

RURAL INDIA

(Journal of the Madras Forest Panchayats)

A monthly Periodical devoted to the discussion of all
Topics of Rural interest.

EDITED BY

A. SWAMINATHA AIYAR.

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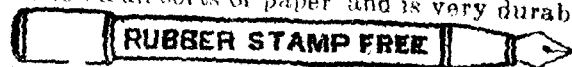
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RURAL INDIA

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Rural Indebtedness AND Land Mortgage Banks

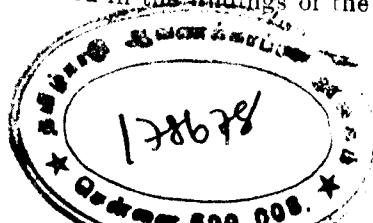
I. General Considerations.

By The Hon'ble V. Ramadas Pantulu.

A well-organised system of rural credit is the greatest economic need of India. The central problem of our rural economies may be summed up in one word. The chronic indebtedness and poverty of the ryot leads to low agricultural production, and low agricultural production in its turn leads to increased indebtedness and poverty. It is indeed moving in a vicious circle. Low agricultural production carries with it three economic implications. First of all, it means that the quantity of the produce raised by the nation, per head of population, is less than what is required for the economic needs of the people. It is an admitted fact that vast masses of our people are under-fed and meagerly-clad, that many of them go without a full-meal a day and many others without two meals. Secondly, low production means that the unit of produce got from land in India is less than the unit of produce obtained from an equal area of land in other countries. Thirdly, low production also signifies inferior quality of the products and the consequent disadvantages they suffer from in the world's markets in competition with those of other countries. Indian products not only fetch unremunerative prices but are sometimes driven out of those markets. The extent of rural indebtedness and peasants' poverty have been the subjects of numer-

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ous piece-meal investigations by official and non-official agencies, but so far as I know, no comprehensive survey of it was conducted by any agency. On a rough estimate it is believed that the rural indebtedness of British India (excluding the States) is six hundred crores of rupees and that of Madras Presidency ninety crores. As for the causes of indebtedness the enquiry made by the Committee appointed to investigate into the causes of the agrarian riots which occurred in the Deccan in 1875 is, I believe, fuller and more reliable than other enquiries. The findings of the Committee were not merely confined to the immediate causes of the riots but covered a wide economic ground. Sir Frederic Nicholson who examined the causes of agricultural indebtedness in Madras Presidency pointed out that the findings of the Deccan Committee were of general applicability to India, notwithstanding the fact that the inquiries of the Committee were confined to a comparatively small area. It may be that the causes enumerated by the Committee will not be found to operate in the same measure and to the same degree in all Provinces but will be found to be at work more or less all over India, some more predominantly in some Provinces, and others in some other Provinces. The findings of the Committee regarding rural indebtedness are thus summarised by Sir Nicholson himself: (1) Poverty with unproductive soil, precarious climate, and irregularity of income (2) ignorance and improvidence (3) extravagance (4) ancestral debt (5) expansion of credit (6) increase of population without corresponding increase of returns (7) facilities for borrowing owing to influence of money-lenders (8) the Limitation Laws, as leading to renewals on usurious terms including compound interest (9) revenue system of fixed demand. It seems to me that the findings of the Committee are defective at least in one material particular in so far as they omit to mention a very potent cause which appears to have contributed in no small measure to the reduction in the peasants' resources; it is the destruction of Cottage Industries and the consequent loss of income to the ryot by a subsidiary occupation in the off-season. Excessive fragmentation of holdings which renders agricultural industry uneconomic and certain other factors are also not mentioned in the findings of the Commission but they



may perhaps be brought under one or other of the heads summarised above.

It is true that the indebtedness of the ryot is not a recent evil. It has been an age-long problem. But there are two recent features of it which are causing alarm and anxiety. It is growing in volume rapidly. It is also becoming more and more *unproductive*. That rural indebtedness has grown considerably in the last 4 or 5 decades is conceded by no less an official authority than Sir Edward Maclagan. In his brief but illuminating conspectus of the situation as it stood in 1911, he observed as follows:—"It has long been recognised that indebtedness is no new thing in India. The writings of Murno, Elphinstone and others make it clear that there was much debt even at the beginning of our rule. But it is also acknowledged that the indebtedness has risen considerably during our rule and more especially in the last half a century. The reports recorded from time to time and the evidence of annual sale and mortgage data show clearly there has been a very considerable increase of debt during the last half a century." Indebtedness may not in itself be an evil. Debt when productive is as helpful to an agriculturist as capital advanced is to an industrialist. If the growing debt is also becoming increasingly unproductive, as it unquestionably is, then there is real cause for grave anxiety. The agriculturist himself cannot be wholly acquitted of blame for this unfortunate position. It is useless to deny that the agricultural population have had their share of the benefits which have accrued to the country at large by the improvement of communications, by big irrigation schemes, by the opening up of trade and other facilities which developed in the last fifty years. These factors have contributed to impart enhanced values to land as well as to agricultural raw products. The system of land settlement and record of rights, defective as it is, has invested individual ownership in land with an authoritative estimate of value and therefore agricultural land has become a coveted security and in consequence enhanced the borrowing power of the ryot. So the increase in the volume of debt is partly to be accounted for by the facilities these factors have contributed to the borrowing

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capacity of the ryot. But the tragedy of the situation is that these advantages are not availed of by the ryot to improve his economic condition; on the other hand he is saddled with a heavier load of unproductive debt. At present the ryot is actually weighed down and is groaning under the burden which he carries on his either shoulder, chronic indebtedness and traditional illiteracy. The consequence is that the rural population now lives in an atmosphere of utter depression. Unless the vicious course of rural unproductive indebtedness is arrested, it is bound to lead to economic paralysis if not to economic death.

What are the remedies for this grave evil? Several have been suggested and some are being tried. Leaving aside such drastic remedies as the overhauling of the land revenue system, radically altering the laws of inheritance and partition, emigration and birth-control to relieve pressure on the soil and the like, the remedies which can be attempted and are likely to be fruitful may be grouped under five heads; (1) removing from the peasant, as far as possible, all causes for uneconomic borrowings and inducing him to confine his wants, within practicable limits, to legitimate objects; (2) adoption of measures to ensure for the peasant fair treatment in the determination and recovery of debts claimed against him, by the improvement in the provisions of the processual and contractual laws (3) adoption of measures calculated to prevent the peasant from experiencing the more serious consequences of indebtedness such as the loss of land or the permanent impairment of capital by restricting the power of alienation over the land (4) relieving pressure on the land by promoting schemes for the reclamation of fresh land and creation of subsidiary occupation; and (5) devising means by which the peasant may obtain such money as he really wants for economic objects on easier terms than are now available and with less disastrous results; in other words, measures undertaken with the object of providing and maintaining credit or redeeming debt. When further analysed, all these remedies centre themselves round one essential factor, the supply of capital and credit on a judicious, controlled and regulated system to the agriculturist. Without providing for capital and credit it is perfectly useless to talk of improved

methods of agriculture, making agriculture a paying industry organising the peasants, and so forth. It is a mistake to suppose that agriculture yields a quick annual return and is therefore a self-supporting industry which can finance itself. Mr. Wolff is absolutely right when he says that "under pressure of advancing times, agriculture has long since become far from the easy, self-rewarding occupation which it is understood to have once been, a business of money and enterprise like all other business, having the same tasks set to it but not the same means at its disposal wherewith to accomplish this task." This statement is equally true of India, although Mr. Wolff was speaking about other countries.

Credit granted for the promotion of any line of agriculture is called Rural Credit and is of two varieties, the short term credit and the long term credit. Of late, intermediate credit, in between those two varieties, is coming into great prominence, specially since the passing of the Intermediate Farm Loan Act of 1923 to supplement the Federal Farm Loan Act of 1916 in America. For our present purposes intermediate loans may be classed with short term credit. Short term credit is, generally speaking, working capital of agricultural industry to meet the current needs of the husbandman, such as cultivation expenses, cost of small repairs, purchase of seeds and manures and so forth. This form of credit should be supplied to him on the security of his current and future income from land over a short period of 2 or 3 years and on personal guarantee and surety-ship. The Co-operative Credit Societies which are established on the German model of Raiffeisen type with mutual guarantee and unlimited liability of the members are the best agencies for liberating this form of financial accommodation to the agriculturist. This variety of short term credit and the village primary societies which dispense them are not suited for satisfying the larger needs of the cultivator for purchasing land, effecting permanent improvements to his holding, converting uneconomic holdings into more economic ones by sinking costly wells or installing valuable machinery, discharging prior debts and so forth. Needs of this kind could be satisfied only by long term credit. This form of credit is advanced on the

security of the ryots' permanent wealth, namely, his lands and houses, contradistinguished from his temporary wealth, his annual harvest. So in every country two types of institutions are installed to work side by side to satisfy both kinds of credit needs of the ryot. In some parts of India, especially in Madras the slogan of the rural credit society being utilised to serve all the credit needs of a member has gained currency and the 10 or 12 year land mortgage loans have become a feature of these Madras societies. They are encouraged. In some districts they form 90 per cent of the total loans and on the average 50 per cent of the loans are on land mortgages. This combination of the short term (personal security) finance with long term (real security) finance, in which some orthodox co-operators in Madras have pathetic faith, is responsible for a great deal of dislocation in the financial adjustments of the movement. The indisputable fact is that the long term credit cannot be rationally dispensed on business principles by the rural credit societies.

The essential features of this variety of loan are, firstly, the sum advanced to the ryot should be sufficiently large to effectively start him on his business by placing in his hands funds required not only to lift his old debts but also to leave a surplus to serve as capital wherewith to improve the land so as to ensure increased returns. Persons who are mostly benefitted by this form of credit are those who absorb comparatively large loans and who can offer substantial security. Persons with small uneconomic holdings and slender security to offer, and landless tenants, cannot be helped with this kind of accommodation. In countries whose holdings are large and yield large returns and profits, even joint-stock banks finance land-holding classes on security of land and therefore Co-operative credit has no hold on countries like England and the United States of America. But in countries like India with small and scattered holdings which leave precarious margins of profit, joint-stock banks will not advance money on the security of land. The obstacles to such lending are the meagre value of the collateral securities offered, the dissipation of the banks' resources over a wide area among numerous borrowers, and the need to establish close control and watch over the

activities of the borrower, without which the loans and their recovery will not be safe. *Secondly*, the loan should be made repayable from the margin of profits on his holdings, without putting the ryot to the necessity of borrowing from another source to discharge it, or selling his holding to raise the money to meet the creditors' demand. In other words, the long term loan has to be spread over a long term of years and recovered in small dribblets. The maximum time allowed for repaying such loans is 30 years in Finland, 33 years in Chile, 36½ years in Newzealand, 42 years in Australia, 50 years in Italy and Japan, 54½ years in Austria, 55½ years in Switzerland, 60 years in Denmark, 63 years in Hungary, 68½ years in Ireland and 75 years in France. No individual money-lender or joint-stock companies can afford to "tie up their capital and take it back in dribblets as it is refunded bit by bit out of the earnings or savings from the soil during a long series of years." It is therefore only a special type of institutions known as Land Credit Institutions or Land Mortgage Banks, that can embark upon this kind of Banking.

The right way to study the characteristic features of Land Mortgage Banks is to study the institutions themselves as they are now functioning in various countries all over the world. How far any particular type of Land Bank can be adapted to the conditions of India can be accurately judged only by that process. Full and accurate account of their working are available. When we deal with Co-operative organisations or Land Credit Associations it is well to remember one fact, namely, that the organisations have sprung up more as practical solutions of peculiar local difficulties and were not conceived at their inception as embodiments of any definite theory of economic organisation. But, for facility of study, the process is often reversed and the common aspects and principles which may be extracted from the institutional features are first expounded and the institutions themselves are cited as illustrations of those principles. However helpful this method might be for purposes of academic study, it should not lead us into the mistaken path of selecting one or other type of such institutions on *a priori* grounds of its inherent merits without regard to the peculiar

needs of Indian rural economy and social and political conditions. A detailed description of the various kinds of Land Mortgage Banks cannot be attempted here. They may be classified in different ways on different principles. For instance, they may be divided into *public*, *semi-public* and *private*. Public Land Banks are owned and operated by the State. They are practically Departments of Government. They own no share capital. They obtain the funds required for granting loans either by appropriation (budget grants) or by issue of debentures guaranteed by the State. The profits are either devoted to some public purpose or utilised for extension of business. Semi-public Land Credit associations are those in which the State is a part owner and participates in the management or control or assumes a responsibility of some sort. Private Land Banks (so also semi-public ones) may be associations of borrowers or of lenders (that is, Joint Stock Companies) who carry on land mortgage credit operations with the minimum of State interference. When they are Joint Stock Companies, their aim is to make profits and declare as large a dividend as possible. When they are associations of borrowers, "they have no capital stock or lucrative object, and if they happen to accumulate a surplus from earnings or savings, it belongs to the members and is distributed in rebates of principal and interest in proportion to the amounts paid up on their loans." Another basis on which Land Credit Associations may be classified is this; they may be co-operative, non-co-operative, or quasi-co-operative. The co-operative type is represented by the Prussian Farm Mortgage Mutual Credit Associations, which are associations of borrowers. They have no capital. They aim at keeping interest low and do not aim at profit. Each member pays a small entrance fee to meet the necessary expenses, initial cost of land valuations and other incidental charges. Credit is created by the issue of mortgage bonds bearing interest and made payable to bearer and these bonds are regarded as perfect types of secure investment and are quoted on the Exchanges throughout the German Empire. The attempt to co-ordinate the activities of the local *landschaften* through a central *landschaften* made in 1873 did not prove successful.

The Federal Farm Loan Banks of the United States of America are also illustrative of the co-operative type. The non-co-operative type is represented by the numerous commercial and Joint Stock Land Mortgage Banks working all over the Continent of Europe. They work for profits and declare dividends, but the State exercises control over their operations in order to ensure that they do not work hardship to borrowers and that they fulfil their obligations to their investors or debenture holders. They are mostly based on the French model of *Credit Foncier de France*. The Agricultural Bank of Egypt is also illustrative of the non-co-operative commercial type.

In between these two types, there are institutions which combine co-operative and commercial ideals in varying proportions and so quasi-co-operative in character. Associations with membership of borrowers and non-borrowers, operating over fairly large areas and formed with share capital and on limited liability basis, but in which each member has a single vote irrespective of his share capital and the dividend on share capital is fixed at a low minimum, may be taken as illustrations of quasi-co-operative type. The Hungarian Land Mortgage Institute for large land owners and the National Small Holdings Land Mortgage Institutes are examples of quasi-co-operative land Banks.

In my next I shall deal with the form of Land Mortgage Bank that suits India.

Forests and Agriculture

Some Old Facts and Statistics Recalled

By "The Editor".

The wealth and power of any country comes chiefly from the soil and its continued prosperity depends upon an adequate supply of water. "When forests go, fishes and games go, crops go, flocks go, herds go, fertility departs—then the age old phantom appears, stealthily one after another, floods, drought, famine, pestilence."

How water supply is dependant on forest growth is made illuminating and understandable when we read the scientific reports of great engineers which show that 88 per cent of the rainfall will be absorbed by the forest beds of thick humus and leaves, and what is more important it takes generally 27 months for its proper distribution under normal condition. When we annihilate these water-conserving forest areas, either by fire or cutting, 92 per cent of the rainfall runs or oozes off taking in

its rich fertile soil and silt. In America, destroying hands have laid low 5/6 of its moisture retaining forests with the unhappy result of destructive, death-dealing floods followed by immense losses of property and sterility of agricultural lands. The reason for disastrous floods and long spells of water famine on account of lack of rainfall can be straightaway traced to destruction of forests.

History records positive proofs of the effects of such destruction. Deforestation of all countries along the north-east of Africa, at one time the granaries of the Roman Empire; Palestine, Mesopotamia, Sicily, and China once fairy glens of magnificent forests and prosperous people are now merely barren or wild desert wastes. In some cases, the re-forestation has brought about prosperous conditions. It will thus be evident that there is an intimate relationship between forest and agriculture.

A writer speaking of the condition of Tartary in 1826, said, "For eight days we may travel in the country of Sayd, and not be out of one delicious garden. On every side, villages, rich corn fields, fruitful orchards interspersed by rivulets, reservoirs, and canals", and so on. About 1876, another writer speaking of the same country said, "The Khanate of Bucharia, presents a striking example of the consequences brought about by clearing. This was one of the most fertile regions of Central Asia, a country which when well watered was a terrestrial paradise; but within the last twenty-five years a mania of clearing has seized the inhabitants, and all the great forests have been cut away and the little that remained was ravaged by fire during the civil war".

The consequence was that the country was converted into a kind of arid desert. The water courses dried up, and irrigating channels became empty. One side of the Himalayas which is almost a desert now, but was once every populous until the forests were destroyed. The other side of the same mountains is heavily timbered, has a large number of big rivers and maintains an immense population. The now arid plains of Austrolins, (South Asia) were once heavily timbered, and desolation began after the trees were destroyed. Germany, Greece, Italy

Spain, France, England, South Africa, and last our own country, all have suffered from the destruction of forests. England less than the others. In Europe, before the days of forest destruction, several streams were navigable by ships, but now hardly float a rowing boat. In America, enormous areas have been denuded by axe and fire, and the destruction is proceeding so rapidly that the government are becoming alarmed, and are now actively making efforts to stop the destruction and to reestablish the forests. The Russian steppes were once heavily timbered and maintained a teeming and prosperous population. When Ali Pasha, burned the forests of Peloponnesus, he brought famine and desolation upon an earthly paradise. Cases illustrating the same effects are recorded, concerning the Islands of Ascension, and Mauritius, the Azores, Denmark, Sweden etc. On the other hand, where aridity once prevailed, by the planting of extensive areas with trees, rain and fertility have been brought about on the delta of the Nile. There used to be an average of six rainy days during the year. The Khedive, caused millions of Eucalyptus to be planted, during the past half a century, and the average number of rainy days has been now increased to over forty per annum. Napoleon III, caused millions of this species of trees to be planted in France with surprisingly beneficial results, and in Algeria, he had thousands of acres covered with trees, thereby doubling the number of rainy days.

We have also some data, relating to this presidency, which bear on the question. Mr. D. Brandes, a former Inspector-General of Forests in India, who was responsible for the organisation of forest conservancy in this presidency, has given us some very interesting material, which goes to prove that forests do influence rainfall, and consequently irrigation, lower down to a very great extent. Mr. Brandes instances the case of the Palar river, which rises in the Kolar district of Mysore. The whole water supply derived from the catchment area, in that district, is stored in the tanks of Ramasagar series in Mysore, and only during exceptional floods, does the surplus water find its way into the North Arcot district. Although the river has numerous feeders in the District it is believed, that its

unsatisfactory water supply, is due to a large extent, to the wholesale destruction of forests and jungle for railway fuel in the Kangundi Zamindari. May it be that the diminished water supply in the Noyil river in the Coimbatore District is chiefly due to the reckless destruction of the forests at the head of the Bolampatti valley, or that the large and steady water supply of the Bhavani river, is influenced by the larger forests, which clothe its catchment area.

The published rain records of the Nilgiris from 1870-1890, prove this interesting result. Previous to 1870, Ootacamund, and its neighbourhood were nearly bare of trees. After 1870, strenuous efforts were made by the government, and private individuals to plant trees on a large scale. During the five years, 1870-74, there were one hundred and twenty-one rainy days, in the months, March to May (when the rains are generally local). While in the same months of the five years, 1886-90, (by which time the station had become fully wooded) there were no less than one hundred and forty-seven rainy days with an increase in rainfall by three inches. In the other months of the year also, (June to August) it was found that during the treeless period, 1870-74, there was a total of three-hundred-and-seventy-four rainy days only, whilst during the wooded period, 1886-90, there were 416 rainy days. The agricultural importance of these facts, cannot be over-estimated: There is an old Hindu injunction, which requires that for every tree cut, two should be planted. May we hope, that this wise injunction will be followed by the people and especially the Forest Panchayatdars who have undertaken a truly national work.

Rural Reconstruction

Six Directions of Advance

By S. V. Ramamoorthy, M.A., I.C.S.

India, like all other parts of Asia, has got the family as its unit of society, whereas, in the West, the individual forms such a unit. It is obvious that, with the introduction of Western education and the rapid means of communication, the strength of the family system has disintegrated. It is partly the ideal

of Western society, in regard to individual freedom and development, and partly the possibility of the different units of the family spreading themselves out in different parts of the country, through the economic struggle for life, that has led to this result. It has to be noted, however, that the family does still retain a considerable part of its old hold on its members, so that we have at present a hybrid social system in which there is struggle going on between the family and the individual. No kind of an appreciable synthesis has yet been made. In a country like Japan, where Western civilisation has taken fair root and a strong Government has been built up, there is the same phenomenon of the want of social synthesis. So far, then, as social reconstruction is concerned, urban experience has little of achievement to place before the villagers.

Village Panchayats

Fifty years ago, even European administrators talked of the evidence of village organisation through the existence of the Panchayats. At the present day, such evidences have almost disappeared. In India, Madras is perhaps the only Province where there is an appreciable amount of village Panchayat organisation. This is partly due to the efforts made in the last 7 or 8 years by an enthusiastic Registrar-General of Panchayats, Mr. N. Gopalaswami Iyengar. The political reconstruction of the village can lie only through the formation of Village Panchayats. It is all to the good that there is a fairly strong public opinion in favour of the resuscitation of the Village Panchayat, and we may hope to see in the course of the next decade or two a very large extension of the Panchayat movement in this Presidency. In towns, we have been accustomed, in the last 4 or 5 decades, to the development of Municipalities and Union Boards. Our desire to reconstruct the Village Panchayat has been to some extent due to our urban experience of Municipalities and Union Boards.

Economic Uplift

It is perhaps in the economic direction that Indian reconstruction has been most wanting. In Japan, along with political reconstruction, a determined effort was made by the

Government to develop the country in the economic sphere. Half of the Japanese population still live by agriculture, and their methods are mostly old methods with the addition of a few small improvements. In India, the raiyat wastes at least half his time. In Japan, strong cottage industries have been built up. To silk industry, hand-loom weaving, the making of baskets, such other simple cottage industries have been fostered by the help of Co-operative Societies and introduction of electrical power. It remains in India to achieve a systematic development of cottage industries, so that agriculture may be made to pay with its supplementary industries. It is true that in towns larger development of small industries has yet to take place. The energy of townsmen has been directed mostly to Government service, professional services and also trade, whereby the villager has been made to pay for things from Europe and not been helped to make things himself. Owing to a glut in the market of educated men there is a need for the development of small industries in towns themselves. But it is quite clear that, so far as the economic reconstruction of the village is concerned, the imperative need is to develop cottage industries for the spare time of the raiyats.

Physical Reconstruction

Then in regard to physical reconstruction, it must be said that towns have scored largely as compared to villages in India. The introduction of science and the Western medical system has helped largely to improve the health and sanitation of towns, whereas, in villages, there still continue the same absence of protection against disease, the same insanitation of the villages and their surroundings that we had before the introduction of Western knowledge. It is open to educated men to help the physical reconstruction of village life by making it sanitary and by teaching the villager Western methods of improving health.

Intellectual Region

Then coming to the intellectual region, it must be said that the educated Indian has yet remained unable to reconstruct his intellectual life into any sort of synthesis of the old and new

knowledge. There is a conflict of two different streams of life and culture in the life of educated India. There is one system of life in which he is brought up at home, and there is another in which he is led by his teacher. Even in Japan, there is the same complaint of men being torn between two different directions of intellectual and cultural life and life having lost the old singleness of purpose. So far as the intellectual reconstruction is concerned, the village cannot be given the advantage of any synthesis made by the educated men of the town.

Will to be Energetic

Then coming to the moral region, India has grown stagnant and apathetic. It needs to be stirred into energy. The European is keen both in work and in play. India, by coming into contact with the energetic West, has begun to regain the will to be active and energetic. Indians who have travelled in other countries of the world learn the necessity and the value of this will to be effective and not the means to be effective. For instance, village roads can be levelled and made sanitary, if only the villagers desire to do so. It is not the lack of money that stands in the way, because money only pays for the labour which must come from the village itself. There is a great need for the reconstruction of the moral life in the village so as to make it once more active and energetic.

People's Interests Roused

Thus then out of the six directions in which National Life can be reconstructed, there are two in which no synthesis has been made and men are torn between the Eastern way and the Western way, viz., the social and intellectual regions. In the other directions, however, viz., political, economic, physical and moral, urban reconstruction has been made to an appreciable extent, and, in the light of this experience, there is a great scope for the reconstruction of the village. We may well hope that the time of mere talk has ended, and that people's interest has been sufficiently roused to take up seriously rural reconstruction in the future.

—*The Swarajya Annual.*

Social Service.

By T. S. Gangadhara Aiyar, B.A., B.L.

The spirit of social service is an effective harmoniser of many an irreconcilable political element. In our country, where caste, communal and political differences are too many, social service creates a feeling of oneness among the people of various views and their differences evaporate in no time. In this respect social service is a cement joining together the various forces of disruption and disharmony. Amidst the clash of political opinions and the turmoil of communal prejudices, nothing serves a better purpose than social service, which rises far above differences of caste, creed, politics and religion.

Social service like mercy is "twice blessed." It serves both the server and the served. The importance of social service, therefore, lies in the fact that the persons carrying on social service have a feeling of real unity interse among themselves, while, they and those, whom they serve, have the same feeling of comradeship. In fact the harmonious feeling existing between the high caste social workers and the depressed classes, is entirely due to the all-pervading spirit of social service.

Social service indicates freedom from shibboleths, dogmas and conventions; fellowship among various classes of people, self-determination on the part of those, who serve and self-realisation among those, who are served. It aims at the betterment of the condition of the individual, and through that, the progress of the nation as a whole. Its object is to serve and secure the growth and happiness of the community. In short, its ultimate goal is the achievement of "the greatest happiness of the greatest number".

In our country, which is beset with many social evils, a true spirit of social service among the young men, is highly indispensable. With caste and communal distinctions dividing us, with the great problem of untouchability checking our national progress at every stage, with the drink evil staring us full in the face, with crude and anti-diluvian customs and practices troubling us frequently and with the existence of

several other social evils and disabilities, our country is in a state of chaos and confusion. The path towards a better state of affairs clearly lies in the boxafide performance of real social service by our young men.

Social service for the improvement of the condition of the labouring classes, for the amelioration of the depressed classes, for the development of maternity and child welfare work, for the betterment of the agricultural classes, for the eradication of the drink evil, for the health and sanitation propaganda and for the relief of the beggars, should be carried on steadily and progressively. The experiments of the social service settlements may be introduced in our country. Young men may be made to camp in slums and acquaint themselves with the life there and carry on the work for the betterment of the condition of the poorer classes. The veteran social workers like the members of the Servants of India Society may be quite ready and willing to guide the young social workers and give them very useful instructions. Rural reconstruction, which is the all-absorbing topic of the day, should receive the immediate attention of all social workers.

It is noteworthy that in the United States of America social service organisations are working in a business-like method with commendable regularity and system. In India due importance should be given to the theory and practice of social service, in the educational institutions. The government should come to the aid of social service organisations and help them by means of liberal grants. The existing social service organisations should be thoroughly overhauled and set in active motion, while new ones should also be started in great numbers. There is no doubt that real social service will soon build a New India with broader vision and wider outlook. And with the mitigation of many of her social evils, she will be able to take her stand alongside or even ahead of, the advanced nations of the world.

Village Work & Missionary Enterprise

Schemes for the consideration of and efforts directed to the building of a rural civilisation have necessarily to take account of the wretchedly low economic condition of the rural population. Nin tenths of India's population of 320,000,000 live in villages and fourfifths of these are directly or indirectly connected with farming. During recent years owner cultivators have decreased in numbers, and much of the decline is attributed to the forfeiture of lands on account of debts. Excessive fragmentation of holdings giving each cultivator a constantly decreasing area often times in bits widely scattered diminishes the net yield from fertile lands and the return obtained is not sufficient to provide a living wage for the average peasant family and some supplemental source of income must be found. These facts which we have summarised from the very interesting report of the Rural Conference held at Coimbatore under the auspices of the National Christian Council of India, Burmah and Ceylon presents in a nut shell the present agricultural position of India. The Conference which was fairly representative of all interests engaged in rural reconstruction work, including the Y. M. C. A., Mission bodies, and private individuals, laid in their discussions much emphasis upon the serious neglect of the rural areas and their specific problems and endorsed the view expressed by the Jerusalem meeting of the International Missionary Council as to the importance of doing rural missionary work and to that end emphasised the pressing need for continuous and comprehensive study of the problems of the rural life with a view to their practical solution.

The discussions touched many important phases of rural life and the activities in which mission agencies are now engaged were indicated. These include (1) rural elementary education including the education of adults, (2) training of teachers for rural schools and the literature to be provided for them and (3) rural economic improvement including rural self-government.

* Report of the Rural Conference held at Coimbatore, December 19 & 20 1928.

The report is valuable on account of the attempt made to outline the back-ground, to shew the needs and possibilities of rural mission work in this country and to call attention to the advances which have been made along various lines since the Village Education Commission of 1920 presented their report.

On the subject of rural education including the education of adults, it may be noticed that almost all missions in India are engaged to a greater or less extent in village day schools which are meagrely equipped and poorly taught except in the Punjab where the instruction imparted has relation to the village life. Owing to the greater popular interests in elementary education, Provincial Governments are now taking an increasing interest in it and the general opinion expressed at the Conference with which we concur was that missions should eliminate their weakest schools and strengthen the rest, the latter being rendered centres of influence, in which would be demonstrated a better type of teaching that would build character. From the agricultural standpoint it is essential that the pupil should be encouraged to seek his interest in the every day life of the country side. As observed in the Report of the Royal Commission on Agriculture, while a system of rural education for children is obviously indispensable for the future, it cannot affect the present situation unless it is supplemented by a determined effort to spread adult education. The spread of literacy is important in view of the urgent need for the "Rural population to be approachable through the printed word", as illiteracy presents the most formidable single obstacle to rural development in the widest sense. The Conference considered the problems of adult education under two general heads, namely, those educational activities carried on in regular schools including night schools and special vacation schools and general welfare activities carried on as part of a rural reconstruction programme. The Conference wisely decided that these two aspects should generally be combined in one comprehensive endeavour for community or adult education.

In this connection, the importance of the teacher cannot be over estimated, for he is the only person available in the village who can lead the villagers and is the only one capable of con-

necting the work and demonstration of the agricultural department with the villagers themselves. And where teachers have given themselves unreservedly to community uplift, the response of the villagers has been certain. The training of the teacher to take his proper and legitimate place in the rural economy of the country becomes therefore all important. His training should be such as would establish close relationship with the actual needs of the village people in matters of health, economic improvement, agricultural advance, cooperative methods and the development of cottage industries. We have no doubt that the conclusions reached at the conference in this respect will meet with general approval for rural development as it is conceived at present as achieved in the villages and with the help and willing cooperation of the villagers themselves and not as hitherto, imposed upon them by townsmen who cannot be expected to know and appreciate the view points of the villagers.

Proceeding next to consider the problems of the economic improvement of true villagers, the conference recommended the promotion of special educational propaganda through the village schools, cooperative societies and village panchayats to help the villagers to protect themselves from exploitation of the money-lender, grain-dealer, and the petty official.

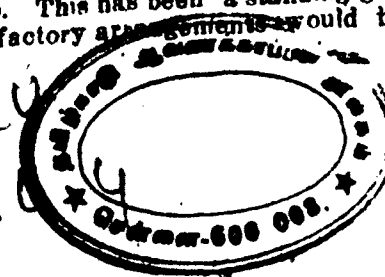
Finally, the conference considered the question of rural self-government and reorganising the villages as well-recognised self-contained units as was the case in ancient India. The old Indian villages produced their own food and maintained the artisans required for service to the village community. They were also self-governing through panchayats or committees of village elders who adjudged disputes and maintained the corporate good of the village. With the extension of the means of communication and the wider exchange of products the old isolation and independence of the villages have disappeared. Ancient domestic and village industries have declined and labour difficulties have grown up. Under modern conditions, the villages cannot remain isolated and will be expected to participate in the larger movements of the province. Recent legislative and administrative measures have enabled the

transfer to village panchayats of the powers formally exercised by the local boards over education, health, conservancy, public works and other matters. These powers for self Government have not been used to an appreciable extent owing to the villagers' inexperience and lack of desire and unfortunately also to over-cautiousness on the part of government. A healthy change requires to be created and fostered in the outlook both of the people and the government and to this end, the best energies of the leaders should be directed. Christian Missionaries and other rural workers for whose initiative and enterprise we have to feel thankful have also a duty to perform in this noble endeavour, which we have no doubt they will cheerfully render.

Notes & Comments

THE FOREST POLICY OF GOVERNMENT. At the recent Budget session of the Madras Legislative Council, the Forest policy of Government came in for much informed criticism, as the result of which a token cut of Rs. 100 was carried in the Forest demand of Rs. 41.33 lakhs. Member after member pointed out how unsatisfactory was the working by the Forest Department of forests which were a great national asset. The complaint was made that the executive staff of the Forest Department was top-heavy and that there was considerable scope for reduction in expenditure. People living near forests were unnecessarily harassed. Forest Panchayats were not given adequate powers and their requests were not cared for. Nothing was done to encourage the formation of more Panchayats nor were there rules to guide the conduct of Panchayats. A former Chief Conservator of Forests had stated that lands which were unfit to be included in the forest areas were classed as state forests while panchayats which have given a good account of themselves in the management of the forests already entrusted to them were unnecessarily kept out. In some Districts useless growth of dense jungle was permitted which bred wild animals and malaria with disastrous consequences to cultivators. Sir Norman Marjoribanks the Member in charge of Forest Panchayats gave the assurance that the object of the Government was that the forest reserves transferred to Panchayats should be managed by them subject to a minimum interference, that orders had been issued directing that reserves should be out in rotation for green manures, and that Government were considering whether Panchayats were entitled to any impounding fee. This has been a standing grievance and we trust that satisfactory arrangements would be

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made in regard to it. The Hon'ble the Law Member stated that the policy of the Government generally was to work the forests in such a way as to give the highest revenue possible consistent with exploitation. He also gave the assurance that the hunting of wild animals in reserved forests was now permitted and that orders were passed for clearing marshy areas near villages. Incidentally the question of the supply of fuel was raised in the discussion. The prices of fuel were going up and government had not made provision for selling fuel to poor ryots at reasonable prices. The Hon'ble the Law Member stated that contractors were directed to sell fuel at standard rates which were being revised. Whatever safeguards might be provided by Government, there would still be corruption in the Forest Department and harassment by petty officials. The Madras Forest Panchayat Association which was recently formed should, it seems to us, form vigilance committees in districts and bring to the notice of Government specific instances of corruption and acts of oppression.

OTHER MATTERS. Another subject that claimed the attention of the Legislative Council, during the Budget debate, related to the question of VILLAGE SANITATION. It is a matter for congratulation that more and more attention is now being paid to the needs of the village. Most of the villages have no protected water-supplies and in several of them, there is no water supply at all for eight months in the year, let alone conservancy and preventive measures during epidemics. One often hears of large schemes for the supply of water to urban areas, but what about the villages inhabited by 90 percent of the population. It will be interesting to know, what portion of the large sum of money released by the Central Government, had been set apart for improving village conditions. As well pointed out by Rao Bahadur B. Munuswami Naidu Garu it was but right, that government which was taking large sums of money from the agriculturists should give something in return for them. The Minister for Public Health, while recognising the present backward conditions of the villages and the urgent need for their improvement, did not mention what concrete proposals were under the consideration of government. He, however, welcomed the suggestion made during the discussions that a fund should be specifically constituted for village improvement work. If there was such a fund, it could be drawn upon whenever money was needed for village improvement work, whatever might be the financial condition of the province at the time. There would not be the risk of village works suffering by reason of grants lapsing.

The discussions in the council in regard to the grant under Agriculture, was not of much importance, except for the suggestion made, that the export of manures should be prohibited. It is unfortunate that on a question so vital to the well-

being of the agriculturists there should be such divided opinions. The specious plea set up by Mr. C. E. Wood, that the export of manures, was really in the interest of the country was amusing and could not have been meant to be seriously advanced in a discussion in which the interests of millions of agriculturists were involved.

Time after time, the attention of Government had been drawn to the need for a survey of COTTAGE INDUSTRIES, for the purpose of selecting, such particular industries as would enable the agriculturist during the slack season to supplement his meagre income. We are afraid that the government have been taking far too much time in maturing plans. We hope that when the final report of the special officer, which is expected shortly is received, prompt steps would be taken by the government in the matter.

During the past few years, small sums have been set apart for improving RURAL COMMUNICATIONS, the government giving grants to local bodies on what is known as half-grant system. This system does not work well, as local bodies are not able to find the other half with the result that village communications have been neglected. It was suggested during the Budget discussion, that a Rural Road Fund should be constituted by specific grants made to it, instead of the present half-grant system. There was some desultory discussion, which ended in nothing. There appears to have been some confusion in the minds of the non-official members, who participated in the discussion, as to what exactly was to be the scope of the fund, whether it was to be a rural development fund for village improvements generally, including village communications or a separate road fund. It is to be hoped, that when the question comes to be discussed again as it must be, members interested in village improvement will be better fortified with facts and figures which can satisfy official criticism.

THE HANDLOOM WEAVING INDUSTRY. The Government have recently passed orders on the recommendations of the Textile Conference. The more important of the recommendations of the Conference related to the handspinning and handloom weaving industry and connected cottage industries and the urgent need for their development. The Government have recognised the present low condition of this important cottage industry and that is half the solution of the problem. The order of the Government is a straight-forward document evincing a genuine desire to better the condition of the weaving classes, and the Development Minister and the department over which he presides deserve to be congratulated on it. As the Government themselves observe, the crux of the weavers' problem is how to standardise the products of the looms and to

effect a reduction in the price of the cloth without reducing the earnings of the weavers. It must be recognised that progress in the organisation of the industry on its commercial and economic side is beset with considerable difficulties and the complex problem of producing the standardised hand-made goods in quantity, of cheapening the cost of producing such goods, of replacing the middle man by a net work of co-operative societies, of creating a steady and regular demand for the cloths turned out and last but not least of improving the morale of the weaver and inculcating in him habits of thrift is one which is not easy of solution. Government have recognised the difficulties and are prepared to find a solution for them and that is a matter for satisfaction. The Registrar of Co-operative Societies has been asked to pay specific attention to the development of weavers' societies with a view to affording them the necessary credit, supplying them with cheap yarns and arranging for marketing facilities for their finished products. The improvident and intemperate habits of the weaver are a great handicap to his success. The Conference recommended that side by side with the technical improvement, steps should be taken to combat the evil of drink habit among the weavers and suggested that the co-operation of the Excise department should be secured with a view to find out ways in which that department could assist in reducing the drink evil. Government have promised to examine this recommendation and we hope that a satisfactory solution will be found. The Government have in this connection considered the question whether a partial solution of the present problems of the weaver could not to a certain extent be found by diverting some of the members of the community to other branches of the textile industry e.g. hosiery, artificial silk etc. The Textile Expert who will hereafter be an important head of the department under the Director of Industries has been asked to examine the possibilities of introducing these industries and report on it. The responsibility of the Textile Expert, now Assistant Director (Textiles) under the new scheme is heavy and we have no doubt that he will have the necessary initiative and resourcefulness to place the industry on a sound basis.

TUBERCULOSIS, OCCUPATIONS AND FOOD. Dr. C. A. Bentley, Director of Public Health, Bengal, who has been pleading for the establishment of open air schools where happy healthy children will be able to study free from ordinary risk of tuberculosis germs, has in a recent address to the Calcutta Rotary Club given interesting facts shewing the effects of occupation and food on the incidence of tuberculosis. He has stated that out of every 1000 deaths among the undermentioned classes of workers the deaths from tuberculosis were as follows:—clergymen 121, doctors 128, Lawyers 130, farmers 139, policemen 167, inn-keepers 268, dressmakers 385, stone cutters 391, teachers 396, and printers 394. Apart from occupations espec-

ally dirty ones which greatly dispose to the occurrence of tuberculosis there is an intimate association between poverty and prevalence of the disease. There is an extra-ordinary high correlation between the price of wheat in several countries of Europe and the death rates from Pthisis; there is also a similar correlation between the general cost of living and the tuberculosis death-rate over a long series of years. The meaning is that the two conditions, poverty and tuberculosis tend always to move together so that if we can diminish poverty we shall likewise diminish the disease which tends to accompany it.

LAND GRANTS TO PEASANTS. Under the great irrigation project in Sind in the Bombay Presidency known as the Lloyd Barrage Scheme which it is expected will be in working order in 1932, the Government of Bombay have proposed to set apart 50,000 acres for grant to 3000 peasants who will be settled only on land of good quality. The grant in each case will ordinarily be about 16 acres and never more than 24 acres. With the intensities of cultivation that will be possible and must be encouraged under the Barrage, this will admit of as much annual cultivation as an ordinary *hari* with the assistance of other members of his family can cope with. These peasants will be tenants-at-will for the first five years during which they will pay Rs. 3 per annum per allotted acre and will be required to comply with certain conditions framed with a view to ensuring that they actually live in or near their land and bring it under cultivation. Thereafter they will be required to pay *malkano* and ordinary land revenue will be recovered in addition to payments of land revenue. According to the Bombay government scheme, the peasants will be able to complete the payments for their holdings within a period ranging at their option, from 20 to 45 years. The Government consider that it is not desirable to permit payments within a shorter period since the object is to get the peasants settled on the land and not to encourage them in the speculative selling of their holdings. The present value of these payments is about Rs. 50 per acre.



Reviews and Notices.

MEMOIRS OF THE DEPARTMENT OF AGRICULTURE in India. (Vol. 10, No. 7). A contribution to our knowledge of the Thysanoptera of India by T. V. Ramakrishna Ayyar B. A., Ph. D., F. C. S., Lecturer in Entomology, Agricultural College, Coimbatore.

This is a comprehensive descriptive account, fully illustrated, of the particular insect order which forms the subject of the Memoirs regarding which little attention was paid by Entomologists in comparison with that bestowed on other major divisions of the large group "Insects." The writer's attention was drawn to this group of insects for the first time in 1915 when he noted a species of "thrips" causing some appreciable injury to the rice crop in the Chingleput District. This incident coupled with the knowledge that practically very little work was done with reference to this group of insects stimulated the idea in the author's mind of working in this unexplored field. In the Memoirs before us, the writer has brought together as a connected record all that is known of the Thysanoptera in India as the result of the study not only in the writer's collections but also by the incorporation of all other available records in Indian forms. As stated by the writer, this cannot be taken as a complete account of all the Indian forms but as a contribution to our rather extremely meagre knowledge of this interesting but little known group of Indian insects the endeavour is valuable, and should prove useful to others who may be engaged in similar investigations. The economic role played by Thysanoptera in India is not as important as it is in other countries but their plant-inhabiting habits certainly indicate possibilities as pointed out by the author, of some of them becoming economically important and attracting attention under favourable conditions.

THURSTON'S PHILOSOPHY OF MARRIAGE. By William R. Thurston. (S. Ganesan, Publisher, Triplicane, Madras., price annas twelve.) Mr. Thurston who served nearly ten years in the United States army as an officer and who during this period served in several foreign countries including

China, had devoted considerable attention to and carried on much investigation on the present system of marriage and its defects. Most of the data furnished in the brochure before us are based on personal observation and information obtained from physicians principally obstetricians and gynecologists, statistics compiled by bureaus of social hygiene and by medical examiners during the war. Mr. Thurston's main conclusions are that nature never intended a woman to be bound to a man for life, and to be compelled to occupy the same bed or habitation with him night after night, in pregnancy and out, that the daily juxtaposition of the male and the female leads to unrestrained sexual intercourse which perverts the natural instincts of both male and female. Those who are familiar with the old family dharma of the Hindus will find support in the main conclusions of Mr. Thurston. Under the stress of the so called modern civilisation and the break up of the old joint Hindu Family system with its discipline, the old Dharma has disappeared and the sanctity and the high purpose of the institution of marriage has been debased.

To one of the remedies which Mr. Thurston suggests that husband and wife must under normal conditions live in separate rooms and not share the same bed except when both desire progeny, and not for the mere indulgence of lust, there can be no serious objection as in fact it is the central idea of the traditional Hindu Dharma. There cannot be the same measure of agreement in respect of the other remedies suggested. We agree with the author as to the unavailability of contraceptive methods. "Once a knowledge of contraception has been disseminated to the women of the masses, the knowledge can never be recalled," and in spite of powerful support in our country from influential quarters, we are inclined to agree with the author that nothing less than the lingering death of the race will be the price we may have to pay, for this knowledge. We congratulate Mr. Ganesan on his enterprise in obtaining the permission of the author to print the book for circulation in India.

We acknowledge with thanks the receipt from the Government of Travancore of a volume of lectures and leaflets issued by the State Agricultural Department during a period of eight years, 1084 to 1102 of the Malayalam era. The subjects dealt with cover a wide range and relate among others to preparation and application of manures, cattle improvement and diseases of cattle, crop pests and diseases of the coconut. Most of the lectures which are in Malayalam are written in a popular style capable of being understood by the ryot population.

SREE RAMAKRISHNA STUDENTS' HOME, MADRAS.

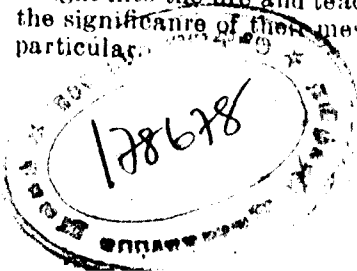
The report of the Home for 1928 is noteworthy on account of the progress achieved in the industrial school attached to it. During the year, the third year classes in carpentry and cabinet making, mechanical foreman and fitters work were opened. The aim of the school is to train the student both in the theory and practice of handicrafts so that he may be able to manage a small factory and earn his livelihood as a foreman fitter or a capable cabinet maker. The extension of the workshop shed was completed during the year and a wood-turning lathe and a steam-engine with boiler were added to the existing machinery. Substantial donations for the maintenance and improvement of the industrial school and workshop were made by the Madras Central Urban Bank who by their gift of Rs. 2000 have emphasised the true significance of the co-operative ideal in nation building. Government also gave a grant of rupees 4000 besides promising a further sum of Rs. 3200. This is a direction in which the help of public bodies and men is very much needed if middle class unemployment should be relieved to some extent.

1. THE MESSAGES OF SWAMI VIVEKANANDA TO THE MODERN WORLD. By K. S. Ramaswami Sastri B.A., B.L. Price As. 4.

2. SREE RAMAKRISHNA PARAMAHAMSA As an incarnation of Indian genius, by K. S. Ramaswami Sastri B.A., B.L. Price As. 4. (Sree Ramakrishna Mutt, Mylapore, Madras).

These are reprints of addresses delivered by Mr. K. S. Ramaswami Sastri at the birth day celebrations of Swami Vivekananda and Ramakrishna Parama Hamsa respectively. Anything coming from such a ripe scholar and devoted student of Hindu culture and civilisation as Mr. Sastri is bound to command attention, and no words are needed to commend these addresses to the careful study of men and women who desire to have a deeper insight into Hindu thought and culture. Swami Vivekananda has justly earned the distinction of "Prophet of modern India" and his "Message to the West and the East" is of great value and importance not only because he saw both the East and the West intimately but also because he was a great seer and genius before whose clear vision the social and spiritual forces of the world were unrolled in all their power and grandeur."

Sister Nivedata has said that Sree Ramakrishna Paramahansa was probably the one universal mind of modern times. The life and work of the great saint cannot but have a profound appeal to all times and to all climes. The Sree Ramakrishna Mutt has done well, in making available in a cheap form these valuable addresses of Mr. Sastri which give a true insight into the life and teachings of these two great souls and the significance of their message to the modern world, India in particular.



SREE RAMAKRISHNA STUDENTS' HOME, MADRAS.
The report of the Home for 1928 is noteworthy on account of the progress achieved in the industrial school attached to it. During the year, the third year classes in carpentry and cabinet making, mechanical foreman and fitters work were opened. The aim of the school is to train the student both in the theory and practice of handicrafts so that he may be able to manage a small factory and earn his livelihood as a foreman fitter or a capable cabinet maker. The extension of the workshop shed was completed during the year and a wood-turning lathe and a steam-engine with boiler were added to the existing machinery. Substantial donations for the maintenance and improvement of the industrial school and workshop were made by the Madras Central Urban Bank who by their gift of Rs. 2000 have emphasised the true significance of the co-operative ideal in nation building. Government also gave a grant of rupees 1000 besides promising a further sum of Rs. 300. This is a direction in which the help of public bodies and men is very much needed if middle class unemployment should be relieved to some extent.

1. **THE MESSAGES OF SWAMI VIVEKANANDA TO THE MODERN WORLD.** By K. S. Ramaswami Sastri B.A., B.L. Price As. 4.

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No. 5

The future of the Intellectual Classes in India

By Dewan Bahadur T. Ragaviah, C.S.I.

The unemployment problem has assumed an acute form for the intellectual classes of this country in view of the persistent demand of the Proletariat for the representation of the various communities in the Government services. The Brahmin tends to be replaced by the non-Brahmin and the latter by the members of the Depressed classes.

The distinguishing characteristic of the intellectual classes is that they do not themselves add directly to the material wealth of the country. They, by their precepts and practices and the knowledge they impart enable society to produce more wealth and cater also to its higher needs. In this material world, the main function of the Body Politic is the production of Material wealth, and the more material wealth the Body Politic produces, there is more to go round society and make life in society more comfortable. The intellectual classes of a country constitute usually such a small fraction of the Body Politic that their direct contribution to the production of material wealth cannot add much to it, while the effective value of their intellect lies in the indirect contribution it makes to the sum of the country's happiness, material, moral and spiritual. The intellectual classes may thus be compared to a parasite (though the word in common parlance conveys an unsavoury meaning) and their life may be compared to the life of a parasite. There are good parasites as well as bad parasites known to science. The good parasite of the vegetable kingdom, for instance, draws its sustenance from the plant on which it

thrives—sustenance which would circulate to the cells of the plant but for its existence, but it justifies its existence by fertilizing the plant and by eating up the bad parasites which, if not so eaten up, would destroy the plant.

Until the advent of the British Rule, the intellectual classes of this country were functioning mainly as the good parasite of the Body Politic. They were fed and looked after by the Body Politic and in return they gave the country its religions, its philosophies, its fine arts and all that is implied in the civilisation of which it is justly proud. Since then, however, they have ceased to serve the country in the way in which they were serving it in the past and have been serving the ruling class for the sake of their own selfish profit. While so serving the ruling class they have not been adding to the material wealth of the country but have been drawing from the wealth produced by the Proletariat. The Proletariat is now coming into its own and it tells the intellectual classes "Look here, we fed you and maintained you in comfort of old as you were then functioning as our good parasite. You were feeding us intellectually and in return we were feeding you materially. But for the last 150 years, you have ceased to discharge your old useful functions. You have neglected and ceased to function for our benefit and you have been unjustly depriving us of part of the wealth we have produced in the shape of the salaries you have been drawing and have thus transformed yourselves into the bad parasite. You have become the official class and have established a monopoly for the loaves and fishes of office. Democracy must destroy vested interests, especially when such interests do not conduce to the general good of the country. We will no longer allow you to be the bad parasite and so we are out not only to prevent you from securing Government employment in future but also to prevent your getting any increase in the share of the country's wealth which those of you who are already in office are enjoying". One cannot but admit that there is a broad justification for this position which the Proletariat is taking on its accession to power. When vested interests are disturbed, individual hardships cannot be avoided and it is for the ultimate good of the vested interests themselves

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that they should be so disturbed. No class ought in perpetuity to be maintained from the wealth produced by the other classes of the community. If it cannot create wealth, it must at least help indirectly to create it. If not, it must perish. It is therefore for its own good that the disillusionment should come, and now that the disillusionment is come, it behoves the intellectual classes to cast about for ways and means whereby they can themselves contribute directly to the creation of the nation's material wealth.

The principle of communal representation in the services which is sought to be introduced by the Reformed Government, is bound to cause individual hardship and to belie fair expectations of future prospects in the case of many an individual already in service. This evil or hardship is, however, nothing in magnitude as compared with the problem of the future of the thousands of young men who have already qualified themselves educationally for service under Government and the many more thousands of boys and young men who are now passing through schools and colleges with the same end in view. What is to happen to all these?

One thing is clear. The English education which they have acquired or are in the process of acquiring with a view to obtain salaried appointments under Government must be written off as a bad debt. The intellectual classes must give up self-seeking and self-enjoyment which, it cannot be denied, has obsessed them since they transferred their services to the Ruling class. They must revert to their old simple life and practise once more their old maxim of simple living and high thinking. They need not flatter themselves that they would do this as a matter of idealistic choice. No; it has now become a matter of unavoidable necessity. The distant thunder and lightning which were unheeded, have produced the torrential rain and the educated classes are now neck-deep in the surging flood. A moment more, and they will be submerged. They must, therefore, be up and doing if they wish to save themselves, and the only way of saving themselves is to cease to be the bad parasite they have been for the last 150 years and try to increase both directly and indirectly the wealth of which in

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common with others, they could partake. Firstly, they must themselves create the wealth which will enable them to live a simple life, and secondly, they should, when they have succeeded in creating the wealth necessary for their own living, re-establish their old position as the good parasite. They can help themselves to a better life only if they help the Body Politic to obtain a better life. The shrivelling up of the life of the intellectual classes is the last stage in the shrivelling up due to their own neglect—of the life of the Body Politic itself.

Those who will possess land must go back to it at once. Their number is, however, very small and land itself is not limitless. Of the 40 million people in South India, only a million pay land revenue of Rs. 10 or more, and only two millions pay land revenue of Rs. 5 or more. Even assuming that the latter extent of land-ownership can provide full creative employment for the pattadars as well as their families, not more than a fourth of the entire population can turn to the land by virtue of ownership. Speaking of South India again, quite half of the population is absolutely land-less and it cannot be said that pattadars paying a land revenue of less than Rs. 5 have enough land of their own to cultivate. The scope for bringing fresh land under the plough is, as every one knows, diminishing fast. Good arable waste land is becoming a drug. A fairly large fraction of the intellectual classes that do not own land, can of course add to the wealth of the Body Politic by leasing other people's lands and bringing their education and intelligence to bear upon them in the shape of better cultivation. This is one important avenue still open to them. Next to these two avenues, the avenue that is most promising is the setting up of small industries that can be run on the cottage industry scale. This avenue is still almost wholly unexplored in this country. There is a great scope for the production in the country side of many an article of general consumption. I need only mention as examples, cloth, milk, eggs, cured fruits and vegetables, toys, buttons and lucifer matches. A little training ought to suffice to enable educated people to take to these cottage industries with success and the best way to work them is on a co-operative basis, as the co-operative method does not involve the out-

lay of large individual capital and is attended with comparatively small risks. Co-operation has not pursued so far a creative line in this country. It has no doubt advanced greatly in the field of credit, but has it done much good in this field? Let us look the Co-operative movement, such as it has been in this country, squarely in the face. The man in debt, often in deep debt, is the man that mainly resorts to it. He has both his legs in the mire. Facile credit in the shape of co-operative credit is dangled before his eyes. He eagerly seizes it and imagines that he will soon be out of the mire. But what often really happens is that he gets deeper into the mire. He seldom can get from the co-operative movement the money he needs for a complete rehabilitation of himself. Even if he applies the money he gets from the co-operative movement, for the discharge of a part of his debt, the uncleared debt soon gathers volume and threatens to engulf him. He does not know whether to keep that debt down or clear the co-operative debt and soon he finds himself in the position of a man between the devil and the deep sea. There is no co-operative creative effort in the land; the intellectual is standing out of it and no intelligence or knowledge is brought to bear on powers of production of wealth. The borrower's means of rehabilitation do not therefore develop. Creative co-operation will on the other hand improve the borrower's earnings and leave him a larger margin for rehabilitating himself besides adding to the sum total of the material wealth of country. The exploitation of the three avenues mentioned above must be the programme of the intellectual class for the immediate future. They must go back to land and take to cottage industries and in both these pursuits they must apply the co-operative method as much as possible. This will bring increased prosperity in its wake.

The next aim of the intellectual classes who are after all the natural leaders of the masses, should be not the mere earning of wealth for themselves but the attainment both for themselves and for the nation as a whole a better and fuller life. Increased material prosperity brings with it increased opportunities for service. The intellectual classes will once more be failing in their duty to the masses if they do not utilise

these opportunities for their benefit. The ideal of service will, therefore, have to be embraced when the capacity to serve is created and an all round programme of rural uplift will have to be taken up. The best agency for carrying out this programme is the village Panchayat which, fortunately for us, has been resuscitated and largely stabilised in this province. The ideal of love and service can achieve much on the country side even without an organization to back it up. A solitary British official and his wife have by their unaided devotion been able within the short time of eight years to convert a most backward, unhealthy and poverty stricken district in the United Provinces into a fairly healthy, prosperous and enlightened one. The village Panchayat organization can, therefore, play a most notable part in the uplift and regeneration of the country side if pressed by the intellectual classes into their service and they will be wise if they do so.

Before closing, I would emphasize that the problem I have attempted to deal with in a cursory manner in this article is the problem of the educated Indian *in general* although today in South India, it is largely the problem of the Brahmin who happens in proportion to his numerical strength to constitute the largest educated intellectual class. Tomorrow the problem might become equally vital to the non-Brahmins *vis a vis* the Muhammadans or the Indian Christians or the Depressed classes.

Some Facts of importance to Paddy Growers.

By Mr. K. Venkataraman, M.A.

Assistant, Paddy Specialist, Aduthurai.

1. The maintenance of seed purity in paddy strains.

The Paddy breeding station, Aduthurai was started in 1922 and the selection work on paddy that had previously been commenced at the old Manganallur Agricultural Farm, was continued at this station. As a result of several years of arduous work nine improved strains of paddy have been evolved and seed of these pure strains distributed to ryots in the Cauvery delta to be grown in place of the inferior, mixed, local

seed. These Aduthurai strains of paddy have proved very popular and the demand for seed is far in excess of the possible supply. Ryots who have grown these strains have appreciated their qualities of even heading, uniform ripening, and high yield. These good qualities shown by the crops raised from improved strains will be kept up only so long as the seed is kept pure and free from admixture of any kind. If care be not taken to keep the seed pure, the crop deteriorates and the yield diminishes in proportion to the degree of contamination in the seed. It is therefore very essential that precautions should be taken by every ryot for keeping the seed pure.

There are three stages at which seed is likely to get contaminated, to wit, the seed-bed, the planted-field, the threshing floor, and storage receptacles.

"SEED-BED." The nursery fields often contain stray seeds fallen from the last harvested crop. Such seeds should be sprouted, and removed, so that they may not get mixed up with the pure seed to be sown. For doing this, the nurseries should be ploughed and water let in for 3 or 4 days and sufficient time allowed for all the seeds lying in the field to sprout up. It is uneconomical to hand pick and remove the sprouted seedlings. When all the seeds have sprouted which will be in about a week after the letting in of water, a thorough ploughing will uproot all the sprouted seedlings, and they will gradually rot. The seed beds should then be finally prepared and pure seed sown. This can be practised in all 'samba nurseries' in the Tanjore delta, since wet-nurseries only are adopted for samba crops. However in the case of dry nurseries for kuruvai crop, this precaution is not practicable and the other precautions detailed below should be taken to ensure purity.

PLANTED FIELDS: The fields in which seedlings are to be transplanted also contains dormant paddy seeds fallen from the previous harvest. It is essential that these residual grains in the field should be sprouted and removed before the field is got ready for planting. This object is easily achieved by letting water into the field after the first ploughing, and keeping the field wet for a week. The residual seeds in the field would

have sprouted well by that time, and the subsequent ploughings would uproot and destroy them. The fields should then be got ready for transplanting. The flowering-time of the crop is another stage at which plants belonging to other varieties can be easily spotted out and removed. This operation is called roguing. When the crop has fully flowered, the very early and late plants in the field should be pulled out and removed. Other plants which look dissimilar to the general type in height, colour or habit, should also be removed. It is not necessary that this 'roguing' should be done in all the cultivated fields. It is quite sufficient to confine this operation to a small area, the harvested grain from which will provide adequate stock of seed for the next season's sowing. For example, if a ryot is cultivating 20 acres of land with a particular variety of paddy, if roguing should be done only in one field about a 'mah' or 1-3rd of an acre in extent, he will have enough pure seed for the next sowing.

LURKING ROGUES. It is a common practise for some ryots to grow different varieties of paddy in very closely adjacent fields or even in portions of the same field. Whenever two crops 'sirumani' and 'Nellore samba' for instance, are grown in adjacent positions, a certain amount of 'natural crossing' takes place in the rows of the two crops that are in close proximity to each other. This amount of 'natural crossing' has been estimated in paddy to range from 1.4 to 2.9 per cent. If in the two varieties 'sirumani' and 'Nellore samba' grown close to each other, a spikelet of a sirumani plant should get crossed with Nellore samba, the resultant grain could not be distinguished from other sirumani grains. The crossed 'sirumani' grain would in the succeeding crop produce a sirumani plant with sirumani-like grains. This is so because 'sirumani' size of grain is dominant to Nellore samba size of grain. Here then is a lurking rogue, a plant so like the true type, but none the less a rogue. The lurking rogue naturally escapes observation and in the next crop produces to the surprise of the ryot, some plants of Nellore samba type and some plants of sirumani type. How then is the ryot to get rid of the lurking rogues that elude the chase. The remedy is very simple, and consists of eliminating

the border-crop from the sheaves that are meant to be threshed for seed-paddy.

THRESHING FLOORS. The ordinary ryots' threshing floor is a great source of contamination. Sometimes a common threshing floor is used by several land-holders, and often different varieties are threshed on the same threshing floor without any attention being paid to cleanliness. It is not certainly necessary to have costly brick or granite threshing floors, but with the exercise of sufficient care, even the ryots' ordinary threshing floor can be made to serve quite as well. In threshing sheaves, the grain from which is to be used for seed purposes, great care should be taken to sweep the threshing floor free of all stray paddy grains, and the sheaves should be threshed right in the middle of the cleanly-swept space. The grains that get scattered allround the threshing-floor should not be gathered up for seed-purposes. If the seed taken from such carefully-threshed sheaves is kept for sowing the next season, purity of seed will be ensured. Here again, all this care and vigilance need be confined only to threshing small lots, the grain yield of which is to form the seed stock for the next season.

STORAGE RECEPTACLES: Very commonly seed-paddy is stored by ryots in straw-twists (kottais) or in gunny bags. These straw twists are dangerous envelopes for seed-paddy. However well straw may be threshed, there will still be found attached to the panicle portions illfilled and undeveloped grains. These half-filled and ill-developed paddy grains (commonly known as karukkai) sticking on to the straw have been found to germinate quite well and grow. Since threshed straw from different varieties of paddy is all usually stacked in the same heap, one can easily imagine what happens when sirumani paddy seeds should be wrapped up in Nellore samba straw-twists. Herein lies the danger of using straw-twists for preserving seed-paddy. If straw-twists cannot be altogether dispensed with for storage, the obviously safest course would lie in using the straw of the same variety for each kind of paddy seeds, after making sure that straw of the wrong type has not crept in.

Gunnies again, are receptacles that have to be used with great vigilance. When a gunny is used for storing seed-paddy, it should be turned inside out and the corners and chinks examined carefully for stray grains sticking to the sides. A stray grain of another variety lurking in a corner of the gunny is enough to vitiate seed-purity if left undetected.

Lastly, seed-paddy should be dried occasionally during storage in order to keep off mouldiness etc., and it is very necessary to exercise the strictest supervision during drying so that a few seeds of one variety do not get mixed inadvertently with seeds of another variety;

2. TURNING TO GOOD ACCOUNT LEAF AND WASTE ORGANIC MATTER. The application of dressings of green leaf as a fertiliser for paddy fields is a beneficial practice which has long been recognised by every paddy cultivator. Green leaf is scarce in deltaic tracts, and there is a keen scramble for leaf as soon as freshes in the river arrive and cultivation operations have to be begun. All available green leaf by the side of river-banks, channel courses etc., is then hurriedly gathered up and applied to nurseries and fields; but the supply proves very inadequate. If, however, during the rainy season, when hedge prunings, weeds and other organic matter are available in large quantities they should be turned to good account by being composted in pits together with a sprinkling of water-suspension of cattle-dung and bonemeal, a supply of synthetic Farm Yard Manure would have been put by, for use during the ensuing season. Such pits which are used for making Synthetic Farm Yard Manure should be protected from the sun and rain. If all organic waste-matter, such as weeds, green leaves, dry leaves etc. should be carefully utilised for making manure, the manurial problem would be rendered a little easier of solution.

3. PREVENTION OF CRAB-DAMAGE IN PADDY FIELDS, AND TURNING DEAD CRABS TO MANURIAL ACCOUNT. Crabs cause damage to paddy crops in several ways. They nibble sprouting seedlings in the nurseries and also cut across newly planted seedlings in fields. The former mischief results in a dearth of seedlings in seed-beds, while the

latter renders it necessary to fill up gaps caused by the destruction of plants. This annoyance is most felt in thin sown nurseries and economically planted fields. The crabs also make holes through the bunds of fields and a field may get completely drained through these holes at a time when water is most needed by the crop.

A simple method of preventing crab-damage has been adopted at the Paddy breeding station, Aduturai with highly successful results. The device is inexpensive and self-acting. A wide-mouthed ordinary mud-pot (chatty) is buried in a corner of the paddy field so that the mouth of the pot is just aflush with the level of the soil in the field. The pot is baited with two handfuls of raw rice bran, moistened, and made into large lumps for convenience in handling. If the whole field is under water, the pot also will naturally get filled with water. This, however, will not wash out the bran in the pot as wet bran quickly settles to its bottom. The smell of the rice bran attracts the crabs which drop into the pot and are held captive there, the sloping convex neck of the pot effectively preventing all means of escape. The bait, to wit, raw rice bran, may be renewed every alternate day. Usually five crab traps should be placed in each acre field, one near the inlet, one near the outlet, one at the centre, and two at the corners. Since channel courses act as the courses of supply, these traps may be put down in beds of channels as well. The irrigator who usually looks after the irrigation and drainage of fields may be entrusted with the looking after and baiting of these crab-traps. The crabs which fall into the pots should be cleared every day, otherwise they die by drowning after twenty four hours, and the dead bodies start decomposing. The crabs cleared from the pots every day should be killed and thrown into pits, and a layer of earth strewn well over to prevent birds of prey being attracted. This process repeated every day and when the pits are full, the rotted crab-manure can be dug out and applied to fields. At the Paddy Breeding station, Aduthurai, a systematic campaign against crabs resulted in the production of over 20 cartloads of manure during one season from the daily catches of crabs in crab pots. Such crab manure when

tried in a field scale against an equal bulk of local cattle manure proved to be of high fertilising value. Using a crop of Aduturai No. 1 (Red sirumani) crab manure and village cattle-manure were turned in at the rate of 300 lbs. per cent, and the results showed that crop reared on crab manure yielded 11 per cent more grain and 37 per cent more straw. The manurial value of dead crabs enhances the usefulness of crab traps, firstly as a preventive measure against damage, and secondly as a beneficial fertiliser for the crop,—a case of "pressing the enemy into service".

The Refining of Ghee

By Dr. K. L. Datta, D. Sc., F.C.S., F.R.S.E.

Industrial Chemist, Bengal.

This investigation into the process of the refining of ghee was undertaken at the request of one of the leading ghee refiners of Bengal and the United Provinces and the results are published for general information.

2. Ghee is generally manufactured from the butter fat of the milk of cows and buffaloes by dehydrating the butter fat by heating. The ghee thus produced is called "kancha" ghee, and is generally made by the actual producers of milk. This ghee still contains a considerable quantity of impurities and has to be refined further before it can be sent to the market. This is generally undertaken by big refiners who buy small lots from the actual producers. The crude ghee contains much dirt and organic matter derived from the milk, making it dirty and not fit for marketing as the organic matter develops an undesirable odour due to its decomposition if it is stored even for a short time. The dirt also injures the colour of the stuff.

3. The process commonly adopted for the refining of ghee consists in melting and heating it so that scum separates and carries the impurities to the top. By this process the ghee is however only partially refined inasmuch as the refined article still contains considerable quantities of impurities generally present in the crude ghee. Besides the product has a tendency to harden and lose its natural flavour owing to the ghee having

been heated to a fairly high temperature during the operation of refining.

4. In working out a satisfactory process for the refining of ghee, it was found that the ghee cannot be treated in a drastic manner for the purposes of refining as there is a danger that the natural colour for which the ghee is prized may be lost as the result of such treatment. Further as the product is used for edible purposes no chemical re-agents can be employed for its refining. It was found that if the crude ghee is boiled with water for several hours, the natural flavour of the ghee is almost entirely lost at the same time. It was also found that if the product is heated to a high temperature to dry it and improve its keeping qualities, the ghee is hardened to a very great extent.

5. In the process described below, the above difficulties have been overcome and a very pure product free from all impurities can be obtained in which the natural flavour and pale colour of the ghee are maintained. The process is carried out as follows. The ghee is taken in a deep iron vessel along with about twice its weight of water. The vessel is then gradually heated and the ghee is stirred constantly with a ladle. By this process, all the organic matter derived from the milk is gradually taken up by the water which becomes more and more cloudy and the ghee which forms the upper layer of the mixture appears clear and clear with a tendency for the dirt and impurities to separate at the bottom of the ghee layer. The stirring is continued till the water begins to boil. The mixture should be allowed to boil for about 5 minutes. It is now allowed to cool when the ghee collects as a clear and transparent layer at the top, with the scums and impurities at the bottom of the ghee layer, while the water assumes a whitish muddy appearance due to the extraction of all the organic impurities derived from milk. When the ghee has cooled to a certain extent and the separation of the ghee is perfect as a clear layer the top layer consisting of the ghee is taken out by means of a shallow vessel or ladle and poured through a thick linen filter when a further quantity of impurities is removed. The layer of ghee can also be decanted off by means of holes fitted with

taps or cocks on the sides of the vessel at different levels and filtered through linen. The last portion of the ghee which cannot be conveniently removed or decanted off is taken along with a fresh charge of crude ghee or preserved for several such lots to be refined again as above in smaller and deeper vessels when the scums will be concentrated and the ghee recovered. The concentrated scum is finally secured by filtering the ghee through linen and the last traces of ghee can be recovered from the scums by squeezing it out of the piece of linen containing the impurities.

6. The ghee as obtained above retains the natural colour and odour of best quality ghee in a very delicate form and is absolutely free from all impurities. It has been observed that on account of its greater purity, the refined product has a tendency on cooling to form larger crystals, than is generally found to be the case in the market. The formation of the larger crystals has to be avoided to suit the market requirements. This is generally accomplished by stirring the ghee occasionally while it crystallises.

7. The ghee thus obtained can be sent to the market in sealed tins as is usually done. But if the ghee is required to be stored for a fairly long time, it is better to dry the ghee from the traces of moisture contained in it on account of its treatment with water. The removal of the traces of moisture improves the keeping qualities of the ghee. This can be done by passing a current of hot air through the liquid ghee before it is allowed to crystallise, for a short time about 15 to 20 minutes, care being taken not to continue this operation for a longer time as that would drive off a portion of the natural flavour of the ghee. For the passing of the hot air, a most convenient and economical arrangement is to heat an iron tube over an ordinary fire place and force a current of air through the tube by means of a foot blower. The hot air should be allowed to bubble through the ghee. Instead of passing hot air, the ghee can also be dried by heating it at about 100°C for some time depending on the "ripening" desired.

8. The cost of treatment per maund of ghee according to this process will range between annas 8 and Re. 1 according to

the quantity refined at a time. For refining very large quantity at a time the cost will be less.

9. Demonstration of the above process can be given by the staff of the department at the request of bona fide parties.

The Problem of the Village.

A great writer has said that India lives in the villages. The village has always been the centre of life in India and will continue to be so as 90 per cent of the people live in the villages. Therefore the village problem is and should be the most important political and social issue in this country. It was in recognition of this aspect of the rural problem in India; the Poet Rabindranath Tagore started his Shantiniketan Ashram. The poet had from the very beginning set his heart to the restoration of the Indian Village to its former healthy and prosperous condition and felt that only when the inner life of the villagers themselves could be moved and stirred to action, there would be a chance of solving the village problem. As stated by C. F. Andrews, the life long friend and co-worker of the poet, the idea that the children of the villages should be taken in hand and made to take interest in village work in order to encourage the older people through them and to build up a new generation more healthy and active than the old is a capital one and this ideal has been worked in the villages situated in the neighbourhood of the Ashram. The village boys have been organised in the work of cleaning up the villages. The village jungles have been cleared, the roads swept, and kept clean; the surroundings of the village houses cleared of refuse and the tanks in the villages cleaned and rendered into sources of pure uncontaminated rain water instead of being the breeding places of mosquitoes by their filthy stagnant condition. We have the testimony of officials and social workers of the marvellous results achieved, the medical officers who visited the villages have commented very favourably on the improvements that have been effected. The spleen rate among children has remarkably diminished and the villages which were malaria ridden have now hardly a trace of the disease. The villagers have enjoyed more general health than before.

The village teachers should be interested in this aspect of the village problem and they can do a great deal in organising the school children in village work.

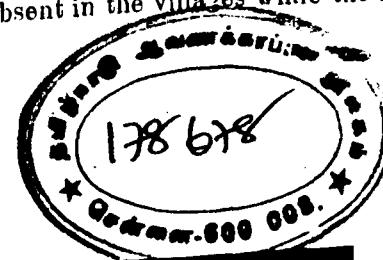
The Ryot and his Cattle.

There is a decided economic interdependence between man and the domestic animals by which he is surrounded. Diseases can be carried by animals to man as well as by human beings to animals. "The veterinary expert that eliminates and destroys the sources of infection of anthrax and rabies is no less important in public service than the medical officer that combats the problem of cholera or small-pox." As stated by Lieut S. Dutt B. Sc., M. R. C. V. S. in the pages of the *Modern Review*, the well being of man is closely bound up with the well being or otherwise of his domestic animals. So far as India is concerned this interdependence is more real and insistent. That the cattle represent the working capital of the agriculturists and that they supply the motive power for his agricultural operations and are indispensable for milk production which is necessary for his health and fitness need no reiteration. How the disease of cattle can undermine the whole fabric of agriculture, the fundamental industry in India is discussed by Mr. Dutt. He is right when he says that the stamping out or prevention of cattle diseases is the very first step to any successful scheme of cattle improvement. If the losses due to epidemics which unfortunately are a normal feature in the rural economy of this country are not reduced or stopped, the 'vicious circle' will not be broken, and any endeavours at selective breeding and scientific feeding will have no effect. The State Veterinary department concerns itself only with combating outbreaks of contagious diseases which endanger the lives of a large number of cattle at the same time. What is required is that the state should take interest in the minor ailments of cattle or those affecting the individual. Public opinion has not been educated to the importance of the state rendering this service. While the education of the farmer in this respect is proceeding, the state cannot afford to sit quiet. We agree with Mr. Dutt in thinking that a more expanded and better organised Live Stock depart-

ment will mean a substantial increase in the wealth of the cultivator as also a corresponding increase of the resources of the state, and that it is therefore a matter of paramount importance that the cattle wealth of the country be first protected from the menace of those virulent scourges which are responsible for much unnecessary loss without which no real progress in the improvement of rural India or agriculture can be effected. In this view we are fortified by the support of such a high authority as the Royal Commission on Agriculture.

The Call of the Village

"The country produces population, energy and original ideas,—the materials of social life,—as it produces food and the raw materials of manufactures. Genius is not generally born in the town. The world's great faiths have germinated in the desert or among mountain heights. Its great policies have been suggested by unsophisticated men. It owes its great discoveries and immortal creations to those who have lived with nature and simple folk." Thus wrote a great writer. But what do we find now? We find cities growing to an enormous extent. Four-fifths of the growth of London was added to during the past century. From 1850 to 1890, Berlin grew more rapidly than New York. Paris is now five times as it was in 1800. Rome has increased 50 per cent since 1890, St. Petersburg has increased nearly 8 lakhs during the last 20 years of the century. Cairo has more than doubled since 1850. These facts which are taken from the "*Principles of Sociology*" by Prof. E. A. Ross and referred to by Major B. D. Basu in an illuminating paper on the subject in the *Modern Review* show that the cityward movement is a world phenomenon. India is no exception. Bombay grew from 150,000 to 821,000 from 1800 to 1890. Similarly also there has been growth of population in Calcutta and other cities. What does all this mean? So far as Indian conditions are concerned, it seems that the village labour has been depleted to work the factories in cities, that the middle class villager has left his village in search of clerical employment in the town and the well-to-do have found in the cities, attractions and amenities absent in the villages while the men behind



the plough drag on their miserable existence in the malarial-stricken haunts in the villages without pure drinking water and suffering many other inconveniences. Is this a state of things that should be tolerated? If in the cities of the west where the growth of cities mean growth of industrialism, there is a cry of 'back to the land,' in India where the growth of the cities has not developed industries in towns, the depletion of the villages is a matter that should make us seriously to ponder over. India lives in the villages, has grown in the villages and has enriched the country in the past through her agricultural and cottage industries. India is principally an agricultural country. So the growth of industries in India should be in keeping with the requirements of agricultural products. In this view, agriculture and industry are and should be closely related and the betterment of agriculture means the betterment of industry. If the latter has been secured in India, we would have no objection to the growth of the cities, the wealth and importance of which will necessarily react on the villages. Then the village and town will have harmonious interactions. From the one will flow food and health, from the other gifts of knowledge energy and wealth. To secure this harmony, the best energies of the intelligentia of the country should be devoted.

Vitamines.

An accurate definition of vitamins is probably difficult to attempt but that they constitute the vital principle of value in our foods is now recognised and a well-balanced dietary will have regard to the existence of this vital principle in food known as vitamins. Dr. H. C. Mankel M. D. gives in the pages of the "Oriental Watchman and Herald of Health" useful hints as to the vitamin content in our foods. For convenience of checking the daily dietary he has arranged an outline of vitamins known as A, B, C, D, and E giving the function performed by each in maintaining the balance to nutrition, the result of a deficiency in quantity, and the principle food sources of each. These substances are so minute representing about five to six parts in ten-thousand that they are difficult to separate or demonstrate. Their presence in or

absence of many class of food substance is ascertained mainly from observable effects of that particular food.

VITAMINE A. This vitamin is very essential to the child. It maintains normal developments and resistance to infections in children and adults. Deficiency of this vitamin in the diet results in eye trouble, retarded growth, loss of weight, lack of interest, susceptibility to infections and respiratory diseases. Whole milk, butter, cheese, codliveroil, fresh green vegetables, tomatoes, carrots, sweet potatoes, green peas are the food sources of this vitamin.

VITAMINE B. This vitamin is necessary for the maintenance of life and health at all ages. Deficiency of this vitamin results in the loss of appetite, retarded growth, serious-digestive and nutritional disease, diarrhoea, constipation, beri beri. All green vegetable tissues, tomatoes, root vegetables fruits, nuts, whole cereals are the food sources of this vitamin.

VITAMINE C. Deficiency of this vitamin produces decay of teeth, ulcerations of stomach and bowels, poor digestion, undernourishment and reddish skin eruptions.

VITAMINE D. This vitamin prevents and cures rickets. Deficiency of this vitamin in a child's diet results in deformity and bone disease with anemia. In adults, the deficiency causes rheumatism diabetes and Bright's disease. Bright sun light is the source of this vitamin. The skin must be exposed to the sun's rays and overcrowding must be avoided. Life in the country as much as possible is the best means of securing the beneficial effects of this vitamin.

VITAMINE E. This vitamin prevents and relieves sterility in both sexes. Lettuce, meat, whole wheat, wheat gram, oats, milk are the sources of this vitamin.

The writer quoting Lt. Col. R. MacCarrison F.R.C.S. says that the best Indian dietary from the point view of this vitamin content is one which includes whole wheat, sprouted gram, milk, milk products, green leafy vegetables and fresh fruits. Whole wheat is better than whole rice, the difference in food value between these two basic foods being not so much in their protine content as in their vitamin and mineral salt content. It may be easily imagined what can be the food

value of polished rice cooked by rejecting even the kunjee. It is well to remember in this connection that orange juice is a valuable source of vitamins and will prevent and cure Scurvy and tooth decay. Grape fruit will prevent and check Influenza.

Notes and Comments

THE RIGHT HON'BLE V. S. SREENIVASA SASTRI. We congratulate the Government of Madras and Rajah Sir Annamalai Chettiar on the very appropriate step they have taken in selecting the Right Hon'ble V. S. Sreenivasa Sastri P. C. as the First Vice-Chancellor of the Annamalai University, which is bound to play a great part in the cultural history of southern India. In a predominantly agricultural country like India, Universities are expected to devote special attention to rural development. A Department of Rural Economics in connection with this Young University will be a desirable feature and we look to the new Vice-Chancellor to see to it that this idea is materialised. Mr. Sastri will, we believe, be able to assume the duties of his office on his return from Kenya whither he is proceeding on an important and delicate mission.

MR. S. V. SUBRAMANYA AYYAR. The appointment of Mr. S. V. Subramanya Ayyar, a Judge of the Travancore High Court as the Dewan in succession to Mr. E. Watts brings back the Dewanship to a son of the soil after a long period, Mr. Sangara Subbaya who retired in 1893 having been the first Travancorian to be appointed Dewan. Mr. Subramanya Ayyar's appointment has given general satisfaction and he will bring to his new task equipment of a high order and intimate knowledge of local conditions which he has gained by his long service in the state. We congratulate Mr. Subramanya Ayyar on his elevation to the Dewanship, and the Travancore Government on the wise choice they have made.

THE FODDER PROBLEM. If a cattle survey is necessary and desirable to ascertain the type and distribution of cattle and their adaptability to the cultural rhythm of the regions in which they are produced and bred, a fodder survey

is equally necessary and desirable. In the pages of the *Journal of the Mysore Agricultural and Experimental Union*, a writer suggests such a survey and enquiry. Although the enquiry is suggested with reference to the conditions of Mysore, the lines indicated by the writer are of general applicability to other tracts as well. They are (1) bringing together all the known facts about famines in Mysore with a view to locate the areas which are prone to famine conditions and the manner in which the situation was dealt with (2) preparation of detailed meteorological maps to show the areas having the same amount of rainfall and similar weather conditions (3) a grass and herbage survey of the areas in the state. (4) a survey of edible forest leaves and fruits. (5) introduction of drought resisting fodder plants (6) forest nurseries and seed depots to supply seeds and plants useful for fodder. (7) opening of silo-pits and stocking fodder in compressed bales in reserved forests, and (8) examination of the feeding values of existing plants and fadders. A suggestion in which the Forest Panchayatdars are interested, is that plantations of edible forest trees should be opened in the dry tracts of the state. The Panchayats should be encouraged to do this and more land in the dry regions should be transferred to Panchayat control which means more area devoted to fodder and fuel. The Forest Department should concentrate attention on the opening silo-pits and preserving fodder in compressed bales to meet emergencies. This is a work which is not possible for Panchayatdars to undertake. Above all, technical help should be forthcoming to the Panchayats. The complaint is often heard that such help is not readily available at present.

CO-OPERATIVE PROPAGANDA. If after so many years of work, improvements in agriculture need the help of propaganda in devising attractive ways to bring home to the cultivator the doings of the agricultural department, there is greater need for educative propaganda with respect to co-operation which is a recent introduction. The development of the movement within the last 25 years has all been in one direction. If agriculture which is by far the most important industry in this country has to develop on right lines we shall need

societies for better farming, for the co-operative sale of crops, for the provision of finance to enable the cultivator to withhold the crops from the market at harvest time so as to secure the advantages of better prices later. What is needed is an education campaign putting forth the claims and advertising the advantages of co-operation as suggested by Prof. A. J. Saunders. We commend for adoption by Government the valuable suggestion made by the Townsend Committee that a small fleet of demonstration motor vans should be organised which would tour the Presidency in charge of an officer with special propagandist abilities and give ocular demonstrations to the ryots of the practical value of co-operation. As the agricultural department has already embarked upon this method of demonstration the co-operative department may well collaborate with it in this endeavour.

ADMINISTRATION OF THE MADRAS FORESTS

That the criticisms of the administration of the Madras Forest Department heard during the last budget discussion in the local legislative council have not been altogether unmerited is evident from the perusal of the report for the year 1927-1928. We may console ourselves with the thought that "the department was more busy in giving hostages for future profits than in seeking them in the present."

The total revenue during the year under report amounted to Rs. 5128 lakhs while the expenditure was Rs. 4912 lakhs. the result was a surplus of Rs. 216 lakhs against Rs. 472 lakhs, in the previous year. The decrease of Rs. 256 lakhs on the net profit this year is mainly due to the dullness of the timber market.

The transfer of the ryots' forests for panchayat management is almost completed and the trained staff of the department who were hitherto engaged on the management of these forests have become available for the intensive working of the more valuable forests. The order of Govt. on the report says that the department is thus faced with the question of formulating a comprehensive programme and policy for future development of these valuable forests. It is not that all these forests are valuable which require to be preserved on climatic consider-

ations or for their valuable timber. The classification of forests is not satisfactory and there is a large area of what is now classified as provincial forests, are really local forests which are not of provincial importance but are intended to serve local needs for fuel and grazing. At the last Panchayat Conference held at Ongole, the Government were requested to transfer such forests to Panchayat control and we trust that this request will be acceded to.

GOVERNMENT'S VETERINARY POLICY. We do not know which to grieve for more, the utter inadequacy of medical relief for village people or the absence of medical help for their cattle which is their main stay. That there is considerable dissatisfaction in this respect is evident from the trend of the discussions in the Madras Legislative Council on the budget demand for the veterinary department. Cattle mortality last year was the largest for 15 years, 76,000 cattle having died in one year. Rinderpest was largely responsible for this heavy mortality but the method of combatting it was very ineffective, with the result that the disease has become more or less epidemic. The serum treatment has not been effective and although the serum simultaneous method have been recommended long ago no really useful steps have been taken.

The veterinary staff is illpaid and there are no attractions to graduates of the department, though in every other department there is a plethora of graduates. The complaint was made that the so-called progress was only in the shape of a larger number of circles and gazetted officers who have nothing to supervise. An increase in the number of sub-assistant surgeons with adequate pay was suggested.

It should not be difficult to accept the modest and practical suggestion made by Rao Bahadur B. Muniswami Nayudu namely that all the veterinary assistants might be attached to hospitals instead of some of them being left to do touring work. A dispensary is necessary for at least every taluk, the touring assistant being attached to the dispensaries. The other sugges-

tion made by Mr. Muniswami Nayudu that the area under each dispensary be reduced, the assistants being required to tour the villages on certain specified days of the week, in accordance with a fixed programme, is also a good one. Very little of the literature issued by the department filters through to the villages and this must be a legitimate grievance. Even well-known propagandist journals like ours are not utilised as they should be. Government evidently recognise the utter inadequacy of the help which the veterinary staff is giving to the ryot but there seems to be some difficulty in getting trained men. Possibly the stipends allowed to the students are not sufficient nor the prospects of trained men bright. The Minister for development undertook to look into the question and announced the formation of a committee for the purpose. It is to be hoped that the committee would be set up without loss of time and that a definite policy of advance would be outlined soon. The complaint that is some times heard of the apathy and lack of cooperation of the people and the singular apathy of leaders of public opinion in the Districts and throughout the Province is not without justification. If the efforts of Government are not heartily supported by the people whose is the blame?

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COOPERATION IN THE LOCAL LEGISLATURE. If the answer of the Hon'ble the Development Minister is not altogether reassuring in regard to the veterinary policy of government, it was even less so in respect of cooperation. It was expected that the minister would announce some definite lines of advance. The silver Jubilee of the passing of the Cooperative Act was being celebrated about that time and the occasion might have been utilised for making a definite pronouncement on the cooperative policy of the Government. Action was pending on the report of the Townsend Committee and of the Royal Commission on Agriculture. There was also the question of starting a Central Land Mortgage Bank and starting new experiments in noncredit co operation.

FORWARD CHINGLEPUT: A child welfare centre for Poonamalle has been opened by Cap. N. R. Ubbaya, Director of

Public Health. This will be the first of such centres in the district as Tiruvattiayur and Walajahbad will have their own centres very soon. The laudable desire of the District Board as represented by its worthy and energetic President, Rao Bahdur M. K. Reddi is that no mother in the District should suffer from want of maternity aid. It is understood that Union Boards in the District would start on their own account Child welfare centres, the District Board contributing a moiety towards the initial and recurring expenditure.

AGRICULTURE EDUCATION. The agricultural middle school of Usilampatti the foundation stone of which was laid by Mr. R. D. Anstead, Director of Agriculture, we owe to the enterprise and initiative of Mr. R. Foulkes the President of the Madura Dt. Board. The villages of Usilampatti is the chief centre of the Kallars; there is already a flourishing high School in the locality under the control of the District Board with a large and well managed hostel attached to it. The object aimed at is to reach the small land-holders the vast majority of whom belong to the Kallar community whose reclamation from crime is being anxiously watched by the Government. We hope that before long the Kallars whose hereditary occupation is agriculture will be weaned from crime and that they will develop into a contented and prosperous agricultural community. We understand that an agricultural middle school will also be opened soon at Tirupanthurithi near Tiruvadi, Tanjore Dt., where wet, dry and garden lands are available in a good healthy open site near the river from which water can be obtained both for irrigation and drinking purposes. The instruction in the school will be given in the vernacular and a certificate awarded to those students who successfully pass the examination to be held at the end of a two-year course. The certificate, it is stated, would be of no value for securing a government post. The sole object in starting the school being to fit students to farm their own lands.

VILLAGE PANCHAYATS. It is understood that a Bill to amend the Local Boards Act will be introduced in the next session of the Local Legislative Council. Among the principle alterations are those intended to render the Village Panchayats units of Local Self Government, to extend the basis of the franchise and abolish nomination, making provision to safeguard the interests of minority communities.

VILLAGE PANCHAYATS IN BERAR: One of the resolutions adopted at the recent Conference of Village Panchayats in Berar was to the effect that in the annual publication "India", issued by the Government of India, the salient features regarding the working of the Panchayat Institutions in India should be incorporated. This is a timely and wise suggestion which we have no doubt will be acted upon in

view of the growing importance of Panchayats. Among other resolutions was one demanding the establishment of compulsory Panchayats in villages with a population of 600 and above, demanding the transfer of administration and control over grazing lands in villages and calling upon Government to instruct subdivisional officers to make at least one inspection of villages under their jurisdiction.

Reviews and Notices.

"MURUGAN, THE TILLER," A Novel of Indian rural life, by K. S. Venkataramani M.A., B.L., Swetasramam, Mylapore Madras. Price Re, 1-8-0.

Mr. K. S. Venkataramani, the author of "Paper-Boats" which is a collection of beautiful descriptive sketches of south Indian Village life written in an attractive style peculiarly his own is already known to the reading public and needs no fresh introduction at our hands. "Murugan the Tiller" has been lying on our table for some time and we owe an apology to the author for the delay in noticing it. We have read with absorbing interest this unique novel of Indian rural life. It is a live picture of south Indian rustic life with its simple joys, trials and difficulties as contrasted with the glamour and the highly materialistic life and outlook of the city dweller with his restlessness and his false Gods. The two main characters in the novel, Ramu and Kethari faithfully depict the two atmospheres. The main idea developed in the novel is "Back to the Village" with its quiet, contented, healthy surroundings and outlook. Mr. Venkataramani's book is bound to rank high in recent literature descriptive of rural life and scenery. There have been similar sketches and studies by others but the best of them has not in our opinion succeeded in presenting a true and vivid picture of Rural India which is real India. We agree with the opinion expressed by a well known writer when he said that the novel is "a faithful portraiture of social life to-day. The old and the new mingle and separately act and react, repel and attract so as to tend towards a new order and harmony and things." We heartily commend the book to city dwellers who need to know more of the people living in the villages, and of the beauty and religion of the countryside, and to English readers generally who are genuinely interested in rural India and its problems.

THE MYSORE AGRICULTURAL CALENDAR, 1929. Department of Agriculture, Mysore. This annual publication of the Mysore Agricultural Department maintains its usual level of excellence and gives a variety of much needed inform-

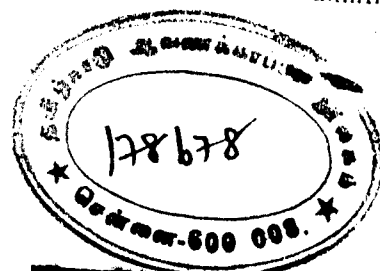
ation useful to the agriculturists. Although intended primarily for the ryots of the State, the information given in the Calendar will be found helpful to others as well. Besides the notes and the monthly agricultural operations, there are short well written notes on cooperation, fertilisers, crop pests and cattle. We notice that arrangements have been recently made by the Mysore Agricultural Department to set apart a collection of books from the departmental library for the purpose of lending to persons interested in agriculture and allied subjects. This desirable improvement may be copied by the Madras Agricultural Department which seems to have of late developed a spirit of parsimony with regard to making available to interested persons literature dealing with agricultural improvements and allied topics.

A NEW ENGLISH PERIODICAL. We have received the opening number of a new English periodical entitled "The Matrimonial Review and Miscellany"—Cochin. Editor S. R. Ayyar. The scope and aim of this new Journal are stated to be to serve as a medium to voice forth constructive and progressive thoughts on social economic problems and among other subjects, it is stated the Journal will deal with Brahmacharya, education and unemployment, child marriage, prostitution and its evils, maternity and child welfare, rural reconstruction, Home industries, temperance movement, untouchability etc. This is an ambitious programme which we trust the promoters will be able to carry out. We wish the Journal every success.

"THE NEXT RUNG" BY K. S. VENKATARAMANI M.A., B.L., Swetasramam Mylapore, Madras. Price Rs. 1-8.

What is the next rung is answered in chapter I of part II of the book entitled "The Urge of Renascent India." "The whole world is longing now not for political unity as a final step but for the realisation of the cultural and the spiritual oneness of all life. Renascent India is bound to help substantially in the fulfilment of the ancient reverie of the race. To the higher civilisation towards which we are all moving, India has a special message to give." In order to properly appreciate the significance of this higher civilisation, the author prepares us by a carefully thought out survey of the condition of society at the present day with its achievements of science which "have necessitated the complex industrial civilisation which needs for its nourishment," the energy of millions which is strenuous and knows no fatigue. "But the happiness which it brings in its train is only to a few and the pain is to the many." A civilisation which has become wholly political and "totally poor in God's goods, culture and religion is a sign of exhaustion. Our daily work in search of food is now stained

with a hundred cruelties. At every step we tread on another crushing and harshly using others to our own needs. And science which has the song of freedom to all has not yet come to the rescue of man. The world balance is now greatly upset by the almost universal neglect of the primary occupation, of agriculture. Every one is now quickly trying to throw the burden of raising his foodstuffs on some one else. The West has led this tragic revolt against agriculture and looks upon the Blacks and Browns to till the soil under their superior guidance from London or New York, and raise cotton, corn and oil for them in return for toys and machinery, woven fabrics and manufactured things. This desertion of the plough and disloyalty to Mother Earth are at the root of all of our misery. Thus has agriculture ceased to be the primary and the most honourable calling and instead of foodstuffs, pleasure stuffs are now produced in plenty, to soothe the cravings of the few. The one solution of the problem of the poor is a reversion to the old ideals of plain living, life and agriculture. The siren call of industry has made the temple of agriculture almost desolate. Foodstuffs are under-produced and luxury stuffs are over wrought. The world needs to quickly gain the will power to reshape itself to a truly nobler purpose by a beautiful harmony of the inner and the outer with minimum waste and maximum expression helped by science and religion which must coalesce together to achieve this high purpose, as indeed the Rishis of Ancient India had tried and achieved. We have given sufficient indication of the author's ideas in part I, and in part II their application to modern India is discussed. The author's object is to give a proper direction to the new creative impulse of the renaissance now overspreading the Indian sky. Limitations of space do not permit us to notice at greater length the author's diagnosis of the present day evils and his suggestions for remedying them. One of the most interesting chapters in part II is that which describes the Indian village, in which the author has given a picturesque sketch of the old Indian village and pleads for its early restoration. What is the meaning of an Indian Village? What is its significance to the world? The author gives his answer in pages 124 to 126. The Indian village is a bright crystal which reflects a great civic ideal. It is the most cheapest form of Government. It is India's solution to the craze of over Government and is the very embodiment of simple life. The Indian village offers the only solution to the economic ills inherent in all progressive societies as it enshrines a great and humane principle. We have perused with great interest Mr. Venkataramani's remarkable book. His thought provoking essays are a substantial contribution to the Indian renaissance that is to be and we congratulate him on the admirable presentation of his theme.



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