.

197. *Supply of credit.*—The village co-operative credit society has been so far depending upon share capital, entrance fee paid by the members, deposits by members and non-members and loans from higher financing institutions. Quite contrary to the orthodox co-operative principle of self-help, most of the village

societies are functioning with external loans. This phenomenon is due to the reluctance of money-lenders to enrol themselves as members and abide by the rules and by-laws of societies. According to the scheme of compelling village money-lenders—who also include individuals making casual loans to ryots—their funds become available for financing agriculture. Assuming that industrial investments are made unattractive by the fixation of a statutory maximum of 4½ per cent and that purchase of land for the sake of receiving rent from tenants and not for direct cultivation is prohibited, village money-lenders will feel much more inclined than to-day to lend to co-villagers at a lower rate of interest. They have already realized that their cash resources deposited for short period in commercial banks will bring them only a return of about 2 per cent. Thus by a dual policy of reducing the rate of industrial dividends and interest on the deposits in banks, village money-lenders can be psychologically turned to be more favourably disposed to lend to agriculturists through the co-operative societies. This is a consummation to be zealously worked for and attained, so that scarcity of loanable capital experienced in most of the village co-operative societies will become a thing of the past. This scheme places rather too much faith in the change of heart on the part of money-lenders. It may well happen that money-lenders would be provoked to grow sullen and vindictive and refuse to lend money even to good borrowers. However, this mood of "striking" work cannot last long. Even if it would last for a short period the grand strategy of the scheme lies in increasing the volume of funds available to credit institutions. This is best achieved by making agricultural paper negotiable and rediscountable. By legislation, the Central Banks as well as the Provincial Co-operative Bank should be enabled to discount agricultural paper and the apex bank, when it has run short of funds, should get the agricultural bills rediscounted by the Reserve Bank. If these discounting and rediscounting facilities are granted, agricultural finance will be able to cast away its oppressive rigidity and become as elastic as commercial finance. Credit may be expanded whenever necessary and there will be no warning by the Central bank to the member society that the limit of borrowing is reached. Likewise a Provincial Co-operative Bank will not administer a similar caveat to the Central banks. In order to make this facility a reality, every society must have a warehouse for storing the produce of its members offered as pledge. The facilities for storage must also be granted by the Government which should construct godowns and granaries in important centres; peasants may take their produce to these Government stores and get official receipts on the presentation and pledge of which credit institutions may lend a certain fixed percentage of the value specified on them, say 60 or 75 per cent. This function of lending on the pledge of storehouse receipts must not only be discharged by co-operative societies but also by all those banks which are inclined to do this kind of business. When the discounting and other facilities mentioned are granted by the Government, not a few of the commercial banks will take to this business and thereby provide greater credit facilities. With such enlarged supply of credit, it will not be difficult to adequately meet the short-term and medium-term credit needs of the rural population.

198. Provision of ample short and medium-term credit facilities is a prime necessity but the machinery for the administration of agricultural credit must be worked on sound banking principles. It is essential to strictly control granting of credits for unproductive purposes while the need for "full finance" should not be ignored. The ordinary credit machinery should be kept as far as possible clear of giving emergency loans to tide the farming population over a difficult period which must be done by the State on philanthropic and not on business considerations. Estimated yield and market conditions should be the principal guide in the granting of medium and short-term production credits. The advantages of local management of the institutions granting such credits are worth preserving" and there is no better method of doing so than by reconstituting and revitalizing the primary co-operative credit societies on the aforementioned lines. Seasonal loans for seeds, and fertilizers may with advantage be made on the basis of bills drawn on co-operative societies or firms supplying goods required by the farmer. They thus tend to be held to the uses they purport to serve and may be linked up with the general banking system through discount." An important function of short-term credit is to facilitate the orderly marketing of crops throughout the harvest year. It is of fundamental importance that the principles that apply to ordinary business should govern co-operative practice.

199. *Long-term credit.*—The provision of long-term credit must aim at raising the standard of living of the agriculturist through a judicious policy of stimulating production. This is best attained by granting loans for permanent improvements of land and agricultural technique as well as for reducing and ultimately eliminating the handicaps imposed by chronic and unproductive debts. At present long-term loans are granted by the Government in accordance with the provisions of the Land Improvement Loans Act by money-lenders and requirements; again the difficulties of getting these loans are considerable and regulation of credit supply. Takkavi loans by Government are of very little significance; the total amount disbursed is relatively very small to the total requirements; again the difficulties of getting these loans are considerable due to red-tapism. On the other hand loans by money-lenders do not suffer from delay but the purposes for which loans are utilized are seldom watched so long as the debtors have huge assets and there is ample security for the money-lenders' credit. Hence money-lenders' credit is fraught with more danger than good to the agricultural economy since loans are likely to be frittered away in an unproductive manner. Co-operative Land Mortgage Banks are guided by theoretically high principles. Loans would be granted only for the liquidation of prior indebtedness and for costly permanent improvements to the land. But numerous defects in practical working, have resulted in decimating the benefit that would have otherwise accrued from their activities. The greatest defect in the working of the Co-operative Land Mortgage Banks is the infinite delay in granting loans. An application for loan by a member is examined first by the Board of Directors. An *ad hoc* sub-committee is appointed to examine and evaluate the assets of the borrower. It generally takes things easily, visits the village in which the land of the applicant is situated, makes local enquiries, exposes to the public the financial plight of the borrower to his bitterness and humiliation, obtains an encumbrance certificate, tries to find out whether the applicant has any unregistered but unacknowledged debt. This is followed by an official inspection by the Sub-Registrar in charge of Land Mortgage Banks. Final recommendation is made in certain lucky cases, for the granting of loan. Then the bank appeals to the Central Co-operative Land Mortgage Bank for finance, which, in its turn, scans and scrutinizes all the concerned documents and, after satisfying itself on all points, grants the request. This is followed by the necessary registration and other technical formalities before the applicant gets the loan he applied for. The land is mortgaged to the primary bank which in its turn remortgages the same property to the Central Co-operative Land Mortgage Bank. This tortuous process usually takes nine months to one year to be gone through. Further, there is always an upper limit to the sum that can be granted as loan by a land mortgage bank: the amount of loan granted will be a small fraction of the value of the assets especially when compared with the amount that will be lent by a money-lender on the security of the same assets. Obviously all these will not go to make the land mortgage banks popular among agriculturists who want loans both urgently and without much fuss and needless exposure of their straitened circumstances. Finally the capacity of these banks to provide loans is limited by the rate at which the general public including the Government will subscribe to their debentures. At present, the Central Co-operative Land Mortgage Bank

issues debentures and the funds thus raised are lent to the Primary Land Mortgage Banks which in their turn lend on the security of lands mortgaged to the individual borrowers. The Primary Land Mortgage Banks make a profit by raising the rate of interest on its loans above their own rate of borrowing from the Central Land Mortgage Bank. Thus the rate of interest to the agriculturist is pushed up to a high level. The primary banks cannot function independently with their own funds. In short these land mortgage banks are co-operative only in name. They are unable to satisfy the needs of their members without external aid. Excessive delay caused by an elaborate and cumbersome procedure is exasperating to the borrower. This description of the actual working of these banks will show how defective the system is.

200. The whole machinery of long-term credit requires a thorough overhauling. The three different agencies for the provision of long-term credit should be brought under unified control. Extending the principle already adumbrated, viz., that private and unregulated money-lending should be abolished, legislation should be made prohibiting also direct secured loans by money-lenders to agriculturists. No fear need be entertained about any breakdown of the long-term credit mechanism on this score so long as adequate alternative arrangements are made. I recommend in a later section some means of liquidating as much of prior debt as possible. In this section I shall confine myself to devising a scheme of long-term financing for permanent improvement of agriculture. An estimate of what amount will be required for this purpose can first be made. As already shown in Chapter V, 1·4 per cent of the landholders only pay an assessment of Rs. 100 and above. The provision of long-term credit to this class of big landholders and the medium landholders will be the concern of the machinery that is to be set up. The claims of small landholders can well be left out because the scope for improvement of land in their case will be strictly limited. It will be admitted that all the big and medium landholders will not be in need of credit and the number of those who need may be safely put down as 50 per cent of the whole. Assuming that on an average each applicant requires Rs. 1,000, the total demand for long-term loans will be about Rs. 100 crores. Permanent improvements, by their very nature, will not be a regular annual event. Indian agriculture being extremely backward, there will be an intense demand for this type of loans for about 5 to 7 years, after which period the tempo of reclamation of land, intensive farming, improving soil conditions and irrigational facilities, the quality of the livestock, equipping farms with modern machinery and implements will gradually spend itself and consequently the demand for loans will decline from the peak level to a plateau. On a rough estimate, the initial period of 5 to 7 years may require a provision of Rs. 15 crores per annum and when an all-round improvement of agricultural economy has been effected, there will be a demand only for about Rs. 4 crores. With regard to the supply of funds for both these periods, I suggest (1) the floating by the provincial Government of "Agricultural Prosperity Loan" of Rs. 15 crores at 2½ per cent per annum redeemable at the end of 20 years; (2) the utilization of about Rs. 20 crores from the reserves accumulated by the Government of Madras during war years; (3) a subvention of Rs. 50 crores from the Central Government to this province as part of their Rs. 1,000-crore programme for postwar agricultural reconstruction; and (4) * a loan of Rs. 15 crores at 1 per cent by the Reserve Bank for the development of agriculture. Sir Manilal Nanavati has recommended that half the profits of the Reserve Bank should be set apart for agricultural improvement. Assuming that this recommendation is implemented, agriculture will be assured of an

* The Reserve Bank of India has offered to make large advances to Provincial Co-operative financing institutions at specially low rates of interest. According to this offer, the Provincial Co-operative Bank in the United Provinces received loan funds recently from the Reserve Bank at 1½ per cent. The Report of the Rayalaseema Co-operative Enquiry Committee (P. 68).

annual income; however the amount would not be considerable and will not be helpful in any scheme of rapid reconstruction of agricultural economy. Therefore I would suggest that the Reserve Bank should float a large loan for stimulating and accelerating the pace of agricultural development immediately. This loan may be repaid from a sinking fund which should be built by the accumulation of the half of the annual profits of the Reserve Bank earmarked for agricultural improvement. In these several ways, it will not be possible to raise a fund of Rs. 100 crores to be spent in the first 5 or 7 years. For the second period I recommend the utilization of the yield from agricultural income-tax that must be levied in a progressive manner on all incomes above Rs. 3,000. It is computed that this income-tax has high potentialities of fetching a huge income that will exceed double the land revenue collection to-day. In that case, it will be enough to fix a maximum of Rs. 4 crores out of the entire yield to be utilized for granting agricultural long-term loans every year. It may be added that since agriculture is the basic industry of the province, the Government should not shrink from floating the loan of Rs. 15 crores and spending at least Rs. 20 crores from the reserves. Improvements effected in the agricultural sector, it may be reiterated, will be infectious in spreading to the other sectors.

201. *Machinery for granting long-term loans.*—The prime requisite for the administration of long-term credit is unification of the various agencies now functioning in the field. It has been shown that the co-operative land mortgage banks are not satisfactory either from the stand-point of financial self-sufficiency or from that of efficient and expeditious disposal of loan applications. Provision of funds for long-term loans to agriculturists, according to the scheme outlined, is made the direct responsibility of the Government. It will be a wrong policy for the Government to supply funds and allow Co-operative Land Mortgage Banks to exercise the powers of granting loans. Divorce of responsibility from power will lead to endless trouble, particularly in the case of the inefficient Land Mortgage Banks. It is not easy to reform the Land Mortgage Banks; hence it is desirable to convert them into Government Land Mortgage Banks administered by the Co-operative Department. Government can lend also the takkavi loans through these institutions; the number of banks should be increased sufficiently to enable each taluk to have one bank.

202. The process of finding out whether the land offered as security by the borrower is encumbered or not, is now one of the causes of endless delay. This delay may be minimized by following the policy of appointing official valuers as found in Malaya and some other countries. These official valuers are supplied with sufficient information from the Registration, Revenue and other departments as to enable them to give certificates of property to prospective borrowers. The certificates show the extent and the current market value of the property, encumbrances, if any, income, crops grown and all the other details required by any lending institution. On payment of a nominal fee, any person can get a certificate of this kind. I recommend the appointment of such official valuers, one in each taluk, from whom agriculturists may get the certificate and produce it before the Government Land Mortgage Bank that is to be set up. As the certificate gives full information, without further ado or delay, the bank can grant whatever loan it can. The registration fee for the mortgage to be effected may be further reduced. These banks must also have an out-door inspecting staff whose duty it will be to check whether the loans sanctioned are spent properly without being misused.

203. The rate of interest on these loans is at present 6 per cent which is too high. It is agreed on all sides that agriculture seldom yields more than 8 per cent income. When the income from agriculture is so low, the statutory maximum rate of interest of 6¼ per cent fixed on borrowings by the Government so late as in 1938, may be considered regressive at least to those chronic debtors whose lands have been overburdened with debt, even though it may be bearable

to prudent agriculturists who borrow small sums for meeting cultivation expenses. The need for reducing the interest rate is clear. I recommend that the repayment of the loans shall take the form of annual instalments of 5 per cent of the capital borrowed for 20 years. As already indicated, the Government will be borrowing at the rate of 2½ per cent. The borrowers will pay only the capital back in twenty equated annual payments; their payments are analogous to instalments payable under hire-purchase system. Under normal circumstances the borrower will have no grievance under this scheme; he returns only the capital without any interest. As the annual instalments are paid, the Government can invest the funds and earn some interest, and whatever loss is incurred in this transaction must be met from the public revenues. This loss will have to be borne only on the loans issued in the first 5 or 7 years. In the later period when long-term loans are granted from the revenues realized from the agricultural income-tax, the question of burden will not arise. It can be easily seen that the burden will not be great, for out of the Rs. 100 crores to be lent in the early years only a sum of Rs. 15 crores is borrowed; the rest does not have any trail of interest payment. Whatever the cost of this service is, it may be treated as a subsidy to agriculture, the basic industry of the Province.

204. *Liquidation of prior debt.*—The major portion of the large volume of rural debt existing at present is unproductive in character. Although the real burden of this debt has been considerably lightened by the depreciation of the rupee (already explained at the end of Chapter V), it is still a drag on agriculture. Unless it is removed, it is bound to retard the material progress of the rural masses. Attempts to scale down debts will not affect the core of the problem. A more radical and systematic effort to wipe out the debt is the crying need of the moment and it must be made as early as possible before the onset of depression. In the early thirties when the depression was acute, various proposals for the complete liquidation of rural debt were made. Mr. Jamnadas Mehta in a speech in Bombay on 29th October 1933 suggested that the State must take over the ryots' debt and convert Sowkar's loans into its own at a moderate rate of interest and that creditors should be given bonds having a currency of 60 years and yielding an interest of 4 per cent. In his book "The Problem of Agricultural Indebtedness (1933)," Mr. Nalini Ranjan Sirkar proposed that the State should take over the debt of at least those ryots who, although incapable of repaying their debt, have sufficient holdings to maintain them if relieved of debt. For this purpose, the Government should float a loan for the total amount, payable in 50 or 60 years out of which they could settle the claims of money-lenders. Both these schemes are too generous with both debtors and creditors and throw a heavy financial responsibility upon the State. For, a large number of debtors would have been wastrels and rescuing them from the grip of their creditors will mean putting a premium on improvidence; and many creditors, if they resorted to court for recovery of their loans would not get the full value of their claims but these two schemes offer full payment to them.

205. A sound scheme of liquidation must not be inequitable to the lender or borrower nor should it subject the Government to serious financial commitments. It must rest on a scientific classification of debtors as well as creditors. The former may be divided into "hopelessly indebted" whose debts exceed their assets and "moderately indebted" who are solvent but do not have liquid resources to pay off their debts. With regard to the first class, which consists of chronic debtors, the creditors will not be able to realize their loans and arrears of interest to the full, whatever means they may adopt. The best solution for the liquidation of their debt is to set up rural insolvency courts and declare them insolvent. From the time the report of the Royal Commission on Agriculture was published, the necessity for this kind of legislation has received emphasis. I am of opinion that mere establishment of Rural Insolvency Courts will not end this problem; no debtor will willingly rush to an insolvency court and incur the odium attached to it. As such a debtor has generally more than one creditor, none of them would easily file a creditor petition but each would try to get his loan repaid fully; because in the case of a debtor whose assets

form only a fraction of his liabilities, declaration of insolvency by the Court would result in *pro rata* distribution of assets. Thus both the debtor and the creditors will not be too eager to go to the insolvency court. But this state of affairs must not be allowed to continue as it is detrimental to rural economy. So I recommend the following procedure:—The establishment of Rural Insolvency Courts, one in every taluk, should be preceded by an enactment compelling every money-lender to submit to a special Taluk Liquidation Officer before a certain date a detailed statement of his loans. Any person who has failed to mention any of his loan transactions will have to forfeit the right of recovering that loan from his debtor. A penal clause to this effect will make all the money-lenders supply all the information needed to gain an idea of total indebtedness. Synchronized with this, there must be a legislation asking all the debtors to give the same officer a statement of their indebtedness and assets. Any concealment of any debt should be declared a penal offence. By the two legislative acts, a complete census of debts together with assets may be obtained. From an analysis of these data, the number and character of hopelessly indebted can be easily be found out. It should be the duty of the officer to prepare a list of insolvent or hopelessly indebted debtors. Within a month of the publication of this list, the debtors must be obliged to appear before the insolvency court. They should be declared insolvent and their assets except the dwelling house, may be distributed *pro rata* among the various creditors. On the whole, with this element of compulsion, about 25 per cent of the debtors will be freed from debt as well as land. These debtors are generally such inveterate borrowers and inefficient agriculturists that their exit from the agricultural economy will not make it poorer; on the other hand a clog in the wheel will have been got rid of. By this process, it is estimated that about Rs. 30 crores of debt may be wiped out. This scheme is sympathetic to the debtor in so far as it leaves his dwelling house with him and it is so to the creditor because it saves him from the trouble of going to court and spending much of his energy and money. At the same time, the Government do not stand to lose. The only problem is to reabsorb the former debtor in some productive occupation for which, development of rural subsidiary industries is essential. The transformation of the chronic debtors into almost paupers might inflict individual sufferings but this will have to be done for vitalising agriculture. More will be said about their re-employment in a later section.

206. Among the moderately indebted, it will be convenient to distinguish those who have mortgaged their lands with possession from the rest. In the Punjab, there is an Act which enables the usufructuary mortgagors to get back their lands so mortgaged after a period of 25 years from the mortgagees without any repayment of capital. Because it is deemed that the creditor who is in full possession of the land mortgaged would have realized both interest charges and the capital originally lent from the annual income. In normal years, it has been calculated that the income accruing from the hypotheca in a period of 25 years will suffice to wipe out the debt contracted on its security since creditors generally demand and get such high income-yielding property. If 25 years are required for the complete clearance of debt of any usufructuary debt in normal times, 15 years will be enough now in view of the abnormal rise in prices of agricultural produce during the last four years. In the majority of usufructuary mortgages, the creditors are non-cultivating grain rent-receivers and the benefit of the rise in prices has been fully derived by them. For example, suppose that a creditor gets 50 maunds of paddy as rent from the land hypothecated to him. In 1939, he would have sold it for Rs. 150 at the rate of Rs. 3 per maund. After deducting the land revenue payment, say Rs. 15, he will get a net income of Rs. 135. Since 1942, he will be selling the same quantity of paddy at Rs. 7-8-0 (assuming a rise of 150 per cent in the prices), for Rs. 375. Less land revenue, he will get a net income of Rs. 360 which is more than 2½ times the income he would have expected and obtained but for the wartime boom. Thus in four years of high prices, he has secured an additional income equivalent to

six years' normal income. Hence the period for the return of land to the mortgagor may *pro tanto* be reduced. This argument, of course, does not apply to mortgagees who directly cultivate the mortgaged land, because of the rise in costs of cultivation which reduce substantially the margin of profit. Hence I recommend that, with necessary exemptions for land cases similar to that just now mentioned, legislation should be made requiring all the usufructuary mortgages to be released after the lapse of 15 years. In that case, all the debts contracted by means of executing usufructuary mortgages before 1931 will automatically cancel themselves and by the end of 1950, also those executed as late as 1935. The outcome of this legislation will be the liquidation of a decent proportion of the aggregate indebtedness. It may be estimated at about Rs. 30 crores.

207. Debtors other than those who are not chronic and have not borrowed on usufructuary mortgages, will constitute a very large percentage of the total number and will owe the largest proportion of the total rural debt. Immediate liquidation of their debts is a difficult problem, but as has been already emphasized, difficulties are not to baffle the reformer but are to be overcome by him. I recommend the following scheme for the clearance of this category of debts. One outcome of the legislation proposed in paragraph 205 will be that the special taluk officer will be in possession of all cases of indebtedness within his jurisdiction and likewise the Government, of all cases in the whole Province. All the debtors except those classified as hopelessly indebted will have to be relieved of their debts. Legislation should be made to enable the Rural Insolvency and Debt Courts to make awards in these cases. The creditors may be given one of two alternatives to choose for the cancellation of their claims; they may, first, be given the option of receiving land instead of cash in due discharge of their loans and the land to be valued at current market rate by an impartial tribunal of non-officials, set up one in each taluk. By this method the debtor will be able to enjoy the benefit of rise in land values when he is relieved of his debt. At the same time the creditor is not seriously affected because as there is still unappeased land hunger he can sell away the land thus got if he wants cash. The other alternative is to give the creditors bonds equal in value to his loan bearing 3 per cent interest. These bonds may be guaranteed by the State and made transferable, but not redeemable at any time, on the pattern of the British Consols. When creditors need money, they can sell these bonds in the Stock Exchange. In order to pay the interest at the rate of 3 per cent, the State should collect from the indebted agriculturists an amount equal to 3 per cent of their debts in perpetuity together with land revenue. The incidental expenses, not likely to be large, in converting the debts of individual agriculturists into bonds issued and guaranteed by the Government may be borne by the Government themselves. Necessary steps to safeguard the rights of the Government to collect this extra 3 per cent from the indebted farmers must be taken, even if the debtors sell away their lands. The payment of this interest should be the first charge, next only to land revenue on the lands held by the debtors at the time of the introduction of this scheme. The debtors served by this scheme are only moderately indebted; therefore the payment of three per cent interest will not be a burden at all.

208. *Interest rate.*—Before concluding this section, I wish to emphasize the necessity for lowering the rate of interest on agricultural loans, whether long or short term, to 3 per cent per annum. When Governments with vast resources are paying only 2½ or 3 per cent interest, it is most inequitable to make the peasant pay a higher rate of interest. It may be contended that the latter does not enjoy as much credit as the former; but under the scheme outlined in this chapter, loans granted to agriculturists will not turn out to be bad, calling for a higher percentage of interest as insurance against loss. By the rigid rules framed for taking and giving loans and by making all transactions pass through authorized institutions, loans will be made more safe though less in volume. Further, the quantity of money in circulation, has increased nearly sixfold in the last six years. There is more money in the hands of the people. The

problem is how to attract it to agriculture for rehabilitating it. At the risk of repetition I would say that other avenues of investment must either be closed or made less attractive. This can be effected only if the Central Government fixed ceilings to dividends on industrial investments. The trend in recent times, accentuated during war years, is a gradual decline in interest rate. The bank rate has fallen; the rate of interest on current deposits universally has almost reached zero and on fixed deposits 2 or 2½ per cent. It is, therefore, in the fitness of things that the rate of interest on all loans taken by the rural masses should also be brought down to the level obtaining in other spheres. The experience gained in war time of making finance the handmaid of public policy, should not be lost or thrown away in peacetime, for, a continuation of this attitude towards money will be productive of immense social benefit.

209. *Price stabilization.*—Indian agriculture is as much a gamble in prices as in monsoons. Even the most efficient agriculturist will meet with loss if prices fall below all reasonable expectations. " In recent years a large number of governments have introduced numerous measures designed to influence agricultural production by encouraging some crops, limiting or restricting others, and sometimes prohibiting fresh plantations, and to organize produce markets more efficiently by storing or holding up of crops."* But none of them, singly or in combination, can ward off losses if measures for the prevention of violent fluctuation in prices are not taken. Such measures must provide for spreading sales over a period of time and also for the fixing of the prices of agricultural produce. In agriculture, more than in any other industry, prices are susceptible to frequent and disastrous changes, for, the demand for agricultural commodities is inelastic whereas production is very variable on account of seasonal and other influences. " A cycle of rising prices and expanding production is followed by falling prices and contracting production, carrying in its train many costly miscalculations and avoidable losses." Adjustment of supply and demand is a very difficult matter in agriculture, which will be further aggravated if imports and exports are freely allowed. Lack of an efficient marketing system will also disturb prices. Insurance against price changes, therefore, is the cardinal need of agriculture. Price stabilization is decisively the only remedy. The problem of price control bristles with many difficulties. The interests of the consumers, the reasonable margin of profit, the varying costs of cultivation in various regions, the relationship between prices of agricultural produce and other manufactured goods ordinarily consumed by the farmers and the level of prices obtaining in other Provinces and countries are some of the main points for serious consideration in any scheme of price stabilization. It is much too complex a problem for exhaustive treatment here. Already a sub-committee appointed by the Government of India is examining this problem. So, I will content myself with some general observations on the broad policy to be adopted to stabilize prices. Without a reference to the high wartime prices, no solution will prove to be satisfactory. The rise in wages and the costs of cultivation, the absence of imports and failure of harvests due to natural calamities will have to be taken into account before a consideration of the level at which prices may be pegged. Fixing the prices of individual grains is doomed to be a failure. Price stabilization should cover all kinds of agricultural produce. The price structure thus constructed must not be at great variance with that prevailing in an adjacent province, state or country with which there is unrestricted trade. It is a moot question whether prices should be fixed or statutory ceilings and floors should be maintained. Prices cannot be fixed permanently; revision of prices will be necessary. It must be decided whether revision should take place annually or at longer intervals. After examining all these aspects, I feel that price stabilization must be the function of the Central Government, which must regulate imports and exports by means of tariff or quota system with a view to maintaining the prices at the predetermined level. Parity of prices of various commodities must not be violently disturbed. Prices should be

* Report on systems of Agricultural Credit and Insurance—page 3.

revised once in three years with the twofold objective of assuring reasonable profit to the agriculturists and steering production of the various crops, food and non-food, in the desired direction. Prices of agricultural commodities may be fixed at 100 per cent, of wages at 125 per cent, of all agricultural requisites and consumption goods at 50 per cent above the respective prewar levels.

210. Prices of agricultural produce have a direct bearing on land values. Sale of lands at fancy or speculative prices must be sternly discouraged. Stable prices of agricultural produce will help but not assure the stabilization of land values. Very high prices of lands are harmful both to agriculture and other industries, for, investment will be diverted into barren fields. Further abnormal rise in land values artificially inflates the credit of agriculturists enabling them to borrow more. Purchase of lands at exorbitant prices has become the pastime of the new rich; people who have piled up wealth in commerce and industry buy lands without any idea of taking to cultivation. Speculative prices should be controlled and methods must be evolved to appropriate to the State profits or unwarranted rise in the price of land.

211. *Modification of land revenue system.*—Before the war, the land revenue system in this country was the target of severe criticism. In times of falling prices, this fixed demand imposed a heavy burden upon agriculturists with dwindling net income. Although this burden is considerably lightened in the present period of high prices, certain inherent defects in the land revenue system which is universally admitted to be regressive in character, demand early rectification. To this end I recommend that (1) a progressive agricultural income-tax should be levied on all agricultural incomes above Rs. 3,000. It is bound to be a very fruitful source of revenue especially when zamindaries are abolished. It will also incidentally make the land revenue system elastic which it is not to-day; (2) an exemption from land revenue collection must be granted to all ryots owning land smaller in size than economic holdings. As already observed, economic holdings will vary from zone to zone due to soil and other differentials. The District Economic Officers, to be appointed, will be entrusted with the duty of fixing the area of economic holdings in each zone. On the basis of their reports, a comprehensive legislation may be made to exempt smaller under-sized holdings from the payment of land revenue. The outcome of this necessary reform will be an immediate fall in land revenue which I roughly estimate at Rs. 2 to 2·5 crores. But the loss will not be permanent because the success of the scheme outlined in an earlier section for the consolidation of holdings will be accompanied by the restoration of a large portion of the revenue temporarily lost. Another upshot of this exemption of uneconomic holding from land revenue will be that a powerful fillip may be given to subdivision on the part of bigger land-holders with the object of evading assessment; for example, parents owning lands larger in extent than economic holdings will divide their property among the sons and heirs into small holdings. However this evasion will be rendered impossible if the prohibition of subdivision and fragmentation of land, recommended in paragraph 176, is enforced. Thus it will be seen that for a short period the loss of revenue may be considerable but in the long run, it will become light. Even the relatively larger loss in the first few years can be made good by the yield of the agricultural income-tax. (It is expected that when the loss due to exemption disappears on account of consolidation of small holdings, the yield from agricultural income-tax would be utilized for long term loans for land improvement by the Government Land Mortgage Banks, vide paragraph 201, in this Chapter.) It will not be possible to calculate exactly what will be the temporary loss due to this exemption of uneconomic holdings, because the size of economic holdings will have to be determined by the District Economic Officers, but it will be of interest to note in this connexion that the total loss of revenue that will be sustained by exempting all assessees paying Rs. 10 and less of land revenue would have been Rs. 1,61,40,898 in 1940–41. This gives a rough idea of the magnitude of loss, which shows that the principle of exemption will not be impracticable.

212. *Rural development.*—The responsibility of the State for the development of rual India has never been recognized so well as it is to-day. The food famine has underlined the urgent necessity for the immediate improvement of agriculture. Rural economic progress is almost synonymous with agricultural prosperity. Establishment of rural cottage industries, utilization of cheap electricity for this purpose, improvement of forests and livestock, inculcation of thrift and liquidation of illiteracy, construction of warehouses and introduction of an efficient marketing system, etc., have been suggested *ad nauseum* for promoting rural welfare. Without minimizing the importance of all these reforms, I hold that the two paramount necessities of rural economic life are irrigation facilities and finance. I have already made the necessary recommendations for the provision of finance and liquidation of all prior and unproductive debt. With reference to the problem of water-supply, the great irrigation works, projected and already begun, will go a long way to solve it. However it will be hardly sufficient unless these giant schemes are also supplemented by vigorous minor irrigation drive. It is becoming common, in recent years, to see a large number of the old tanks, silted up, or their bunds broken, and canals with only a semblance of banks. The feeding channels of tanks in most places have been badly neglected and anicuts across rivers are in serious disrepair. "Kudimaramathu" the relic of the ancient system of village communities has become a caricature of its old self. Factions in villages, absence of close co-ordination between revenue and irrigation departments have further rendered the situation extremely bad. The repair of tanks and canals is a prime necessity. The recent government campaign to increase the number of wells by giving subsidies and loans is not without defects; in most of these cases the subsidy of Rs. 300 or so is quite a small fraction of the total cost of sinking wells and the recipients of subsidies find it hard to complete the work with the additional loans sanctioned. Another serious handicap is scarcity of the necessary technical skill for sinking wells, for such functions as boring and blasting rocks; there is also difficulty in getting cement and other building materials in adequate quantities. No doubt large sums of money are being spent for improving well-irrigation but with little organization or imagination. All these funds would be spent with maximum benefit if the Government send a large number of batches of technical men who would help agriculturists in sinking wells; only the unskilled labour should be locally employed. The band of technically trained men should be posted in every revenue division or taluk and they must be equipped with all the necessary instruments and provided with lorries to enable their quick movements from place to place. The demobilized motor vehicles can be utilized for this purpose. The sappers and miners, must be demobilized immediately and their services utilized for well-sinking. I recommend, therefore, that instead of granting subsidies and loans to agriculturists, the Government should undertake with their own staff of skilled labour and their materials, sinking of wells on a large scale; they may, wherever possible, get from the ryots half or quarter of the expenses incurred by them to sink wells in their lands. If this programme is supplemented till the end of the food crisis, by the subsidized distribution of fertilizers and pure seeds, agriculturists will be able to increase food supply even at present. And the stimulus given to agriculture now will be attended with abiding good results.

213. The most urgent and indispensable conditions of agricultural prosperity may then be epitomized into "irrigation and finance." It is my firm belief that both must be provided by the Government and they may be extended on the lines indicated above. It is the least that the Government can do for the greatest industry in the country.

214. *Administrative machinery.*—At present the promotion of rural prosperity is the common concern of agricultural, co-operative, veterinary, irrigation, revenue, industries and forest departments. Lack of co-ordination among these departments is a serious defect. No authentic information about the potentialities

and needs of the various zones is available on which any plan for rehabilitation and reconstruction can be based. Statistics of areas under the various crops, and yield in India have been variously criticised, particularly by foreign observers as faulty, imperfect, unreliable and inaccurate. Any plan for agricultural prosperity requires accurate data regarding soil conditions, irrigation facilities, wages and also data connected with agro-industries.

215. Governmental functions are becoming in recent years more and more economic. The legislators must be well-versed in economic problems and their possible solutions. Again administrators are too much engaged in routine work to spare time to look at problems as a whole. Thus both legislators and administrators stand in need of proper guidance and education in economic matters. Even three years ago, the Economist has made a strong plea in favour of the setting up of Economic Civil Service in the United Kingdom. The need for such a service is no less keen in India.

In this connexion I recommend the establishment of an Economic and Statistical department with a Director as its head. A district Economic Officer must be appointed in each district with Taluk Economic Guides in each taluk. The functions of this department will consist of, (1) co-ordination of the work and efforts of all the departments which affect rural economic wellbeing, (2) collection of statistics on all matters having a bearing on rural prosperity, (3) conduct of economic enquiries in selected villages and particular regions such as famine, depressed or industrial areas, (4) issue of bulletins on subjects of topical interest with a view to educating the general public, (5) provision of materials, in non-technical language to legislators to facilitate a more informed discussion of bills on the anvil of the legislature, (6) acting as liaision officers between the various departments and the rural masses. The Taluk Liquidation Officers, recommended to be appointed in paragraph 205 may be made Taluk Economic Guides. It should be the duty of these Taluk Economic Guides to study the economic potentialities of the taluks in their jurisdiction and direct the various development departments to fruitful effort. (2) To keep the people informed of all the services rendered by the development departments so that they may derive maximum benefit. (3) To compile statistics relating to live-stock, crops, irrigation sources, raw materials for cottage industries, etc., for each taluk and submit them to the District Economic Officers and in short to bring about co-ordination among the various departments as well as between the Government and the people towards the over-all advancement of the rural masses.

216. A permanent department of this type is essential in the interests of efficient public administration. It will obviate the need for the appointment of *ad hoc* committees at regular intervals. Special Officers and Committees, working at high pressure and goaded by the time-limit set to their labour will not be able to go as deeply into all the aspects of the given problems as a permanent body of experts, alert and assiduous in their work.

CHAPTER IX.

SUMMARY OF RECOMMENDATIONS.

(1) *Creation of economic holdings.*—Subdivision and fragmentation of holdings is the worst defect of agriculture in this as in the other provinces of India. Consolidation is the direct remedy and this has to be effected through Government interference. Two pieces of legislation are recommended. Co-operative consolidation societies in each village or group of villages with compulsory membership of all landholders must take up the work of consolidation on the approval of more than 50 per cent of the members or that number of members owning more than 50 per cent of the occupied lands in the villages. A time limit may be set for this work and remission of half the land-tax for one year may be offered as an incentive for consolidation effected within a year. Further splitting up of land beyond a specific acreage has to be prohibited by means of another legislative enactment. The creation of economic holdings should be undertaken simultaneously with consolidation work. The size of economic holdings in each area should be defined on the advice of special Zone Officers working under the Provincial Rural Development Board, and the duty of creating the holdings, should devolve upon the co-operative consolidation societies. The small landowners who are deprived of their land may be partly "transplanted" the Project areas or absorbed in cottage industries which should be started as part of the Post-war Reconstruction Programme. (Paragraphs 174 to 176.)

(2) *Reform of the tenancy system.*—The present tenancy system requires thorough revision. The permanent settlement should be abolished and the Zamindars may be compensated by means of bonds bearing 3 per cent interest and equivalent in amount to the value of the estates to be resumed. By declaring these bonds non-transferable but heritable, a fall in prices of other Government stocks can be avoided and the zamindari class will be saved from disintegration. The estates should be converted into ryoti lands and the revenue collection from these minus the peshkash payable by the zamindar will constitute a net addition to Government revenue. The entire profit from this source after reduction is made for the payment of 3 per cent interest on the bonds may be accumulated in a sinking fund, and set apart for the redemption of the bonds. (Paragraphs 177 to 180.)

With regard to the ryotwari lands, a less radical method is recommended. Letting out of lands may be made unattractive by statutorily fixing the share of the tenants at a high level and subjecting lands let out on lease to a surtax. (Paragraph 181.)

(3) *Improvement of agricultural labour conditions.*—The standard of life of the agricultural labourer has risen slightly during recent times and satisfactory measures have to be adopted to maintain if not improve this standard. Wages stabilization is the most important and necessary reform. Stability should mean only avoidance of violent fluctuations and the rates of wages in relation to prices should be fixed at such a level as to afford chance for the labourers to raise their standard of living. Thus, if prices are stabilized at two times the pre-war level, wages must be stabilized at 2½ times that of the pre-war average. For this purpose, a minimum wage Act should be passed. (Paragraphs 182 to 184.)

(4) *Improvement of capital equipment.*—The capital equipment of the agricultural labourer has to be increased and improved. Subsidies for effecting agricultural improvements and for the purchase of capital equipment may be extended to all the districts. In order to encourage the agriculturists to market

their goods after some processing; Government should undertake to sell small machinery such as, hand-mills, oil-presses, etc., at subsidized prices or "on hire-purchase system" the full payment being spread over 10 to 12 years. (Paragraph 185.)

(5) *Crop and cattle insurance.*—Facilities should be provided for the agriculturists to insure themselves against losses due to natural calamities such as drought, cyclone, flood, or cattle disease. The present Famine Relief Fund does not go the whole way to meet the need. A Crop Insurance Scheme should be adopted on the lines of the Federal Crop Insurance in the United States of America. A beginning may be made with rice and other major cereals and crop insurance premium of one anna per acre of land under these crops may be collected along with land revenue in all the districts except the dry areas where a higher rate may be charged. This will bring in about Rs. 20 lakhs which may be distributed in the affected areas according as the crop failure is partial or complete. An alternative method is a scheme on 'kind' basis under which premium may be collected in grain and stored in Government taluk and district granaries. Crop insurance has however to be supplemented by a vast development of irrigational facilities of a protective nature. (Paragraph 186.)

A similar insurance scheme against losses of cattle has also to be adopted. The Veterinary department should be in charge of this work. In the early stages, insurance may be limited to bovine cattle. Side by side with this, vigorous attempts should be made to combat cattle diseases and improve the breed of cattle. (Paragraph 187.)

The insurance scheme to be successful, must be made compulsory and be worked only by Government. Detailed statistical information regarding agricultural production and the condition of cattle can be obtained by the Government through the District Agricultural Officers and the Veterinary department. (Paragraphs 188 and 189.)

(6) *Provision of credit.*—Under a sound system of rural finance, there should be ample facilities for short-term, medium-term and long-term credit and for the smooth working of the machinery, effective co-ordination among the various agencies supplying credit is essential. (Paragraphs 190 and 191.)

(*a*) *Short and medium-term credit.*—The distinction between short-term and medium-term credit must be made clear and definite. Short-term loans should be granted only for productive agricultural operations and be made repayable within nine or twelve months. Medium-term loans may be repaid in monthly instalments spread over five years. The function of providing this type of credit should be entrusted to the co-operative societies and not to the Land Mortgage Banks which should specialise in long-term credit. It should be made obligatory for all money-lenders to become members of the local co-operative societies, and money lending directly, without the intervention of the co-operative society should be strictly forbidden by law. As a transitional measure, each co-operative society should be divided into two sections—one dealing with credit transactions in the old way, and the other serving as a registering agent for the prospective borrower and lender who may negotiate for themselves before the application for loan is submitted to the society. This method obviates the delay of red tapism and ensures the free inflow of private capital. All alternative lines of investments should be closed to the money-lender by declaring credit documents not transacted through co-operative societies invalid. If there is no lack of credit supply, the chances of the money-lenders having resource to evasive tactics will be greatly minimised. After a time, the money-lenders will find it advantageous to become full members of the co-operative societies and the two branches may be merged. (Paragraphs 192 to 196.)

By reducing the rate of industrial dividends and interest on the deposits in banks, village money-lenders can be induced to lend to agriculturists through co-operative societies. Any non-co-operating attitude on the part of the money-lenders can be defeated by increasing the volume of funds available to credit institutions. This can be achieved by issuing agricultural paper on the security of the produce stored by the ryots in the granaries of the society. The paper should be made negotiable and rediscountable by the Provincial Co-operative Bank and the Reserve Bank. While there should not be too much rigidity in the agricultural credit system, it is necessary that it must be worked on sound banking principles. (Paragraphs 197 and 198.)

(*b*) *Long-term credit.*—Long-term loans are to be granted for permanent improvements of land and repayment of chronic and unproductive debts. At present, there is no co-ordination among the three agencies of credit—the Land Mortgage Bank, the Co-operative Societies and the money-lender—in the matter of provision of long-term credit. Vexatious enquiries, delay, high rates of interest, and limited capacity to provide loans are the main defects of the co-operative societies. These defects have to be eliminated and the three agencies should be brought under unified control. Private and unregulated money-lending should be prohibited by law. Loans for permanent improvements to land will be required mostly by the first and second class of land-owners and their total demand may be estimated at about Rs. 100 crores. For the first 5 or 7 years about 15 crores will be required annually and for the subsequent period about 4 crores. Funds for this can be obtained by (1) floating by the Provincial Government of an "Agricultural Prosperity Loan" of Rs. 15 crores at 2½ per cent per annum redeemable at the end of 20 years; (2) utilization of about Rs. 20 crores from the Provincial Reserves; (3) a subvention of Rs. 50 crores from the Central Government; (4) a loan of about Rs. 15 crores at 1 per cent interest from the Reserve Bank for agricultural development. For the second period, utilisation of the yield from agricultural income-tax to be levied in a progressive manner on all incomes above Rs. 3,000 is suggested. (Paragraphs 199 to 201.)

(7) *Appointment of Official Valuers.*—Government should assume direct responsibility for granting long-term loans to agriculturists. The present land mortgage bank may be converted into Government Land Mortgage Banks administered by the Co-operative Department. The delay at present caused by the process of finding out whether the property offered as security by a borrower is encumbered or not, can be avoided to a large extent by the appointment of Official Valuers in each taluk whose duty would be, to issue to prospective borrowers, certificates showing the extent, current market value and encumbrance of the property offered as security. The registration fee for mortgage deeds may be reduced. The Banks must have an outdoor inspecting staff to check whether the loans sanctioned are spent properly. (Paragraph 202.)

The interest of 6 per cent at present charged by the Land Mortgage Banks may be abolished. The borrowers should be required to repay the loans by annual instalments of 5 per cent of the capital in 20 years. Since Government has to borrow only 15 crores as suggested above and that at 2½ per cent, the burden on account of loss of interest will be light. (Paragraph 203.)

(8) *Liquidation of debt.*—(*a*) Insolvent debtors. A radical and systematic attempt should be made to wipe out the unproductive debt incurred by insolvent chronic debtors. The debtors should be grouped into two classes—"Hopelessly indebted", and "Moderately indebted". In each taluk a Rural Insolvency Court must be set up and a special taluk officer should be appointed. There should be a legislative enactment requiring all the money-lenders and debtors to furnish full particulars about their loan transactions to the Special Officer. From an analysis of this data a periodical list of insolvent debtors is to be prepared and published. Within a month of the publication of this list the debtors must be obliged to appear before the Insolvency Court. They should be declared insolvent, and their assets except their dwelling houses may be distributed pro rata among the various creditors. By this means about 25 per cent of the debtors will be absorbed from debt and about 80 crores of the total debt may be wiped out. (Paragraphs 204 and 205.)

(b) *Solvent debtors.*—Among the solvent debtors, those who have borrowed on usufructuary mortgages of their property have to be considered separately. In normal times 25 years are required for the complete clearance of any usufructuary debt, but in view of the present abnormal times, this period may be brought down to 15 years. By means of legislation all usufructuary mortgages must be required to be released after the lapse of 15 years. This will account for a reduction of the debt by about Rs. 30 crores. (Paragraph 206.)

As regards debtors who are neither chronic nor have borrowed on usufructuary mortgages, the following recommendation is suggested. Their creditors may be given the option of receiving either land valued at current market rate by an impartial tribunal of non-officials or bonds bearing 3 per cent interest and equal in value to the loan. These bonds should be guaranteed by the State and be made transferable but not redeemable. The 3 per cent interest payable by the state to the bond-holders may be recovered from the indebted agriculturists in instalments of 3 per cent of their debts along with land revenue. (Paragraph 207.)

(9) *Interest rate to be lowered.*—The rate on agricultural loans should be fixed at 3 per cent per annum. (Paragraph 208.)

(10) *Price stabilisation.*—The prices of agricultural commodities have to be stabilised. In fixing the limits, such factors as margin of profit for the cultivator, costs of cultivation, prices of manufactured goods, consumed by the farmers and the level of prices in the other provinces and countries have to be taken into account. The Central Government alone will be competent to bring about stabilization of prices. The objects of the scheme should be to ensure reasonable profit to the agriculturists and to steer production in the desired direction. Prices of agricultural crops may be fixed at 100 per cent, wages at 125 per cent and consumption goods at 150 per cent above the respective pre-war levels. But there should be provision for revision of prices once in three years. Along with this, land values have to be controlled by the Government. (Paragraphs 209 and 210.)

(11) *Modification of the land revenue system.*—A progressive income-tax should be levied on all agricultural incomes above Rs. 3,000. An exemption from land revenue collection must be granted to all ryots owning land smaller in size than economic holdings. Attempts at evasion of assessment by subdivision of holdings should be prevented by strictly prohibiting fragmentation of land. The loss of revenue on account of exemption would not be more than 2 crores. (Paragraph 211.)

(12) *Rural development and administrative machinery.*—Provision of irrigation works in the rural areas is an important need. The grand irrigational projects now planned and begun must be supplemented by a large number of minor irrigation works. Canals and tanks should be maintained in good repair. The present subsidy of Rs. 300, to encourage private well irrigation is not sufficient in view of the lack of materials and technical skill. It is the duty of the government to see that there is a good supply of technical men with necessary equipments in each taluk or revenue division. (Paragraphs 212 to 216.)

An economic and statistical department should be established under a director. He should be helped by District Economic Officers and Taluk Economic Guides. The department is to be a permanent one.

MADRAS,
15th June 1946.

B. V. NARAYANASWAMI NAIDU,
Economist.

A.—QUESTIONNAIRES.

I.—QUESTIONNAIRE TO COMPETENT NON-OFFICIALS, OFFICIALS, ASSOCIATIONS, ETC.

1. Do you think that the rise in prices of agricultural produce during the war-time has contributed to reduce the aggregate rural indebtedness ?

2. How far has the rise in the price of necessary consumption goods of the rural population has counteracted the beneficent effects of the rise in prices of the agricultural produce ?

3. How far has the cost of cultivation and marketing risen during the war years ?

4. Has there been any remarkable rise in the wages of agricultural labourers ? If so, to what extent has it enhanced the cost of cultivation ?

5. Are the agricultural labourers better off due to rise in agricultural wages ? Are they contracting debt in a lesser degree than before ? Is their financial position better or worse ? How far has the cost of living gone adversely to this class of people ? Is there any insistence upon wages in kind ? If so, what is the reason and what degree of response does this demand meet with ?

6. What is the minimum acreage under dry crops and wet crops that is necessary for an agriculturist to have sufficient food for himself in your district ? Have those who own this minimum or a less number of acres benefited by the rise in prices of agricultural produce ? If so, in what manner ? If not, why not ?

7. Do you agree with the statement that the rise in prices has benefited only the bigger landholders and agriculturists who have a surplus to sell in the market ? Whom will you consider as bigger landholders belonging to this category ? How many acres he should own and cultivate in your district ?

8. Has there been in your district any steep rise in land price and any large scale sale of lands for the liquidation of indebtedness on that account ? If so, what is the percentage of rise in the land prices ?

9. To what extent, indebted agriculturists have benefited from the Debt Conciliation Boards in reducing their indebtedness ?

10. To what extent indebted agriculturists have got relief from the operation of the Agriculturists Debt Relief Act ?

11. Have there been genuine savings on the part of the agriculturists due to the rise in prices ? If so, what have they done with their savings ? Have they invested in Post Office Savings Banks, Cash Certificates, Defence Loans, liquidation of their own debts, improvement of lands, purchase of new lands and other productive lines or have they raised their standard of living, increased their expense on luxuries, marriages and other social ceremonies ?

12. If there have been genuine savings has the Co-operative movement taken advantage of it to attract them to the credit societies on deposits ? If not, why ?

What methods could it have adopted to achieve this purpose ?

13. What is the position of the land mortgage bank in view of the rise in prices of agricultural produce ? How far their loans have been paid in advance ?

14. Are the actual cultivators able to derive the full benefit of the rise in prices ? Or are the middlemen depriving them of their legitimate reward ? How far are the agriculturists taking advantage of co-operative sale societies to get fair prices ?

15. Has the yield per acre increased due to intensive cultivation, application of concentrates, etc. ? Does not the high price stimulate agriculturists to adopt intensive cultivation ?

16. Are members of co-operative societies leaving them after paying off their debts ?

II.—QUESTIONNAIRE ISSUED TO SUB-REGISTRARS.

1. The average *real* duration of a secured loan. (My predecessors who enquired into this question have taken for granted that the duration of a secured loan will be that shown in the deed itself, i.e., to say if a party had promised to repay the loan in three years the duration was calculated as three years, regardless of the contingency that it may be paid seven years later or in the next year itself.)

2. The relation between the value of the land mortgaged and the value of the debt.

3. The purpose of the loan—Which of the following causes preponderate in your jurisdiction ? If you have found out that certain causes are losing their importance, please specify.

(a) Renewal of debt.
(b) Agricultural purposes.
(c) Marriage and social ceremonies.
(d) Kist-payment.
(e) Purchase of lands.

(Changes in the purpose during the last six years of War—Character, purpose and course of the loan are to be given.)

4. Do you find any increase in the sale of lands for discharge of debts in the last six war years ?

5. Do you find any changes in the rate of interest of secured and unsecured loans since 1938 ? If so, what are the reasons for such changes ?

6. Has the number of registered loans in general, and secured loans in particular diminished in recent years ?

7. Has the number of sales of land increased in recent years ? If so, what is the magnitude of the transference of lands from agriculturists to non-agriculturists ?

8. Prior to the War, what was the proportion of small loans (i.e., below Rs. 100) to the total of loans registered ? Has this proportion decreased or increased since the outbreak of the War ?

III.—QUESTIONNAIRE FOR THE USE OF THE INVESTIGATORS.

As questions bearing on an individual's financial position usually evoke considerable suspicion, particularly in the minds of rustic villagers, the Investigators must express their bona fides in their talk and manners. They should exercise a good deal of tact and show maximum courtesy to the villagers. The ultimate object is to get as much of information as possible. Investigators must sift the answers to attain the highest degree of accuracy.

1. How many members are there in your family ?
2. What is the extent of your wet, dry and garden lands ?
3. What is the assessment on each category of landed property ?
4. How many cattle do you own ?
5. How many have you bought in the last 5½ years ? and at what prices ? Is the health of the cattle good ? How many did you sell ?
6. Did you buy any land in this period ?
7. Did you buy any implements, oil engine, or other article necessary for cultivation ?
8. Did you sink any well or tube well ?
9. Did you build any house or any portion of your house ? How much did it cost you ?
10. Do you cultivate all your lands or lease out any portion ?
11. Did you buy any movable property ? If so, at what prices ?
12. Did you celebrate any marriage or other ceremony ? How much did it cost you ?
13. Have you had any extraordinary items of expenditure like funeral, giving the children higher education ? What has been the total of such expenditure ?
14. If you have repaid any portion of your debt to money-lenders, did they show any reluctance to receive the dues ? What sorts of evasion to receive did they practise ?
15. (a) Are you indebted now ?
(b) Are you a member of a co-operative society ? How much have you in deposit there or in the Post Office Savings Bank or anywhere else ?
16. What is your total debt ? How much is secured ? If so, is it a simple mortgage or mortgage with possession ? From Government, co-operative societies, land mortgage banks or money-lenders ?
17. How much of your debt is unsecured ?
18. Have you pledged any movables for raising loan ?
19. What is the rate of interest on secured debt ?
20. What is the rate of interest on unsecured debt ?
21. The dates on which the various debts were contracted.
22. Were you in debt in 1939 ? Its nature, magnitude, rates of interest.
23. How much of such debt have you repaid ?
24. Are you regular in paying the interest ? If not, how much is in arrears ?
25. What are the principal crops you raise ?
26. Have you, after the war broke out, changed the crops you have been cultivating ? If so, why ?
27. Have you experienced any remarkable rise in the price of your produce ? What is the extent of such rise ?
28. Are you not incurring the same old cost of cultivation and therefore are you not getting a wider margin of profit ?
29. Are not dealers anxious to get at your produce ? Has not marketing of your produce become easier now than before ?
30. Have you increased the area of cultivation during this period ? State the number of acres and the crops grown.
31. Have you reduced the area of cultivation ? If so, why ? Are lands formerly cultivated, lying fallow at present time ?
32. What is the normal pre-war price of your wet, dry and garden land per acre ?
33. What is the present price of each of these categories ?
34. Have you lent money to anybody ? If so, how much is secured, unsecured and hand-loan ? What are the rates of interest on each category of loan ?
35. What were the purposes for which the debt was incurred ? (a) Payment of earlier debts ; (b) marriage and social occasions ; (c) famine and failure of harvests ; (d) payment of land revenue ; (e) growth of debt by compound interest, interest not having been paid ; (f) seeds and manures ; (g) improved agricultural implements ; (h) improvement of land, terracing, sinking of wells, etc., ; (i) education of children.
36. If your present debts are lower than what they were in 1939, how do you account for the reduction ?
(a) Sale of land.
(b) Reduction due to resort to Debt Conciliation Board.
(c) Reduction due to the operation of the Agricultural Relief Act.
(d) Repayment out of your savings.

IV.—SCHEDULES ISSUED TO CIVIL COURTS.

(a) *Civil courts statistics (suits affecting agriculturists only).*

Year.	Number of suits for money or movable property.	Number of mortgage suits.	Insolvency petitions. Number filed.	Insolvency petitions. Number granted.	Insolvency petitions. Number refused.	Value of No. 1.	Value of No. 2.	Value of insolvency petitions granted.	Value of suits on pro-notes without security.	Value of suits on security of immovable property.	Value of suits on the security of movables.	Remarks.
1939–40 ..												
1940–41 ..												
1941–42 ..												
1942–43 ..												
1943–44 ..												
1944–45 ..												

(b) *Report on the working of the Agriculturists Debt Relief Act with particular reference to the following data.*

Year.	Number of suits filed.	Amount involved.	Number of suits decided in favour of debtors.	Amount involved in such successful suit.	Amount scaled down.	Percentage of (6) to (5).
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1939–40 ..						
1940–41 ..						
1941–42 ..						
1942–43 ..						
1943–44 ..						
1944–45 ..						

(c) *Report on the working of the Debt Conciliation Boards, in the province, with special reference to the following data.*

Year.	Number of suits filed for conciliation.	Number successfully conciliated.	Amount involved in all the suits.	Amount of debts in which conciliation effected.	Amount scaled down by conciliation.
1939–40					
1940–41					
1941–42					
1942–43					
1943–44					
1944–45					

V.—SCHEDULES TO THE CO-OPERATIVE DEPARTMENT.

(a) *Primary Agricultural Credit Societies.*

Year.	Number.	Debts outstanding at the beginning of the year. Principal.	Debts outstanding at the beginning of the year. Interest.	Debt recovered during the year. Principal.	Debt recovered during the year. Interest.	Over dues.	Percentage of overdues to outstandings.	Total deposits by members.	Total deposits by non-members.	Loans made during the year.	Advance recoveries or repayments.
1939–40 ..											
1940–41 ..											
1941–42 ..											
1942–43 ..											
1943–44 ..											
1944–45 ..											

(b) Land Mortgage Banks.

Year.	Number.	Principal lent.	Instalments due.	Instalments paid or recovered.	Advance payments.
1939–40 ..					
1940–41 ..					
1941–42 ..					
1942–43 ..					
1943–44 ..					
1944–45 ..					

VI.—SCHEDULES FOR INVESTIGATORS.

Folio 1.

Name of the village—
District—
Name of the head of the family—

Number of members of the family with their ages—
Taluk—
Ryotwari or zamindari—

Folio 2.—Land—Area in acres and value.

Year.	Owned land. Wet.	Value.	Dry.	Value.	Garden land.	Value.	Total. Area.	Value.	Land held on lease. Wet.	Value.	Dry.	Value.	Garden.	Land.	Value.	Grand total. Area.	Value.	Remarks.
1939–40 ..																		
1940–41 ..																		
1941–42 ..																		
1942–43 ..																		
1943–44 ..																		
1944–45 ..																		

Folio 3.—Livestock—Number and value.

Year.	Plough cattle.	Value.	Milch cattle.	Value.	Others.	Value.	Total value.	Remarks.
1939–40 ..								
1940–41 ..								
1941–42 ..								
1942–43 ..								
1943–44 ..								
1944–45 ..								

Folio 4.—Implements.

Year.	Carts.	Value.	Ploughs.	Value.	Harrows.	Value.	Others.	Value.	Total.	Value.	Remarks.
1939–40 ..											
1940–41 ..											
1941–42 ..											
1942–43 ..											
1943–44 ..											
1944–45 ..											

Folio 5.—Investments.

Year.	Post Office Savings Bank.	Savings Certificates.	Co-operative Societies. Shares.	Deposits.	Other investments.	Year.	Gold.	Silver.	Value.	Remarks.
1939–40 ..										
1940–41 ..										
1941–42 ..										
1942–43 ..										
1943–44 ..										
1944–45 ..										

Folio 6.—Ornaments.

Folio 7.—Life Insurance.

Year.	Value of Policy.	Premium.
1939–40		
1940–41		
1941–42		
1942–43		
1943–44		
1944–45		

Folio 8.—Debts.

Year.	Secured, due to Government.	Co-operative Society and Land Mortgage Banks.	Money-lenders.	Unsecured. Co-operative Society.	Others.	Security of Movables.	Long term. Amount.	Interest.	Short term. Amount.	Interest.	Total.
1939–40 ..											
1940–41 ..											
1941–42 ..											
1942–43 ..											
1943–44 ..											
1944–45 ..											

Folio 9.—Borrowings.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Secured—						
From Government, Co-operative Society, Land Mortgage Banks and others.						
Unsecured—						
Co-operative Society						
Others						

Folio 10.—Repayments.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Secured Debts—						
Government						
Co-operative Society						
Land Mortgage Banks						
Others						
Unsecured Debts—						
Co-operative Society						
Others						

Folio 11.—Productive Expenditure.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Purchase of cattle						
Purchase of implements						
Sinking of wells						
Other improvements						
Total ..						

Folio 12.—Total Income.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Agriculture						
Other occupations						
Total ..						

Folio 13.—Expenditure on Cultivation.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Fodder						
Repairs and renewals of implements.						
Seed						
Farm-yard manure						
Fertilisers						
Wages						

Folio 14.—Approximate Personal Expenditure.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Food						
Clothing						
Other necessaries						

Folio 15.—Special Items of Expenditure.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Ceremonials						
House repairs						
Higher education to children ..						
Other items						

Folio 16.—Sales and Purchases.

—	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.
Purchases						
Sales						
Net purchase + net sale — ..						

B.—STATEMENTS.

STATEMENT I.—*List of villages selected for investigation.*

ZONE I.

Vizagapatam district.

	Taluk.	Village.
1	Anakapalle	Arubupalem.
2	Chicacole	Kuteeram.
3	Do.	Rabulavalasa.
4	Palkonda	Tettangi.

Vizagapatam district—cont.

	Taluk.	Village.
5	Tekkali	Polinayudupeta.
6	Vizianagram	Dharmapuri.
7	Bimlipatam	Ammanam.

ZONE II.

Guntur district.

1	Bapatla	Jupudi.
2	Guntur	Annaparru.
3	Repalle	Pedapulivarru.
4	Tenali	Panchalavaram.

Kistna district.

5	Bandar	Gudur.
6	Divi	Pedaprolu.
7	Bezwada	Atukuru.
8	Gudivada	Kondaparru.
9	Do.	Kurada.

West Godavari district.

10	Bhimavaram	Kumudavalli.
11	Ellore	Kottagudem.
12	Narasapur	Saripalli.
13	Kovvur	Isakapatlepangadi.
14	Tadepalligudem	Kunchanapalli.
15	Tanuku	Alamuru.

East Godavari district.

16	Amalapuram	Chirrayanam.
17	Cocanada	Aratlakatta.
18	Peddapuram	Rajapalem.
19	Pithapuram	Kandarada.
20	Rajahmundry	Kanupur.
21	Ramachandrapuram.	Pedapalla.
22	Razole	Makanapalem.
23	Tuni	Indugapalle.

ZONE III.

Guntur district.

1	Narasaraopet	Palapadu.

Kistna district.

2	Nandigama	Chandapuram.

Kistna district—cont.

3	Nuzvid	Bommalur.
4	Do.	Sukulla.

West Godavari district.

5	Gannavaram	Ampapuram.

ZONE IV.

Bellary district.

1	Adoni	Kupgal.
2	Bellary	Kolur.
3	Hospet	Nagenahalli.
4	Rayadrug	Nagireddipalle.

Anantapur district.

5	Anantapur	Thimmapuram.
6	Hindupur	Kodigenohalli.
7	Kalyandrug	Erragudi.
8	Tadpatri	Aluru.

Cuddapah district.

9	Badvel	Tangedupalle.
10	Jammalamadugu	Kondasunkesula.

Cuddapah district—cont.

11	Rajampet	Nookivanipalle.
12	Siddhavattam	Gangeperur.

Kurnool district.

13	Koilkuntla	Allur.
14	Kurnool	Gudipadu.
15	Markapur	Gurjepalle.
16	Nandyal	Bujanuru.
17	Sirvel	Tallalingamdinne.

Nellore district.

18	Darsi	Mundalamaru.
19	Kanigiri	Talakondapadu.

ZONE V.

Guntur district.

1	Ongole	Korisapadu.

Nellore district.

2	Kandukur	Pydipadu.
3	Kavali	Annavaram.
4	Kovur	Damaramadugu.
5	Do.	Attur.

Nellore district—cont.

6	Nellore	Koruthur.
7	Venkatagiri	Mekanuru.
8	Gudur	Kottapatnam.

Chingleput district.

9	Ponneri	Medrur.
10	Tiruvallur	Velliyur.

ZONE VI.

Chingleput district.

	Taluk.	Village.
1	Chingleput	Agaram.
2	Conjeeveram	Madavilagam.
3	Madurantakam	Acharapakkam.
4	Saidapet	Korathur.
5	Sriperumpudur	Valarpuram.

South Arcot district.

6	Chidambaram	Parampattu.
7	Cuddalore	Periperiankuppam.
8	Tindivanam	Kutteripatti.
9	Villupuram	Pannambathi.
10	Tirukkoyilur	Vadagarai.

Tanjore district.

11	Shiyali	Thirunagiri.
12	Mayavaram	Mudikondanallur.
13	Nannilam	Pillur.
14	Negapatam	Venmani.

Tanjore district—cont.

	Taluk.	Village.
15	Tiruturaipundi	Udayamarthandapuram.
16	Mannargudi	Melanatham.
17	Papanasam	Pilliyur.
18	Kumbakonam	Tipparajapuram
19	Tanjore	Ponnapur.
20	Pattukkottai	Sukkarampatti.

Trichinopoly district.

21	Lalgudi	Kilarasur.
22	Trichinopoly	Arasangudi.
23	Kulittalai	Vadiyam.
24	Musiri	Mullipadi.

North Arcot district.

25	Arkonam	Nameli.
26	Do.	Velakkulam.
27	Cheyyar	Purasi.
28	Walajapet	Veppur.

ZONE VII.

Chittoor district.

1	Chandragiri	Kotala.
2	Chittoor	Potukanama.
3	Kalahasti	Erpedu.
4	Madanapalle	Katragallu.
5	Palmaner	Kamanapalle.
6	Punganur	Melanattam.
7	Tiruttani	Kolatturu.
8	Vayalpad	Enugondapalem.
9	Chittoor	Tenabanda.
10	Chandragiri	Narasingapuram.

North Arcot district.

11	Arni	Paiyur.
12	Polur	Aniyali.
13	Tiruppattur	Anneri.
14	Tiruvannamalai	Pavuthiram.
15	Vellore	Melvi.
16	Wandiwash	Tirokol.

South Arcot district.

17	Gingee	Kadali.
18	Kallakurichi	Murarbadu.
19	Vriddhachalam	Sattukudal.

Trichinopoly district.

20	Perambalur	Kannapadi.

Madura district.

21	Dindigul	Ayyalur.
22	Palni	Kalyanaputtur.

Salem district.

23	Attur	Tittacheri.
24	Do.	Talaivasal.
25	Namakkal	Agrahara Uduppur
26	Rasipuram	Sellappanpatti.
27	Salem	Kulattukombai.
28	Tiruchengode	Agraharatalayur
29	Namakkal	Pilkilpalayam.

Coimbatore district.

30	Avanashi	Kariyanpudur.
31	Bhavani	Varadanallur.
32	Coimbatore	Kavundanpalayam
33	Dharapuram	Marudurai.
34	Gobichettipalaiyam.	Vaniputur.
35	Pollachi	Singanallur.

ZONE VIII.

Ramnad district.

1	Tiruvadanai	Tiruvadanai.
2	Paramagudi	Pambur.
3	Do.	Saligramam.
4	Sivaganga	Kadampankulam.
5	Aruppukkottai	Kovilangulam.
6	Sattur	Kanachanpatti.

Tinnevelly district.

7	Koilpatti	Singampatti.

Tanjore district.

8	Arantangi	Aliyanilai.

ZONE IX.

Madura district.

1	Melur	Ettimangalur.
2	Tirumangalam	Kappalur.
3	Madura	Uttangudi.

Ramnad district.

4	Srivilliputtur	Sundararajapuram.

Tinnevelly district.

5	Tenkasi	Ilanji.
6	Ambasamudram	Adaichanai.
7	Tinnevelly	Melakalloor.
8	Srivaikuntam	Valur Adachanalur.
9	Tiruchendur	Suganthalai.
10	Nanguneri	Tirukurangudi.

ZONE X.

Malabar district. Taluk.	Village.	*South Kanara district.* Taluk.	Village.
1 Palghat ..	.. Kodumba.	9 Puttur ..	.. Sullia.
2 Ponnani ..	.. Toluvanur.	10 Mangalore ..	.. Ullal.
3 Do. ..	.. Tavanur.	11 Karkal ..	.. Kadandali.
4 Valluvanur	.. Anamanga.	12 Udipi ..	.. Shiyali.
5 Ernad ..	.. Arimbra.	13 Do. ..	.. Uliyarkoil.
6 Calicut ..	.. Mayanad.		
7 Kurumbranad	.. Chavatta.		
8 Kottayam ..	.. Kadirur.		

STATEMENT II.—*Number of families examined in each class in each of the ten zones.*

Zones.	I class.	II class.	III class.	IV class.	V class.	Total in each zone.
I	7	40	150	81	51	329
II	22	265	580	140	179	1,186
III	11	74	82	16	32	215
IV	50	229	180	54	90	603
V	15	190	202	42	77	526
VI	41	363	757	180	237	1,578
VII	53	559	1,008	97	307	2,024
VIII	12	142	196	46	64	460
IX	9	91	347	181	115	743
X	20	144	282	293	127	866
Total ..	240	2,097	3,784	1,130	1,279	8,530
Percentage ..	2·9	24·6	44·3	13·2	15	100

STATEMENT III.—*Showing details about population, area, rainfall, etc.*

ZONE .

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari.	Zamindari.	Inam.	Density of cattle population units per 1,000 acres.
							ACS.	ACS.	ACS.	
Vizagapatam district.										
1 Anakapalle	202,520	290	40·6 to 60·5 ..	35·6 to 45·5 ..	20·6 to 40·5 ..	Over 60 ..	453	174,904	17,322	551 to 650
2 Bobbili	246,487	388	Do. ..	Do. ..	40·6 to 60·5 ..	Do. ..	314	134,596	37,041	Do.
3 Chicacole	319,901	425	80·6 and over ..	Do. ..	Do. ..	Do. ..	144,205	54,359	42,178	451 to 550
4 Chipurupalle	271,777	462	40·6 and over ..	Do. ..	20·6 to 40·5 ..	46 to 60 ..	830	288,123	53,802	551 to 650
5 Golgonda	117,713	400	Do. ..	Do. ..	Do. ..	31 to 45 ..	228,505	35,376	33,393	351 to 450
6 Ichapur	74,876	87	Do. ..	45·6 to 55·5 ..	Do. ..	Do. ..	67	129,659	11,919	Do.
7 Palkonda	264,611	357	Do. ..	Do. ..	Do. ..	Over 60 ..	205,652	61,267	54,036	Do.
8 Parvatipuram	148,983	296	Do. ..	Do. ..	20·5 and under ..	Do. ..	336	474,839	23,161	350 and under.
9 Patapatnam	201,315	464	Do. ..	Do. ..	Do. ..	Do. ..	..	..	..	Do.
10 Salur	145,974	425	Do. ..	35·5 to 45·5 ..	20·6 to 40·5 ..	31 to 45 ..	678	83,633	30,889	Do.
11 Sarvasiddhi	214,264	347	20·6 to 40·5 ..	Do. ..	40·6 to 60·5 ..	16 to 30 ..	98,094	109,123	11,164	451 to 550
12 Sompeta	121,080	212	Do. ..	45·6 to 55·5 ..	20·6 to 40·5 ..	46 to 60 ..	55	170,582	4,416	Do.
13 Sringavarapukota ..	174,958	394	40·6 to 60·5 ..	35·6 to 45·5 ..	Do. ..	Do. ..	320	242,744	40,040	350 and under
14 Tekkali	163,702	271	Do. ..	Do. ..	Do. ..	Over 60 ..	9,952	132,497	8,559	451 to 550
15 Viravalli	259,460	233	Do. ..	Do. ..	Do. ..	31 to 45 ..	1,293	227,185	18,760	351 to 450
16 Vizianagram	257,513	359	Do. ..	Do. ..	Do. ..	46 to 60 ..	606	168,916	34,318	350 and under.
17 Vizagapatam	161,287	196	Do. ..	Do. ..	20·5 and under ..	16 to 30 ..	613	101,039	10,111	351 to 450

STATEMENT IV.—*Showing details about population, area, rainfall, etc.*

ZONE II.

CIRCARS—COASTAL REGIONS.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Ryotwari.	Zamindari.	Inam.	Density of cattle population units per 1,000 acres.
Guntur district.										
1 Bapatla	335,283	670	80·6 and over ..	35·6 to 45·5 ..	60·6 to 80·5 ..	31 to 45 ..	434,259	83	9,696	551 to 650
2 Guntur	366,193	541	Do. ..	25·6 to 35·5 ..	Do. ..	15 ..	310,554	..	10,515	651 and over
3 Repalle	166,278	295	60·6 to 80·5 ..	35·6 to 45·5 ..	40·6 to 60·5 ..	Over 60 ..	214,731	2,247	3,579	451 to 550
4 Tenali	299,129	324	80·6 and over ..	Do. ..	40·6 to 80·5 ..	Do. ..	178,573	1,653	9,041	350 and under.
Kistna district.										
5 Bandar	179,033	343	20·6 to 40·5 ..	35·6 to 45·5 ..	20·6 to 40·5 ..	Over 60 ..	100,435	72,319	7,048	350 and under.
6 Bezwada	248,024	436	80·6 and over ..	25·6 to 35·6 ..	40·6 to 60·5 ..	46 to 60 ..	140,844	99,404	30,267	551 to 650
7 Divi	187,494	465	60·6 and over ..	35·6 to 45·5 ..	40·6 to 60·5 ..	Do. ..	173,213	118,819	1,805	351 to 450
8 Gudivada	172,410	289	80·6 and over ..	25·6 to 35·5 ..	60·6 to 80·5 ..	Over 60 ..	108,839	75,814	15,437	451 to 550
West Godavari district.										
9 Bhimavaram	202,363	293	80·6 and over ..	45·6 to 55·5 ..	60·6 to 80·5 ..	Over 60 ..	145,478	30,093	5,088	351 to 450
10 Ellore	214,912	510	60·6 to 80·5 ..	35·6 to 45·5 ..	40·6 to 60·5 ..	Do. ..	111,635	102,080	27,603	451 to 550
11 Narasapur	250,278	279	Do. ..	Do. ..	60·6 to 80·5 ..	46 to 60 ..	154,387	12,973	10,477	Do.

STATEMENT IV.—*Showing details about population, area, rainfall, etc.*—cont.

ZONE II—cont.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari. ACS.	Tenures. Zamindari. ACS.	Tenures. Inam. ACS.	Density of cattle population units per 1,000 acres.
CIRCARS—COASTAL REGIONS—cont.										
***West Godavari district*—cont.**										
12 Kovvur	179,808	398	40·6 to 60·5	35·6 to 45·5	40·6 to 60·5	15	83,366	124,422	18,182	351 to 450
13 Tadepalligudem	190,382	360	Do.	Do.	Do.	Over 60	138,068	44,544	37,178	Do.
14 Tanuku	247,609	214	80·6 and over	Do.	80·6 and over	Do.	86,534	32,557	8,999	551 to 650
East Godavari district.										
15 Amalapuram	283,412	367	80·6 and over	45·6 to 55·5	40·6 to 60·5	Over 60	160,384	71,354	3,020	351 to 450
16 Cocanada	296,495	297	Do.	35·6 to 45·5	Do.	Do.	113,438	76,258	384	451 to 550
17 Peddapuram	250,465	604	20·5 and under	Do.	20·6 to 40·5	16 to 30	200,163	108,216	80,501	350 and under.
18 Pithapuram	124,555	193	40·6 to 60·5	Do.	40·6 to 60·5	46 to 60	56	123,726	..	Do.
19 Rajahmundry	252,572	376	20·6 to 40·5	Do.	Do.	16 to 30	185,381	36,237	5,581	Do.
20 Ramachandrapuram	308,159	291	80·6 and over	Do.	60·6 to 80·5	Over 60	154,163	25,964	167	551 to 650
21 Razole	279,029	291	60·6 to 80·5	45·6 to 55·5	Do.	Do.	125,745	35,891	2,528	451 to 550
22 Tuni	95,607	126	40·6 to 60·5	35·6 to 45·5	40·6 to 60·5	31 to 45	326	73,694	1,380	551 to 650

STATEMENT V.—*Showing details about population, area, rainfall, etc.*

ZONE III.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Ryotwari. ACS.	Zamindari. ACS.	Inam. ACS.	Density of cattle population units per 1,000 acres.
CIRCARS—UPLANDS.										
Guntur district.										
1 Vinukonda	114,094	644	20·6 to 40·5	25·6 to 35·5	40·6 to 60·5	15	358,765	..	58,414	350 and under.
2 Narasaraopet	254,912	716	60·6 to 80·5	Do.	60·6 to 80·5	15	408,588	..	49,710	Do.
3 Sattenapalle	237,345	706	80·6 and over	Do.	40·6 to 60·5	15	422,106	..	29,843	351 to 450
4 Palnad	192,309	1,041	Do.	Under 25·5	Do.	15	629,784	..	36,622	350 and under.
Kistna district.										
5 Nandigama	203,428	677	80·6 and over	25·5 to 35·6	40·6 to 60·5	15	278,502	142,938	12,179	451 to 550
6 Nuzvid	86,988	315	40·6 to 60·5	35·6 to 45·5	20·6 to 60·5	16 to 30	3,053	94,559	92,589	Do.
7 Tiruvur	105,457	425	Do.	Do.	40·6 to 60·5	Do.	1,087	242,010	29,185	351 to 450
West Godavari district.										
8 Gannavaram	168,815	286	80·6 and over	25·5 to 35·6	40·6 to 60·5	46 to 60	180	33,246	152,481	551 to 650
9 Kaikalur	99,645	236	Do.	Do.	20·6 to 40·5	Over 60	229,803	4,252	9,478	351 to 450
10 Chintalapudi	85,741	418	20·5 and under	35·6 to 45·5	Do.	16 to 30	180,922	53,024	103,411	350 and under.

STATEMENT VI.—*Showing details about population, area, rainfall, etc.*

ZONE IV.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Ryotwari. ACS.	Zamindari. ACS.	Inam. ACS.	Density of cattle population units per 1,000 acres.
DECCAN ZONE.										
Bellary district.										
1 Adoni	201,200	765	60·6 to 80·5	Under 25·5	60·6 to 80·5	15	..	..	..	350 and under.
2 Alur	111,445	613	Do.	Do.	80·6 and over	15	..	..	..	Do.
3 Hadagalli	65,441	406	20·5 and under	Do.	60·6 to 80·5	15	..	..	..	Do.
4 Bellary	151,408	652	60·6 to 80·5	Do.	80·6 and over	15	..	..	..	Do.
5 Harpanahalli	129,056	763	20·5 and under	Do.	40·6 to 60·5	15	..	..	..	Do.
6 Hospet	102,464	566	Do.	Do.	20·6 to 40·5	15	..	..	..	Do.
7 Kudligi	113,941	863	Do.	Do.	40·6 to 60·5	15	..	..	..	Do.
8 Rayadrug	106,854	681	20·6 to 40·5	Do.	60·6 to 80·5	15	..	..	..	Do.
9 Siruguppa	69,431	403	60·6 to 80·5	Do.	80·6 and over	15	..	..	..	Do.
Anantapur district.										
10 Anantapur	136,446	926	20·5 and under	Under 25·5	40·6 to 60·5	15	571,606	..	20,162	351 to 450
11 Dharmavaram	99,260	76	Do.	Do.	20·6 to 40·5	15	465,480	..	5,528	Do.
12 Gooty	178,189	896	40·6 to 60·5	Do.	40·6 to 60·5	15	558,880	..	14,552	350 and under.
13 Hindupur	127,805	431	20·5 and under	Do.	Do.	16 to 30	252,110	..	23,807	451 to 550
14 Kadiri	193,438	1,158	Do.	Do.	20·6 to 40·5	15	720,727	..	20,224	351 to 450
15 Kalyandrug	97,321	821	Do.	Do.	40·6 to 60·5	15	505,175	..	15,765	350 and under.
16 Madakasira	107,166	446	Do.	Do.	Do.	15	270,684	..	14,547	451 to 550
17 Penukonda	104,094	682	Do.	Do.	20·6 to 40·5	16 to 30	407,973	..	28,532	351 to 450
18 Tadpatri	127,700	641	60·6 to 80·5	Do.	40·6 to 60·5	Do.	399,987	..	10,362	350 and under.
Cuddapah district.										
19 Badvel	103,278	756	20·5 and under	25·6 to 35·5	20·5 and under	31 to 45	485,918	..	26,869	350 and under.
20 Cuddapah	124,820	509	40·6 to 60·5	Do.	20·6 to 40·5	Do.	305,065	..	17,893	351 to 450
21 Jammalamadugu	115,572	612	80·6 and over	Under 25·5	40·6 to 60·5	15	344,909	..	42,752	Do.
22 Kamalapuram	72,372	303	40·6 to 60·5	Do.	Do.	15	189,850	..	4,314	Do.
23 Proddatur	122,814	480	80·6 and over	Do.	Do.	16 to 30	284,754	..	12,851	Do.
24 Pulivendla	103,487	568	40·6 to 60·5	Do.	Do.	15	351,966	..	6,465	Do.
25 Rajampet	175,606	1,035	20·5 and under	25·6 to 35·5	20·5 and under	46 to 60	570,749	..	67,187	350 and under.
26 Rayachoti	169,151	1,104	Do.	Do.	20·6 to 40·5	16 to 30	648,710	..	24,150	351 to 450
27 Siddhavattam	69,412	606	Do.	Do.	Do.	46 to 60	377,794	..	12,499	350 and under.
Kurnool district.										
28 Cumbum	151,824	1,048	20·5 and under	Under 25·5	20·6 to 40·5	15	628,589	..	50,125	350 and under.
29 Dhone	122,858	836	20·6 to 40·5	Do.	40·6 to 60·5	15	512,150	..	10,858	Do.
30 Koilkuntla	93,469	572	80·6 and over	Do.	Do.	15	363,673	..	2,285	Do.
31 Kurnool	177,273	640	Do.	Do.	60·6 to 80·5	15	405,127	..	4,435	Do.
32 Markapur	127,601	1,366	20·5 and under	Do.	20·5 and under	15	831,826	..	40,173	Do.
33 Nandikotkur	137,644	1,092	80·6 and over	25·6 to 35·5	20·6 to 40·5	15	829,779	..	7,635	Do.
34 Nandyal	111,911	664	Do.	Do.	Do.	15	434,541	..	7,635	Do.
35 Pattikonda	126,879	747	20·6 to 40·5	Under 25·5	60·6 to 80·5	15	473,498	..	4,704	Do.
36 Sirvel	96,791	617	80·6 and over	25·6 to 35·5	40·6 to 60·5	15	394,931	..	..	Do.
Nellore district.										
37 Darsi	113,062	591	40·6 to 60·5	Under 25·5	20·6 to 40·5	15	..	..	..	350 and under.
38 Podili	86,600	564	Do.	Do.	Do.	15	..	..	..	Do.
39 Kanigiri	149,752	1,000	20·5 and under	Do.	20·5 and under	15	249,350	342,752	48,160	351 to 450
40 Udayagiri	109,303	371	Do.	20·6 to 35·5	Do.	16 to 30	260,403	228,410	68,307	350 and under.

STATEMENT VII.—*Showing details about population, area, rainfall, etc.*

ZONE V.

Name of taluk.	Population 1941.	Area in square miles.	Proportion of alluvial and regar soil percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari. ACS.	Zamindari. ACS.	Inam. ACS.	Density of cattle population units per 1,000 acres.
NORTH COROMANDEL.										
Guntur district.										
1 Ongole	311,740	820	80·6 and over	25·6 to 35·5	40·6 to 60·5	15	381,042	117,751	22,404	350 and under.
Nellore district.										
2 Kandukur	187,808	801	20·6 to 40·5	25·6 to 35·5	20·6 to 40·5	15	333,613	148,461	30,566	351 to 450
3 Kavali	118,951	548	20·5 and under	35·6 to 45·5	Do.	31 to 45	235,751	63,878	50,912	350 and under.
4 Atmakur	120,752	689	Do.	25·6 to 35·5	Do.	16 to 30	353,946	22,726	32,464	351 to 451
5 Kovur	161,312	385	Do.	35·6 to 45·5	Do.	Over 60	206,048	..	40,441	Do.
6 Rapur	82,400	594	Do.	Do.	Do.	16 to 30	309,869	..	59,488	Do.
7 Nellore	212,945	505	80·6 and over	25·6 to 35·5	Do.	Over 60	263,136	16,192	43,693	Do.
8 Venkatagiri	81,120	427	40·6 to 60·5	35·6 to 45·5	20·5 and under	Do.	..	..	..	Do.
9 Gudur	101,219	462	20·5 and under	Do.	20·6 to 40·5	46 to 60	185,836	89,088	19,418	Do.
10 Sulurpet	91,302	561	Do.	25·6 to 45·5	20·5 and under	Over 60	132,077	195,014	33,370	350 and under.
Chingleput district.										
11 Ponneri	244,988	637	20·5 and under	45·6 to 55·5	20·6 to 40·5	46 to 60	283,987	127,940	50,202	351 to 450
12 Tiruvallur	284,676	523	Do.	35·6 to 45·5	40·6 to 60·5	Do.	149,677	88,009	28,640	551 to 650

STATEMENT VIII.—*Showing details about population, area, rainfall, etc.*

ZONE VI.

Name of taluk.	Population 1941.	Area in square miles.	Proportion of alluvial and regar soil percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari. ACS.	Zamindari. ACS.	Inam. ACS.	Density of cattle population units per 1,000 acres.
SOUTH COROMANDEL.										
Chingleput district.										
1 Chingleput	221,218	436	20·6 to 40·5	45·6 to 55·5	20·6 to 40·5	46 to 60	220,934	33,530	24,830	451 to 550
2 Conjeeveram	282,147	412	40·6 to 60·5	Do.	40·6 to 60·5	Do.	222,486	1,843	39,153	551 to 650
3 Madurantakam	265,540	530	Do.	Do.	20·6 to 40·5	16 to 30	210,297	103,064	26,112	Do.
4 Saidapet	331,038	247	20·5 and under	Do.	Do.	46 to 60	123,492	5,549	30,396	..
5 Sriperumbudur	194,348	306	20·6 to 40·5	Do.	40·6 to 60·5	Do.	150,611	26,630	18,515	..
South Arcot district.										
6 Chidambaram	345,882	404	60·6 to 80·5	45·6 to 55·5	60·6 to 80·5	Over 60	254,227	..	3,181	651 and over.
7 Cuddalore	403,537	448	20·6 to 40·5	Do.	40·6 to 60·5	16 to 30	265,415	5,856	14,236	551 to 650
8 Tindivanam	305,108	561	Do.	35·6 to 45·5	Do.	Do.	284,985	..	634	451 to 550
9 Villupuram	196,186	352	Do.	Do.	60·6 to 80·5	31 to 45	289,216	2,355	7,488	651 and over.
10 Tirukkoyilur	367,483	584	Do.	Do.	40·6 to 60·5	Do.	356,608	5,769	11,827	551 to 650

Name of taluk.	Population 1941.	Area in square miles.	Proportion of alluvial and regar soil percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari. ACS.	Zamindari. ACS.	Inam. ACS.	Density of cattle population units per 1,000 acres.
Tanjore district.										
11 Shiyali	147,173	171	40·6 to 60·5	55·6 and over	60·6 to 80·5	Over 60	105,173	..	4,191	651 and over.
12 Mayavaram	286,170	282	80·6 and over	45·6 to 55·5	Do.	Do.	176,386	..	4,727	Do.
13 Nannilam	223,457	291	Do.	Do.	Do.	Do.	182,416	..	5,876	Do.
14 Negapatam	237,790	240	Do.	Do.	Do.	Do.	139,305	..	13,672	Do.
15 Tiruthuraipundi	214,132	496	60·6 to 80·5	55·6 and over	40·6 to 60·5	46 to 60	291,995	..	24,956	451 to 550
16 Mannargudi	214,795	301	40·6 to 60·5	45·6 to 55·5	Do.	Over 60	166,436	..	25,830	651 and over
17 Papanasam	201,599	228	60·6 to 80·5	35·6 to 45·5	60·6 to 80·5	Do.	126,578	..	21,094	Do.
18 Kumbakonam	300,954	212	40·6 to 60·5	Do.	40·6 to 60·5	15	117,016	..	17,992	Do.
19 Tanjore	316,207	423	Do.	Do.	Do.	31 to 45	223,747	..	44,373	551 to 650
20 Pattukkottai	302,194	700	Do.	Do.	20·6 to 40·5	Over 60	86,127	169,354	178,039	451 to 550
Trichinopoly district.										
21 Lalgudi	215,683	373	40·6 to 60·5	25·6 to 35·5	40·6 to 60·5	16 to 30	223,053	..	15,200	651 and over.
22 Trichinopoly	359,980	329	20·6 to 40·5	Do.	20·6 to 40·5	46 to 60	167,590	210,547	42,957	Do.
23 Kulittalai	353,781	913	20·5 and under.	Do.	Do.	16 to 30	359,526	172,557	52,723	Do.
24 Musiri	312,348	670	40·6 to 60·5	Do.	40·6 to 60·5	Do.	380,730	36,276	8,160	551 to 650
North Arcot district.										
25 Arkonam	208,070	319	20·6 to 40·5	35·6 to 45·5	40·6 to 60·5	46 to 60	191,494	3,060	9,734	651 and over.
26 Cheyyar	189,286	327	Do.	Do.	Do.	16 to 30	201,395	..	8,230	Do.
27 Wallajahpet	287,986	395	20·5 and under.	Do.	Do.	Do.	243,418	..	9,466	Do.

STATEMENT IX.—*Showing details about population, area, rainfall, etc.*

ZONE VII.

Name of taluk.	Population 1941.	Area in square miles.	Proportion of alluvial and regar soil percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari. ACS.	Zamindari. ACS.	Inam. ACS.	Density of cattle population units per 1,000 acres.
CENTRAL DISTRICTS.										
Chittoor district.										
1 Chandragiri	149,726	548	20·6 to 40·5	25·6 to 35·5	20·5 and under.	Over 60	238,413	72,378	39,668	350 and under.
2 Chittoor	129,734	786	20·5 and under.	Do.	20·6 to 40·5	31 to 45	321,126	167,936	13,958	451 to 550
3 Kalahasti (Z)	..	615	40·6 to 60·5	35·6 to 45·5	20·5 and under.	Over 60	..	..	..	350 and under.
4 Madanapalle	173,591	836	20·5 and under.	25·6 to 35·5	20·6 to 40·5	15	528,184	72,378	39,668	351 to 450
5 Palmaner	140,954	716	40·6 to 60·5	Do.	Do.	15	234,362	..	8,678	Do.
6 Punganur (Z)	134,487	648	Do.	Do.	20·5 and under.	31 to 45	..	..	..	Do.
7 Puttur	218,016	542	Do.	35·6 to 45·5	Do.	Over 60	..	..	..	451 to 550
8 Tiruttani	218,057	401	Do.	Do.	Do.	Do.	..	..	..	651 and over.
9 Vayalpad	166,643	302	20·5 and under.	25·6 to 35·5	Do.	16 to 30	492,684	..	20,473	451 to 550.
North Arcot district.										
10 Arni	158,005	180	20·6 to 40·5	35·6 to 45·5	20·6 to 40·5	16 to 30	272	115,129	..	651 and over.
11 Chengam	177,605	652	20·5 and under.	Do.	Do.	Do.	355,130	..	..	451 to 550
12 Gudiyattam	288,147	481	20·6 to 40·5	25·6 to 35·5	Do.	Do.	307,546	..	320	Do.
13 Polur	217,826	565	20·5 and under.	35·6 to 45·5	Do.	Do.	373,753	..	179	351 to 450
14 Tiruppattur	309,974	581	Do.	25·6 to 35·5	Do.	15	232,749	135,080	10,477	651 and over.
15 Tiruvannamalai	282,432	375	Do.	35·6 to 45·5	40·6 to 60·5	16 to 30	277,987	8,375	4,730	451 to 550
16 Vellore	310,065	432	Do.	25·6 to 35·5	20·6 to 40·5	Do.	274,330	..	2,246	651 and over.
17 Wandiwash	203,144	339	20·6 to 40·5	35·6 to 45·5	40·6 to 60·5	Do.	214,803	..	2,483	Do.
South Arcot district.										
18 Gingee	299,715	410	20·5 and under.	35·6 to 45·5	40·6 to 60·5	16 to 30	255,180	..	7,098	651 and voer.
19 Kallakurichi	354,684	873	20·6 to 40·5	Do.	20·6 to 40·5	31 to 45	409,504	142,428	6,999	451 to 550
20 Vriddhachalam	296,158	576	60·6 to 80·5	Do.	40·6 to 60·5	16 to 30	366,621	..	3,535	651 and over.
Trichinopoly district.										
21 Karur	327,501	710	40·6 to 60·5	Under 25·5	40·6 to 60·5	16 to 30	356,973	23,994	9,100	651 and over.
22 Perambalur	244,817	678	80·6 and over.	25·6 to 35·5	Do.	15	414,394	13,798	4,420	Do.
23 Udayarpalayam	380,031	749	Do.	Do.	Do.	15	331,904	130,336	17,562	551 to 650

STATEMENT IX.—*Showing details about population, area, rainfall, etc.*—cont.

ZONE VII—*cont.*

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Tenures. Ryotwari.	Zamindari.	Inam.	Density of cattle population units per 1,000 acres.
							ACS.	ACS.	ACS.	
CENTRAL DISTRICTS—cont.										
Madura district.										
24 Dindigul	367,948	696	20·5 and under.	25·6 to 35·5	40·6 to 60·5	16 to 30	374,644	144,550	6,753	651 and over.
25 Palni	262,853	625	20·5 and under.	25·6 to 35·5	40·6 to 60·5	31 to 45	225,286	172,954	512	451 to 550
26 Kodaikanal ..	33,698	360	20·6 to 40·5	55·6 and over.	20·5 and under.	15	65,705	..	..	350 and under.
Salem district.										
27 Attur	221,505	650	20·6 to 40·5	35·6 to 45·5	20·6 to 40·5	16 to 30	384,134	28,621	2,356	451 to 550
28 Dharmapuri	291,153	945	20·5 and under.	25·6 to 35·5	Do.	15	444,799	116,736	12,763	Do.
29 Harur	202,795	910	Do.	Do.	Do.	15	494,699	87,036	934	350 and under.
30 Hosur	224,240	1,181	Do.	Do.	Do.	15	559,456	166,144	30,701	351 to 450
31 Krishnagiri	256,868	688	20·6 to 40·5	Do.	Do.	15	231,309	188,243	20,173	451 to 550
32 Namakkal	378,500	682	20·5 and under.	35·7 to 45·5	40·6 to 60·5	16 to 30	174,144	204,275	13,625	651 and over.
33 Omalur	300,600	554	Do.	25·6 to 35·5	Do.	15	224,582	9,676	1,299	Do.
34 Rasipuram	164,192	317	Do.	Do.	20·6 to 40·5	16 to 30	235,500	13,728	1,830	451 to 550
35 Salem	395,940	466	Do.	35·6 to 45·5	Do.	15	286,299	39,265	8,635	651 and over.
36 Yercaud	17,245	61	..	..	..	..	..	..	..	..
Coimbatore district.										
37 Avanashi	237,826	493	20·5 and under.	35·6 to 45·5	40·6 to 60·5	16 to 30	323,606	..	..	451 to 550
38 Bhavani	209,228	576	Do.	Do.	20·6 to 40·5	31 to 45	369,946	..	..	351 to 450
40 Coimbatore	410,762	528	20·6 to 40·5	Under 25·5	40·6 to 60·5	16 to 30	322,857	..	14,810	350 and under.
40 Dharapuram	321,794	854	20·5 and under.	Do.	Do.	Do.	546,465	..	..	551 to 650
41 Erode	380,656	599	Do.	25·6 to 35·5	60·6 to 80·5	31 to 45	383,853	..	..	651 and over.
42 Gobichettipalayam ..	309,165	1,128	Do.	Do.	20·6 to 40·5	16 to 30	749,436	..	..	351 to 450
43 Kollegal	118,591	1,076	Do.	Do.	20·5 and under.	Over 60	682,170	..	25,363	350 and under.
44 Palladam	324,039	585	20·6 to 40·5	Under 25·5	60·6 to 80·5	16 to 30	375,341	..	..	451 to 550
45 Pollachi	316,540	714	20·5 and under.	35·6 to 45·5	40·6 to 60·5	15	345,630	53,837	..	350 and under.
46 Udumalpet	181,047	555	20·6 to 40·5	25·6 to 35·5	Do.	31 to 45	335,404	..	5,289	Do.

STATEMENT X.—*Showing details about population, area, rainfall, etc.*

ZONE VIII.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Ryotwari.	Zamindari.	Inam.	Density of cattle population units per 1,000 acres.
EXTREME SOUTH—EASTERN REGIONS.										
Tanjore district.										
1 Arantangi	118,904	398	40·6 to 60·5	25·6 to 35·5	20·6 to 40·5	15	50,102	30,129	193,601	451 to 550
Ramnad district.										
2 Tiruppattur	291,988	568	40·6 to 60·5	35·6 to 45·5	20·6 to 40·5	Over 60	..	212,256	163,500	551 to 650
3 Tiruvadanai	180,299	548	Do.	25·6 to 35·5	Do.	31 to 45	1,905	209,491	104,745	451 to 550
4 Paramagudi	178,680	440	Do.	Do.	40·6 to 60·5	16 to 30	3,651	162,244	123,571	Do.
5 Ramnad	156,119	334	Do.	Do.	20·6 to 40·5	Do.	3,438	117,766	92,556	Do.
6 Aruppukkottai ..	229,753	626	Do.	Do.	60·6 to 80·5	Do.	17,595	256,969	74,661	350 and under.
7 Sivaganga	225,436	651	Do.	Do.	40·6 to 60·5	Over 60	65	451,238	84,415	351 to 450
8 Mudukulattur ..	198,080	6,462	Do.	Do.	Do.	15	982	364,162	48,142	Do.
9 Sattur	276,327	576	80·6 and over	Do.	60·6 to 80·5	Do.	199,002	131,085	37,862	Do.
Tinnevelly district.										
10 Kovilpatti	383,493	1,085	60·6 and over.	Under 25·5	60·6 to 80·5	15	209,743	447,059	40,551	551 to 650

STATEMENT XI.—*Showing details about population, area, rainfall, etc.*

ZONE IX.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Ryotwari.	Zamindari.	Inam.	Density of cattle population units per 1,000 acres.
EXTREME SOUTH—WESTERN REGIONS.										
Madura district.										
1 Melur	190,345	484	40·6 to 60·5	35·6 to 45·6	40·6 to 60·5	31 to 45	236,244	..	9,960	451 to 550
2 Nilakkottai	325,945	507	Do.	25·6 to 35·6	Do.	Do.	133,498	68,864	19,692	551 to 650
3 Periyakulam	501,396	1,106	20·5 and under.	Do.	20·6 to 40·5	15	251,821	281,261	1,281	350 and under.
4 Tirumangalam ..	360,913	737	60·6 to 80·5	Do.	40·6 to 60·5	16 to 30.	250,720	37,497	37	451 to 550
5 Madura	402,504	268	20·5 and under.	Do.	Do.	Over 60	118,957	41,510	6,215	551 to 650
Ramnad district.										
6 Srivilliputtur	252,961	426	60·6 to 80·5	25·5 and under.	40·6 to 60·5	31 to 45	239,928	30,932	8,107	351 to 450
Tinnevelly district.										
7 Sankaranainarkoil ..	284,699	634	20·6 to 40·5	25·6 to 35·6	40·6 to 60·5	16 to 30	208,128	146,897	51,475	350 and under.
8 Tenkasi	282,744	403	20·5 and under.	35·6 to 45·5	Do.	31 to 45	135,293	122,795	275	451 to 550
9 Ambasamudram ..	233,960	496	Do.	25·6 to 35·5	20·5 and under.	Do.	253,900	55,842	2,547	350 and under.
10 Tinnevelly	257,687	326	20·6 to 40·5	Do.	20·6 to 40·5	31 to 45	188,332	..	24,826	351 to 450
11 Srivaikuntam	259,528	361	40·6 to 60·5	Under 25·5	40·6 to 60·5	16 to 30	189,104	28,582	18,707	451 to 550
12 Tiruchendur	254,098	323	20·5 and under.	25·6 to 35·5	20·6 to 40·5	Do.	210,923	..	9,344	Do.
13 Nanguneri	2[illegible],262	693	Do.	Do.	Do.	31 to 45	422,507	..	21,491	551 to 650

STATEMENT XII.—*Showing details about population, area, rainfall, etc.*

ZONE X.

Name of taluk.	Population, 1941.	Area in square miles.	Proportion of alluvial and regar soil; percentage of total area.	Rainfall in inches per annum.	Proportion of cultivated area and percentage of total acreage.	Percentage irrigated.	Ryotwari.	Zamindari.	Inam.	Density of cattle population units per 1,000 acres.
WEST COAST.										
Malabar district.										
1 Palghat	495,634	643	20·5 and under.	55·6 and over.	40·6 to 60·5	15	436,271	..	..	350 and under.
2 Ponnani	686,929	427	Do.	Do.	80·6 and over.	15	272,093	..	..	Do.
3 Walluvanad	487,418	873	Do.	Do.	20·6 to 40·5	15	562,045	..	..	Do.
4 Ernad	515,851	978	Do.	Do.	Do.	15	618,496	..	..	Do.
5 Calicut	406,839	380	Do.	Do.	40·6 to 60·5	15	242,477	..	..	Do.
6 Kurumbranad ..	446,008	560	Do.	Do.	Do.	15	323,456	..	..	Do.
7 Wynad	106,350	821	Do.	Do.	20·5 and under.	15	524,831	..	..	Do.
8 Kottayam	297,899	484	Do.	Do.	Do.	15	308,032	..	..	Do.
9 Chirakkal	445,423	688	Do.	Do.	Do.	15	436,271	..	..	Do.
10 Cochin	28,396	2	Do.	Do.	40·6 to 60·5	15	1,158	..	..	Do.
South Kanara district.										
11 Kasargod	342,301	767	20·5 and under.	55·6 and over.	20·5 and under.	15	487,597	..	..	350 and under.
12 Puttur	220,701	1,246	Do.	Do.	Do.	15	796,182	..	..	Do.
13 Mangalore	391,271	406	Do.	Do.	20·6 to 40·5	15	260,927	..	..	351 to 450
14 Karkal	153,479	767	Do.	Do.	20·5 and under.	15	402,374	..	..	350 and under.
15 Udipi	250,347	357	Do.	Do.	20·6 to 40·5	15	228,186	..	..	351 to 450
16 Coondapur	159,240	619	Do.	Do.	20·5 and under.	15	396,189	..	..	350 and under.

STATEMENT XIII.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE I.

Name of taluk.	Number of villages.	Rural population.	Total area.	Forests.	Arable Area.	Incidence of land revenue per head.
			ACS.	ACS.	ACS.	RS.
1 Anakapalle	152	173,271	192,679	16,345	128,897	0·69
2 Bobbili	185	224,767	171,951	..	140,093	0·67
3 Chicacole	306	292,318	240,742	..	198,612	1·44
4 Chipurupalle	286	271,777	342,755	..	171,696	0·28
5 Golugonda	165	161,069	315,290	130,651	105,645	1·20
6 Ichchapur	329	63,717	141,645	..	52,426	0·57
7 Palkonda	337	239,406	320,955	41,362	158,777	1·56
8 Parvatipuram	232	121,170	498,336	..	250,452	0·65
9 Patapatnam	..	185,381	..	..	..	..
10 Salur	132	125,400	115,200	..	113,600	0·40
11 Sarvasiddhi	149	205,210	218,381	14,815	186,439	1·18
12 Sompeta	290	97,973	175,053	..	144,403	0·28
13 Srungavarapukota ..	191	167,586	283,104	62,836	145,548	0·15
14 Tekkali	354	145,024	151,008	..	151,008	0·48
15 Viravalli..	258	244,414	247,238	9,488	137,689	0·31
16 Vizianagram	196	189,214	203,840	10,003	155,287	2·20
17 Vizagapatam	76	91,044	111,763	4,820	47,798	0·10
18 Bimlipatam	124	210,132	163,424	12,451	101,596	0·10

STATEMENT XIV.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE II.

						RS.	A.	P.
1 Bapatla	116	242,450	444,038	13,462	378,320	3	14	1
2 Guntur	116	153,185	321,069	4,564	275,510	1	15	8
3 Repalle	69	144,844	220,557	24,195	173,213	4	4	1
4 Tenali	86	230,699	189,267	..	176,534	4	10	5
5 Bandar	107	109,472	179,802	26,926	119,032	2	4	9
6 Bezwada	125	148,001	270,515	31,382	204,499	1	14	9
7 Divi	100	187,494	293,837	26,899	182,827	3	14	4
8 Gudivada	164	23,919	200,090	..	166,299	4	8	6
9 Bhimavaram	93	175,006	180,659	11,614	161,078	3	13	5
10 Ellore	126	150,001	241,318	21,046	204,886	3	6	3
11 Narasapur	92	213,903	177,837	1,804	155,526	3	8	7
12 Kovvur	111	162,201	225,970	..	215,234	1	4	5
13 Tadepalligudem ..	116	173,478	219,790	9,182	193,035	2	15	2
14 Tanuku	99	187,803	128,090	..	112,864	3	13	3
15 Amalapuram	106	165,520	234,758	8,070	151,325	3	0	9
16 Cocanada	106	199,007	190,080	55,921	118,880	2	0	8
17 Peddapuram	222	124,889	388,880	43,424	211,045	1	8	11
18 Pithapuram	53	106,381	123,782	..	107,056	0	3	1
19 Rajahmundry	84	166,625	227,199	14,801	186,794	1	3	6
20 Ramachandrapuram ..	117	180,959	180,294	..	154,262	4	7	0
21 Razole	107	181,314	164,164	..	137,700	3	2	11
22 Tuni	52	82,547	80,400	..	80,400	0	7	7

STATEMENT XV.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE III.

1 Vinukonda	77	106,029	412,179	107,702	119,115	1	15	8
2 Narasaraopet	114	228,517	458,298	30,054	369,024	2	0	9
3 Sattenapalle	136	221,133	451,949	80,362	339,211	2	3	1
4 Palnad	93	185,063	666,406	205,481	430,287	2	13	4
5 Nandigama	125	193,391	270,515	..	204,499	1	14	9
6 Nuzvid	83	72,804	190,201	..	55,441	0	1	6
7 Tiruvur	90	103,457	272,282	..	234,588	0	5	8
8 Gannavaram	105	154,190	165,907	..	91,906	3	7	10
9 Kaikalur	90	99,645	243,533	..	122,462	4	10	11
10 Chintalapudi	140	85,741	337,357	36,296	281,141	1	1	1

STATEMENT XVI.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE IV.

Name of taluk.	Number of villages.	Rural population.	Total area.	Forests.	Arable area.	Incidence of land revenue per head.		
			ACS.	ACS.	ACS.	RS.	A.	P.
1 Adoni	177	143,044	490,250	22,357	453,216	1	9	11
2 Alur	94	111,445	392,920	11,978	370,594	3	6	4
3 Hadagalli	88	55,428	376,797	23,865	327,337	2	2	0
4 Bellary	104	86,531	417,041	6,848	383,295	2	2	2
5 Harpanahalli	84	117,340	390,594	52,959	298,630	1	10	1
6 Hospet	128	58,016	339,621	84,848	227,025	2	7	3
7 Kudligi	119	101,675	554,149	130,779	386,798	1	4	9
8 Rayadrug	82	90,821	436,332	28,006	378,102	2	2	2
9 Siruguppa	86	56,764	257,655	829	238,701	3	6	1
10 Anantapur	118	114,164	591,768	46,647	499,284	1	8	8
11 Dharmavaram	63	87,173	471,008	26,101	409,319	1	10	2
12 Gooty	135	62,359	573,382	38,363	506,122	1	12	9
13 Hindupur	87	108,756	275,917	24,009	215,038	1	6	5
14 Kadiri	140	181,553	740,951	137,892	361,253	1	1	3
15 Kalyandrug	74	91,337	520,940	21,711	458,880	1	10	6
16 Madakasira	61	101,832	285,261	21,731	235,893	1	2	0
17 Penukonda	105	98,188	436,505	78,982	314,677	1	8	5
18 Tadpatri..	97	112,516	410,349	45,726	334,566	2	0	1
19 Badvel	140	97,550	462,787	181,728	229,634	1	8	3
20 Cuddapah	111	91,128	322,958	116,569	142,435	2	0	9
21 Jammalamadugu ..	138	105,919	387,661	31,610	237,687	2	4	3
22 Kamalapuram	64	66,435	194,164	9,016	132,387	2	1	5
23 Proddatur	86	95,853	297,605	61,008	173,179	2	9	3
24 Pulivendla	97	93,119	358,431	31,593	296,514	1	15	6
25 Rajampet	143	158,178	637,936	295,710	327,116	1	8	7
26 Rayachoti	118	101,257	672,860	209,248	405,756	1	3	9
27 Siddhavattam	79	69,412	390,293	215,768	130,672	1	6	2
28 Cumbum	104	138,152	678,714	346,939	259,859	1	4	3
29 Dhone	77	79,029	523,008	103,728	393,803	1	5	4
30 Koilkuntla	86	45,837	365,958	34,767	280,353	3	2	2
31 Kurnool	97	116,687	409,562	11,691	362,117	1	10	10
32 Markapur	95	60,768	871,999	492,144	330,280	1	2	7
33 Nandikotkur	92	64,775	837,414	303,888	501,216	2	15	9
34 Nandyal	73	85,910	434,541	191,773	216,111	2	9	8
35 Pattikonda	73	111,794	478,202	21,474	406,226	1	13	7
36 Sirvel	87	96,686	394,931	135,804	237,788	2	12	5
37 Darsi	..	113,062	..	..	..		..	
38 Podili	..	86,600	..	..	..		..	
39 Kanigiri	210	143,376	640,262	48,856	539,126	0	10	9
40 Udayagiri	136	103,644	557,120	91,914	332,254	0	11	7

STATEMENT XVII.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE V.

1 Ongole	176	184,622	521,197	3,500	420,302	1	12	9
2 Kandukur	186	177,412	512,640	28,803	268,977	2	3	1
3 Kavali	80	106,982	350,541	27,809	244,937	2	8	1
4 Atmakur	116	120,752	409,139	66,401	248,862	2	15	1
5 Kovur	89	132,933	246,489	13,413	149,812	4	4	8
6 Rapur	120	82,400	369,357	123,360	174,605	2	6	6
7 Nellore	121	158,630	323,021	20,079	219,408	3	6	7
8 Venkatagiri	..	64,712	..	..	..		..	
9 Gudur	116	89,114	294,342	19,541	138,421	2	8	5
10 Sullurpet	145	76,909	360,461	24,950	79,938	3	11	10
11 Ponneri	466	235,699	462,129	54,156	368,890	2	2	4
12 Tiruvallur	338	270,493	266,326	10,361	178,848	2	6	6

STATEMENT XVIII.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE VI.

Name of taluk.	Number of villages.	Rural population.	Total area. ACS.	Forests. ACS.	Arable area. ACS.	Incidence of land revenue per head. RS.	A.	P.
1 Chingleput	315	193,884	279,294	38,295	133,220	1	11	9
2 Conjeeveram	340	116,326	263,482	3,392	150,460	1	15	4
3 Madurantakam ..	413	249,654	339,473	6,573	214,900	2	3	0
4 Saidapet	197	195,521	159,437	3,227	102,546	0	13	3
5 Sriperumbudur ..	250	171,333	195,756	6,480	119,544	2	3	10
6 Chidambaram	341	119,580	257,408	3,355	197,087	3	6	11
7 Cuddalore	242	173,136	285,507	5,535	234,554	1	8	11
8 Tindivanam	250	204,992	285,619	3,697	113,999	1	15	1
9 Villupuram	288	265,245	299,059	2,083	236,031	2	1	4
10 Torukkoyilur	353	213,862	374,195	39,868	260,232	1	15	9
11 Shiyali	102	124,374	109,364	..	88,171	2	15	6
12 Mayavaram	190	155,518	181,113	..	150,742	3	1	8
13 Nannilam	254	150,430	186,073	..	158,242	4	14	4
14 Negapatam	220	99,838	152,977	12,460	195,801	1	14	4
15 Tiruturaipundi	157	106,836	316,951	..	161,602	2	15	2
16 Mannargudi	210	128,475	192,266	..	151,408	1	8	10
17 Papanasam	189	111,865	147,672	..	121,028	4	12	9
18 Kumbakonam	217	129,441	135,008	..	112,347	3	9	11
19 Tanjore	293	133,125	268,120	..	201,608	2	11	7
20 Pattukottai	473	177,320	433,520	..	277,112	1	8	10
21 Lalgudi	131	196,093	238,253	7,289	189,163	2	15	3
22 Trichinopoly	125	100,750	210,547	..	156,679	1	4	4
23 Kulittalai	233	196,658	584,806	23,475	449,537	1	2	11
24 Musiri	157	137,766	425,165	57,229	323,042	1	14	10
25 Arkonam	143	178,678	204,288	3,680	137,405	2	3	6
26 Cheyyar	222	176,764	209,625	3,588	141,830	2	10	11
27 Wallajapet	189	222,791	252,884	20,176	176,532	1	11	3

STATEMENT XIX.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE VII.

Name of taluk.	Number of villages.	Rural population.	Total area. ACS.	Forests. ACS.	Arable area. ACS.	Incidence of land revenue per head. RS.	A.	P.
1 Chandragiri	283	129,583	350,459	149,501	104,398	1	4	11
2 Chittoor	380	273,352	503,020	66,175	216,084	1	11	6
3 Kalahasti	..	115,030	..	..	..	..		
4 Madanapalle	110	161,693	535,167	94,986	383,769	1	10	7
5 Palmaner	99	130,279	263,040	112,841	128,021	1	8	11
6 Punganur	..	124,877	..	..	..	..		
7 Puttur	..	218,016	..	..	..	..		
8 Tiruttani	..	210,860	..	..	..	..		
9 Vollpetta	127	166,643	513,107	101,761	310,711	1	7	11
10 Arni	193	133,437	115,401	..	78,773	0	2	9
11 Chengam	177	177,605	355,130	133,506	186,891	1	12	5
12 Gudiyattam	187	243,157	307,866	121,150	151,829	1	6	7
13 Polur	179	186,397	373,932	140,071	173,893	1	10	11
14 Tirupattur	231	255,685	378,306	106,389	223,175	0	12	6
15 Tiruvannamalai ..	214	198,857	291,092	63,007	202,209	1	6	5
16 Vellore	158	197,409	276,576	155,215	106,588	1	0	7
17 Wandiwash	207	193,740	217,286	5,415	158,340	2	0	2
18 Gingee	245	233,726	262,228	33,070	186,911	1	12	10
19 Kallakurchi	376	337,328	558,926	58,846	273,761	1	13	6
20 Vriddhachalam	296	281,321	370,156	17,731	270,579	2	14	3
21 Karur	106	288,663	390,067	..	350,356	1	7	8
22 Perambalur	134	237,819	432,621	43,645	336,106	1	15	11
23 Udaiyarpalaiyam ..	235	351,262	479,802	13,277	382,322	1	4	4
24 Dindigul	155	303,196	571,283	45,376	424,714	1	5	7
25 Palni	120	217,884	400,128	1,376	310,885	1	13	8
26 Kodaikanal	15	24,574	247,923	182,218	31,275	1	13	4
27 Attur	144	205,849	415,111	86,594	210,024	1	6	9
28 Dharmapuri	288	272,048	574,298	160,580	349,414	1	0	10
29 Harur	455	197,048	582,669	197,631	333,851	1	3	2
30 Hosur	239	217,057	756,301	257,921	363,068	1	5	0
31 Krishnagiri	150	234,499	439,725	34,667	336,660	1	1	1
32 Namakkal	194	353,054	392,044	44,717	274,939	1	4	0

STATEMENT XIX.—*Statistics relating to population, area, forests and incidence of land revenue*—cont.

ZONE VII—*cont.*

Name of taluk.	Number of village.	Rural population.	Total area. ACS.	Forests. ACS.	Arable area. ACS.	Incidence of land revenue per head. RS.	A.	P.
33 Omalur	131	274,163	235,257	42,524	161,772	1	4	4
34 Rasipuram	146	146,428	251,058	32,886	134,404	1	1	9
35 Salem	265	266,238	334,199	107,409	212,530	0	12	2
36 Tiruchengodu	155	375,665	386,352	8,241	345,502	1	4	8
37 Yercaud	..	77,245	..	..	..	..		
38 Avanasi	73	213,966	323,606	71,636	230,757	1	3	3
39 Bhavani	57	200,138	369,946	214,424	150,649	0	13	9
40 Coimbatore	81	226,599	337,667	84,066	217,184	1	0	5
41 Dharapuram	86	301,134	546,465	3,474	502,615	1	9	0
42 Erode	215	168,286	383,853	3,746	345,365	1	10	3
43 Gobichettipalaiyam ..	154	284,044	749,436	385,203	301,669	1	12	7
44 Kollegal	89	103,490	707,533	467,069	185,517	1	3	4
45 Palladam	101	276,435	375,341	..	344,065	1	5	6
46 Pollachi	139	279,291	399,467	102,440	267,165	1	13	1
47 Udamalpet	93	163,256	361,945	127,353	210,100	1	7	9

STATEMENT XX.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE VIII.

1 Arantangi	548	118,904	273,832	..	77,278	3	9	2
2 Tirupattur	230	213,571	375,756	..	261,606	0	0	8
3 Tiruvadanai	991	147,695	316,141	..	242,010	0	1	9
4 Paramagudi	361	141,892	535,718	..	272,590	0	1	8
5 Ramnad	210	117,887	213,760	..	182,935	2	4	0
6 Aruppukottai	555	176,737	349,225	..	303,241	0	4	9
7 Sivaganga	361	192,492	535,718	..	113,600	1	4	11
8 Mudukulattur	703	176,824	413,286	..	346,183	0	0	8
9 Sattur	251	157,070	367,949	..	309,628	1	2	11
10 Koilpatti	282	347,830	697,353	..	626,971	0	13	9

STATEMENT XXI.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE IX.

1 Melur	110	171,999	309,862	63,658	201,280	1	15	2
2 Nilakottai	123	307,274	263,060	41,006	203,055	2	7	0
3 Periyakulam	90	327,455	707,834	63,391	587,036	1	11	4
4 Tirumangalam	284	165,362	471,398	18,108	303,294	2	3	4
5 Madura	259	127,530	171,142	4,460	139,438	1	15	2
6 Srivilliputtur	85	159,417	102,195	46,353	176,772	..		
7 Sankaranayinarkoil ..	154	216,771	406,500	27,289	163,233	1	2	0
8 Tenkasi	101	213,158	258,363	25,712	191,448	1	1	11
9 Ambasamudram ..	112	143,956	312,289	89,180	140,479	2	7	0
10 Tinnevelly	136	78,120	213,158	4,837	167,584	1	11	3
11 Srivaikuntam	92	..	236,393	6,446	184,471	1	13	8
12 Tiruchendur	87	109,841	220,267	11,372	180,010	1	6	4
13 Nanguneri	120	128,621	443,998	55,968	319,528	—		

Statement XXII.—*Statistics relating to population, area, forests and incidence of land revenue.*

ZONE X.

Name of taluk.	Number of villages.	Rural population.	Total area.	Forests.	Arable area.	Incidence of land revenue per head.		
			ACS.	ACS.	ACS.	RS.	A.	P.
1 Palghat	138	221,687	411,539	35,650	234,108	1	3	8
2 Ponnani	121	184,010	272,093	..	257,494	0	15	11
3 Walluvanad	317	236,253	562,045	334,161	334,161	1	3	0
4 Ernad	94	313,190	618,496	101,561	491,444	0	15	6
5 Calicut	188	137,932	242,477	27	235,604	0	11	2
6 Kurumbranad	341	224,181	323,456	..	255,182	1	1	8
7 Wynad	58	58,237	524,831	132,257	387,559	2	3	8
8 Kottayam	227	122,594	308,032	34,140	193,073	0	13	11
9 Chirakkal	272	286,928	436,271	..	293,943	0	15	2
10 Cochin	1	2,576	1,158	..	940	0	11	6
11 Kasaragod	114	195,832	487,597	19,822	445,361	1	9	2
12 Puttur	184	162,925	796,182	266,696	212,993	2	0	2
13 Mangalore	178	212,571	260,927	1,353	242,905	1	9	0
14 Karkal	105	144,467	402,374	98,176	275,424	2	1	9
15 Udipi	115	232,304	228,186	3,909	214,294	1	14	7
16 Coondapoor	103	150,328	396,189	128,494	252,629	2	2	3

Statement XXIII.—*Statement showing variation in the total area cultivated, irrigated and lying fallow.*

Year.	Total area.	Net sown area.		Irrigated area.		Current fallows.	
		Acres.	Percentage to total area.	Area.	Percentage to total area.	Acres.	Percentage to total area.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ACS.			ACS.			
1938–39	79,795,395	31,383,337	39·3	10,476,310	29·1	9,860,540	12·4
1939–40	79,843,525	31,460,404	39·4	10,655,537	29·4	9,781,176	12·2
1940–41	80,012,442	31,959,310	39·9	11,610,104	31·1	9,299,255	11·6
1941–42	80,059,541	31,613,203	39·5	11,011,748	30·2	9,762,064	12·1
1942–43	80,017,129	31,324,380	39·2	11,242,215	30·6	9,348,567	11·7
1943–44	79,875,954	31,890,989	39·9	11,339,898	31·4	8,911,146	11·1
1944–45	79,934,462	31,533,823	39·5	11,721,973	31·7	9,289,800	11·6

Year.	Other uncultivated land excluding current fallows.		Not available for cultivation.		Forests.	
	Acres.	Percentage to total area.	Acres.	Percentage to total area.	Acres.	Percentage to total area.
	(9)	(10)	(11)	(12)	(13)	(14)
1938–39	10,862,821	13·6	14,497,180	18·2	13,191,517	16·5
1939–40	10,903,914	13·7	14,509,826	18·2	13,188,205	16·5
1940–41	11,316,264	14·1	14,115,628	17·7	13,321,985	16·7
1941–42	11,278,184	14·1	13,980,423	17·5	13,425,717	16·8
1942–43	11,759,619	14·7	14,116,144	17·6	13,468,419	16·8
1943–44	11,551,511	14·5	14,214,677	17·8	13,307,631	16·7
1944–45	11,433,633	14·3	14,217,581	17·8	13,459,625	16·8

Statement XXIV.—*Statement showing the number of families which have partially or fully cleared their debts and families which have incurred or increased their debts between* 1939 *and* 1945.

Classes.	Zones.	Free from debt.	Completely cleared debt.	Partially cleared debt.	Newly incurred debt.	Increased debt.	Maintained same debt.	Total.
I ..	1	1	..	1	1	3	1	7
	2	5	2	11	2	1	1	22
	3	2	3	4	..	2	..	11
	4	16	11	8	8	3	4	50
	5	3	5	2	1	..	4	15
	6	22	10	3	..	6	..	41
	7	23	7	7	7	2	7	53
	8	1	1	5	2	3	..	12
	9	3	..	4	..	2	..	9
	10	4	1	7	2	3	3	20
	Total ..	80	40	52	23	25	20	240

STATEMENT XXIV.—*Statement showing the number of families which have partially o fully cleared their debts and families which have incurred or increased their debts between* 1939 *and* 1945—*cont.*

Classes.	Zones.	Free from debt.	Completely cleared debt.	Partially cleared debt.	Newly incurred debt.	Increased debt.	Maintained same debt.	Total.
II ..	1	11	4	6	9	7	3	40
	2	48	46	56	68	28	19	265
	3	15	15	25	9	5	5	74
	4	43	23	64	41	25	33	229
	5	37	28	46	32	34	13	190
	6	91	78	101	21	62	10	363
	7	174	78	127	81	47	52	559
	8	22	9	46	39	18	8	142
	9	17	6	33	14	15	6	91
	10	21	24	34	19	30	16	144
	Total ..	479	311	538	333	271	165	2,097
III ..	1	41	5	80	86	18	20	150
	2	189	49	111	180	62	39	580
	3	11	19	29	11	3	9	82
	4	45	6	29	46	22	32	180
	5	30	28	32	50	36	26	202
	6	186	153	156	109	117	86	757
	7	279	95	287	284	109	54	1,008
	8	36	18	38	72	22	15	196
	9	58	19	97	98	54	21	347
	10	26	48	58	67	60	23	282
	Total ..	851	485	817	908	508	275	3,784
IV ..	1	28	8	16	11	11	12	81
	2	52	9	18	45	15	6	140
	3	2	3	5	4	1	1	16
	4	3	5	12	13	12	9	54
	5	9	6	8	14	5	..	42
	6	55	38	25	38	14	10	180
	7	28	8	12	27	17	5	97
	8	10	1	7	23	4	1	46
	9	58	9	46	41	20	12	181
	10	48	11	45	98	73	18	298
	Total ..	288	93	189	314	172	74	1,180
V ..	1	14	7	11	6	6	7	51
	2	42	14	17	56	28	22	179
	3	5	5	11	6	8	2	82
	4	8	7	28	19	25	8	90
	5	15	14	17	23	6	2	77
	6	62	47	81	43	23	81	287
	7	81	27	34	84	58	23	307
	8	14	8	9	27	8	8	64
	9	27	8	40	22	9	9	115
	10	19	7	23	41	32	5	127
	Total ..	287	139	216	327	198	112	1,279
Total for all classes.		1,985	1,018	1,812	1,900	1,169	646	8,530

STATEMENT XXV.—*Per family and per capita debt for each zone in* 1939 *and* 1945.

Zones.	Debt per family.			Debt per capita.		
	1939.	1945.	Difference.	1939.	1945.	Difference.
	RS.	RS.	RS.	RS.	RS.	RS.
I	242·8	289·2	+ 46·4	36·0	42·9	+ 6·9
II	395·1	336·4	− 58·7	62·9	53·9	− 9·0
III	525·6	268·5	−257·1	83·1	42·5	− 40·6
IV	316·7	269·7	− 47·0	54·5	46·3	− 8·1
V	447·3	327·9	−119·4	76·7	56·2	− 20·5
VI	308·8	191·9	−116·9	50·1	31·1	− 19·0
VII	271·1	231·2	− 39·9	43·6	37·2	− 6·4
VIII	164·4	140·1	− 24·3	26·2	22·3	− 3·9
IX	287·7	253·8	− 33·9	49·7	43·9	− 5·8
X	356·8	307·6	− 49·2	49·3	42·5	− 6·8
Average ..	318·8	255·2	− 63·6	51·1	40·8	− 10·3

STATEMENT XXVI.—*Per family debt of each class in each zone.*

(In rupees.)

Zones.	I.			II.		
Class.	1939.	1945.	Difference.	1939.	1945.	Difference.
I ..	2,214·3	3,757·1	+1,542·8	680·6	806·5	+125·9
II ..	2,852·3	1,759·1	—1,093·2	693·3	638·2	—55·1
III ..	4,536·3	2,236·4	—2,299·9	447·9	256·5	—191·4
IV ..	765·0	460·3	—304·7	417·0	331·9	—85·1
V ..	1,746·9	355·3	—1,391·6	770·8	598·6	—172·2
VI ..	1,998·8	422·0	—1,576·8	550·1	351·1	—199·0
VII ..	627·8	603·6	—24·2	485·6	355·5	—130·1
VIII ..	495·8	186·7	—309·1	275·8	195·2	—80·6
IX ..	2,112·2	1,585·6	—526·6	790·5	556·3	—234·2
X ..	2,927·5	2,577·2	—350·3	804·3	542·4	—261·9
Average ..	1,630·6	980·4	—650·2	564·7	425·9	—138·8

Zones.	III.			IV.			V.		
Class.	1939.	1945.	Difference.	1939.	1945.	Difference.	1939.	1945.	Difference.
I ..	173·6	171·9	—1·7	119·7	113·1	—6·6	28·0	32·1	+4·1
II ..	337·7	285·8	—51·9	120·4	115·4	—5·0	35·3	51·7	+16·4
III ..	259·1	126·8	—132·3	484·4	147·5	—336·9	20·0	48·0	+28·0
IV ..	225·5	252·9	+27·4	257·9	262·7	+4·8	30·0	43·0	+13·0
V ..	278·9	224·9	—54·0	86·7	95·0	+8·3	34·3	51·6	+17·3
VI ..	237·1	181·2	—55·9	104·1	57·7	—46·4	31·6	43·0	+11·4
VII ..	223·9	204·9	—19·0	90·0	170·5	+80·5	30·8	46·3	+15·5
VIII ..	129·8	132·8	+3·0	66·4	113·4	+47·0	31·9	50·7	+18·8
IX ..	285·6	282·1	—3·5	117·1	124·6	+7·5	22·1	28·0	+5·9
X ..	318·1	288·2	—29·9	144·2	175·4	+31·2	21·3	31·8	+10·5
Average ..	253·6	222·5	—31·1	129·1	134·5	+5·4	30·0	42·1	+12·1

STATEMENT XXVII.—*Per capita debt of each class in each zone.*

Zones.	I.			II.		
Class.	1939.	1945.	Difference.	1939.	1945.	Difference.
I ..	212·3	360·3	+48·0	86·7	102·7	+16·0
II ..	282·7	174·3	—108·4	93·1	86·2	—6·9
III ..	525·3	258·9	—66·4	60·1	34·4	—25·7
IV ..	93·9	56·5	—37·4	71·1	56·6	—14·5
V ..	179·4	36·5	—142·9	120·7	93·8	—26·9
VI ..	237·5	50·1	—187·4	75·6	48·1	—27·5
VII ..	78·5	75·5	—3·0	66·9	49·1	—17·8
VIII ..	63·9	24·1	—39·8	37·8	26·8	—11·0
IX ..	253·5	190·3	—63·2	106·2	74·8	—31·4
X ..	298·7	263·0	—35·7	95·5	63·9	—31·6
Average ..	188·5	113·3	—75·2	78·8	59·4	—19·4

Zones.	III.			IV.			V.		
Class.	1939.	1945.	Difference.	1939.	1945.	Difference.	1939.	1945.	Difference.
I ..	25·8	25·6	—0·2	17·5	16·5	—1·0	5·3	6·1	+0·8
II ..	56·2	47·5	—8·7	20·3	19·3	—1·0	7·0	10·3	+3·3
III ..	44·5	21·8	—22·7	85·2	25·9	—59·3	6·8	9·6	+2·8
IV ..	41·6	46·7	+5·1	44·2	45·0	+0·8	5·7	8·2	+2·5
V ..	52·6	42·4	—10·2	14·9	16·4	+1·5	6·7	10·1	+3·4
VI ..	41·3	31·6	—9·7	17·4	9·6	—7·8	5·8	7·8	+2·0
VII ..	38·5	35·2	—3·3	16·2	30·7	+14·5	5·6	8·4	+2·8
VIII ..	21·6	22·2	+0·6	10·9	18·6	+7·7	6·6	10·5	+3·9
IX ..	49·4	48·8	—0·6	22·1	23·5	+1·4	4·4	5·5	+1·1
X ..	44·5	40·4	—4·1	18·9	23·1	+4·2	4·5	6·7	+2·2
Average ..	42·8	37·6	—5·2	20·5	21·3	+0·8	5·7	8·3	+2·6

STATEMENT XXVIII.—*Per capita debt in 1939 and 1945 in the ten zones.*

(In rupees.)

Zones.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	Average.
1939	36·0	62·9	83·1	54·4	76·7	40·1	43·7	26·1	49·7	49·3	51·1
1945	42·9	53·9	42·5	46·3	56·2	31·1	37·2	22·3	43·9	42·5	40·8
Percentage of 1945 to 1939 debt.	119	86	51	85	73	77·5	85	85	88	86	80

STATEMENT XXIX.—*Per capita income and debt in each of the ten zones in 1945.*

(In rupees.)

Zones.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	Average.
Income ..	112·1	161·8	168·5	107·0	174·5	125·6	153·7	164·0	169·9	121·8	144·4
Debt	42·9	53·9	42·5	46·3	56·2	31·1	37·2	22·3	43·9	42·5	40·8
Percentage of debt to income.	38	33	25	43	32	25	24	14	26	35	28

STATEMENT XXX.—*Per capita debt in 1939 and 1945 for the five classes in the whole Province.*

(In rupees.)

Class.	I.	II.	III.	IV.	V.
1939	188·5	91·7	42·8	20·5	5·3
1945	113·3	64·1	37·6	21·3	8·3

STATEMENT XXXI.—*Agricultural income—Per family.*

(In rupees.)

Zones. / Class.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
I	3,494·0	5,570·0	5,554·6	1,412·2	3,368·0	4,986·0	4,324·8	2,570·8	7,177·8	2,049·5
II	1,491·5	1,491·8	1,257·2	631·8	1,545·0	1,150·7	1,559·3	1,296·8	1,680·5	1,288·8
III	634·0	871·7	655·7	457·7	707·9	537·9	687·5	798·2	807·7	838·0
IV	612·7	800·6	737·5	470·6	539·0	464·1	590·1	999·2	786·8	796·4
V	382·2	351·2	286·0	587·4	332·6	412·7	424·4	902·9	698·4	589·7

STATEMENT XXXII.—*Agricultural income—Per capita.*

(In rupees.)

Zones. / Class.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
I	335·0	552·1	643·2	178·5	346·0	592·5	540·6	331·7	861·3	201·1
II	190·0	201·4	168·5	107·7	242·0	161·3	215·2	177·9	225·9	151·9
III	94·3	145·0	112·7	84·5	133·4	93·7	109·7	132·4	139·7	117·3
IV	89·6	134·1	129·7	80·7	93·2	77·5	106·2	164·2	148·7	100·9
V	73·0	70·0	64·0	112·0	65·0	75·0	77·0	187·0	138·0	124·0

STATEMENT XXXIII.—*Statement of purchases or productive investment by different classes between 1939 and 1945.*

(In rupees.)

Zones. / Class	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	All zones.
I ..	2,250	9,000	9,400	4,050	..	350	2,650	400	1,150	334	29,584
II ..	1,602	30,800	3,000	7,347	22,252	16,085	35,984	3,840	6,600	5,196	1,82,706
III ..	2,720	13,150	370	4,895	9,975	17,582	28,568	2,465	17,798	7,612	1,00,610
IV ..	100	450	800	900	120	565	3,292	..	4,363	565	10,655
V											
Total ..	6,672	53,400	13,570	17,192	32,347	34,582	65,489	6,705	29,911	13,707	2,73,555

STATEMENT XXXIV.—*Family budgets—Per family figures for all classes in the Province.*

(In rupees.)

Class.	Cultivation.		Food.		Clothing.		Other necessaries.		Ceremonies.	
	1939.	1945.	1939.	1945.	1939.	1945.	1939.	1945.	1939.	1945.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
I	506·8	1,286·1	424·6	846·4	189·6	281·4	97·3	201·3	50·3	228·6
II	166·1	381·8	233·3	456·5	57·5	118·3	39·2	81·4	7·9	42·2
III	84·8	175·6	196·4	361·0	46·7	86·8	34·1	68·9	14·6	49·7
IV	91·2	183·9	176·9	382·3	37·9	71·9	27·7	58·9	4·0	21·4
V	..	..	134·5	261·8	20·3	48·9	12·6	28·8	4·8	26·9

Class.	Repairs.		Education.		Total expenditure.		Total income.		Surplus or deficit.	
	1939.	1945.	1939.	1945.	1939.	1945.	1939.	1945.	1939.	1945.
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
I	20·6	78·7	33·7	75·4	1,272·4	2,947·9	1,925·1	4,066·0	+652·7	+118·1
II	7·3	45·6	2·9	7·5	514·2	1,133·7	635·6	1,250·9	+121·4	+117·2
III	13·9	6·3	0·1	7·9	390·6	751·2	398·5	750·3	+7·9	—0·9
IV	7·4	6·5	0·1	..	345·2	719·9	343·3	675·8	—1·9	—44·1
V	1·3	6·4	..	..	173·5	[illegible]	182·4	356·2	+8·9	[illegible]

STATEMENT XXXV.—*Data supplied by the Co-operative Department—Working of the Co-operative Land Mortgage Banks.*

Year.	Number.	Principal lent (rupees in lakhs).	Instalments due (rupees in lakhs).	Instalments paid or recovered (rupees in lakhs).	Advance payment (rupees in lakhs).
1939–40	119	42·57	9·59	8·33	4·68
1940–41	119	42·17	11·32	10·10	7·26
1941–42	119	40·40	12·59	11·48	13·01
1942–43	119	24·81	13·30	12·59	25·39
1943–44	119	18·31	13·66	13·19	22·61
1944–45	119	24·81	12·41	12·02	14·70

STATEMENT XXXVI.—*Data supplied by the Co-operative department—Working of the Primary Agricultural Credit Societies.*

Year.	Number.	Debts outstanding at the beginning of the year.		Debts recovered during the year.		Overdues.	Percentage of overdues to outstandings.	Total deposits by members.	Total deposits by non-members.	Loans made during the year.	Advance recoveries or repayments.
		Principal.	Interest.	Principal.	Interest.						
1939–40 ..	11,097	350·05	45·51	148·19	24·47	163·21	46·6	9·05	17·54	147·29	12·41
1940–41 ..	10,993	354·15	43·07	163·48	23·48	155·01	43·7	8·00	15·88	144·72	20·11
1941–42 ..	10,964	330·95	40·63	179·86	25·20	132·96	40·1	9·14	17·81	175·77	20·18
1942–43 ..	10,893	324·69	38·22	210·94	23·23	95·97	29·5	14·46	22·46	167·18	24·73
1943–44 ..	10,821	278·08	33·81	180·30	19·09	90·52	32·5	14·02	25·44	167·16	16·56
1944–45 R	10,792	260·77	29·65	175·65	18·13	77·17	29·5	15·48	27·61	189·67	14·91

STATEMENT XXXVII.—*Statement showing the working of the Madras Agriculturists' Relief Act,* 1938, *during the quarter ending* 31st *December* 1945 *and during the period of* 94 *months ending* 31st *December* 1945.

Particulars.	Quarter ending 31st December 1945.	Ninety-four months ending 31st December 1945.
	RS.	RS.
Amount involved in applications under sections 8, 9, 19 and 19-A.	4,29,7[illegible]6	9,58,95,850
Amount as scaled down during the period	[illegible]38,[illegible]56	4,59,50,749
Amount of reduction by scaling down and percentage reduced ..	[illegible]9[illegible]590	4,99,45,101
	[illegible]45 per cent.	52 per cent.
Number of cases disposed of during the period ..	769	2,04,643
Number of cases pending at the close of the quarter ..	608	608

NOTE.—Cases voluntarily settled by parties without going to Court are not covered by this statement.

STATEMENT XXXVIII.—*Statement of sales of land by different classes between* 1939 *and* 1945 *for liquidating indebtedness.*

Zones.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	All zones.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Class—											
I	..	1,000	8,400	4,866	..	37,750	3,600	400	..	1,000	57,016
II	1,800	26,500	2,800	6,500	36,912	31,580	34,402	3,875	8,300	46,119	1,97,788
III ..	5,242	54,090	3,850	9,450	14,518	48,590	15,285	2,040	15,155	30,318	1,98,538
IV	950	4,900	..	2,850	450	1,715	350	520	2,000	1,630	15,365
Total ..	7,492	86,490	14,550	23,666	51,875	1,19,635	53,636	6,835	25,455	79,062	4,68,697

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