PROBLEMS OF RURAL INDIA


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Being a collection of Addresses delivered on various occasions in India and in England

BY

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"The aim of the Government should be to preach to the nation the importance of a stable agriculture in the national polity."

The Right Hon. Edward Wood, M.P.,
Minister of Agriculture.

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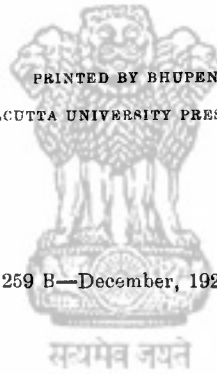

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TO

THE MOST HONOURABLE

JOHN VICTOR ALEXANDER HOPE,

MARQUESS OF LINLITHGOW, D.L.


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PREFACE

To publish in the form of a book a selection of lectures which I delivered on various occasions on the subject of Indian rural conditions may be considered to be an offence which it is perhaps better not to try to extenuate. These lectures do not adequately deal with the numerous complex problems associated with a constructive programme for rural betterment, nor do they attempt to expound theories of rural economics. But if the author has strong convictions, as expressed in these pages, that a diagnostic study of the factors inhibiting any process of development among the mass of Indian cultivators must form the basis of a comprehensive policy of rural construction in India, it is perhaps not unreasonable that he should wish for a wider publicity for these lectures than was possible at the time of their delivery.

I must express my sense of gratitude to Professor Satis Chandra Ray and Srijut Jogeschandra Chakravorti, Assistant Registrar of the University of Calcutta, for seeing the book through the Press during my absence. Without their assistance it would have been quite impossible for me to publish the book now. I am deeply grateful to the great Irish patriot, the Right Hon'ble Sir Horace Plunkett, K.C.V.O., D.L., P.C., for a short introduction to the book. My acknowledgments are also due to the Publication Committee of the University of Calcutta for generous encouragement given to me.

LONDON,
August, 1927.

NAGENDRANATH GANGULEE.


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INTRODUCTION.

This little book is a collection of lectures and addresses originally written for a purpose which has been signally fulfilled. It is now published because there is an immense amount of work, to which Professor Gangulee is devoting the best years of his life, yet to be accomplished. It is, briefly, a study of the rural problems of India, with a view to their solution mainly through education of the public opinion which counts both in his own country and in Britain. The Author advocated, in some of these lectures, the appointment of a Royal Commission to investigate the conditions in which the great majority of the peoples of British India fight against the ever-prevalent famine and the ever-present scarcity.

The Royal Commission is now hard at work under the chairmanship of Lord Linlithgow, whose public record is the best guarantee we could have that its labours will not be in vain. Professor Gangulee is, needless to say, a member of the Commission. In the lectures and addresses he now publishes he has gone a long way to prepare the public and the Governments concerned to see to it that the Report shall not be relegated to the proverbial shelf, but shall lead to the action the conditions do—and, we may hope, the evidence will—demand. The discerning reader will observe that as the chapters (which are arranged in chronological order) proceed, the Professor builds up the case for his Royal Commission and meets, to me convincingly, the criticism of influential persons who look askance at his proposal.

Passing then to the main purpose of the writer, there are two criticisms I desire to anticipate. It may appear that, short as the book is, it might be reduced much further by eliminating mere repetitions; and, secondly, I can well imagine serious readers complaining that, if the diagnosis of the ailment is correct, the

treatment prescribed is altogether inadequate. My answer upon these two points can be briefly stated, and will supply the reasons why in my judgment the book should be read by all interested in the welfare of rural India more especially by the leaders of its rural communities.

The repetition arises from the necessity of having the basic facts of the wretched human existence, which is the subject under discussion, brought prominently before the minds of the heterogeneous audiences Professor Gangulee has addressed at intervals during the last ten years. In the first paragraph of the first address, delivered in 1917 we are confronted with " a tremendous wastage of human life by frequent famines and epidemics," with the result that the sufferers have an average time on this earth of $23\frac{1}{2}$ years as against 40 years in England and 60 in New Zealand! The " decline of vitality " was going on and was mainly due to underfeeding. The writer is by profession a teacher; he can gauge accurately the intelligence of his Indian readers and knows that whatever the Royal Commission may recommend—to say nothing of the many recommendations he makes himself—the cure for the complexity of evils will have to come largely from the most " backward " members of the community in whose behalf he appeals. I have examined these pages chiefly with regard to the impression they should make upon the leaders of these people, and I wish I could have written them.

There remains the constructive portion of the work; and here it may be said that the reader is left to select a practicable programme out of a scattered miscellany of suggestions. The method is unusual, but in all fairness we must put ourselves in the writer's position and ask ourselves what else he could have done. He cannot anticipate the Report of the Royal Commission of which he is a member. It is safe to prophesy that many recommendations made in addresses delivered before his chief proposal—the appointment of the Commission, which he had also advocated in letters to *The Times*—had been adopted, will be favourably considered. Be this as it may, Professor Gangulee has rendered a service to the Empire by provoking thought upon one of its gravest and most complex problems in the minds of people as varied as are the conditions, human and material, of which he treats. It

is inconceivable to me that the good seed that he has sown will fail to germinate. I am glad to tell him that where my fellow-workers meet it will not fall upon stony ground.

HORACE PLUNKETT.

THE HORACE PLUNKETT FOUNDATION,
10, DOUGHTY STREET, LONDON, W.C. 1.
15th August, 1927


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Problems of Rural India

I

The Problem of Increased Food-production in India.

[The following paper was read before the Thirteenth Indian Industrial Conference held in Calcutta on the 30th and 31st December, 1917. Mr. V. P. Madhava Rao, C.I.E., was in the Chair.]

"Use the land without abusing it."—*J. Otis Humphrey.*

Mr. President, Ladies and Gentlemen,

Those who make a careful study of the population problem in India tell us that in spite of tremendous wastage of human life by frequent famines and epidemics, the total population of this country has increased during the last decade by 7·1 per cent. They also tell us that among Asiatic countries India has the highest birth-rate and there being no checks to the increase of population, the death-rate is also very high. The natural duration of life in India is very short in comparison with that of other countries of the world, the average life being 23·5 years; while in England, the average is 40 and in New Zealand 60. So in India "there is a rapid succession of short-lived human beings to keep up the number, one generation being pushed out of existence before its time, to make room for the next."

The Census figures bear testimony to the gradual decline of vitality of the Indian population. The reason of such a deplorable phenomenon is not far to seek. Our labourer class is underfed, and in the densely populated parts of the country there are not sufficient food-grains for the people. Sir Charles Elliott says, "I do not hesitate to say that half of our agricultural population never

know from year's end to year's end what it is to have their hunger fully satisfied."

This is a problem which demands the immediate attention of our countrymen. Although, compared with the European countries, the rate of increase of our population is extremely low, its pressure upon cultivation is fairly intense. Naturally, the percentage of the people solely supported by agriculture is rising at each Census, owing to the meagreness of non-agricultural forms of employment. That is, the ratio of progress in the production of wealth is far from satisfactory, and the possible consequence is the increasing pressure upon subsistence. Mr. Datta in the Report on the Prices Enquiry has come to the conclusion that "the requirements of food-grains for internal consumption have increased in a larger proportion than the total production of food-grains."

Then again, the external demands for Indian food-grains have considerably increased; and, in consequence, the prices of food-grains have risen at a quicker rate than the wages.

Though in our country about 70 per cent. of the population is engaged in agriculture, there are not sufficient food-grains to feed its inhabitants, and the development of industries is so slow that we cannot hope to make good the shortage of food by their help. So there can be no question about the urgent necessity for us to pay attention to the increase of food production in this country. Faced with the problem of over-growth of population, Malthus and his followers sought its remedy in abstention from improvident marriages while the Eugenist suggests a system of restriction and selection in perpetuating the race.

But the increase of the productive powers of man in the agricultural and industrial field has somewhat shaken Malthus' fundamental idea. The doctrine preached by Eugenists cannot be universally accepted; for, it is difficult to conceive a social system in which a select portion of mankind can alone be given privilege to perpetuate the race. Professor Taussig says, "any system of restriction and selection would probably be inconsistent with that striving for freedom of opportunity and for individual development which is the essence of the aspiration for progress."

There is another class of economists who believe that we ought to be able to adapt population to subsistence and there should be

deliberate control of birth-rate. The famous Dutch economist, Dr. Pierson, says, "no improvement in the economic situation can be hoped for, if the number of births be not considerably diminished."

While I admit that there are sufficient reasons to advocate late marriages and voluntary restraint in married life in India, my firm conviction is that it is possible to adapt subsistence to population.

" There is not one nation in the world," says Kropotkin, "which, being armed with the present powers of agriculture, could not grow on its cultivable area all the food and most of the raw materials derived from agriculture, which are required for its population, even if the requirements of that population were to rapidly increase as they certainly ought to be." That this is not a mere dream of an idealist has been amply proved by the growth and improvement of agriculture in France, Belgium, Denmark, Germany and other continental countries. In the course of the nineteenth century, the French peasants have nearly doubled the area under wheat as well as the yield from each acre. Prince Kropotkin shows that in France the means of existence drawn from the soil have grown about fifteen times quicker than the population.

It may be argued that this is not the case with every country. It is generally believed that the area of land in the British Isles is too small to feed the inhabitants. But I cannot say that any serious effort has been made to give it a fair trial. In fact, in most countries of the world, the application of science to agriculture has been slow and is still unsatisfactory.

India is essentially an agricultural country and it is likely to remain so for some time yet ; but in no other country has the system of production been so unprogressive as here. The productivity of the soil has not kept pace with the growth of population. The average cereal crop-yield all over India comes up to about eleven bushels an acre, while England produces thirty, France thirty-three, Denmark forty-one bushels. A closer study of the economic conditions of a Deccan village by Dr. Harold H. Mann has revealed a miserable picture of the Indian peasantry. It has been shown that " in a typical dry village in the Deccan, the

population has increased, the number of landholders has increased, and the holdings have become so split up into fragments that not only are the areas now held too small in the vast majority of cases to maintain the family which holds them but also they now exist in the most awkward form of economic cultivation."

Dr. Mann says that the average net return per acre of land in the village is about Rs. 14-8-0, but its average debt comes up to nearly Rs. 13 per acre. It shows that agriculture is no longer sufficient to maintain the cultivators. The result of this is clearly indicated by the steady increase of landless agricultural labourers at each Census.

The question is what then can be done to improve the condition of our agricultural population ? I can see no hope unless our peasants are taught to make a better use of soil resources. To do this, our cultivators have to be freed from their huge burden of debt, and the holdings must be sufficiently extended in size in order to make economic farming possible. No student of Indian Economics will deny that the excessive sub-division of land is a great drawback and that the time has come when both the State and the public should co-operate to remove this evil.

But in spite of our present disabilities, it is not impossible to grow at least a blade and a half in place of one. Fertility of soil is largely a matter of treatment, and insufficient produce is partially due to the neglect of scientific agriculture. Since Lord Curzon's regime, the Government of India seems to have realised the value of fostering systematic research in agricultural science, but whatever results may have been accomplished in our laboratories, Research Institutes and Government Farms, they are of no use unless proofs of their practical value are brought home to the cultivators. No farmer cherishes an abstract enthusiasm for the methods and results of science.

"In agriculture," as Dr. Russell, the present Director of the famous Rothamstead Experiment Station, England, puts it, "the judgment of the man on the spot has usually to be final, and the more clearly he has the facts before him, the sounder the judgment is likely to be."

The first step then towards helping farmers to understand the exact needs and potentialities of the land under cultivation is to

have a full record of the soil of our country. That is to say, there should be a systematic soil-survey of the cultivable area of India. This will give us an accurate account of the " state of health of every field " and our agricultural experts will, then, be in a better position to prescribe just what is needed to extract the maximum yield from each acre of cultivable soil according to its nature and capacity. It cannot be expected to develop a capacity of its own for the production of some specific crop. Therefore local needs of the soil must be thoroughly understood before any practical suggestion for scientific methods can be made.

The second step towards the introduction of science in our agricultural enterprises is to establish suitable agencies for the spread of information. It must, however, be remembered that unless the very unfavourable conditions in which the Indian peasant lives and works are, at least, partially removed, no amount of effort can induce him to change his methods. But this is a very large question and brings us to the pressing need of State help to agriculture. Of late years, some attempts in this direction have been made by the Departments of agriculture, but not even the fringe of the problem has yet been touched. The Government farms are not effectively organised, and however large may be the amount of facts which have been gathered, there is no suitable arrangement by which they can be readily placed in our farmer's hands.

I, therefore, appeal to my countrymen that they should, in co-operation with the Government, organise such institutions through which agricultural knowledge can be distributed broadcast and facilities to buy manures, seeds and implements given to those who need them. The scheme of soil-survey, as suggested above, would naturally divide the country into groups of agricultural tracts or districts according to types of soils and other conditions, and in each tract, there should be an agricultural organisation. The institution mentioned above may be named " District Farm Bureau." It should be an organisation in which farmers, landlords, and agricultural officers of the Government must *combine* in order to have the desired effect. The District Agricultural Association, as it exists now, is not properly organised, and therefore it has failed to find a permanent place in our rural economy.

The Bureau will have a well-trained farm adviser. His business will be to help farmers in prescribing the most effective treatment for their lands; to point out new lines of work; to suggest and plan out experiments on the farmer's own field and interpret their results. Besides these duties, he will conduct experiments and research into local agricultural problems with the help of qualified assistants.

Each tract will be divided, according to its size and importance, say, into ten or twelve centres, and each centre will have a village headman as the chief who by his occupation must be a cultivator. The village headman will meet together as frequently as possible under the presidency of the Farm adviser and questions pertaining to the agricultural prosperity of the "tract" will be discussed.

The Farm adviser will visit the centres and go about the fields to investigate the actual needs of the locality. For example, if the soil is deficient in organic matter, the Bureau will devote its attention entirely to the study of that particular phase of agricultural practice. The Farm adviser will be called upon to explain all the different forms of organic matter, how they can be used, what precautions are necessary and what form is the cheapest, and the most convenient.

I need not go into the details of the working of the Bureau in which farmers themselves should take an active part in order to be able to increase the crop-yield and to reach a profitable market without middlemen's intervention. The Bureau will be a sort of Rural Chamber of Commerce interested not only in the marketing of the Produce but also in the development of intensive methods of food production in India.

The other directions in which we must look for increase in our food-supply are uses of (1) artificial manures, and (2) improved seeds.

You are aware of the fact that during the past century in Europe, the outturn of cereals has been doubled and in some cases trebled only by the right and intelligent use of manures.

Everywhere in India, the present available supply of manure (chiefly cattle-manure) is inadequate and the use of artificial manures is almost unknown. A large quantity of cattle-manure

is used for fuel purposes which cannot be dispensed with, until some other cheaper substitute can be found.

So in any scheme calculated to increase the productiveness of the land, the artificial manures must occupy a prominent place. Of course, in the dry tracts of India where moisture is the limiting factor, irrigation is absolutely necessary, and when it is provided for artificial manure will be of vital importance.

The question of better seed is not less important than the increased use of manures. In this direction, there is much to be done in India. The quality of seed has deteriorated to a great extent and a systematic research and plant-breeding experiments need to be undertaken to produce better varieties of economic crops.

An example of what could be achieved by means of the efforts of a nation supported by its educated public, is furnished by the agricultural history of Denmark. I quote from Prince Kropotkin's book :—

" After the war of 1864, which ended in the loss of one of their provinces, the Danes made an effort widely to spread education amongst their peasants and to develop at the same time an intensive culture of the soil. The result of these efforts is now quite evident. With a very poor soil, they have a cultivated area a trifle below seven million acres, out of which about three million acres are under cereals. Their wheat crops are on an average forty-one bushels per acre " and, Ladies and Gentlemen, the average in India is about eleven bushels only per acre.

We are on the eve of an Industrial renaissance in India. No one doubts that the solution of our poverty problem depends largely on the development of industries, for excessive preponderance of agriculture is not economically sound. The Indian cultivator has few subsidiary sources of income and he has to depend on a single crop. There being no diversity of occupations in our villages, our cultivators, during a large part of the year, find nothing to do.

And here is a problem for the Industrial Conference. We often hear of establishing large factories, workshops and mills in our cities ; but let us not forget the example of Europe. Her industrial revolution has been " disfigured by the reckless waste of human life and human happiness" ; in India, we must not repeat

that tragedy of history. We should make our villages the seats of a variety of industries, and the chain that connects the farm with the factory will be linked. Agriculture and Industry will co-operate and no system of production must be allowed to sever their connection. Let us keep in our mind the truth of the following statement recently made by Professor Warren of Cornell University :—

" As our farms are the foundation of our wealth, so the farmers are the foundation of our civilization. No high civilization can long endure that is not based on a high type of citizenship on the farms."

Ladies and Gentlemen, I thank you for listening to this somewhat brief address. We cannot long put off organized efforts in the direction of increasing food-production of India. The problem does no longer concern only the farmer, but it is perhaps one of the most pressing economic problems that are sure to dominate political affairs of the country.

II

The need for the study of Agricultural Economics in India.*

[A meeting of the staff and the students of the American College at Madura was held on Wednesday, February 19, 1919, at the College Hall at which the following paper was read. It was "Gokhale Day" and the meeting was well attended. The Principal of the American College was in the Chair.]

Mr. President, Ladies and Gentlemen,

I thank you heartily for the kind reception you have extended to me. It is with much pleasure that I stand here to-day, the day of the anniversary of the passing of a great Indian patriot, Gokhale. It is a fitting occasion when we should turn our attention to the questions relating to the uplift of the Indian masses.

The subject which I have chosen for my paper this afternoon is one to which the attention of your college has already been drawn. As a matter of fact, Professor Saunders is one of the pioneers in the direction of instituting Village Economic surveys in South India. He has pursued the work undertaken by Dr. Gilbert Slater of the University of Madras, and has done what our political workers have not yet begun. No serious investigations have been made by them with a view to acquire an accurate knowledge of the most complex economic facts and factors that are beginning to operate on the life and labour of the majority of Indian peoples. The play of new forces arising out of modern civilization is now evident in every sphere of our life, and these forces act and react with greater intensity than in any former time.

* The main portion of the address was published in the *Mysore Economic Journal*, June, 1919.

With the growth of civilization, with new discoveries in science and other causes changes are becoming more rapid than before. The nations which fail to adapt themselves to these changing conditions must lag behind in life's race, for the power of adjustment is the true test of vital power, and any deficiency in this dooms us to a state of perpetual stagnation, obscurity and subordination.

In India, owing to various circumstances, this process of adjustment has been extremely slow. But we feel sure it is gaining in impetus, and the violent impact of the outside world, instead of affecting India adversely, will inevitably rouse her from her social torpor and economic inertia. We are now beginning to get conscious of the fact that the old order of things has ceased to exist and that world-wide relations have been established, even with the obscurest villages of India.

No doubt, there are certain charms and advantages in the simplicity of natural life; it has its beauty and its convenience. But, all the same, when we leave it behind, the complexities of adult life cannot be fitted into the clothing of childhood. The conditions of the past age in India whatever may have been their beauty and advantages, were different from those of the present time; and therefore the type of organization which characterized that age cannot wholly endure now. In former days, the cultivator was quite satisfied if he could raise his own food and clothing. Very few of the necessaries of life ever had to be bought by him, —the fields and the livestock providing him with his daily wants; and therefore he had little need of communication even with his neighbours, still less with the outside world. During the time when agriculture was a self-supporting industry, rather than a profit-making business, the fundamental character of the economic organization was its self-sufficiency and its social segregation. Each tribe, or class, produced goods for its own use only; there was no need of the medium of exchange and of any labour organization, that is to say, the economic problem of agriculture was almost absent.

But, to-day, we have come in touch with a wider world; and because that world is new and complex a fresh adjustment in our economic life is urgently required. Social systems and religious

ideals are, comparatively speaking, slow to move; for any change in them means widespread dislocation, and therefore it is best that they should take time for change. But the economic pressure of the modern world is far too assertive and aggressive to allow slowness in our efforts towards the solution of agricultural problems which are the predominant factors in our economic life.

We know that some of our agricultural products form the basis of several industries, and therefore the world market is now at the door of our cultivator. It is not enough for him to consider merely what he is able to produce : he must raise crops not only for to home but also for the foreign market. The system of barter has passed away; he has to calculate the prices for which he can sell his crops and also the prices at which he can purchase his requirements from the world-market. Agriculture is no longer a self-supporting industry—it has to keep pace with the industrial evolution that characterises our time. It is this "commercialisation of agriculture" that calls for adjustment in relation to the socio-economic conditions of India.

The history of the transition of agriculture to its modern phase shows that while industrial evolution was making rapid progress, agricultural evolution was extremely slow in its growth. The result was that population migrated to the city and a decline of agriculture became conspicuous. Then came the discoveries of modern natural science, which gave fresh impetus to agriculture and thus revolutionized the art of good production. Side by side with the knowledge of increased production, "commercialisation of agriculture" began and out of this phase there emerged the modern economic problems of agriculture.

Modern agriculture is, therefore, not merely technological or scientific; it is a part of the commercial-industrial regime of the century, and the problem that is now facing politicians and economists is how best "to organize agriculture as part of a price-ulated society." The modern farmer must know how to pro- e crops which will sell for more than they have cost in luction ; he must understand the economic forces that ılate his profit, and, in case he finds himself to be a loser, he st know how to adjust himself to the new conditions. Let us, erefore, realise that all measures of reform towards the ameliora-

tion of the condition of the Indian peasantry depend for their success upon their economic soundness.

In India, we are in a parlous situation. The world's commerce, with all its intricate economic forces, is impending over us; our agricultural produce is sought for by every industrial country; a well-organized modern Government is at the helm of our destiny; yet we are in no sense modern, still less our farmers. The commercial and economic movements belong, no doubt, to the twentieth century, but producers of raw materials, round which these movements organize themselves, belong to the remote past. The whole system of commerce and finance is worked by this powerful organization in which the Indian cultivator has no place. He labours in his farm and produces jute, cotton, wheat and oil-seeds, but the prices of these farm products are fixed in London. Thus, the farmer is continually at a disadvantage in his transactions with the well-informed commercial organizations, and he is easily exploited by captains of industry.

Take the case of jute. The profit realised by everyone, from the country buyer up to the factory manager, is hugely disproportionate to the scanty profit realised by the grower. The jute forecasts, published by our Government, give an approximately fair estimate of the probable supply, and organized traders can conveniently speculate and fix their prices for jute.

The remedy for this state of things lies, not in appealing to the moral sense of the powerful, but in making our own position strong and secure. What we must do, if we are to resist economic exploitation, is to organize ourselves in a strong defensive line, and it is one of the functions of Agricultural Economics to indicate the nature and extent of such defensive action.

Economic organization is the very heart of modern agriculture. All the factors of production, as well as of distribution, should be brought together in harmony under co-operative organizations. How this is to be done in our own case is a questic which must necessarily come under the sphere of agricultu economics.

It is a truism that education and economic efficiency go h in hand ; to my mind, the problem of rural education should a be taken up by co-operative effort. It will have the dou

function of protecting the farmer's interest and of making him conscious of his position in the world's market. This consciousness will help to widen his views of life and he will realise within himself that his interests are intertwined with those of the wide world around him.

It is needless to say that the character of social life depends upon the nature of its economic condition, and most of the changes that have lately happened in our society have been brought about by economic pressure. Therefore our economics cannot be dealt with apart from our social system. Let me give an illustration. I came in touch with some villages where caste regulations prohibit selling vegetables. It had its meaning when different sections of the community lived upon occupations specially allotted to them, saving them from the fierceness of uncontrolled competition. But with the change of conditions these regulations have become more of the character of a hindrance than a help. When it is clearly demonstrated that the use of bone-manure gives increased yield of paddy, farmers refuse to do so for fear of losing caste. In case of a bad harvest, the deities receive a liberal supply of sacrifice, and puja is offered for increasing the productivity of the land.

Therefore, as I hinted before, those who deplore the state of our poverty should remember that economic and social forces cannot be understood as isolated phenomena. Social development is certainly a co-ordinate factor in the progress of our rural civilization; and how it has retarded its growth and what may be the ultimate solution, it is the function of agricultural economics to determine.

Now and then, a great enthusiasm to minister to the farmer's troubles prevails in certain quarters and some palliative measures are suggested as remedies. Some immediate causes of their miseries occupy our attention, such as failure of crops, agricultural distress, labour trouble in plantations, indebtedness and such other phenomena. But what is necessary is a careful consideration of the deeper and wider economic issues involved in agriculture, for, whatever may be the nature of particular economic disturbances, they are never isolated phenomena. Therefore a comprehensive survey of the scope of agricultural economics should be made before any serious work of reconstruction can be

undertaken. To do this, a clear conception of the character of agricultural economics has to be obtained. Perhaps you will permit me to make a few remarks here on the character of agricultural economics. We must remember that it depends on the nature of the ends which the nation aspires to achieve. For example, Germany's chief concern has not been merely to secure a large return to the individual farmer or to obtain the greatest return upon her productive expenditure, but her ambition has been directed towards obtaining security in times of war. Speaking generally, her agricultural economics has been indentured to the service of a Military State. The following quotation from a German treatise on agricultural economics will explain what I mean :—

"Under normal circumstances the domestic agricultural production of a nation should certainly provide for the needs of the resident population as to necessary products of the soil, especially as to the indispensable foodstuffs. Otherwise the country falls into a position of greater or less dependence upon other states, which are in a position to produce more human subsistence than is needed within their own domains. This dependence is especially precarious in time of war and for such lands as, like the German Empire, are bounded on nearly all sides by other countries, and have only a very limited access to the open sea. In a war with Russia, France, England, or several of these countries together, the adequate maintenance of the home population might be seriously endangered. To be sure, the danger is somewhat lessened by a strong fleet, such as we hope to have in our possession in the course of a few years, but yet is by no means entirely removed. It remains, at any rate, an especially vital problem for German agriculture to strive to provide its domestic needs of indispensable means of subsistence, and particularly its breadstuffs. Out of regard for its own existence, even the government is compelled, so far as lies within its power, to assist agriculture in the solution of this problem."*

The case of France is quite different. While the character of the German agricultural economics was being determined by mobilizing all resources for the purpose of " National strength and

* Translated and quoted in Agricultural Economics by Prof. Nourse.

self-sufficiency'', France devoted her attention to the individual prosperity of her farming population. It is with this end in view, that she attempted to put into the hands of her cultivators the well-devised scientific equipments necessary for intensive agriculture. I may quote a few lines from M. Jouzier's book, in which he points out that, after the cultivator obtains a thorough training in science and its applications to farming,

'' he is then able to practise the art of agriculture, which involves simple transformation of material by the process of cultivation, but not the industry of agriculture, which involves, at the same time and to a greater extent, the realization of an increase of wealth. And he needs moreover, in order to enable him to accomplish this double purpose, an appeal to social science, which teaches him to understand man so far as he is a social being, the needs and desires which govern him, the higher laws which he obeys in the social relationships which he forms with his fellow-men ; he ought, lastly, to have recourse to rural economics in order to learn, as we have said before, to co-ordinate the action of all his industrial resources, to the end of making the greatest profit possible. But if, according to our point of view, rural economics remains the science of the internal organization of the agricultural enterprise, we shall not commit the mistake of confining it within too narrow limitations and excluding from its province all that concerns the relationships of the enterprise with the outside world.....It is, so to speak, the agricultural science of sciences, not because it claims a quality, but because it draws upon them all and sums them all up to speak the last word of technological science, profit.''

Thus, we see two distinct types of agricultural economics, one governed by the military state, the other left to individual enterprise. Although the character of agricultural economics in India depends on the extraordinary circumstances of our close connection with a great manufacturing nation like Britain, yet the example of France stimulates our imagination. But unless we clearly understand what is really taking place in the economic aspect of Indian agriculture, and collect data with scientific precision, we shall not be able to form any decision about our future economic programme.

Unfortunately, Indian economists have shown very little practical interest in collecting data on which the principles of agricultural economics can be based. They attempt to build theories upon foreign premises. It is due to the fact that they are not, in the first place, familiar with the principles of scientific agriculture, and secondly, their attention is directed chiefly to the problems of Industrial economics; when questions relating to rural life become important, our economists try to elaborate, in the absence of any reliable agricultural data, from general economic doctrines, certain economic ideas which can never be applied to a rural environment. Only recently some attempts have been made to collect data from rural areas with a view to ascertain the process of India's economic development. It can hardly be denied that many of the results of such enquiries have not only been inadequate, but fragmentary and superficial. On the other hand, we gladly acknowledge our indebtedness to Dr. H. H. Mann, of Poona Agricultural College, for organizing an economic survey of a Deccan village. This is the first attempt in this direction, and we hope that similar studies will be undertaken by other agricultural colleges; for, the effort to work out a better technique of farming cannot be wholly successful unless the necessary adjustment in economic conditions is brought about.

From the economic survey referred to above, it is clear that two main obstacles stand in the way of introducing improved methods of agriculture, namely, the small average size of holdings and their scattered nature. As an illustration I may refer to a case, cited by Mr. Keatinge, of a particular landlord of Ratnagiri District, owning forty-eight acres of paddy land, who had it divided up into fifty-three separate plots. Dr. Mann's survey shows that such holdings are scarcely economic. We do not know exactly the situation in other parts of India, as no systematic investigation of the extent to which holdings are divided and scattered has yet been made. An Economic survey would place all such facts before us, and we could then discuss what should be done to mitigate the evils of excessive divisions.

But the handicaps to agricultural development of the country referred to here are not the only ones whose nature must needs be diagnosed. Since the opening of the markets of the world, new

economic factors have begun to dominate even the daily life of every tiller of the soil. Just how these factors are operating upon the socio-economic life of the people, and to what extent economic and social problems are inter-related, it is difficult to say without a scientific approach to the questions involved. It is a matter of regret that the study of rural economics has been seriously neglected in this country. Ignorance of the fundamental factors which contribute to the production of wealth from the soil, and to the much-needed readjustments in Indian rural life to-day, is largely responsible for the indefiniteness in our agricultural endeavours.

Schools and colleges for teaching agriculture are of very recent growth in India. No suitable curriculum, specially adapted to Indian students has yet been offered, and so far as the technical courses in agriculture are concerned the institutions follow a simple standard. Be that as it may, agricultural colleges in India should offer systematic courses in agricultural economics. The task of organizing an economic survey of our rural areas rests with the administrative officers of the agricultural colleges and the state Departments, and when this is done, the students will realise the public and social aspects of our agricultural problem. I know students who are well-trained in scientific agriculture, but who lack interest in the economic aspect of the subject, simply because they have been taught agriculture only from the point of view of science dissociated from the agricultural life in its completeness.

I have one more suggestion to make, before I conclude. Our agriculture is not exclusively the concern of farmers ; it affects a very large percentage of our population. To my mind it is a matter of the highest national interest, and as such it should demand careful consideration both from the people and the Government. Is it not then a fair suggestion to make that a chair of agricultural economics should be established in every Indian university? Surely the importance of agriculture in our economic life is great enough to justify such a demand.

III

Agriculture and Industries.

[With a view to study the various aspects of socio-economic life of the peoples of India, an organization under the name of " School of Social Science " was established in Calcutta. During its brief existence, a number of weekly meetings was held; and in one of those meetings the following paper was read on the 2nd November, 1920.]

Friends,

The average city-bred youngman is not quite familiar with the conditions and the problems of rural areas. But if we glance at the figures of Indian export trade, we may realise what an important part agriculture plays in the economy of this continent. It is our premier industry, and for the development of manufacturing industries India must depend on the resources of agriculture. The value of the total annual production from food and non-food crops is estimated approximately at two-thousand crores of rupees. And yet the average yield of our staple crops is comparatively low, the methods of cultivation and the farm implements employed being primitive and inefficient.

Now, agriculture is the oldest and the most elemental of industries. The origin of this industry in the history of mankind has given rise to many speculations among the anthropological investigators. " When we examine the intricate conditions under which agriculture is carried on amongst us at the present day, it becomes a matter of no small difficulty for us to imagine a period when man should have raised food from the soil without any of the, to us apparently essential, pre-suppositions having been complied with. With us, apart from the primary indispensability of a suitable climate and soil, we see that the farmer requires security from domestic and foreign foe, in other words a reliable government, a

certain amount of capital and labour, freedom from animal pests, a fixed settlement and—that primary incentive to toil in civilization—want."* The primitive man must have observed the plants of the region where he lived and also the hindrances to their growth. " In the progress of civilisation," says De Candolle, " the beginnings are usually feeble, obscure and limited. There are reasons why this should be the case with the first attempts at agriculture or horticulture. Between the custom of gathering wild fruits, grain, and roots and that of the regular cultivation of the plants which produce them there are several steps." Various determining causes which favour or obstruct the extension of cultivation must have regulated these steps. On examining these causes, it becomes clear to us why certain regions have been for thousands of years peopled by settled agriculturists, while others are still inhabited by nomadic tribes.

Not only the beginning of agriculture, but the invention of the plough itself is pre-historic. One of the most ancient examples of cultivated plants is to be found in a drawing representing figs in the pyramid of Gizeh. Historians believe that there must have been an established agriculture in Egypt centuries before the date of the Pyramids. In India our Vedic literatures are full of references to established agriculture. The plough, for instance, found a most glorified place in our Epics. Referring to the story of *Sita*, a western scholar remarks : "Many nations have glorified the plough in legend and religion, perhaps never more poetically than where the Hindus celebrate *Sita*, the spouse of Rama, rising brown and beauteous, crowned with corn-ears, from the ploughed field ; she is herself the furrow (*Sita*) personified."†

So much for the historical aspect of Agriculture. We now turn to modern agriculture. The industrial evolution of the present age has brought into operation a set of new " determining causes " to which agriculture must adjust itself. Agricultural practices have to keep pace with forces that lead to commercial activities of the present time. Agriculture is no longer an industry designed to serve the bare necessities of the farmer. It is now a

* Ling Roth : Journal of the Anthropological Institute, 16, 102-36.
† Taylor : Journal of the Anthropological Institute, 10, 74-81.

business and he must become a business man. He has begun to apply science to the art of farming and therefore he must understand the basic principles underlying that application. It has entered upon a field of competition both at home and from other countries ; and there, he must employ capital and labour economically. Along with competition has come new opportunity, and therefore he must be sufficiently alert and enterprising to utilize it to his advantage.

These are, then, some of the conditions which the farmer of the twentieth century must fulfil. The question is, to what extent the Indian cultivator is able to do so. India with the bulk of her agricultural population has been described by Sir Daniel Hamilton "as the minus quantity of the Empire : minus education, minus doctors and medicine, minus sanitation ; and in the year of scarcity, minus food, minus water, minus clothes, minus oil, and everything else that makes the wheel of life turn smoothly."

Now, all these minus quantities are due to the fact that the average per capita income of the people is exceedingly low resulting chiefly from low agricultural production. In spite of a settled Government and growth of commercial activities, India finds her peasantry living as it were in stagnation. Comparing the conditions at the close of the sixteenth century with those of to-day Mr. Moreland finds that the difference in the gross income per head of the rural population " would not be so great as to indicate a definite alteration in the economic position." His conclusion is : " our final verdict must be that, then as now, India was desperately poor, and that deficiency of production which is the outstanding fact of the present day was, at least, equally prominent at the close of the sixteenth century."

The factors largely responsible for the depression of our agricultural production may be discovered if you only try to analyse the root cause of the stagnant conditions of life in which the bulk of the people of India exist to-day. I need not refer you to the social and religious factors. On the economic side, there are abundant sources which fundamentally affect any process of rehabilitation. Lack of education, lack of capital, lack of health, energy and initiative, all contribute to a vast waste in our economic life.

Recently I have been touring in some districts of Bengal. Among various deficiencies in the economic life of the peasantry, I particularly noticed the nature of agricultural holdings and the quality of cattle. The waste due to fragmentation of land is serious and there can be no doubt that this is ruinous to "better farming." Unless some Legislative measures are adopted to check the process of further subdivision of lands, I see no way of making any definite progress in our agriculture. As it stands, the uneconomic holdings fail to support the numerous cultivating classes whose economic condition, in absence of any other subsidiary occupations, has been seriously imperilled. In rural Bengal agriculture and other occupations are inter-dependent; and whenever there is any derangement of the ordinary farming operations, caused by the failure of rain or such abnormal weather conditions, it affects not only those dependent on the income from the land, but practically every organ of social economy.

As regards cattle, they are deficient both in number and in quality. Considering the peculiar type of agriculture of this country, the poor outturn of crops is largely due to inefficient plough-cattle. Perhaps you expect me to state briefly what other deficiencies exist in the agricultural economy of Bengal. The main hindrance to crop improvement in Bengal appears to arise from the absence of adequate irrigation and in some localities proper drainage facilities.

A considerable portion of the agricultural lands has passed into the hands of Mahajans for whom the actual cultivators work under the Bhag system, or as day labourers. This is a fatal handicap to the development of agriculture. Among other handicaps we may mention the following :—

(1) Want of cheap credit.
(2) Want of economic sense among the cultivators.
(3) Want of adequate facilities for supply of good seeds and manures.
(4) Want of facilities for marketing farm produce.
(5) Want of education.
(6) Want of rural sanitation and prevalance of preventible diseases.

The list is not half complete, but I hope the above items will show that the problems of rural Bengal are grave, and therefore call for a special study of the situation in all its bearings. If we know exactly where we are, then we can go on to work and reconstruct the existing rural institutions on an economical and scientific basis.

To my mind, there can be no effective organisations in rural areas without an army of rural workers recruited from our educated classes. India needs rural leadership.

In the second place, our immediate attention must be directed to increased production of crops. Here empirical methods, however great may have been their achievements in the past, must now needs be replaced by science. The place of science in rural life and labour is assured in some of the western countries. And the confidence inspired by the application of scientific methods is so great that the Dutch farmers say, "God made the sea, we made the land."

I cite an illustration of what may be achieved by the application of scientific methods to farming operations from the history of German agriculture.

The soils of Germany are by nature no better than those of the surrounding countries. Thirty years ago, by rotations of crops and by very careful cultivation, the Teuton farmers were able to garner from eighteen to twenty bushels of wheat to the acre and only fifteen bushels of rye. But immediately preceding the great war, thanks to the use of nitrogenous fertilizers, the cultivated acres of Germany were producing from thirty to thirty-two bushels of wheat to the acre and twenty-five bushels of rye. Two decades back, without any application of essential manures, the oat fields produced thirty bushels to the acre, and in 1913 nitrogen fertilization brought up the crops to sixty-one bushels an acre. Take the case of potato cultivation. In the early eighties 130 bushels of potatoes to the acre was considered a prime yield, but in 1914 Chile saltpetre had made it possible to count upon an output of 210 bushels per acre. Germany did this while the seas were open to her; and because the same course was not followed by farmers in Russia, Austria-Hungary, France and Italy, these countries, with similar, if not better soils, did not improve upon their crops of thirty or forty years ago. On the other hand, Great Britain,

Belgium and Holland profiting by German example, were able to increase the fruitfulness of their acres anywhere from fifty to a hundred per cent. The difference in favour of Germany's increased production when compared with that of other European countries may largely be attributed to more scientific methods of cultivation, extensive use of better seeds and essential fertilizers, and to the application of knowledge derived from plant-breeding. Germans look upon farming as a national service.

Prior to the war, Germany drew upon Chile yearly for something like 900,000 tons of Sodium nitrate, and there is good reason to believe that fully 600,000 tons of this were utilized in the preparation of fertilizers for domestic use. German ships transported most of the Saltpetre from the Chilean beds, and her enemies knew the economic significance of that traffic.

To make a beginning in the direction of " better farming, better business, better life " in India, I believe we must look to the co-operative movement. When the principles of co-operation are applied to agriculture, it becomes fruitful in more than one direction. A new avenue of progress is opened and a fresh impetus is given to the process of adjustment necessitated by political and socio-economic facts of the 20th century. Numerous examples could be cited from the history of agricultural crop in Europe. In Italy for instance the country where the existence of vast estates (the latifondi) owned by absentee landlords and the general social and educational condition of the peasantry enable us to draw a comparison with conditions of our own agricultural population, the co-operative societies have undertaken to cultivate large areas. They drained and reclaimed waste land and succeeded in converting it into a fertile agricultural region. The societies had to make their way through serious internal strife and machinations of party politics ; but, once the foundation of agricultural co-operation is made secure, its growth cannot be jeopardised. That foundation must be truly laid in Bengal, if we desire to stimulate and foster schemes of rural reconstruction.

Friends, I have spoken at length on some problems of agriculture. I will only make a brief reference to industrial questions. I believe that the possibilities of establishing industries in India are intimately bound up with those of agriculture. One example may

be cited here. The area under cultivation in British India is about 220 million acres, and to till this acreage more than 25 or 30 million ploughs are required. Suppose these are replaced by more efficient iron ploughs. You will then have out of the manufacture of this single implement, a very flourishing industry opening out new fields of employment for our technically educated youngmen. Besides iron ploughs, there are other implements that may be gradually employed in agriculture. Motor pumps for lifting water, sugar-mills, threshing machines, oil presses, bone crushers,—all these may be manufactured in India.

The report of the Industrial Commission has strongly emphasised the importance of the development of agriculture as the basis of industrial development. A glance at the figures of agricultural products such as oil seeds, raw sugar, jute, cotton, will convince you in what abundance raw materials of industry are available in this country. By increasing her agricultural output India can substantially assist industrial development.

Crops.	Estimated Yield—(1923-24). *
Raw Sugar	3,317,000 tons.
Linseed	463,000 ,,
Sesamum	441,000 ,,
Rape and Mustard ...	1,149,000 ,,
Groundnut	1,086,000 ,,
Jute	8,401 000 bales, each weighing 400 lbs'
Cotton	5,979,000 ,, ,, ,, ,,

Leaving aside the question of industries on a large scale, there is still an ample scope for developing cottage industries in India. It is known to you that our peasants are mostly small holders. Even in advanced countries small holders find it well-nigh impossible to make a living merely out of agricultural pursuits. The state of affairs in India is deplorable in the sense that she is unable to assemble necessary resources under efficient organisations for the purpose of encouraging and propagating cottage industries. "The gospel of the spinning wheel" alone cannot solve the problem, although it may direct the attention of the country to the necessity of organising subsidiary industries in Rural India. Fruit culture

* The figures have been brought up-to-date.

dairying, poultry and goat breeding, apiculture, sericulture, lac industry, these are some of the occupations which may be developed in the country. No programme, however, can be translated into action unless and until some of the educated young men are determined to work and live in rural areas.

Well, friends, the entire socio-economic structure of New India must be renovated and adapted to the conditions of this century. For that task India needs the services of an army of well-equipped young men and young women. A scathing indictment of British rule cannot take us very far. True foundations have to be laid by the people themselves. The late Mr. Gokhale once said :

" There is work enough for the most enthusiastic lover of his country. On every side, whichever way we turn, only one sight meets the eye, that of work to be done ; and only one cry is heard, that there are few faithful workers. The elevation of the depressed classes, who have to be brought up to the level of the rest of our people, universal elementary education, co-operation, improvement of the economic condition of the peasantry, higher education of women, spread of industrial and technical education, building up the industrial strength, promotion of closer relations between the different communities—these are some of the tasks which lie in front of us and each of them needs a whole army of devoted missionaries."

Can Bengal produce a band of Rural missionaries ?

IV

Plea for Rural Reconstruction.

[On the 14th April, 1922, at a meeting of the Karmi Sangha, a rural welfare centre organised at Behala, 24-Parganas, the following paper was read before the workers and sympathisers of the Sangha. Babu Pramotho Nath Mukherjee was on the chair. The address was followed by a lively discussion.]

Fellow Workers,

The dust storm that had been raised by the political agitation all over the country seems to have passed away; at least the atmosphere is sufficiently clear to make it possible to see things in their proper perspective. Now is the time for us to understand what must be done to solve the problems of our national life. Mere quarrel over political bones will only exhaust our limited stores of energy and not give us anything very much wholesome.

Yet, in a country where the entire socio-economic institutions dominated by worn-out traditions and religious conventionalities have been crystallized into a hard mass, hopelessly out of harmony with the changing social and political needs, such a wide-spread mass movement was, indeed, a necessity. The dynamic property inherent in such a movement breaks up the crust that conceals beneath it a stagnant society dangerous not only to the nation but also to any civilized Government. And as such, this movement should be welcomed by every sincere friend of India.

But we must guard ourselves against political obsession. Political agitations readily catch the imagination of the people; but, unless we are able to evolve some constructive idea upon the questions that are of vital interest to our national life, the life of the nation cannot sympathetically respond to forces released by

political methods. Recall the days of the Swadeshi movement of 1905. Nothing of any permanent value was achieved. It was, however, realised that reorganisation of some sort was needed of the entire system of our rural life, and those who tenaciously clung to the work they had taken in hand discovered that the fundamental basis of " Swaraj " lay in rural reconstruction. Then, simultaneously, with the suppression of political outbursts, the leaders disappeared from the field of action leaving a set of young men to contend against the forces that were brought into existence. Gradually the country relapsed into the silence of somnolence.

Since the beginning of the Non-Co-operation movement, the Provincial Congress Committees have issued manifestos drawing the attention of the country to the urgency of rural reconstruction. The band of young men who rushed out of Calcutta to engage themselves in rural services soon after the session of the special Congress, failed to carry out the vague " programme " designed for them by the leaders.

This failure has many lessons to import. Successful organisation rests upon a correct understanding of the precise problems affecting the rural population. As this was not fully realised, it became difficult for workers to formulate their policies.

The organisation which we hope to build up in a rural area aims at gathering a somewhat clear notion of the various phases of village life and habit. We are beginning to realise how important it is to understand " the rural-group mind." We are here more as investigators rather than as workers.

The Karmi Sangha is a rural welfare organisation or Association by which the problems related to needs of rural communities are to be investigated, and in the light of experience, a programme of organization of rural needs is to be drawn up.

The real idea of ' Swaraj ' consists in the creation of a rural civilization; and as a step towards that we aim at the revitalization of rural communities through practical organisations under the guidance of a number of young men and women who must be trained in rural work before they are called upon to serve the country.

The needs of rural communities which require organisation may be outlined as follows :—*

I. *Business Needs.*—

(1) Better farm production; revival of cottage industries.
(2) Better marketing facilities.
(3) Better means of securing supplies.
(4) Better credit facilities.
(5) Better means of communication.

II. *Social Needs.*—

(1) Better educational facilities.
(2) Better sanitation and rural hygiene.
(3) Better opportunities for recreation.
(4) Better home economics.
(5) Better relations between various group-life.

I propose to deal this evening with the social needs of rural communities. Perhaps, the most fundamental requisite is rural education. No scheme of rural regeneration is sound without an adequate provision for imparting education of the right kind.

In certain quarters, doubts are expressed as regards the feasibility of educating the rural population of India. We are told that the handicaps to any practical scheme of rural education are far too many for an easy solution. But, friends, it may be instructive to you hear a short account of Danish Peasant Schools whose influence in Danish rural life has been of a dynamic and far-reaching character.

That little country of Denmark has always been the object lesson to the world as regards the improvement of her rural population. The high standard of intellectual culture of the Danish peasants and the marvellous progress made by their agricultural and economic institutions have always impressed students of rural economy. The secret of it all lies in the introduction of a rational system of education, and in the efforts of a group of Danish patriots

* See Professor Carver's Principles of Rural Economics.

to whom patriotism is almost a part of their religion. I shall briefly summarise the information I could collect with regard to the origin, the development and the results of peasant schools in Denmark through which 47 per cent. of the young rural population come out with decent education. These peasant schools are designated as the " High Schools " in Denmark.

The movement of elevating the rural population of Denmark owes its origin to the Danish Poet, Nikolai Frederik Severin Grundtvig. The fact that imagination has creative power is amply proved by the success of these Danish national institutions, the foundation of which was first laid by a poet. This noble Danish patriot holds a unique position in the literature of his country. His writings have had a great influence on his own countrymen. So, when, in the year 1844, he appealed to his countrymen in the following words, he had sown the seeds of his ideals in a fertile soil. He declared at a meeting of several thousand citizens :—

" It was necessary to elevate the people, and for that purpose to revive their religious and patriotic sentiment; that no beauty is too high for them; that the purest sources of intellectual and moral life must be placed within their reach; that with the new schools a living, real, and national education should be created."

The poet's voice woke up the citizens of Copenhagen. They rallied round him to offer their services to the cause of national education. The workers sought his help to build up the organisation with detailed precision in order to be able to give his ideals a practical shape, but the poet only formulated the principles and inspired others with the enthusiasm necessary for their practical application. Grundtvig must have seen clearly with the vision of a true poet that a too rigid programme would exclude any possibility of variation and thus the capacity for adaptability as the circumstances change would not be maintained.

This is, indeed, a lesson to us who are so apt to lay undue stress on the importance of rules and regulations in the educational organisations. And I wish to draw your attention to this view-point when the idea of establishing a school under this organisation is being developed. Our success, remember friends, will

depend much more on the teacher's personality than on school equipment or regulations or a list of text books. I should like to state in some details the principles on which the Danish Peasant Schools are governed. And as I read them I was struck by the remarkable uniformity of ideas among the leaders of thought in different countries. How often the same principles as formulated by the Danish poet were declared to be the basis of a sound educational system by our own poet Rabindra Nath.

The principles of this educational organisation are as follows :—

(1) The instruction must be exclusively oral. The professor must not use any book, any notes; he must come into relation with his pupils by means of a real familiar conversation. The poet-founder of the organisation insisted on this point. The voice alone, he says, " coming from a human breast, can give words strength and wings." He used to argue that if the main object was to communicate with souls, we could only do the work " with the word," that is heard, that goes into the unseen to awake the invisible mental life."

(2) As the age of 18 to 25 years is considered to be most susceptible (according to poet Grundtvig) to lasting impressions, the young persons of that age should only be admitted to the schools.

(3) No attempt should be made to impart technical education. The education must be general in character, aiming at opening new horizons in every direction and cultivating the patriotic, religious, aesthetic and moral sentiments. When this is attained, the schools will turn out such men who would be capable of learning agriculture or any other profession with profit.

(4) The teaching of history, specially the national history and national poetry, should form an essential part of the instruction. Grundtvig was very keen on the methods of teaching history. He says, " History must be related in poetic language, as it passed from mouth to mouth in the recitations of the *Scalds*. He emphatically discouraged the practice of learning a mass of facts, statistical tables, etc., by heart in chronological order.

(5) Instruction should be given in the mother tongue. It is necessary that each student while leaving school, will be able to

speak and write Danish perfectly. Such a principle is quite easy to follow in a country like Denmark, for the Danish elementary schools keep the child in school until he is 14 or 15 years old. During this period the elementary instruction in various branches of study prepares him for continuing further studies. Grundtvig's idea was to resume instruction in the vernacular language in " the High Schools " and carry it on to a degree of refinement very rare among the peasants. In this, according to the latest report, " The High Schools " have had considerable success.

(6) The fees must be paid by each student; the fees are quite low, but no student is exempted from payment.

(7) The system of education dispenses with all examination and all diplomas. To follow the Grundtvigian principle, there should not be even oral examinations. Sometimes the pupils are questioned collectively, never individually.

As we have seen, no diploma is given by the High Schools. To most of us this feature of organisation will not seem to be quite feasible. The Government of Denmark once proposed that the schools should organise examinations, giving a diploma entitling the students to enter the Copenhagen Agricultural School. The answer to this proposal by the followers of Grundtvig is characteristic :—

" Our object is to awaken the spiritual life, by means of free lectures, to excite patriotism through a right understanding of the language, nature and history of our country. We wish to do for the civic life of the people what the church is doing for their religious life. The moment, in which we succeed in teaching our pupils, in rousing their appreciation for what is high and noble in human life, is more important for us than that in which they acquire a grammatical idea or solve a mathematical problem. We want them to do that also, but as subordinate to the principal work. Our pupils must leave us full of desire to devote themselves to noble ends. What information they lack they will easily acquire later, but it is evident our education cannot adapt itself to an examination programme."

There is another principle laid down by the poet which is related to the civic instruction. While he realised that the school

must not be a " political tribune," he strongly recommended that the pupils must be given a sufficiently clear idea of the existing political conditions.

So much then, for the principles of the " High Schools." Let us now pass on to the other phases of the system of education. The followers of Grundtvig are the directors of the schools, and they are called the Grundtvigians.

All the pupils of the High Schools are sons or daughters of peasants. There are at present 80 such schools in the country districts of Denmark. But as the fees are to be paid, these schools are not within the reach of the poor peasant, and the agricultural labourers. With the increase of small land owners in Denmark, peasants are becoming prosperous, and the Grundtvigians are setting up schools among the poorer peasants.

There are no regular courses, but discussions on such subjects as history, geography, Danish language and literature, social economy and elements of natural history, physics and chemistry are held. The young men come in the winter when the field work leaves them more leisure. During a residence of a few months the pupils could not be taught the large number of subjects mentioned above, and therefore the courses have not a definite programme. The directors are of opinion that discussions are more helpful in getting an idea of certain subjects than following a text book. These discussions in the high schools awake the curiosity of the pupil and his desire to continue, at home, with the assistance of the excellent public libraries and lectures—another important feature of Denmark's educational activities—the study of the branch of knowledge which appeals to him most strongly.

The organisations of these schools fully realise the necessity of adapting the principles of education to the prevailing conditions of the village where the school is to be opened. So the details of the schools organisations are extremely variable. The personality of the director has great influence on the tendencies of the school.

There is no strict discipline imposed on the young men. These tillers of the soil enjoy perfect liberty while at school for a few months, but their liberty never degenerates into license. The

professors and their families occasionally take one or two of their meals with the pupils and live on the most familiar terms with them. They are always welcome to come to their teachers at all hours, and speak to them. Teachers are very sympathetic and kind to the boys.

The High Schools or the Danish peasant schools attract educationists from all parts of Europe. I have read with great interest an article written by a French Lady who spent a few years in Denmark to study the Danish educational system. I wish to quote a few sentences from her article.

" In July I found 200 young girls at Fredriksberg, for the most part farm or domestic servants. * * * The pupils listen, in turn, say, to a literary address or a romantic poem by Paludan Mollen, then a historical lecture, say, on the battle of Fredericia, followed by gymnastic exercises accompanied with singing."

She writes that in another village, she heard a lecture on Michael Angelo and the part Sovonarola may have had in the moulding of his genius. And this, my friends, is a village school in Denmark.

I have remarked that the object of the lectures, discussions and recital in the village schools is to stimulate desire for knowledge. In case a young man wishes to continue his studies in advanced courses, he can go to the University of Askov. This institution has nothing to do with the official universities. It is organised and controlled by the Grundtvigians, and most of the pupils come from the village " high school." Here some young persons are also prepared as teachers of the high schools.

The courses last two or three seasons. The education in the natural sciences, geometry and mathematics is especially advanced. The professors first instruct the pupils in the earliest scientific discoveries, and then relate the lives of men of science and inventors. Biographical sketches of those who contributed to the progress of science appeal strongly to the imagination of the pupils.

Only a general outline of science is taught. The object in teaching science, according to the Grundtvigian principles, is not to make men of science, but minds capable of understanding the science.

It is admitted by those who are acquainted with the Grundtvigian method of education that the " High Schools " are blessings to the Danish national life. These schools have undoubtedly stimulated the growth of intellectual development of the Danish peasantry; yet this is not what the Grundtvigians value most. When visitors question about the influence of the high schools on the people, they get such reply as follows :

" This certainly cannot be proved by material evidence, since Grundtvig only desired to act upon what cannot be weighed or measured or valued in money : the increase in spiritual value. However, there is evidence to show that our pupils are superior to the peasants who have not passed through our schools. The managers of the Technical Agricultural schools, to which a third part of our young men proceed on leaving us, declare that they assimilate instruction much better than the others. In the agricultural world, it is the Grundtvigians who found the co-operative societies which constitute our fortune, and any visitor may observe what success our pupils have had in municipal and political life."

I believe no further comment is necessary to impress on you that the prosperity of rural Denmark and a high standard of intellectual culture of the Danish peasants are due to the facilities given to them for education. Education is, like life and health, the birth right of all. And yet in India education in rural areas has been seriously neglected. While education must be one of the most important functions of the State, the function that cannot be discharged by any agency other than the State, I consider that a greater responsibility rests on the educational leaders of the country for finding such material as may be necessary in order to lay the foundation of a rational system of rural education in India.

The problem of rural sanitation and hygiene is equally important and complex. In making an organised attempt to build up on modern lines a rural welfare centre in the village of Behala, we found that side by side with some productive agencies, such as Rural Education, revival of Cottage Industries, etc., it became necessary to develop a health organisation through which medical help could be extended to the villagers. It requires neither elaborate display or statistics nor much imagination to realise that

rural Bengal is at a somewhat rudimentary stage of development where even the primary conditions of modern civilization are not fulfilled. The appalling waste of human life in this province is a menace both to the industrial and political welfare of Bengal. In some parts of the Burdwan and Presidency Divisions the deaths exceeded the births by nearly 200 per cent. In the municipal area of Behala, birth and death statistics are as follows :

Year.	Total Births.	Total Deaths.
1918	855	846
1919	723	820
1920	691	886
Average	756	850

N.B.—Birth-rate is lower than death-rate. High death-rate is due chiefly to malarial fever.

Behala and its neighbouring villages are notorious for malarial epidemic, and during the prevalance of the disease no proper medical relief is available, existing Municipal and District Board arrangements being insufficient to cope with the situation. The result is, that a large portion of the rural population suffers either from no-treatment or from hopeless maltreatment by inefficient doctors, kavirajs and midwives. Besides these, there are cases when doctor's help is required in the home of the villagers who are neither able to pay fees to any local doctor nor is it possible to remove their patients to out-door dispensaries. About 80 per cent. of the villagers receive practically no treatment during their illness. Druggists, patent-medicine hawkers and unscrupulous men all contrive to trade on these illiterate countrymen by inducing them to buy their commodities at a high price.

The situation is deplorable, and unless very definite constructive work in the interests of rural health is undertaken without delay, revitalizaton of rural life is not possible.

Well, then, the task of providing effective medical relief for the rural communities must soon arrest the attention of those engaged in rural reconstruction. Before we may hope to achieve

the rank of a civilized nation, we must stop the decay that is going on in rural life.

I see a number of young men present here who have pledged themselves to rural service. My appeal to them is that they should make a thorough study of the village or a group of villages where it is proposed to organise a welfare centre. May I suggest a line of enquiry for your village?

(1) Birth and death rates.

(2) Defectiveness in school children.

(3) Nature of sickness.

(4) Conditions as to the care of the sick, and of the destitute.

(5) Quantity of patent medicines sold.

(6) Methods employed by village doctors, quacks, patent-medicine hawkers and kavirajs to exploit the ignorant.

(7) The quality and sufficiency of diet.

(8) The working methods of agencies for rural health improvement.

(9) Conditions of roads, drainage, water-supply.

(10) Possibilities of improvement of the rural conditions.

Be it rural education or rural sanitation, success in any scheme for rural betterment depends largely upon efficient organisations.

I believe that one of the fundamental pre-requisites to formulating a well-devised plan for rural re-habilitation is to assemble all isolated constructive forces now operating in rural areas with a view to finding how best they may be co-ordinated. In the absence of such a co-ordinating organisation, it has not yet been possible to develop a comprehensive rural policy. Therefore, it is of the highest importance that all agencies, state and voluntary, which are engaged in grappling with the problems of rural life must now combine and adjust their relations to one another with a view to the development of the basic principles of a rural policy. Those principles may be summed up in the words of Sir Horace Plunkett : "Better farming, Better business, Better living."

While the basis of rural government in India has been predominantly the social organisation, it has undergone fundamental

changes since the advent of the British rule. The state departments that are directly or indirectly concerned with the realization of the needs of rural Bengal are :—

(*a*) Department of Agriculture.
(*b*) Department of Fisheries.
(*c*) Department of Industries.
(*d*) Department of Co-operative Societies.
(*e*) Department of Public Health and Sanitation.
(*f*) Department of Public Instruction.

In addition to the above, the functions of the District, Local and Union Boards have to be considered.

This is not the place to discuss the merits or demerits of the state organisations. From your own experience in this locality you are becoming familiar with certain internal defects which are responsible for many of the objectionable features within our rural organisations.

But, friends, it is an easy task to dilate upon the inherent weaknesses of the system of government. The state departments have undoubtedly taken the initiative in introducing various measures calculated to improve rural conditions, but their scope and functions must necessarily be limited and any measures which they initiate cannot be really effective without the whole-hearted co-operation of the public. It is clear, therefore, that in the interests of efficiency and economy a well-planned scheme of co-ordination with the existing voluntary and other organisations is essential. I go further and say that unless and until voluntary organisations take upon themselves the function of arousing social consciousness, civic machinery, however perfect, will not function in the interest of the people. The urge for life must needs be manifested by voluntary organisations, and it is gratifying to note that there are at present a number of organisations almost in every district in Bengal whose object is to ameliorate the conditions of life in which the rural population dwells. Various Sanghas, Samitis, and Asrams have mobilized a number of young men eager to give expression to the spirit of service, but their efforts have hitherto been mainly of a philanthropic nature, and they have consequently not been able to bring

about an integration of social and economic forces in rural areas evolving conditions under which a progressive realization of self-government may be made possible. Those who are members of this organisation know that I believe in co-operation with the government in matters of rural betterment.

It is to be regretted that attempts hitherto made in bringing both state and voluntary organisations together for necessary combined action have been very feeble. True, by the establishment of the office of the Development Commissioner in certain provinces a greater activity among the official departments has been made possible; but as it does not embrace the voluntary organisations, the educated public still remain apathetic. The situation arising from India's political relations makes it almost imperative that the initiative in the direction of devising means and methods of co-ordinated efforts must come from the State.

Since we have come together in this village for the purpose of establishing a " live " centre from which rural workers may receive adequate training in rural service, I have had many occasions to discuss this problem of co-ordination between the State and the voluntary rural organisations. And I have a proposal which I place before you for your criticism. The proposal is that an organisation under the name of " The Bengal Rural Organisation Society " should be formed with the object of providing the necessary stimulus for a comprehensive rural policy. That policy must embrace greater efficiency in the methods of agriculture, revival of rural industries, well-conceived economic organisation and reconstruction of social life.

The function of the proposed society will be as follows :

The society will undertake a systematic study of variouss problems affecting the rural population so as to be able to provide reliable information upon important questions in regard to rural life and labour. It will initiate a well-organised movement for promoting and developing a comprehensive rural policy. It will mobilize all forces including socio-religious institutions of the country with a view to making the most urgent re-adjustments in the life of the peasantry. Thus, it will serve as the intermediary

between the departments referred to above and the voluntary organisations and finally between their organised efforts and the rural community. The society will be administered as a central organisation from which all activities for rural betterment will be directed through a regular channel.

The duties of the society will chiefly involve (*a*) training of rural workers (*b*) planning of an educational campaign with the co-operation and co-ordination of official and non-official agents (*c*) collection of reliable data in regard to various aspects of rural problems.

The central organisation will have to be equipped with an office and a reference library in Calcutta. There should be a paid secretary assisted by two clerks and a librarian. The society should have at its disposal such equipment as may be required for the purpose of its educational propaganda.

In the absence of any efficient district organisation it is difficult to suggest the actual composition of a society as outlined here. But a beginning must be made with whatever nuclei we can assemble together.

There should be an advisory council consisting of heads of the departments mentioned above and a number of representatives from well-known non-official rural welfare centres. Attempts should be made to establish the Rural Organisation Society in each district; and when it is formed, the advisory council of the central organisation, in addition to the heads of the departments, would find a place for one representative from each district in Bengal. An Executive body for administrative control should be appointed by the Council.

This is just a bare outline of the scheme I have drawn up in greater details in my own mind. I now invite your comments. Remember, friends, this is a century of efficient organisation. In rural Bengal we want such bodies as may eventually lead to a more efficient rural organisation in which alone lie possibilities of great promise for the future stability of our rural life. The country awaits some indication of a constructive mind, and let that indication come from this small organisation, "Karmi Sangha." I ask you, my fellow-workers, to take a broad view of Indian politics. Our efforts must be directed to revive rural life in Bengal

so as to be able " to create or draw out the highest economic, political and human qualities in the people " without which, I believe, the " Swaraj " or " Reform Scheme " is a mere myth or a vain political speculation.

V

The Problem of Rural Life in India.

[A meeting of the East India Association was held on Monday, May 18, 1925, at the Caxton Hall, Westminster, S.W. 1, at which the following paper entitled " The Problem of Rural Life in India " was read.

The Right Hon. Viscount Peel, G.B.E., was in the chair.]

The Chairman : Ladies and Gentlemen,—Even in this country one is always searching about, not always with success, and sometimes with a lack of continuity, for an agricultural policy. Unfortunately, we are always borne down by the great mass of opinion, not always highly instructed, of the townsman ; but they are very much more fortunate in India, because the great mass of the people there, as we all know, are engaged or connected with the science of agriculture. They have not got there this preponderating opinion, as we have in this country, of the townsman. Therefore in India they are more fortunately placed, and the question of a good policy in agriculture is even more important than it is in this country.

Now, Professor Gangulee, who is going to read to us a paper this afternoon, is singularly well-equipped for the task, both from the practical and the theoretical side. He started by a course of three and a half years of study in the University of Illinois, where he obtained the B.Sc. Then he acquired practical experience in the management of a farm in Bengal, and his attention there was called very strongly to the necessity of scientific agriculture among the Indian people, and he wrote two books on the problem of Indian agriculture, one of them called " War and Agriculture." Between 1918 and 1920 he undertook a tour throughout India in order to obtain first-hand knowledge of the problems connected with agriculture in that country, and he attempted with success to set up and establish a band of workers in order to study the question of

reconstruction in agriculture. At present he holds the Chair of Agriculture and Rural Economics at Calcutta University. Then he was granted leave to enable him to study the problems connected with soil fertility at the famous Rothamsted experimental station, and there he acquired considerable knowledge connected with those difficult and intricate problems. He holds the view that political problems are occupying the political mind of India rather too much, and that they have not addressed themselves always to those underlying economic questions which have an influence far transcending in many directions the political questions themselves. He realizes that it is no use having a wide political advance in self-government unless it is accompanied by an intelligent application of science to agriculture. I think he is aware, too, that economic problems are now the dominant problems in government generally.

We have, then, a man singularly well-equipped for discussing the problem of Indian agriculture. He does not look upon the problem from the somewhat narrow point of view of the agriculturist, but he is equipped from both sides, from the Government point of view and from the theoretic side, and also—which many of our advisers on agriculture are lacking—from the point of view of working experience. I invite you therefore with great satisfaction to listen to Professor Gangulee's lecture. (Hear, hear.)

I only hope the audience and Professor Gangulee will pardon me, but in the course of a few minutes I shall have to retire, because I have, unfortunately, another important appointment to attend to.

My Lord, Ladies and Gentlemen,

I thank you for this opportunity you have given me to present before you the problem of the rural life in India. The attempt at diagnosis of some of the deeper causes that underlie that problem is not an easy task. It is difficult even to present a short sketch of the problem without committing sins of omission and commission which may give rise to sources of misunderstanding. I trust you

will pardon me for such sins. The ever-increasing demand for rural reconstruction among the most industrially advanced countries signifies that the disparity of conditions between urban and rural life has begun to react on the life of the nations. Supported by mechanical inventions, the industrial revolution set in motion the most complex politico-economic forces which have shaped the character of modern civilisation since the last half of the eighteenth century. The world market was discovered, cities grew, industries expanded by leaps and bounds, and State policy came to be dominated by urban interests. The new civilisation passed the farmer by.

But this inevitable subordination of rural to urban interests resulted in raising a host of complicated social and economic problems, and the issues involved in them became so vitally important that they could not be relegated to the background any longer. Consequently, since the beginning of the twentieth century, among the advanced countries there has grown a distinct tendency towards what may be called "rural revival." In America, a country already equipped with the resources of scientific agriculture, President Roosevelt forced the problem of rural life to the front by appointing the Country Life Commission. The findings of the Commission brought home to the politicians of the country the urgency of protecting the fundamental interests of the farming population and thus a way was prepared for necessary legislative reforms designed for the welfare of the rural population.

One of the striking post-war developments in Great Britain is the anxiety of the Government to frame a stable agricultural policy in order to place British agriculture on a sound economic basis. In the last session of Parliament, for instance, three measures (*e.g.*, the Agricultural Returns Bill, the Forestry Bill, and the Importation of Pedigree Animals Bill) directly concerned with the betterment of agriculture were brought forward. Various organised farming bodies are asking for such reforms as would enable them to bring the conditions of agricultural production and distribution in line with modern economic tendencies.

Broadly speaking, there are two aspects of the problem of agriculture—one being scientific and the other economic. In America and in many of the European countries agricultural re-

search and education were instituted in the middle of the nineteenth century. The science of agriculture has made tremendous advances since then, but the application of the knowledge gained presents a new problem. With the rapid development of better and cheaper transportation there came into existence what the economists call the world market, and with its growth the transition of agriculture into the commercialised stage was effected at a pace far in advance of scientific agriculture. The situation calls for necessary readjustments in the whole economic basis of the farming industry, and in every corner of the civilised world this process of adjustment is in operation.

Drawn into the sphere of influence of the world's commerce, India found herself unprepared. Two decades ago Lord Curzon, with his characteristic ability, gave his attention to the question of agricultural research in India. A central research institute was established. Spasmodic and disconnected labours of individual officers were thus replaced by systematic investigations of the fundamental problems of Indian agriculture. Progress made in this direction indicated the possibilities of the farming industry in India, and the complacent belief that " there was little or nothing that could be improved " was discountenanced.

My apology for introducing the subject of agriculture as a preamble to the discussion of the problems of Indian rural life is that agriculture is the basis of a rural existence. No nation can hope to check the disintegration of rural life without establishing the farming industry on a sound economic foundation.

Now the population of India is characteristically rural. Agriculture is the mainstay of the people, and will remain so for an immeasurable period of time. We are, therefore, justified in examining the problems of Indian rural life under three heads—namely, Farm Economics, Farm Production, and Farm Life.

I. Farm Economics.

That the economic situation may restrict agricultural progress may be adequately illustrated by the present position of British

agriculture. With all the resources and strength of organisation if the British farmer finds himself drifting before the currents of the world's economic forces, consider the plight of the Indian peasantry.

As the basis of all successful agricultural efforts lies in efficient organisations, we proceed to examine briefly some of the conditions under which the Indian peasant works. It is necessary to regard the farming industry as "business," taking cognisance of the fact that the essential economic factors operate freely on urban as well as on rural pursuits.

Our first consideration in farm economics must of necessity be the land as an important economic factor. It is well known that in India the disastrous processes of sub-division and fragmentation of holdings have been going on at such a rate that agriculture is on the verge of bankruptcy. Those who constantly fix their gaze on Whitehall and Delhi for constitutional advances would do well to glance at the following observations.

Dr. Mann, in his economic survey of a village in the Bombay Presidency, found that in 1771 the average size of the holding was 44 acres, and by 1915 it had been reduced to 7 acres. Of the total number of holdings in the village 81 per cent. are now under 10 acres in size and 60 per cent. under 5 acres. The extent of fragmentation may be realised from the fact that these holdings are split up into 729 separate plots, of which 463 are less than 1 acre and 112 less than $\frac{1}{4}$ acre. In a village in the Madras Presidency Dr. Slater found that in 1882 there were 112 holdings paying Rs. 10 and less in *kist*, but in 1916 the number rose as high as 366. My own investigation in Bengal confirms the existence of this disruptive tendency which is rapidly reducing a large proportion of agricultural land into uneconomic holdings.

Mr. Thompson, in Bengal, finds the size of the agricultural holding to be about 2·215 acres per cultivator, and according to the census of 1921 the average comes to $2\frac{1}{4}$ acres, and it must be remembered that these acres are very often divided into many fragments. Day by day the most disastrous consequences of this state of affairs on rural economy are making themselves felt. Knowing that for his livelihood he could not depend on such a small holding, the owner puts in very little effort to "better farm-

ing," and even if he did, its production could not have maintained his family. Thus, in the absence of any organised rural industries, chronic unemployment has become one of the striking characteristics of Indian rural life. The Census Superintendent of Bengal says : " It is largely the land system of the country that is responsible for the present conditions. In other countries, where the holdings are comparatively large, and the farmer can only manage with his own hands a fraction of what work there is to be done, he employs hired labourers, and engages as many as are required to do the work, and no more. In Bengal the holdings have been so minutely sub-divided that there is not enough work for the cultivators; but, on the other hand, there is no other work to which they can turn their hand." In the Punjab, Mr. Calvert has recently shown that the work done by the average cultivator does not represent more than 150 days of full labour in twelve months. Space will not permit me to analyze the situation in any detail, but it is clear that the time has come for decisive action. As the economic motive in Indian life is largely dominated by social customs and traditions, the representatives of the people brought into existence by the Indian Reforms must realise that they cannot establish a twentieth-century form of government on fifth-century socio-economic organisations.

Turning to the second factor—that is, farm capital—we are confronted with the problem of the heavy indebtedness of the Indian peasantry. While the co-operative movement, instituted about fifteen years ago, has made considerable progress in this short time, the fact remains that the vast bulk of the agricultural population require to borrow even for the bare necessities of a primitive agricultural practice. From what I have seen in Bengal, I have an impression that the benefits of the co-operative movement do not reach the substratum of the peasantry. The fact that the necessary stimulus to the development of the movement has not come from those who love to designate themselves as " the natural leaders of the masses " appears to be significant. For that closely allied group known as the money-lending classes—consisting of zamindar, talukdar, lawyer, trader, village shopkeeper, priest, and numerous other associates—reap rich harvests of interest from the peasantry. By virtue of

being in possession of liquid capital, and also by their place in the social organisation, they have a very strong grip on the rural masses. The commercialisation of agriculture has made the position of the money-lending classes almost indispensable and hence more secure.

This brings us to the third factor in farm economics. The importance of better marketing facilities for agricultural products is such that any deficiency in the system is bound to retard agricultural progress. As the production is small and the means of transportation extremely inefficient, it is practically impossible for the grower to reach the market centres without the intervention of several middlemen. I may mention, in passing, that rural roads in India are unsatisfactory, and that the progress in this direction has been extremely inadequate. The total mileage of metalled and unmetalled roads in the British territory is about 216,000.

In considering the problem of marketing, we must bear in mind that, generally speaking, the greater portion of the prospective harvest is held in mortgage to the village trader. Once drawn into the vicious circle which surrounds the Indian markets, the cultivator cannot hope to receive the full benefits of the current prices. As an illustration, I beg to draw your attention to the following data collected by me in a market near Calcutta :

Crop.	Price per 82 lbs. on a certain date.	
	"Mortgaged" Crop.	"Free" Crop
	R. a. R. a.	R. a. R. a.
Jute	5 8 to 6 0	8 10 to 9 0
Linseed	1 8 to 1 12	2 8 to 2 13
Grain	4 8 fo 5 0	6 12 to 7 0

The disparity between the profits made by brokers and dealers and the prices the grower receives is so enormous that in the marketing centres all over the country "money-lenders congregate as flies over jam," and they are soon able to entangle the growers of the neighbourhood into permanent indebtedness.

Let us visualize a peasant bringing his crop to an "organised" market, such as Lyallpur. Having accepted the price dictated by the *ahrti* (commission agent), the seller has to pay *paledar* for emptying and filling bag, *toledar* for weighing, and *chandar* for separating dust from the grain. He is also made to contribute a fixed charge for local charity and for the maintenance of *gausala* (cow hospital). This is not all. The *ahrti's* household must be satisfied, therefore he charges cash for his langri (*cook*) and *bhisti* (water-carrier), and the sweeper takes his share in kind out of the grain from the seller. Then, as regards the accuracy of weights and measures employed by the *ahrti,* Heaven alone knows how variable they are!

The picture is not a bright one, and no industry can hold its own under such economic handicaps.

2. Farm Production.

Having briefly reviewed some of the economic circumstances which are obstructing the channels of many possible improvements in Indian agriculture, we set out to examine the question of crop production. Do we obtain from our agricultural land that amount of produce which, after meeting the needs of the people, must leave sufficient residue for maintaining the balance of trade? Or are we carrying on this national industry as a going concern? If it were possible to make out a " profit and loss account " for the average cultivator, we should then be able to find some explanation why the vast population of India lives on the edge of extreme poverty. A critical examination of the available agricultural statistics for British India from 1911 to 1919 shows that there has been on the average a yearly deficit of about 10·3 million tons of food-grains and pulses, and that it cannot be met even if the exports are strictly prohibited. One cannot challenge the conclusions of Professor Dayashankar Dubey that "64·6 per cent. of the population lives always on insufficient food, getting only about 73 per cent. of the minimum requirement for maintaining efficiency. In other words, it clearly shows that two-thirds of the population always get only three-quarters of the amount of food-grains they should have."

But this state of semi-starvation is chiefly the result of persistent soil-erosion and soil-exhaustion, which have brought the greater part of the cultivated land to its fertility level, and if this is allowed to continue, the day of reckoning is not far.

One word about soil-fertility. Agricultural science has taught us to treat the soil like a bank account. Continuous cropping without an adequate supply of the three essential elements—nitrogen, phosphorus, and potash—cannot maintain the productiveness of the land. There has been no systematic soil-survey in India, and, consequently, I am not able to present before you any extensive data on soil-exhaustion. But a recent preliminary survey of the Delta tracts in Madras has thrown some light on the subject.

Delta.	Deficiency in Phosphate.	Deficiency in Nitrogen.
	Percentage of Sample.	Percentage of Sample.
Godavari	23	40
Krishna	33	55
Gunhir	33	81
Tanjore	80	87

The case of Madras is, to a great extent, the case of other Provinces. Referring to four chief soils of the Central Provinces, Dr. Clouston remarked that in most districts they had reached a state of maximum impoverishment. Mr. Davis has drawn our attention to the phosphate depletion in Bihar soil. Thus the agricultural capital of the soil in India is also being rapidly depreciated. With these facts before us, is it impertinent to ask whether Indian agriculture of 1925 is based upon the rock or upon the sand? A comparison in wheat-yield with other countries may help us to realise where we stand.

AVERAGE YIELD OF WHEAT (1909-1913).

	Bushels per Acre.
Belgium	37
United Kingdom	32
Germany	32
Egypt	26
New Zealand	25
Austria	20
Japan	20
Roumania	19
Canada	19
Bulgaria	15
United States	14
INDIA	12

" At present," writes Dr. Norris, " there is a tendency to face the problem of low yield in another way, by the attempt to bring into cultivation large areas of more or less unprofitable land; but judged only from the point of view of production, this can have but little permanent value, and cannot be regarded as anything but a palliative of a temporary nature." The increased production of essential Indian crops can only be brought about by a comprehensive agricultural policy. There is no question that " better farming " is possible in India, and agricultural science has already given us the promise of such possibilities. But, I repeat, the value of the assistance that science may offer is greatly discounted by economic and social handicaps.

Therefore, the country must be awakened to the realities of the present situation. The insistent and increasing demand of the world for jute, cotton, wheat, and other commercial crops which India is able to produce has radically altered her economic relations with the world. The agricultural system and the socio-economic organisations which supported it might have been intrinsically sound under the conditions of the past; but they become uneconomic, and, consequently, fatal to progress when a pressure of the world's market and also of internal requirements begins to assert itself.

3. Farm Life.

There is one more item to consider. That is the human factor. In an economic analysis of rural problems the "man behind the plough" must of necessity engage our attention. The description of the Indian masses as "millions of squalid people, densely ignorant and unspeakably filthy," and desultory discussions about them are so common in the press and on the platform, that I feel it is unnecessary to make an attempt to depict Indian peasant life before you. Sentimentalism has no place in economic science; but I do ask you to consider the conditions under which the Indian peasant lives in relation to efficiency in producing the necessary raw materials for himself and for the Empire. Since Indian agriculture depends largely on manual labour, the chief asset must be the output of physical energy of which the worker is capable. As the physical fitness cannot be easily assessed, "the expectation of life" at any specified age may be taken as an indication of physical well-being.

In this connection a table based on the data computed by the famous statistician, Dr. Glover, from the official figures for each country is illuminating. "These life expectations mean that, on the average, individuals alive at a given age have the number of years to live stated in the column for that age."

Expectation of Life in Years

(*Males above, Females below.*)

Countries.	Period.	Age 20.	Age 30.	Age 40.
1. Denmark	1906-10	46·30	38·00	29·70
		48·10	40·10	32·00
2. England	1901-10	43·01	34·76	26·96
		45·77	37·36	29·37
3. Italy	1901-10	43·27	35·94	28·23
		43·69	36·58	29·18
4. Japan	1898-03	40·35	33·44	26·03
		41·06	34·84	28·19
5. India	1901-10	27·46	22·44	18·02
		27·96	22·99	18·49

The table covers the best working period of a peasant's life. In examining the table, the discrepancy between the Indian and the other people considered is only too apparent, and indicates a state of affairs inimical to the development of a vigorous peasantry.

If we consider, along with these figures, the period of illness during the lifetime of the average Indian peasant, we may then realise that he is not an efficient economic unit in the farming industry. While various factors—historical, social and climatic —have combined to produce the present state of rural sanitation and hygiene, it must be admitted that, with organised efforts, considerable progress may be made to improve the situation. Professor Rushbrook Williams has recently drawn our attention to the problem. He says: "In the matter of rural sanitation, which affects the lives of some 90 per cent. of India's millions, very little has been accomplished. The average Indian village is, as a rule, little better than a collection of insanitary dwellings situated on a dunghill."

One has to admit that the rural backwardness is in the rural mind. Therefore the fundamental requisite to necessary reforms, either in this matter of sanitary improvement or in relation to economic adjustments, is education. But that leaven is absent in the mass of the people. In India we have utterly ignored the problem of rural education, and Sir George Anderson is justified in saying that "the comparatively wealthy urban area has profited by the provision of facilities for advanced school education at the expense of poorer rural tracts."

Such are the main problems of Indian rural life. I do not for a moment suggest that the Government is oblivious to them; but I feel that the time has come for a comprehensive measure of rural reconstruction. Democracy in India cannot be successful unless the rural population is allowed to acquire strength to support that form of government. While the sober opinion in India is conscious of the need of progressive and expansive adaptation to the conditions brought about by her status in the British Empire, much now depends on the lead from the supreme Government. We have had enough of constitution-making and constitution-breaking. It is now necessary to get seriously to work at

the problems on whose solution the salvation of the millions of India depends. For, in the words of a Chinese philosopher, "The well-being of a people is like a tree; agriculture is its root, manufacture and commerce are its branches and its life; if the root is injured and the leaves fall, the branches break away, and the tree dies." This is my plea for a Royal Commission for an enquiry into the problems of Indian rural life.

While it is gratifying to note that there is a general agreement as to the need of such an enquiry, the proposal of a Royal Commission has evoked some criticism. It has been suggested that "Governments notoriously are addicted to shelving all such problems by the appointment of Royal Commissions." But, judging from the services rendered to India by various Commissions, I feel that we are not justified in accusing the Government of this expensive method of "shelving" the complex problems with which it is confronted. Take a few examples. The remarkable improvement in the health of British troops in India, whose death-rate fell from 20.37 in 1875-79 to 5.94 in 1915, is undoubtedly due to the direction given by the Army Commission. Again, the fact that India to-day has the largest area of irrigated land of any country in the world, and is now developing a scheme involving £12,000,000, which will turn an arid desert into 6 million acres of cultivated land, is the logical outcome of the irrigation policy formulated by the Irrigation Commission. As a result of the Famine Commission, we have a famine code which has proved itself invaluable in times of sudden stress. It was this Commission which first drew the attention of the Government and the public to the urgency of establishing the departments of agriculture in each Province, and of making suitable arrangements for imparting agricultural education to the people. The Industrial Commission, appointed during the War period, has indeed placed before the country a storehouse of information which will be of great assistance to the Government in formulating an industrial policy. There is no evidence that the important question of the public services in India has been "shelved" by appointing two successive Royal Commissions. The British statesmen have repeatedly acknowledged that "the rural classes in India have the greatest stake in the country, because they contribute most to its revenues." There-

fore, I cannot persuade myself to believe that the findings of a Commission appointed to examine the foundations of Indian rural economics will remain " shelved " in the archives of Whitehall and Delhi.

I have been warned that, in view of the complexities involved in the problem, it would be impossible to draw up the terms of reference. Although the scope of such an enquiry must of necessity cover a wide range, it may be limited to the fundamental aspects of the problem. The chief concern of the Commission will be to discover what are the handicaps to the betterment of economic conditions in rural India, and the causes to which they are owing; whether those causes are of a permanent character, and to what extent they may be removed by the pursuit of a well-devised rural policy.

The difficulty arising out of the varied conditions in different parts of British India may be overcome by appointing a number of assistant commissioners. Each typical agricultural area may be assigned to them for collecting such facts as may be required by the Commission. Such was the method adopted by the Royal Commissions of 1879 and 1893 on agricultural depression in Great Britain and Ireland.

It should be obvious to every sane man that no Royal Commission is charged with the task of finding " some one panacea " for the mal-adjustments it seeks to analyse and diagnose. If the Commission succeeds in bringing to the surface the true nature of the circumstances which are inhibiting the revitalising processes in rural India, and if it can create a public opinion of the country in favour of necessary social and legislative reforms, it will have fulfilled its mission.

But my Swarajist friends assure me that no good will come out of such a Royal Commission unless the heart of the Government is changed. My reply is, the appointment of such a Commission will clearly indicate that the Government is solicitous for the economic welfare of the people, and is anxious to assist the Indian Ministers in their efforts to grasp the underlying realities of India's problems. The leaders of the Swarajist party are at present in a mood of reconciliation, and I feel confident that the auspicious time for co-operation and co-ordination with them has come. I do not

hesitate to assert that the problem of reorganising the socio-economic life of the Indian peasantry will furnish all concerned in the welfare of India with a *common* task.

It remains for me to make a brief reference to the criticism, in which I am reminded of the fact that "whatever can be done officially is being done to promote the prosperity of India's masses," and that, owing to the rapid increase in the population, nothing could be done to solve India's poverty problem. I am fully aware of the resources of agricultural science and organisations which are benefiting the Indian peasantry; but have we explored the agricultural possibilities of the country or adjusted our worn-out organisations to the needs of agricultural commerce? Any failure to make such adjustments constitutes a defect which may become a danger.

Population problems and their relation to the productivity of the land have been lately discussed by the Census Commissioner. In 1901 the total population was 294 millions; in 1911 it rose to 315 millions, and in 1921 slightly less than 319 millions—that is, the total gain between 1911 and 1921 was only 3,786,000 people, or 1.2 per cent. I agree with Professor East of Harvard University in his conclusion that "India has reached a point where it is impossible for her to increase rapidly by an excess of births over deaths."

Be that what it may, if it is true that the declared mission of Britain in India is to uplift about one-fifth of humanity to that condition of existence in which life can find full play for development, if Indo-British relations are to be fruitful in the unity that comes from the growth of healthy life, then it is hoped that this plea for an enquiry into Indian rural life will not have been made in vain.

(Discussion)

The Right Hon. Lord Lamington took the Chair.

Colonel Sir Charles Yate said he would like to congratulate the Professor most heartily on his excellent lecture.

He quite agreed with what the Lecturer had said about the subdivision of holdings, which was going on most disastrously in

India at the present time. The Lecturer had quoted various authorities to show how hopelessly the land in the various provinces was divided up, and that it was largely the land system of the country which was responsible for the present conditions. He had also pointed out that "the representatives of the people brought into existence by the Indian Reforms must realize that they cannot establish a twentieth-century form of government on fifth-century socio-economic organizations"—a wise saying, which it was hoped their President would convey to the present Secretary of State for India, as it certainly deserved serious consideration.

With reference to the heavy indebtedness of the Indian peasantry and the money-lending classes, who reap rich harvests of interest from the peasants, he could only hope that the co-operative movement would go on increasing, and eventually save the peasantry from the village money-lender. The Lecturer had rightly called attention to the fact that the necessary stimulus to the development of the movement had not come from those who love to designate themselves as "the natural leaders of the masses."

With regard to the Lecturer's remarks as to the description of the Indian masses as "millions of squalid people, densely ignorant, and unspeakably filthy," he entirely disagreed with that description ; he regarded the Indian peasant as one of the cleanest peasants in the world, and he would like to contradict that statement.

Regarding the Lecturer's reference to the political aspect in India, he fully agreed in hoping that the members of the Legislative Assembly would in the future turn their attention to what were really the needs of the rural masses of the country ; as the Lecturer had truly said, "we have had enough of constitution-making and constitution-breaking."

With regard to the Lecturer's suggestion for the appointment of a Royal Commission to enquire into the problems of Indian rural life, one had only to point to what was happening in this country, where it seemed impossible to get people to agree on how to benefit agriculture. India was not one country like England, but a continent of many countries, and the differences among the people of the various provinces were enormous. In his

opinion, it would be better for the Government to appoint a separate committee in each province to go into the question, and then for the chairman of each of those different committees to meet—say, at Delhi—and see if they could not bring out some useful report applicable to each of the various provinces. He did not think a Royal Commission for the whole of India would be advisable ; but, of course, that was a matter of opinion.

The Lecturer had told them that his Swarajist friends assured him that no good could come out of a Royal Commission " unless the heart of the Government is changed." Now this expression about " change of heart " does not seem to be a monopoly of the Swarajists alone. In the papers there is a telegram from Calcutta of May 17 in which Sir Surendranath Banerjee is reported to have stated with reference to the Swarajists themselves that " our doors are open to them and the Liberal party will welcome them if there is a change of heart and a real guarantee." Evidently it is amongst the Indian politicians themselves that this " change of heart " is necessary. There is no change of heart required on the part of the Government. The Government is ready and anxious at all times to do its best to " assist the Indian Ministers to grasp the underlying realities of India's problems." The unfortunate part of it is that the Indian politicians have hitherto made no effort to do this, and if there was one thing more than another brought out by the Professor's lecture it was that it is hopeless and futile to expect that anything will be done under the present system of diarchy Government in India to " promote the prosperity of India's masses," so ardently asked for by the Lecturer.

MR. O. ROTHFIELD said that he has been closely connected with the co-operative movement in India and questions of agriculture, and he hoped he might be allowed to sweep away some of the misconceptions about the movement. Sir Charles Yate was apparently under the impression that persons who called themselves the leaders of the people had taken no part in the movement. The facts were that the co-operative movement had been supported and led by Indians, and business men largely had taken a leading part in it. It had been said that under no circumstances could the benefit of the movement reach the poorer classes of the agricul-

turists. Of course they could not take men who were destitute and make them rich by making them members of a co-operative society, but what it did was to take those who had the possibility of making a living out of their trade, and help them to do so with self-respect, and also helped them towards a better system of marketing, which was of the first necessity in India.

The main point the Lecturer had touched upon was the fact that India had been dragged into the world market. Twenty-five years ago the cultivator grew crops for his own subsistence, but to-day he grew crops to sell in the market. Then there was the fact of the enormous amount of cutting up of holdings which reduced some strips of land meant for cultivation to little more than the size of a table, and under such conditions profitable cultivation was impossible. In his opinion, until the Legislature passed a measure to facilitate re-stripping, there would be no improvement, and that was a question which should be pressed on the Provincial Governments concerned. He disagreed with the Lecturer's suggestion of relying on a supreme Government ; until they had a much greater provincial autonomy they would not get the necessary improvement in any of the things which touched the daily lives of the people to the extent that agriculture did.

In conclusion, he wished to say how much he had enjoyed the paper, and he thought the effort which had been made to state the facts succinctly was really remarkable, and did great credit to the Professor. (Hear, hear.)

Sir Alfred Chatterton said he had great pleasure in joining with Sir Charles Yate in congratulating the Lecturer on the admirable way in which he had presented his case for the appointment of a Royal Commission, but he still doubted whether a Royal Commission was the best way of arriving at any improvement in the rural conditions of India. The question was one of great importance, when one remembered that there were about 220,000,000 acres under cultivation in British India, and that the gross value of the crops in a good year was well over a thousand crores of rupees, so that even a small percentage of improvement meant a large increase in the wealth of the country. His own experience as a member of the Indian Industrial Commission had not been

altogether satisfactory ; some of the points raised in the paper were dealt with in this report, amongst them being provision for a powerful central authority to deal wih the various problems connected with agriculture, but unfortunately political considerations favoured the transfer of agriculture and industries to the Provincial Governments, and, contrary to the advice of the Commission, the whole of the proposed central organisation was scrapped, with the result that much work which might have been started had proved to be beyond the resources of local administrations. A recent tour through the North of India had given him the advantage of seeing how things were going on, and he had noticed how comparatively little was being done, and how indifferent each province was to the work going on in the other provinces. If a Royal Commission could remedy such matters, he was in favour of one, but it would be difficult to prevent politicians being appointed on the Commission—men who generally wanted to write a Minority Report. (Hear, hear.) Such being the case, he had come to the conclusion that it would be advisable to try to work on the co-operative principle. It seemed to him that a Federal Council composed of expert members nominated by each Province could be established, independent of the Government of India altogether, and they might meet to discuss the problems before them and frame programmes of work. In that way it might be possible to evoke more active interest in the matter, and by co-ordinated effort solve some of the problems now under discussion. (Hear, hear.)

Sir Patrick Fagan said that, with 70 per cent. of the population of India dependent on the cultivation of the soil, and 90 per cent. of it living in rural localities, it was obvious that whatever political and industrial developments the future might have in store for India, rural and agricultural development, both on its economic and commercial, as well as on its technical and scientific sides, must certainly occupy a position of pre-eminent importance, because it was the chief means towards the development of India's political and cultural capacity. It was one of the most regrettable features of the political turmoil which had characterised the recent past in India that it had tended to relegate to obscurity the more

pressing material needs of the masses. And, amid such needs, all that bore on the subject of rural and agricultural development must occupy a foremost position. In saying this, he made no suggestion that the problem of political development was not worthy of the attention which had been devoted to it. He thought the Lecturer had not given quite sufficient consideration to what had been already done for promoting the rural prosperity of India. A very long step had, in recent years, been taken in dealing with agricultural indebtedness by the introduction of co-operative rural societies. In the Punjab, for instance, there were at least 8,000 of those societies, with a membership of 200,000 and a working capital of some two crores of rupees. They supplied a means whereby the peasant could secure on equitable and fairly easy terms capital for the prosecution of his industry. In this respect the position was very much better than it was when he went to India forty years ago. What had been done already was full of instruction and encouragement as to what might still be done in the very wide field which still remained. He was disposed to agree that something in the nature of a scientific enquiry was desirable, whether that took the rather cumbrous form of a Royal Commission, or some other shape likely to lead to more speedy practical results. But, in any case, an immense mass of material was available in India, though in an undigested and inco-ordinated form. A principal function of the enquiry suggested would be to digest the information which already existed in such vast volume about the condition of rural India.

Mr. Arnold Lupton said he had listened with interest to six men of great experience ; they had not contradicted any of the statements made by the Lecturer as to the condition of the people. Professor Gangulee supports William Digby, who filled his book with reports from the highest English officials in India, the saddest book in the English language, called " Prosperous British India." It was true that 50,000,000 people in India, from January 1 to December 31, never had one full meal in the whole year. What was one to think of the Government ? The prevailing agitation for a change of Government was the one hopeful sign of the times.

The land over large areas had got to the very lowest point of

production in India through the want of manure. This deplorable condition came about because no one insisted on the necessary manuring of the land by the tenants, as was done by the landowners in England.

The Indian Government statistics were first-class, and he found from them the total food production of India, and that there was just enough, equally divided, to provide for every human being—if there had been no animals to feed. The domestic animals of all sizes, not counting poultry, were equivalent to 170,000,000 oxen ; in addition to grass, straw, and other green food, they required corn. There was no surplus corn production, so that what corn the animals had, in effect, came from the stomachs of the Indians. This could easily be remedied ; he had described the means in his book, " Happy India." But it was necessary for the Government to take the matter in hand ; if they did, at a trifling expense, in a few years, there might be general prosperity and abundant food for all. But the Viceroys and their courts took more interest in Tibet, the North-West Frontier, and Afghanistan than in the daily life of a submissive peasantry.

PROFESSOR AHLUWALIA GOPALJI said : In India people expect everything from a Government responsible to the British Government. They ought to work out practical problems, help themselves, and avoid much talk and unnecessary criticism. The three greatest problems of India in order of importance are : Swaraj (self-government), ganam-maryada (birth-regulation), and khetibari (agriculture, including dairying and fruit-culture). A Royal Commission is, after all, a waste, but a first-rate waste, and should be appointed.

In replying, PROFESSOR GANGULEE said : It is gratifying to note that there is a general agreement as to the need for an enquiry into India's rural problems. The difference of opinion lies in regard to the method to be adopted in holding such an enquiry. In view of the prevailing temper of the country, the task cannot be successfully accomplished either by Provincial or Central Government. The enquiry must be directed by a Royal Commission,

and must be free from the political bias of the Indian Nationalist as well as of the official bodies. Only such an impartial tribunal will be welcomed by the public opinion of the country. With regard to the difficulty arising out of varied conditions in different parts of India, it could be solved by appointing a number of regional commissioners for a given typical agricultural tract, whose function will be to collect such relevant information as would be required by the Commission.

Sir Alfred Chatterton made an admirable suggestion for the formation of a Federal Council, but the task of *diagnosis* of the sources of disabilities under which the majority of the people work cannot be discharged by such a Council. The appointment of a Rural Commission by Royal Warrant and the publicity which must of necessity attend its activities would help to draw the attention of responsible people to the vital need of overhauling the conditions of rural India. Thus the public opinion will be roused for necessary legislative or social reforms. Sir Alfred, I am sure, will agree with me that progress in such matters in every country is conditional on public opinion.

Some of the speakers have introduced the problem of the Indian Constitution. That is a ground on which I fear to tread. To my mind political prophecies are not in the least helpful in bringing about necessary changes in the Indian political outlook, nor are they relevant to the subject under discussion this afternoon. If, however, one likes to be critical, one might point out to Sir Charles that if a five-year old representative system of Government was unable to give any evidence of solving the Indian rural problem, how was it that, in spite of generations of settled rule and undisturbed peace within her frontiers, the great majority of the Indian people are to-day unable to find a decent human standard of living ? But let not these controversial matters be allowed to confuse the main issue.

I share Mr. Rothfield's hope in the attainment of provincial autonomy ; but, situated as we are to-day, it is difficult for us not to rely on supreme Government. The fact remains that Parliament has supreme control of Indian affairs, and therefore the British Government cannot absolve itself from the responsibilities of helping India to make any adjustments that may be necessary

to enable her to keep pace with the conditions of modern civilization.

MR ROTHFIELD appears to be impressed by the support given to the co-operative movement by Indians. I am well aware of this fact, and prepared to give full credit to the services rendered to this movement by many men of high position. But do we actually find among them those who call themselves "natural leaders of the people"? And is it not a fact that some of the wealthy people who participate in the movement are at the same time actively engaged in the money-lending business?

I must thank you again most cordially for the interest you have taken in the subject. It was a great encouragement to feel that Lord Peel was able to express sympathy and interest by taking the chair at this lecture.

LORD LAMINGTON said he would like to associate himself with the chorus of approval given to the paper. With regard to the quotation which had been criticised, as to the squalor that existed in Indian houses, he considered it to be a gross inaccuracy; the *inside* of their houses was always the embodiment of cleanliness, though outside the house no attempt might be made to observe sanitary precautions.

Another criticism was where the Lecturer found fault with regard to the lack of macadamised roads; he had always understood there was nothing the Indian liked less than a macadamised road, and wherever one was made a soft roadway was always left at the side for the use of native carts, and he did not think the Indian ryot would find fault with regard to the lack of them until the time came when he adopted Western methods of locomotion.

With regard to the problems of rural life in India, whilst it was perhaps desirable to have an enquiry as to the conditions, he did not think it was desirable to have a Royal Commission. All the information already existed, although perhaps it needed to be formulated and condensed. Any enquiry ought to be confined to Provinces. A general enquiry would be no more practicable than one for all Europe.

VI.

The British Commonwealth and the Indian Peasant.

[A Meeting of the Independent Labour Party was held at Harpenden, (Herts)—the seat of the famous Rothamsted Agricultural Station. At the request of a number of friends of the Party the following paper was read on the 6th June, 1925. Mr. Harold Sandon, M.Sc., was in the Chair.]

Fellow-Citizens of the British Commonwealth,

I have been requested to speak to-night on the political situation in India; but I am afraid you will be disappointed. Since I have taken refuge in the Rothamsted Laboratory, India has also become a distant land for me. To be frank, my information as regards the present political situation comes to me through your newspapers in which even the most important questions relating to the Indian Empire find very little space. You will, therefore, pardon me if I avail myself of this opportunity for the purpose of elaborating the subject on which I have been contributing letters to your press. That subject, as some of you know, deals with the conditions of life in which the Indian peasantry lives.

Concurrently with the signs of unrest in India there has been an increasing interest on the part of our fellow-citizens of the British Commonwealth to recognise her place in the communion of universal humanity. That recognition has a greater significance for India than any political concessions she may acquire from the British Government.

Politically, steps have been taken to give India certain measures of reform which may eventually raise her to the status of a self-governing dominion. Her representatives now participate in the world's affairs. She has been admitted into the League of Nations, and in the International Labour Organisation she holds a responsible position as one of the members of the governing body.

These post-war developments, however, cannot bring about any fundamental change in her rural economics which stand in need of re-adjustment to the new conditions. Everywhere in the internal affairs of the country one is able to detect an ill-balanced socio-economic structure.

The introduction of Dyarchy led to the transference of the Departments of Agriculture, Education, and Sanitation to the Ministers called into being by that constitutional measure; but, partly due to lack of knowledge as regards the exact nature of the problems involved in these "nation-building" Departments, and partly due to the political confusion in which the Ministers found themselves, they were not able to record any achievements in the direction of revitalising Indian rural life. Thus, they could not offer the people any convincing proof of the benefits of the Reforms.

The circumstances following the inauguration of the Government of India Act have been unfortunate, and they have given a fresh lease to the spirit of discontent among the politically-minded classes. Both the giver and the recipient of constitutional blessings are in moods equally vehement in expression, each blaming the other for the inefficacy of constitutional remedies for India's ills. It is no exaggeration to say that never before in the political history of India has there arisen a situation like that of the present time. While it is clear that neither the Swarajists nor the revolutionaries will be able to organise a really effective movement by which the foundation of an organised State may be shaken, one has to admit that the attitude of distrust gradually spreading among the masses would be a disaster for India as well as for the British Empire. The conditions of *rural life* in India are such that the spirit of distrust in the Government is likely to strike deeper roots; and once the substratum of national life is contaminated, the remnant of her disintegrated socio-economic life will collapse. The political remedies, as administered to her in successive doses, failed to bring about conditions under which processes for evolving a suitable form of government in India can have full play. In Indian rural communities one misses that healthy display of life which goes to supply energy for the necessary reconstruction of both economic and social organisations of a country. Democracy can only work efficiently in *the guild of life*.

Since the latter part of the eighteenth century the economic order that has grown out of the physiographical and social conditions peculiar to India has been brought into conflict with a host of exotic economic forces. The inevitable collapse of that order resulted in changing the centre of the economic sphere from rural to urban life. Cities grew, trade expanded, industries developed, and their collective forces largely began to influence the developmental processes of state-polity.

But in India this tendency is bound to be fatal to progress; and to an impartial observer the chasm between urban and rural life must appear as one of the potent causes of discontent.

The importance of rural reconstruction in India may be realised from the fact that there are some 685,000 villages, and that three persons out of every four have to gain their livelihood directly from the soil. It is a matter of extreme difficulty for those who enjoy life under the conditions of Western civilisation even to imagine how these people live. While there may be some exaggeration in the Nationalist Press or in the superficial knowledge of sympathetic British tourists, one may safely quote the Governor of a great Indian Presidency who, speaking of the cultivators of the soil in India, said : " They do not live; they only exist." His Highness the Aga Khan, who cannot be accused of any prejudice against the Administration, describes the life of the peasant of Western India in the following terms, which in their broad aspect can be applied to the *ryot* in other provinces :

" The ill-clad villagers, men, women and children, thin and weakly, and made old beyond their years by a life of underfeeding and overwork, have been astir before daybreak and have partaken of a scanty meal consisting of some kind or other of cold porridge, of course without sugar or milk. With bare and hardened feet they reach their fields and immediately begin to furrow the soil with their lean cattle of a poor and hybrid breed, usually sterile and milkless. A short rest at midday and a handful of dried corn or beans for food, is followed by a continuance till dusk of the same laborious scratching of the soil. Then the weary way homeward in the chilly evening, every member of the family shaking with malaria or fatigue; a drink of water, probably contaminated, the munching of a piece of hard black or green

chapati, a little gossip round the pipal tree, and then the day ends with heavy, unrefreshing sleep in dwellings so insanitary that no decent European farmer would house his cattle in them."

Let us hear how Kipling describes the life of the Indian peasant :

> "His speech is mortgaged bedding,
> On his kine he borrows yet,
> At his heart is his daughter's wedding,
> In his eye fore-knowledge of debt.
> He eats and hath indigestion
> He toils and he may not stop,
> His life is a long-drawn question,
> Between a crop and crop."

We have still another very interesting account recently published by Mr. Samuel Higginbottom who is connected with a Presbyterian Mission. He writes :—

"Then we tried to find out how these people lived, and we learned in some villages at certain times in the year they would go for a month or more without a meal or cooked food. They would take millet, this small yellow grain which we use as bird-seed chiefly here—it is like fine buckshot—and they would steep that in cold water. You would see a man going to work—you can see them working on the mission farm to-day—a man starts out, takes down one corner of his *pagri* or turban takes a handful of grain and pours it into one corner, ties a knot in it, dips it in water, sticks it back on his head, and when lunch time comes a few grains in the palm of the hand are thrown into the mouth—you talk about Fletcherizing and other stunts that we have here in America, well, he can show you how to do it—and I have had men tell me that they would be perfectly satisfied with life if they could get all they wanted to eat of that. We learned in many of these villages that the custom was to have a meal every day when times were good, and so we learned how exceedingly poor these villagers were."

The questions naturally arise, how is it that, in spite of generations of settled rule and undisturbed peace within her frontiers, the great majority of the Indian people are unable to find a decent human standard of living? Has the agricultural production increased, and what are the conditions of agricultural productivity in India? What are the handicaps to the betterment of economic conditions in rural India and the causes to which they are owing? Are these causes of a permanent character, and to what extent they may be removed by the pursuit of a well-devised rural policy?

Unfortunately the political controversies continue to draw our attention away from these vital questions. We live in the hope that our political status will give us the clue to a panacea for the cure of our socio-economic ills arising out of mal-adjustments between the life of 5 per cent. and 95 per cent. of the people.

Obviously, the panacea for the most depressing conditions in rural India cannot be found merely in constitutional changes. It is becoming increasingly evident that the attention of the country must be diverted to the practical problems of revitalising the fundamental sources of her socio-economic life; and as a necessary step in that direction, an inquiry into the prevailing economic conditions of rural India is essentially needed.

Let it not be understood that the Government of the country is not aware of it. During the "eighties" it made some tentative efforts to arrest the process by which the bed-rock of Indian rural life was being disintegrated, but once this disintegration sets in it calls for drastic measures. Since the beginning of the twentieth century a number of remedial legislative reforms have been enacted with a view to reviving the Indian village community. By the introduction of co-operative organisations and agricultural research stations a direction to the economic welfare of the Indian peasantry has been given, but the time has come for a bold and comprehensive policy for the betterment of Indian rural life.

Since the Conservative Government came into power the writer ventured to suggest that a Rural Commission appointed by Royal Warrant be sent out to India with a view to submitting to His Majesty's Government a report which would enable the Government and the representatives of the people to formulate a programme for the revitalisation of rural life.

As a result of the Royal Industrial Commission appointed during the War period, we are now in possession of a wealth of facts and details on which the Government may formulate an industrial policy; but agriculture is the basic industry of the country; by its development not only the supply of raw materials (such as wheat, cotton, jute, oilseed, etc.) may be assured to the Empire, but upon it the prospect of the economic and social improvement of 95 per cent. of the Indian population largely depends. In India it is the rural population which must immediately engage our attention, and the conditions of life under which the peasantry lives should be the ultimate subject of our inquiry. We must consider the Indian peasant as an important factor in agricultural production, and examine what are the obstacles and defects which stand in the way of making him an efficient economic agent for exploring the potentialities of Indian agriculture. At this stage of transition to commercialised agriculture, such an inquiry is essentially necessary in the interests of India as well as of the Empire. The scope of inquiry must needs cover a large ground and be comprehensive; but the Commission should direct special attention to the conditions prevailing in the rural areas so far as they affect farm production, and particularly as regards the prevalence of practices operating against the fundamental interests of agricultural development.

I am aware of the official attitude which is characterised by excessive political caution towards such an inquiry. But to those who have had occasion to come into close contact with the rural classes, certain psychological changes are quite noticeable. The idea that the Government of the country does not stand by them is gradually gaining ground. The appointment of a Royal Commission will show that the present Government is genuinely solicitous for the economic and moral welfare of the masses, and the immediate effect of such an act cannot but rekindle people's faith in the Government.

A policy of rural reconstruction based on the recommendations of the Royal Commission will assuredly furnish a rallying point for all the more moderate influences; and the existing movements for the recuperation of rural life organised by numerous social-service organisations in India will receive much-needed

direction. Thus the forces which the Government will be able to mobilise for carrying out a well-devised programme for rural reconstruction will gradually help to build a stable economic foundation without which the structure of representative government cannot be supported.

Friends, I must confess here that I am not a politician by profession. My advocacy for taking such practical steps as may lead to the improvement of the economic life of the Indian peasant has been greatly misunderstood by those who are absorbed in constitutional questions. But practical politics must deal with the immediate problems which affect the majority of Indian people. I still maintain that in India we have utterly ignored the fact that the developmental processes of State policy cannot function normally unless and until national activities are directed towards necessary socio-economic adjustments. In the history of political agitation in India constructive ideals are conspicuously absent; and that is why the Congress has failed to be creative. An inquiry of the nature suggested here would throw much light on the existence of such mal-adjustments in the socio-economic life of the people as are bound to cause serious obstruction to any process of political evolution, and we shall then realize that the first and foremost task before us is to discover the elements of affinity amidst the congeries and *ensembles* of various conditions of life. We have to construct a foundation suitable for the support of a twentieth-century form of government, realising that if the conditions of life of the greater part of the population remain static, any system of representative government is bound to break down.

The success of a Royal Commission will largely depend on the manner in which the Government approaches the country. Bearing in mind the psychology of the people, all likely sources of misunderstandings should be carefully avoided. A Royal Proclamation setting forth the purpose of the Commission will help to win the confidence of the people, and the scepticism of the educated community as regards any benefit accruing from an official inquiry can be overcome by soliciting their active co-operation in getting at the root causes of India's poverty. While the Commission should be presided over by a

member of the House of Lords, the majority of the members should be Indians. In preparing the list of witnesses efforts should be made as far as possible to obtain views from all shades of public opinion, so that there may be no trace of suspicion as to the motive of the inquiry.

Since the publication of the proposal in the columns of *The Times*, I have had the privilege of discussing the matter with certain members of the Government and other public-spirited men of this country. While expressing their full sympathy with the purpose of such an inquiry, they raised certain questions which might influence the decision of the Government. Therefore I find it incumbent on me to answer some of the questions put forward.

The first important question is :

Whether constitutional difficulties may not arise in an inquiry which involves departments such as Agriculture, Education, Sanitation, " transferred " to popular control by the Act of 1919.

Inspired by the wave of idealism that swept over England during the Great War, and anticipating the demands of the politically-minded classes of India, His Majesty's Government laid the foundation of responsible government in India. The sudden change in the political system, however, did not affect—nor could this be expected—the existing economic order. By the Act of 1919 the Indian Ministers have been entrusted with the control of the administrative organisations, and, realising that the test of efficiency would lie in their ability to run the State machinery, their attention is chiefly focussed on the smooth working of the departments. In their attempts to introduce proposals of economic reforms, one not only misses that understanding of the processes by which the complex economic forces of the day may be harmonised, but also the intimate knowledge of the conditions, economic and social, which are not operating in favour of the progress of the Indian masses. The function of a Royal Commission would be to diagnose the root causes of poverty in the rural life of India. Further, it would indicate the manner in which a comprehensive rural policy might be formulated, both in the interest of furnishing the stages of representative government with stable

economic foundations and in making India a more valuable Imperial asset. There is certainly no limitation in the Government of India Act of 1919 which might stand in the way of appointing such a Commission. By that Act the British Government has undertaken a greater responsibility, and, at this stage of India's political history, much depends on the lead that may be given to her in readjusting her socio-economic life to the complex factors of modern civilization. Such a lead as may come from a Royal Commission on rural India will be welcomed by those who are pledged to work the reforms successfully. The representatives of the people will then have before them an analysis of the factors which are influencing the existing rural conditions. In that historic Royal Proclamation acclaiming the Reform Bill, His Majesty advised the leaders of the people "not to forget the interests of the masses who cannot yet be admitted to franchise." The appointment of a Royal Commission with a view to finding how best the interests of the masses may be protected cannot offer any insoluble constitutional difficulties, and its findings will be of great assistance to the Parliamentary Statutory Commission of 1929.

The seconsd question is :

Whether the materials necessary for such an inquiry are not already available in numerous official reports and publications.

While recognising the wealth of information available in ficial documents, it must be admitted that they do not take cognizance of important contributory factors which are outside the sphere of official interests and influence. If official documents were sufficient for diagnosing certain vital deficiencies in national economy, there would be no necessity for Royal Commissions in any civilized government. Notwithstanding the Blue Books, the Government of the United Kingdom has had two Royal Commissions within the last fifty years to inquire into the causes of agricultural depressions. In the Commissions appointed by the Crown every effort is made to obtain evidence from the several sources representing different interests. Admittedly, in the official papers relating to a country like India, where the administrators cannot always come into touch with the life-current of the

people, it is not only difficult to find the records of divergent views on such questions as may be raised in connection with an inquiry such as is proposed by me, but the changes that are taking place in the rural life are often passed unnoticed, or at best do not receive the attention they merit. "Rural classes have the greatest stake in the country because they contribute most to its revenues," write the authors of the Constitutional Reforms, and yet no comprehensive inquiry into their conditions of life has been made. I submit that the official documents need to be supplemented by evidence from other sources, and that there would then be abundant material for examination by a Royal Commission.

We now come to the third question :

Whether, owing to the presence of such varied conditions in different parts of India, any benefit may accrue from an inquiry which, it is suggested, should include the whole of British India.

One fully realizes the importance of the regional factor in economics. While it exerts a considerable influence in moulding the character of economic development, the more primary determining factors are those inherent in the very organisation of modern civilization, and to these organised and largely mechanical forces the unorganised rural life in India must adjust itself. The first step, therefore, towards formulating a comprehensive rural policy is to discover the principles which are fundamental in determining the direction in which the economic regeneration of the country must proceed. For this purpose the presence of varied conditions in different parts of India will not offer a formidable obstacle. The laws governing the economic interests of the people are at least equally operative in different parts of the country, however divergent the conditions of life may be.

There are other minor questions which may briefly be alluded to. The question of the expense of a Royal Commission may be answered with the remark that a sum spent for an inquiry which may lead to the adoption of an agricultural *policy* in India must be considered as an investment, the benefit of which the country will reap in the restoration of the confidence of the vast rural population in the authority of the State, and in the inauguration of an era of revival in agricultural practices.

As regards the pessimistic outlook that the problem of India's poverty is insoluble owing to the rapid increase in the population, I wish to emphasise that the agricultural possibilities of the country have not as yet been realised, much less fully explored. Furthermore, the true function of a modern State is to adapt itself to such an inevitable increase. To say that India is densely overpopulated and that her terrific poverty is therefore insoluble is to shirk the most important duties before the British Commonwealth. It is indeed a very sad exhibition of the non-scientific attitude of mind of some of the overzealous official apologists.

I am afraid I have exceeded the time-limit of the meeting and apologize for detaining you so long. The Indian peasant constitutes the bulk of the population of the British Commonwealth, and I feel justified in laying before you the problems that confront that portion of suffering humanity. I thank you, friends, for asking me to address you to-night.*

* The address was followed by a discussion which was not taken down.

VII.

Indian Politics and Rural Reform.

[After the meeting of the East India Association under whose auspices a paper on the problem of Indian Rural Life was read, considerable interest in the matter was roused among a number of friends. It was arranged to have a meeting to discuss the questions further. Miss Maud Royden kindly lent Eccleston Guildhouse and on the 18th of June a conference was arranged under the presidency of Sir Michael Sadler, K.C.S.I., inviting only those friends who are specially interested in India and her problems. The conference was opened by me with a short address urging the necessity of a through inquiry into the conditions of the Indian peasantry. I take this opportunity of recording my sense of gratitude to Mrs. Alexander Whyte, Miss Maude Royden and to Sir Michael Sadler for the kindly interest they took in my plea for a Commission of Inquiry into the rural conditions in India and for all the trouble taken in summoning the conference.]

Sir Michael Sadler, K.C.S.I., was in the Chair. In his opening speech, he expressed the view that we were all under debt to India and what we have learnt in India and from India goes on growing in our minds. "We feel, I think, that the problem of India is both spiritual and economic. Spiritual fundamentally, but on the spiritual side there is a strong pressure, past and present, of economic facts. On the economic side alone there is no hope; no hope, that is, unless men and women see beyond wealth-getting to the things of the spirit.

We have met in order to hear Professor Gangulee say what is in his mind and heart to say. I will now ask him to open our Conference and when he has read his paper perhaps he will allow us to ask him questions and state the points on which we would like further guidance."

Sir Michael, Ladies and Gentlemen,

I am deeply moved by this expression of your genuine interest in the welfare of the Indian masses. There is unmistakable

evidence among a certain section of the British people of a sincere desire to acquaint themselves with the realities of the situation in India.

I attach a great deal of importance to the necessity of keeping every educated man and woman of this country well informed as to the conditions of the Indian peasantry, for I believe that the conception of the British Commonwealth cannot be made real unless it is based upon a wider inter-relationship of humanity. It is also necessary to realise that there is an identity of economic interests, and, in order that the benefit may be made reciprocal, no time should be lost in adopting a vigorous policy for the betterment of Indian rural life.

As a step towards the adoption of such a policy, I suggest that a Commission be appointed by the Imperial Government for the purpose of making a searching inquiry into the existing disabilities that affect the life and labour of the majority of India's population. If we want "prosperous India," we must rehabilitate rural community on a sound economic basis.

One of the fundamental pre-requisites for the realisation of our political goal is the will to regeneration. While it is clear that that will is at last immanent in the educated classes, to them now belongs the responsibility of demonstrating the right moral attitude towards the great majority of the population of India. It is a misfortune that one cannot submit sufficient evidence to show that the interest of the peasantry has largely dominated the minds of the legislators in our councils and assemblies. The truth is that prolonged and persistent domination of anti-social and uneconomic conditions has so completely mastered our life that it is now difficult to detect the sources of the handicaps to any process of revitalisation. Given the will to regeneration, the next thing is to analyse the facts of our socio-economic life. Without such an analysis, the true nature of the mal-adjustments cannot be known; and unless we know it, we cannot apply any effective remedy.

This, in brief, Sir, is the *raison d'etre* of the proposal I have ventured to submit before the Imperial Government. The proposal met with some approval from such public bodies in India as are able to discover fatal disabilities in the socio-economic life of the majority which are sure to stand in the way of attaining poli-

tical freedom in its true sense. Referring to the need of an inquiry *The Evening News of India*, a paper published in Bombay, says : " But the future of Indian agriculture, on which the big majority of the people of this country depend for their livelihood, is a problem which will have to be faced at no distant date. We do not mean to infer that nothing is at present being done for the agriculturist. By the establishment of co-operative societies and agricultural colleges, Government has done and is doing a good deal, but a real national effort is required to bring Indian agriculture into line with that of other countries and make it the success it ought to be." After stating some of the handicaps to better rural life in India, the paper says :—" The problem of how these difficulties ought to be slowly but surely solved—they obviously cannot be settled in a day—is one well worth careful consideration by a Royal Commission." (May 19, 1925.)

I feel tempted to quote at length from another leading journal of India with a view to replying to the criticism that my proposal received no support from India and as such the Government should ignore it.

The editor of the *Wednesday Review* writes as follows :—

" We are glad that the Secretary of State, LORD BIRKENHEAD, is interesting himself in the Indian rural problems and, if the report be true, he proposes to appoint a Royal Commission to investigate into our rural needs. If such a Commission be appointed it will prove about the most useful of the Commissions, Royal or other that have been hitherto appointed to report upon particular questions. Apparently nobody thought that our rural needs are of sufficient importance for the appointment of a Royal Commission. The Government and the intelligensia are too much absorbed in flshy politics to turn their attention to the obscure village, though the village still lingers as the unit of our national life and is really the backbone of the country. But its politics are not of the advertising variety ; and, that is why it does not attract the politician and the professional agitator who pretend to speak on behalf of the masses of the population whose abode is the village. The situation briefly stated is this. The Government, Provincial or Imperial, is too far removed from the village to attend to its

wants. But we cannot say that it has been neglecting the village. It has created Local Bodies with statutory powers which are expected to keep in close touch with the village and supply its wants from their resources. It is, however, notorious that in this regard the Local Bodies had sadly neglected their charge and it is the village which receives the least attention from them. The fact is, the constitution of these bodies is itself against a proper discharge of their duties to the villages. The District Board is composed of members some of whom come from the outlying villages but they are generally ignorant and often illiterate, are unable to follow the proceedings of the Board with intelligent interest, and therefore, unable to help the Board in doing its duty by the villages. They are content with promises from the executive of the Board that it would set right a village road or two, if funds permitted, or establish a primary school there. After the meeting which is held once in two months or so, the members disperse to the distant corners of the district, and, the village road and the primary school are no more remembered. The area under the control of a District Board is too extensive for its executive to devote the necessary attention to the distant and outlying tracts. No doubt, there are Taluk Boards having jurisdiction over smaller areas. Here again their constitution is against a proper discharge of their duties towards the villages. The so-called village panchayats which are supposed to be constituted for the sole and specific purpose of attending to the needs of the villagers, are no better. The panchayat is an attempt at the revival of an old institution which was the pride of India in ancient days. It enabled each Indian village to be a self-contained unit enjoying a full measure of autonomy unaffected by the political and dynastic cataclysms which shook the foundations of the cities and capital towns. The village went the even tenor of its way, the five wise men or elders of it attending to its slightest wants, settling disputes and promoting the amenities of its life. There is little use in sighing for the old days. It will be madness to attempt the revival of the village panchayat in its pristine glory. The complexities of modern life and civilization will not permit it. The discontented politician will glibly accuse the British rule of the disappearance of the village panchayat. But the British rule is no more to blame for the disappearance of the

panchayat than for the appearance of the railway. British rule or no, the railway would have appeared and the panchayat would have disappeared. No purpose is served by discussing who is responsible for it and trying to fix the responsibility on something or somebody. The village is not going to be improved by an academical discussion of the causes that led to the extinction of the panchayat and reduced it to its present helpless condition. What is more to the purpose is to set up an independent agency which would take the place of the old panchayat and be able to devote its undivided attention to the improvement of the village. The Indian village is not the Arcadia that it is supposed to be who read of it in the books or who catch a distant glimpse of it as they are whirled past on a railway train. A nearer approach will completely disillusion one. The Indian village is the most insanitary of places. It has no water-supply and, if it has any, it is a prolific source of contamination and disease. The children have no school to go to. The village road is a mockery. It is a series of ruts of lesser or greater dimensions. Nobody cares to recognise that the improvement of communication between the village and the town or the nearest sea-port has a direct bearing on the material progress of the country as a whole. There is no incentive to the villager to try to make two blades of grass grow where one grew before, as the means of transport are practically non-existent. If Lord Birkenhead be really interested in the rural problems of India, the least that he can do is to appoint without loss of time a Royal Commission which would deal with the whole question of village improvement comprehensively and make practical suggestions for rehabilitating the village as the unit of Indian national life."

(May 13, 1925.)

Of course, the political parties have taken no notice of my plea for this inquiry. The disproportionate interest in politics has created among the educated classes in India a disproportionate belief in political remedies.

My firm conviction that the readjustment of the existing social and economic conditions in India is a necessary pre-requisite for her further political evolution has been challenged by some of my critical fellow-countrymen. They assert that I under-estimate the political realities of India's problem, and ignore the fact that only

when the people are adequately invested with political power can the necessary reforms in matters relating to education, sanitation, and the economic development of the country be made possible. Consequently, they do not evince much enthusiasm in the proposal for an inquiry into the fundamental handicaps to progress in agricultural and rural conditions of the country, and consider that such a step might result in giving the Government yet another opportunity to divert our attention from our political objective.

What, then, is the political objective ? It is becoming increasingly necessary that the expressions used in stating the nature of the political alliance which India wishes to make with Great Britain must be clearly defined and their implications thoroughly grasped. To one group of politicians the cry of "self-government" means absolute independence, while the other qualifies it by fixing its limit at Dominion Status. Ignoring the extravagant utterances of the former, it is clear that in the demand for substantial self-government the intelligent opinion of the country is practically unanimous. It is a noteworthy phenomenon that, amidst the very diverse conditions prevailing in various parts of that sub-continent, there is, perhaps, for the first time in her political history, this solidarity of public opinion. But while one would sympathise with the moral legitimacy of such an aspiration, the difficulty arises out of the methods advocated by various Indian parties for the speedy attainment of self-government on Colonial lines, or, in other words, " Dominion Status."

The critics who cry out " give us Dominion Status and other things will be added unto us " fail to appreciate the fact that its success depends upon many conditions co-ordinate with the socio-economic life of the nation. Just as the political consciousness which animates the educated communities to-day is the result of certain fundamental changes in the educational and social systems of the country, brought about by Indian reformers in the middle of the nineteenth century, so it is now necessary to set free such forces as would furnish the necessary impetus towards the sure but slow process of democratic self-government in India. Before we can have our political ideas and ideals fulfilled, we must incorporate into our basic industry, which is agriculture, and also into the

general social outlook, such ingredients as would assist in the political evolution of the country.

The problem in India, I repeat, is at bottom economic, and unless this vital issue can be successfully dealt with the political problem must remain incapable of solution.

To my mind, " the isolation of the poor " is the outstanding feature of socio-economic life in India. While factors which tended to accelerate this had been so regulated in the past by organisations in the village communities that the disintegration of divergent social unit was partially checked, with the development of external relations, brought about by the establishment of Dutch and English companies, this control was no longer possible ; for, to quote Mr. Moreland, " almost throughout India the tendency was to reduce the reward of production to a point where it ceased to offer an adequate incentive, to attract brains and energy to the struggle for a share in what had been produced by others." That is, economic parasitism on one hand and the demands of a chaotic administration of the decaying Moghul Empire on the other, robbed the actual producer of substantial benefit derived from the opening of the external markets.

While settled government and administrative reforms helped to protect the interest of the producer, the process, culminating in the destruction of the companionship of classes, went on generation after generation. Thus, the existing differences among various groups, to which socio-religious traditions lent support were rather intensified by the inevitable changes in economic relationships. All these factors—social, religious, educational, and economic—combined in creating a cleavage between the semi-educated and an educated minority known as *Bhadraloka* and a densely ignorant majority spoken of by such contumelious terms as *Chasha* or *Chhotaloka*. The latter lost confidence in the educated class as a whole, and the evils resulting from this became a menace to national life.

Then came the day of awakening when we soon discovered the obstructions in the current of our life, while the resurgent spirit of India in its struggle for freedom found in an alien government the chief source of obstacles against national development,

the fundamental truth was laid bare by the voice of the Poet of the Indian renaissance.

" Leave this chanting and singing and telling of beads !
Whom dost thou worship in this lonely dark corner of a temple with doors all shut ?
Open thine eyes and see thy God is not before thee !
He is there where the tiller is tilling the hard ground
And where the pathmaker is breaking stones,
He is with them in sun and in shower.
And his garment is covered with dust.
Put off thy holy mantle and even like him
Come down on the dusty soil !
Come out of thy meditations and leave aside thy flowers and incense !
What harm is there if thy clothes become tattered and stained ?
Meet him and stand by him in toil and in sweat of thy brow."

Although the call inspired the young generation, it did not succeed in rousing them to action. The task was difficult and there was no one to lead. A decade later another call, led by an irresistible idealist, stirred the country.

Foreseeing the danger that the normal growth of national life might be stunted and the possibility of representative government in India frustrated by allowing the process of the isolation of the poor to develop further, this apostle of the poor asked his countrymen to spin and to remove the sin of untouchability from the social system. Expounding his gospel of the spinning wheel, he recently said : " When a man spins he feels he has something in common with the starving Indian peasants. It is only when we feel in common and work in common for at least half an hour a day that we can realise the real lot of the millions of India."

While his emotional appeal, followed by the discovery of certain obstructions in the current of our socio-economic life, resulted in adding fresh stimulus to the will to regeneration, it did not succeed in creating an organised enthusiasm in the country strong

enough to exercise an appreciable influence over constructive politics. As a matter of fact, the resurgent spirit of India found in an alien Government the chief sources of destitution, and the conflict appeared to be a general revolt against the impact of Western civilisation. The true and deeper causes of unrest, however, lie in the existing mal-adjustments not only in the economic organisations, but in every sphere of life ; and the methods recommended by MR. GANDHI failed to indicate any well-balanced, consistent and positive process of adjustments of which the country was in need.

The positive aspects of the Gandhi movement did not escape MR. CHITTARANJAN DAS. Though an evangelist of Indian traditionalism, he felt that the inhibiting influences active beneath the life of the Indian peasantry must be checked. After his release from prison, he offered a non-political programme with the reconstruction of rural life as its essential feature. When the question of popularising the Congress among the masses was being discussed, I ventured to suggest at an interview with MR. DAS that the establishment of a Provincial Congress Bank, designed after the Egyptian Agricultural Bank, would be the most effective means of impressing on the peasantry and village artisans the utility of a national organisation. He agreed ; but the drift of ever-changing tactical policy designed to wreck the constitution proved far too strong even for a man of his intellectual force. I cannot help thinking that his surrender to political demagogues was tragic. At any rate, it contributed no less to limit the freedom of action of a constructive mind. It is interesting, however, to note that in laying down the " honourable " terms of co-operation with the Government, MR. DAS asked for State-aid in raising a loan for village reconstruction.

Whatever may be the extent of failure of political agitation, it has succeeded in rivetting the attention of the country to the most depressing conditions which surround rural life in almost every part of the country.

Never before, in the history of India was there such a desire for the revitalisation of her rural life ; never before had the intelligensia come into such a close contact with the masses. The youth in every civilised country, in consonance with the spirit of

the century, is impelled by a desire of service. The function of the State is to throw open numerous spheres of activity so that this dominant spirit of service may find rational means of expression. The young men of India are seeking an outlet in their desire to serve their country, and unless they are mobilised for an organised effort to grapple with the vital problems of the nation, their minds will be continually focussed on mere political issues.

Turning to the rural classes, one finds conspicuous changes in their attitude. The idea that the Government of the country does not stand by them is rapidly gaining ground. The administrators can no longer congratulate themselves on ' Happy and contented dumb millions' of India. That pathological symptom is gradually disappearing. As far as the Indian masses are concerned, the unrest is essentially the outcome of their abject poverty. The agrarian trouble now and then breaking out in different parts of the country indicates that the rural classes are on the verge of desperation, and the British garrison cannot always succeed in restoring peace and order.

As an instance of the fact that the Indian peasant himself is beginning to realise the gravity of the situation, I translate here a passage from a circular issued by the Bengal Provincial Jotedars and Raiyats' Conference :—

"Agriculture, which is the principal resource of Bengal, is in a moribund condition. There are no strong cattle in the country, as a result of which land is not being ploughed regularly, and the want of rice, milk, and *ghee*, which are the principal foodstuffs, is being felt keenly. Various diseases are making their hold permanent in the country, and the life-power of the Bengali race is gradually waning. There are no grazing grounds for cattle in the villages, no arrangement for breeding them, or for their medical treatment."

Through the efforts of Mr. Gandhi, a number of peasant organisations have come into existence almost in every province of India, and they express, in substance, the sentiment quoted above. The truth is, the Indian peasant is still in the fifteenth century, while the political and commercial organisation of the country are shaped in accordance with the demands of the twentieth century. Such a wide discrepancy, giving rise to serious mal-adjustments in

Indian socio-economic life, is fatal to any form of stable government. Agriculture is the main industry of the country, but has it gained sufficient strength to cope with the pressure of new conditions arising out of the modern commercial impact ? As an instance of the consequences following upon many social and economic disabilities under which the Indian has to labour, MR. MACHIE'S (I.C.S.) evidence, given before the Taxation Committee, may be noted. He pointed out that a large proportion of the land in the Bombay Presidency had come into the possession of non-agricultural classes, such as moneylenders, through mortgages. As to the conditions of rural life, even a superficial inquiry shows that the Indian peasant, in many parts, is always on the verge of starvation. The rural sanitation is still very primitive, and in Bengal there is on an average one medical man to 42,000 rural inhabitants (excluding the municipal area). When formulating a suitable constitution for India to-day, the illiteracy of the masses offers a formidable obstacle. In the face of these realities, political prophesying for India is an idle speculation.

I am aware of the challenge that will be thrown to such views as I have placed before you. I do not for a moment doubt that as long as there is some misconception in regard to the motive of the British Parliament in respect of India's future political status, the present state of unrest among the politically-minded classes must continue. What I wish to emphasise is that the requisites for exercising " self-determination " must be acquired by a greater portion of the people, and that acquisition is only possible provided the primary and normal requirements of life are properly satisfied.

Let it not be understood that the Government is unaware of the changes that are taking place in India ; nor is it true that nothing is at present being done for the agriculturist. But the fact remains that the majority of the Indian peasants are found ' with all the improvidence and recklessness belonging to an irrevocable sentence of poverty for life,' and this in 1925 ! Admitting that many of the disabilities of Indian rural life are due to social and religious traditions, it cannot be denied that there is ample scope for improving the situation by the pursuit of a bold and comprehensive policy for the betterment of Indian rural life.

A change in the system of administration was long overdue. It became imperative under the stress of the circumstances to give India a hand in the affairs of her governance.

Concurrently with the sign of unrest in India there has been a marked change in the administrative policy of the Government. Steps have been taken to give India certain measures of political reform which may eventually raise her to the status of a self-governing Dominion. H.R.H. the DUKE of CONNAUGHT, in inagurating the Reform, said: 'The principle of autocracy has been abandoned.' India now participates in the world's affairs; she has been admitted to the League of Nations, and in the international Labour Organisation she holds a responsible position as one of the members of the governing body; but, all these post-war developments can never give her a dignified status in the comity of nations if she cannot give 200 millions of her own population a decent standard of living.

I, therefore, maintain that while political adjustments are necessary, it must be borne in mind that any changes made should be of such a kind as to lift from the Indian peasant the burden of grinding poverty. A conviction which has grown with my intimate association with rural life in India is that a well-devised policy for village reconstruction is bound to have a favourable reaction on the political situation of the country. The appointment of a Royal Commission for rural affairs will show that the Government is anxious to improve the status of an essentially agricultural community. The desire of the Government to recuperate the village life of India will furnish a rallying point for all moderating influences in the country. As progress in such matters in every country is conditional on public opinion, the publicity which must attend the activities of a Royal Commission would help to draw the attention of responsible people to the vital need of overhauling the conditions of rural India. The findings of the Commission would reveal to the youth of the country the underlying realities of India's problems. It will, then, be realised that social and economic development of the Indian peasantry can no longer be relegated to the background, and that the country must bring about conditions favourable to a process of revitalisation of rural life.

In conclusion, I ask you to remember that "Out of 460 million British subjects, 319 millions are Indians. Of this vast population about 65 per cent. live on insufficient food and dwell in huts so insanitary (to quote H. H. the AGA KHAN) 'that no decent European farmer would house his cattle in them.' When we think of building the British Commonwealth upon the 'economic brotherhood,' let us also think of 'the poorest, the lowliest, and the lost.'"

DISCUSSION.

CHAIRMAN :

SIR MICHAEL SADLER opened the discussion by saying that Professor Gangulee showed a vivid and intense desire for the betterment of India. He would like to put before the Conference two considerations of order and aim. First, let us have a general discussion on the larger issue, that is, assuming that enquiry through a well-planned Commission would be a valuable factor in contributing towards a wise advance. Secondly, the framing of a Reference for the suggested Commission. We had to consider what was the real aim of the Enquiry and how to avoid handcuffing the investigators. It was important to give everyone a chance to express an opinion and to bear patiently with the witnesses. The organisers must never doctor the conclusions but should record and publish a well-balanced account. Vague requests were of no value; it was necessary to ask the questions that you desired answered. No part was more important intellectually or more difficult than the questionnaire. In order to economise time he suggested that those present should frame in their minds eight or ten great questions on which we wished to have the experience and guidance of very different types of people. Professor Gangulee was facing one of the greatest problems of the world.

Dr. Gilbert Slater.—It was pointed out by DR. GILBERT SLATER that the value of a Commission depended very largely upon the manner in which it was appointed. It should be an impartial and unbiassed effort to get at the economic truth. In the opinion of the speaker it was important to gain the co-operation of all parties, and in particular that of the Moslem League and Mr.

Gandhi. A common aim, in which they could all co-operate, should be presented to them.

Mr. Oswald Mosley.—He emphasised the fact that the best brains of the country were concentrated on the political struggle. The politicians were engaged in manoeuvres to discountenance the Government and *vice versa*. The problem presented was, how to deal with this atmosphere of suspicion? How face up to, for example, the Bengal Land production or the Cornwallis Settlement? The economic and political issues are inseparable and a cessation of the political struggle was essential to the nature of investigation suggested by Professor Gangulee. A Commission, such as suggested, would involve the whole administrative machinery of India ranging from religion to taxation.

If methods of procedure were agreed upon, the question remains how to surmount the natural prejudices which one would be bound to meet. Local prejudices must be considered. It was also essential that there should be a central driving organisation.

Three essential factors were suggested by the speaker.

1. An Agricultural banking system, that is, some form of direct state credits so as to break the power of the moneylenders.

2. Introduction of co-operative farming, including the use of steam tractors. He cited as an example the case of a famine area in which the peasants, though starving, opposed the use of a steam plough and only under great pressure allowed it to be used.

3. Co-operative marketing must be organised centrally by some powerful driving authority. Elimination of middlemen was essential.

Chairman.—Sir Michael Sadler asked whether it would be possible to get a Commission which would do for the rural and economic welfare of India what the Phelps Stokes Commission had done for East and West Tropical Africa. He expressed the hope that the forward-looking governors might for the sake of India send out a Commission, which could obtain the kind of Report which had been written by Dr. Jesse Jones and his colleagues on the economic and educational needs of Tropical Africa.

Mr. Mosley.—Mr. Mosley answered that he considered that it would be very difficult for such a Commission to get evidence.

The Swarajists would oppose it on the grounds that they had already suggested such methods of inquiry and that nothing had come of it. In the present atmosphere he considered it essential that a political move as a gesture of friendliness should precede any action.

Professor Gangulee.—Professor Gangulee said that there was a possibility of making a truce. Mrs. Besant's Commonwealth of India Bill indicated the way to approach the problem of village reconstruction and an inquiry into this would help to show the sort of Constitution which might be suitable for India's Governance. But he added "Nevertheless I believe that India must evolve her own constitution." With regard to Land Reform, Professor Gangulee stated that he thought there would be considerable opposition ; but he very much hoped that this would not stem efforts towards rural reforms. In Bengal, he thought the Government would have considerable support in reforming the land-tenure system.

Mr. Yusuf Ali.—Mr. Yusuf Ali said he was entirely opposed to the appointment of such a Commission and he regretted that there were so few Indians present to discuss the subject, and in his opinion the people of India were very unfavourably disposed to Commissions of any kind. He took as an instance the Education Commission on which one would imagine there would have been complete agreement. He had recently visited the University of Calcutta and had discovered that the University had definitely refused to accept the recommendations of the Commission. In fact, he declared, that in the opinion of India the recommendations of the Commission were guaranteed to ruin the education of India. Thereupon, he made a plea for politicians on the grounds that the charges against them were not supported by facts. The question of village life had certainly been misunderstood and wrongly dealt with, but the fault lay not entirely with the British Government ; a great difficulty was the immensity of the country, even a Province is too big an area to deal with. It was imperative to try in India to clear the atmosphere of suspicion. It was necessary to allow time to elapse to enable the separate movements towards reform to go forward. The time for a Commission was premature.

After Tea MR. OSWALD MOSLEY took the chair.

Chairman.—He said we were to consider terms of Reference but as we did not seem to be quite clear as to whether or not such a Commission was desirable, therefore we should continue the discussion until we arrived at some decision. If the Conference decided that a Commission, as suggested by SIR MICHAEL SADLER, should be sent out it would be a good thing if the suggestion could appear to come from the Indians themselves. Possibly Tagore might be approached; for he had considerable influence with men like Gandhi, and a combined effort of this kind might inspire India to ask for such a Commission. It is most important that the Indians should make this move themselves.

Mr. Yusuf Ali inquired as to the cost of such a Commission and was told that it would entail about £20,000. It was suggested by Professor Gangulee that the Indian Universities might work in conjunction with the State Departments responsible for agriculture, rural credit, rural education and rural sanitation.

Professor Beni Prasad.—Professor Beni Prasad said that the political difficulty was the chief one. He suggested that the Commission should be appointed by the Ministers of the different Departments. He said that the agricultural system was bound up with the land tenure. The Commission would find itself baffled by a variety of problems and he therefore suggested Local Commissions. A Commission dealing with all India would take too long a time but *after* local investigation had been made an All-India Conference might be called to consider the possibility of such a policy. Indian Universities should be asked to co-operate and to do the preliminary work through such agencies as Rural Boards.

Chairman.—He suggested that the suggestion for such a Commission should be sent to responsible Indian quarters, to people of understanding and influence such as Tagore and Gandhi. The intermediary work must be left to a small sub-committee. He suggested that the Committee should consist of Professor GANGULEE, SIR MICHAEL SADLER, and MISS MAUDE ROYDEN. He asked the Conference to register its opinion on this matter.

The Conference voted that a Committee, consisting of the above members be appointed.

Professor Gangulee.—Professor Gangulee said that the terms of reference must of necessity be wide. Its purpose would be to inquire into the depressed conditions of the agricultural industry and the causes to which they are owing : whether those causes are of a permanent character ; and how far they have been created or can now be remedied by legislation. The inquiry would embrace all questions relating to agricultural research and education, cattle-breeding, rural transport, marketing of farm produce, agricultural co-operation and various aspects of rural questions affecting rural prosperity in general.

Mr. Yusuf Ali insisted that the terms of reference should be left to be drawn up by the Indians themselves.

Professor Gangulee said that non-official efforts in these directions were feeble and had failed miserably. It was time we stopped talking about a Dominion Status or any such ideal constitutional settlement with the British Government. "All of us, the intelligensia, are moneylenders ; and every peasant is in debt. I ask my friends to examine the foundations of our rural economy. The political parties as well as the Government of India are equally loud in professing that their ultimate concern must be the Indian peasant. And yet such facts as the rejection of the Orissa Tenancy Bill under pressure from the landed interest, or the prevalence of numerous sources of oppression to which the Indian peasantry is left exposed, do not suggest that the educated classes have yet a settled plan for rural revitalisation. The Government, on the other hand, cannot congratulate itself upon a policy which might have furnished sufficient evidence to justify its claim as trustees of the people."

To return to constitutional problems, Mrs. Beasant's scheme was interesting. The village Panchayet system is a very desirable thing for India. For the task of rehabilitating the village, every possible avenue for service should be explored and help should be accepted from any source, official or non-official. *Mr. Mosley* suggested the need of a central driving organisation. Judging from the Reforms, it is clear to me that India is moving

towards some form of Federal Government. And I may tell you that in the United States of America, the Government provides for such a strong Central Body : The U. S. D. A. in Washington.

Mr. H. Polak.—Mr. Polak said that Professor Gangulee had entirely under-estimated the political realities. It was futile to attempt to do anything constructive in India until the political problem was settled. Masses of the people are still uneducated and when asked for funds, there are no funds for education, the funds having been transferred (40 per cent. is devoted to military purposes) and therefore not available for education. It was necessary to take into account the people in possession of power and the existing type of Government. Political exigencies must not be ignored. Anything that appears to side-track the political issues would be a matter of suspicion. The problem of India must be settled by the people themselves. He stated that he was in favour of carrying on with the decision of the Conference but an unofficial Commission is desirable.

Hereupon Mr. Mosley declared the meeting to be closed. A hearty vote of thanks was passed on Professor Gangulee, which he gratefully acknowledged.

VIII.

The Next Step in Indian Agricultural Development.

[The Empire Parliamentary Association took a very keen interest in the problem raised by the discussion on Indian agricultdre and rural life in the press and platform. A meeting of the Committee on Indian affairs was held in the House of Commons on December 10th, 1925, at which the following address was delivered.

H. Snell, Esq., M.P., was in the Chair.]

Chairman :—

We have Professor Gangulee here who is Professor of Agriculture and Economics in the University of Calcutta, and he is going to speak to us on "The Next Step in Indian Agricultural Development." I ought to explain to him that we have got very important business in the House which is going on at present, and that is detaining Members from being with us. The subject upon which the Professor is going to speak is of extraordinary importance, and I am sure we shall all be delighted to hear what he has to say.

Mr. Chairman and the Members,

Lord Morley once pointed out India as the only great unit of the Empire which made the British Empire an Empire at all. Referring to India's place in the British Empire Sir George Birdwood wrote :—

"India has done everything for us, everything that has made these islands, as insignificant on the face of the globe as the islands that made up Japan, the greatest empire the world has ever known, and for this we owe undying gratitude to India."

In course of the dramatic changes that followed the post-War adjustments within the Empire, India has been described as its pivot. Therefore, it is in the fitness of things that your association should extend its invitation to one who is anxious to consider with you what may be called the foundation on which that pivot rests.

The vast areas of land, abundance of forests and a storehouse of minerals, may furnish the physical basis for an Empire but do not make one. That India possesses immense potential wealth in her resources is a fact which needs no special emphasis before this audience; but I do wish to emphasise what Sir Stanley Reed has recently pointed out that "in the past the Government of India had been cool towards the economic growth of India" and that "the national wealth of India would be doubled in the next five or ten years by means of a more vigorous agricultural policy." The fact is, throughout the Nineteenth Century, while the country was exposed to all the organised forces of Industrialism, there was no attempt made to adjust the productive occupations of the country to the new economic conditions arising out of a highly developed system of transport and commerce. The most efficient mechanism of the world's market supported by political supremacy of a great commercial and industrial nation investing progressively-increased amount of capital in India came into competition with the remnants of industrial life in India and gradually reduced her almost entirely to an agricultural country. According to the last Census 224 million persons, or 71 per cent. of the total population, depend solely on agriculture for their livelihood. Unorganised industries occupy 10 per cent. of the people, but they are unable to make a living out of their occupation alone. The result is already shown in the Census report, namely, the number engaged in industries has actually decreased and agriculturists have increased a little faster than the whole population. Add to the number of actual agriculturists those who are thrown in the category of vague and unclassifiable occupations, and you will have the total dependent on the produce of the soil. Therefore I feel justified in drawing your attention not only to the fundamental industry of the country, but to the conditions of life as well, in which 90 per cent. of the population live. A recent writer on the economic development

of the British Overseas Empire has reminded us that "it is from the (Indian) peasantry that the Government has derived in the past the bulk of its revenue, and from the peasants it draws the largest single item of revenue to-day; on the peasant the merchant depends for the bulk of his exports, and it is on the peasant that the artisan depends for his employment. It is the demand of the peasant that determines a large portion of the import trade."

And yet not till the beginning of the twentieth century was any serious attempt made to improve the methods of farming in vogue. The Government hoped that by establishing "law and order," by ensuring security of property, and by gradual extension of transport facilities the mass of the cultivators would be given sufficient incentive to bring about an appreciable improvement in agriculture.

What actually happened was that the area of cultivation was extended; and in order to meet the demands of the world's market, mixed farming was largely abandoned. In short, the economic phenomena created by the opening of the world market for commercialised products such as, jute, cotton, wheat, oilseeds, etc., were characterised by rising rents, lengthening chains of rent-receivers and middlemen, and widespread resort to the usurer.

Before passing on to the history and achievement of scientific agriculture in India initiated during the Viceroyalty of Lord Curzon, I may be permitted to make a brief reference to some of the features of Indian agriculture and of the conditions of life under which the rural population lives.

Perhaps, it may be of some interest to you if I quote here an extract from the address recently given to Mahatma Gandhi by the Tipperah (Bengal) Ryot's Association.

"We may tell you that the ryots of Tipperah—half-starved, half-naked, without health, without education—are the greatest of sufferers. We are the food-producers of the people and deserve the kindest consideration, but are really the least cared for in every way. We represent nearly 90 per cent. of the people, so that it may truly be said that Tipperah means the ryot. We have field-work only for about six months, when we work day and night, but for the remaining six months we have no employment on a living

wage, and have to starve. When our small and always insufficient stock of food-grain is used up we have no cash to buy food with, and have to resort to the money-lender who charges fabulous rates of interest, whether in money or grain. As a consequence we are unable to clear our debts, and our holdings are sold away to money-lenders and other profiteering middlemen who have no interest in food-production. We become thereby reduced to mere landless labourers without any right, and perish from starvation with wife and children. The sight would sicken your heart. Our lands do indeed produce jute. The rule always is that the producer fixes the price. But for some mysterious cause the price of jute is under the absolute control of the foreign merchant and the middleman, so that we are always compelled to sell our jute at a price that does not even cover the cost of production. We, Ryots, are not allowed to cut down trees on the land for which we pay rent, nor are we permitted to excavate tanks, though we should perish with family for want of drinking water. We, Ryots, are being ruined by litigation. The so-called settlements are periodical unsettlements to ruin the ryots while they afford a bumper crop of litigation to large and powerful vested interests."

Here in very simple language, we find a portion of the Indian ryots expressing themselves and in their statement we discover some of the fundamental truths as well as the obstacles to agricultural development of the country.

The first thing to remember about Indian agriculture is that it has to support a population which is pressing so closely on the margin of its resources that every adverse circumstance throws down a greater part of the cultivators below the level of subsistence. Such a state of affairs must constantly remain a source of anxiety for the administration of the country. An instance from the war-period may illustrate the point. Although the rise in food prices was not very high in comparison with the other countries during the war, the effect of controlled prices for grains on the internal price market was disastrous. The rice and wheat crops of 1916-17 and 1917-18 were probably the biggest on record, but in 1918-19 the loss of production amounted to about 20 million tons. The safety margin even from the preceding good harvests vanished entirely.

In those countries where the margin of subsistence is not low, their economic life was not seriously endangered by the inevitable derangement in the world's market due to the War. The average rise in retail food prices in Sweden, for example, went as high as 234 per cent. and in the United Kingdom, where food control was rigorously exercised, the rise was about 107 per cent. But the effect of the rise upon the people was not fatal as it was in the case of India.

The narrow margin referred to above is due to the pressure of population on the cultivated area resulting chiefly from absence of other occupations; and unless the pressure is to a certain extent relieved, the agricultural economy of the country must remain unsound. According to Sir Thomas Holderness' calculations, "we shall not be far wrong if we assume that there is less than one acre of cultivated land per head of total population and not more than one acre and a quarter per head for that portion of the population which is directly supported by agriculture."

While the accuracy of the finding has to be admitted, a closer examination of the available agricultural statistics shows that there is a further tendency in the reduction of the share of cultivated area per head. Thus any step towards a specific contribution to India's welfare must be in the direction of relieving the pressure on land resulting from the decadence of her indigenous manufacturing industries. The situation cannot be explained away merely by calling attention to over-population. After all, the average decennial increase of population since regular censuses were taken has not been more than 4 per cent. The remedy lies in exploring the vast possibilities for the development of her agricultural resources and of her indigenous industries.

This has been realised by the Government of India since the days of Lord Mayo, but organised efforts to effect any agricultural development were first made during the Viceroyalty of Lord Curzon. An Imperial Department of Agriculture was established at Pusa and in each province a separate department under a qualified director was organised. Within the period of a quarter of a century it has been made possible to produce better qualities and larger yields of some of India's chief crops. The increasing

demands for better seeds show that the Indian peasant though illiterate, is not usually a fool. Various problems related to agriculture are now being investigated and the progress is accelerated by the assistance of the co-operative movement.

But the findings of scientific researches on agricultural problems cannot be put into practice as the conditions under which they can be successful are handicapped by numerous socio-economic factors existing in Indian rural life. Science herself cannot reform agricultural methods; she needs such assistance as may come from the adjustments of various complex forces that are brought into play upon the basic industry of the people of India. Therefore, I am inclined to believe that the next step to the development of Indian agriculture should be the removal of some of the fatal obstructions that are impeding progress and thus prepare the way for a gradual expansion of scientific agricultural method in India.

Now, broadly speaking, scientific agricultural methods aim at the removal, as far as possible, of some of the limiting factors that are known to interfere with normal crop production. These limiting factors may consist of lack of suitable plant nutrition or the deficiencies in soil conditions caused by bad tilth and moisture supply; or there may be ravages of insects and other pests which need to be controlled. But, with the processes of commercialisation of agriculture, numerous other factors are being released and the success of the industry largely depends now on the efficiency with which they may be regulated. Take the case of the Punjab agriculture. Here the limiting factor was lack of water-supply. Of all the provinces Punjab has received a large share of benefit from the irrigation works. Agriculture flourished but the lot of the agriculturists has not improved to any great extent. Mr. Darling's recent investigations* have shown that the average Punjab peasant under ordinary circumstances does not make both ends meet. Obviously there must be some defects in agricultural economy which, in spite of the introduction of "better irrigation", do not seem to improve the conditions of life of the peasantry.

* See Darling's Punjab Peasant.

Within the time allotted to me, it is not possible to discuss such economic handicaps as the nature of holdings, their size and distribution, the heavy indebtedness of the peasantry, the conditions of marketing, defective transport facilities in rural areas, absence of co-operative spirit and a host of other socio-economic factors which conspire to keep Indian agriculture confined to a medieval stage of development. But, I crave your permission to make a brief reference to certain fundamental aspects of rural life. In the first place we must consider rural sanitation. Here the picture is gloomy. The result obtained by Dr. Bentley from an inquiry in a District in Bengal (Murshidabad) shows the rate of infant mortality never lower than 261 per mille during the investigation (1918-1923). "In one small circle of 500 people," says Bentley, "the exact intensive registration gave the appalling figure of 700 infantile deaths per thousand births."

It is a well-known fact that medical relief in rural areas is extremely inadequate. There are according to Major Chopra about 3,927 registered medical practitioners in Bengal to a population of 46 millions. That is, one doctor to 11,450 persons. As most of the doctors find a better scope in towns, the rural population is usually left to quacks and barbers for medical relief.

Now, this question of rural sanitation and of available medical help should be considered from the economic point of view. The capitalised value of the prodigious loss caused by preventible diseases has lately been estimated by Mr. G. B. Williams, Chief Engineer, Public Health Department of Bengal, at £2,000,000,000. Answering the usual argument that India cannot afford to undertake expensive works for the improvement of public health, he said :—

"In reply to this, it may be asked how far is India poor because of being unhealthy. If this is the case it may well be suggested that instead of India not being able to afford to carry out works to improve public health, it may be a question for consideration as to how long she can continue to afford the expensive luxury of being unhealthy."

We now turn to the question of rural education. The extent of illiteracy may be realised from the fact that all but 3.39 per cent.

of the population do not receive any benefit from the existing educational system. Apart from this extremely low percentage of literacy, education in India is not only ill-balanced but ill-adapted to the conditions of life. Its tendencies need to be carefully modified if India desires to find a place among the self-governing nations of the world.

As far as agricultural education is concerned, we have not touched even the fringe of the problem. It cannot develop unless and until there is a system of primary and secondary education linked up with a general scheme for the spread of agricultural knowledge.

My time is over. Our Secretary of State has given us an assurance that during the tenure of his office he would give a powerful impetus to the development of Indian agriculture. The problem, as I have tried to show here is closely linked with rural backwardness. The factors which are handicapping agricultural development and any process of rural rehabilitation need to be analysed by a comprehensive survey of the situation. Like the diagnosis of a disease, such an analysis must precede a sound constructive agricultural and rural policy. It would help the Government and the conscious public opinion of the country to envisage the fundamental deficiencies existing in the basic industry of India. To my mind, this is to be the next step to the development of Indian agriculture. I thank you, gentlemen, for your kind attention.

Chairman.—The Professor has run over very quickly and effectively the agricultural problem in India, and I think we shall best use our time if we try to extract from him any further information that we require, by questions.

Col. R. V. K. Applin, D.S.O.—Regarding the question of the failure of the crops in India—and I have spent a great many years in India—I believe now very definite relief for this is being given by the Government?

Reply.—Yes. The failure of the crop may be caused by various factors. For instance, the limiting factor may be water, and after the water is supplied we get a crop, as you may see, in the Punjab from the areas where not one blade of grass grew before.

The limiting factor in another case may be want of better seed, and water and moisture to mature it. But the great difficulty in that Province is that almost each peasant is heavily in debt. Could you run any business under such conditions as prevail in rural areas? And the rate of interest for money lent in Bengal is a minimum of 36 per cent. I recommend you to read a little book by Mr. Jack who was a Settlement Officer in Bengal before he left India for the battlefields where he died, and in the brief report on an Economic Survey of a whole district, he shows the magnitude of indebtedness of the peasantry of the district.

Mr. Darling has just written a book called "Punjab Peasant," and the limiting factor there revealed is not lack of moisture, but in many cases it seems to be inferior seed. In the same way it may be illiteracy, or the land tenure system or social custom or religion. These are things which need taking into consideration in any stable economic order. Or the limiting factor may be largely social. In India we have to overcome certain traditional prejudices: for instance, bone dust will not be used in certain parts of the country because it is derived from the sacred cow. Of course, if it is mixed with rape dust or other oil cakes and then given to the farmer who does not know what it is, and he uses that all right. He knows he gets a better result from it and so he will take it.

Mr. H. Snell.—What truth is there in the suggestion that the peasantry is so poor because cowdung which should be used for fertilization of the fields is used for fuel, and the land is perpetually starved owing to the poverty of the people?

Reply.—Precisely, that is so. The three ingredients most needed for fertilisation are nitrogen, phosphorus and potash. In some countries potash abounds, but the nitrogen shortage is the most serious. That is what Sir William Crooke in 1899 said before the British Association, that the whole of humanity was in danger of. That may be applied to India to-day quite as well. You have in Europe processes for preparing nitrogen by artificial means. In India the only source for nitrogen is cowdung. Now, the farmer cannot afford to use it for his land because he has no fuel. What happens is a most interesting economic phenomenon, and it

is not due to the British Government, but simply to this the farmer gives up his piece of land as he finds its cultivation no longer profitable. And he puts under plough fresh plots. This process goes further on, and in that way cultivation has been extended to the jungle land and thus the common land is now being encroached upon which was originally the property of the whole village where they could get twigs or which could be used as pasture land and so on. All that has disappeared, and the result is that cow dung is the only source of fuel for the farmer, and he cannot afford to use it on his land.

Mr. H. Snell.—Supposing that manure were available for the abandoned land would it not be capable of production and become re-established as an economic factor?

Reply.—Quite. In Madras this plan was followed by Dr. Norris who took up some of the abandoned land and used sulphate of ammonia and nitrate of soda. What happened? The land readily responded to manurial treatments. I did not anticipate such questions here, otherwise I could have brought with me a few graphs showing the results of some of the experiments conducted by the Government stations in India.

Dr. L. Haden Guest, M.C.—What is the yield of wheat in India as compared with us?

Reply.—11 bushels to the acre—yours is 34.

Mr. G. Pilcher.—May I make a few remarks, though not in the nature of a question? The fundamental proposal of the Professor is that we should have a Royal Commission to make an enquiry into the whole agricultural position of India. I have also lived for 10 years in India, and naturally one has made something of a study of the agricultural position in India. I am frankly in opposition to the appointment of a Royal Commission in India, and I would like to give reasons and hear the Professor comment on them. I do not think people here quite realise, or the people reading the Professor's articles—every one of which I have read since he has been here—can derive any idea of the immensity of the country he is really discussing. If you will just imagine this country, quite as much diversified as the continent of Europe, in

race, in quality of land, in mountainous regions and so forth; imagine the appointment of a Commission for Europe to make a report on agricultural conditions in every country from Poland and Hungary, Czcheko-Slovakia and Bulgaria, Northern Germany and the sandy soils of Prussia, Holland and the intensive culture of France, the Balkans and the United Kingdom. The idea is most fantastic. I do not see how on any feasible lines, a Royal Commission could possibly cover the territory existing in the Provinces of that country.

Then, you have a different system of land tenure in certain parts of the country. In the United Provinces land is practically held from the Government—the Government is still the visible proprietor. In the Punjab alone you have an Act prohibiting the disposal of land, except under certain restrictions. Bengal has an unrestricted disposal of land. And while I personally am extraordinarily glad to see the Professor here in England, and I think he has done a lot of good in stirring up the India Office on this point, there is a little danger that the Professor may confuse people here who are not familiar with Indian conditions. But there are three or four things which simply leap to the mind. I was in India when the Chelmsford Scheme was being developed, and it seems a pity that we did not have some sort of systems of education adapted to the people and their method of life. If this could be done what stupendous results might be produced in India in 20 or 30 years' time—an India prepared for progress, as she is not prepared now with her illiterate people.

Then, as regards agricultural implements, these are still in a primitive state,—the ploughs, the pumps. You ought to see the primitive Indian pump used to-day in Bengal. We ought to tackle this problem quickly, because at the present moment the Americans are doing so, and getting out pumps at a cheap rate. I have not said all this in any unfriendly criticism, but because these are urgent problems which I want to see tackled now, rather than through a five years' enquiry with nothing done at the end.

Brig.-General J. Charteris, C.M.G., D.S.O.—I would like to say, taking my own experience, in general I agree with Mr. Pilcher. Of course education is at the bottom of the whole thing.

It is possible of course to have agricultural advance before the people of India are fit for the change, and education must really The illiteracy of the people is gigantic. More money should advance—not merely by the spilling of money in the country. undoubtedly be spent but that alone is not going to produce in 30 or 40 years a literate population.

As regards the actual question of agriculture, advance has been made in one place in the Punjab, as possibly the Professor knows, by the regiment there working a farm and running it with modern knowledge, and so helping forward the present rate of Indian progress there. I believe that we should extend the agricultural colleges and their excellent influence should be encouraged and developed. You should have the best men possible, and make use of people like the Professor himself: in addition to which I believe that if some exemplary model farms were set up for the various parts of the Provinces, an enormous amount could be done. But regarding a Royal Commission, I cannot but agree with Mr. Pilcher. Of course, as every one here knows, we have the assurance of the present Secretary of State that in agriculture he sees great hope of rapid progress in India, and I think we ought really to press for that, and what I have heard of the Professor leads me to think his assistance in these efforts will be enormously valuable.

Dr. Guest.—What we have heard seems to point to the fact that great benefit might accrue by the flotation of a large loan for the purpose of development. I am very glad to hear,—for I am not an expert on India, never having been there—so much about the conditions. I do know there is a great deal of unemployment in this country, and the loan would create employment by giving purchasing power to others; and that seems common sense. This is really what is required from the point of view of this country, and quite apart from questions of Empire as a whole.

But I really rise because I think that while you can deal with this matter so, the efficiency of the country may be tackled in a still simpler way by improving its health conditions. As a matter of fact the level of health in India is exceedingly low. I have thought for some time that something ought to be done. For instance, the

average life of an Indian is only 25 years as against something like 45 for people in this country, and this is due not only to illness but simply to insufficiency of food. The question of food is a factor in the economic question. With regard to illness, there is a tremendous amount of malaria, and I believe a great deal more can be done to stem malaria than is being done at the present time. Then there is another thing, and I am indebted to Sir Walter Fletcher, of the office of Scientific Research in this country, for the knowledge that a proportion of the people in India, about 90 per cent. suffer from hook-worm disease. And people with hook-worm disease suffer from anaemia, and people with anaemia cannot work very hard. As regards hook-worm disease, we know a great deal regarding its prevention and a good deal as to its treatment, and we simply want these diseases—malaria and hook-worm disease—matters on which there is no obscurity and no lack of knowledge, given adequate treatment. If there were a decided improvement in the health of the Indian community I do not think it would take very much to create greater activity in the agricultural service of India.

Mr. S. Saklatvala.—I have only just got one observation to make. I also agree with Mr. Pilcher that we will be spared the calamity of a Royal Commission on this or any other question. On the principal question we are all agreed; that the Indian is a human being and we need to make him fit for his work as well as making him fit to be able to use the available methods which he has at his disposal. Now I do not believe for one moment that the matter can be settled by the multiplication of and collection of taxes in the same proportion as in other countries, for the money would simply be absorbed in the establishment of a university here or there. What I suggest very urgently is this, that the cultivator in India is protected by the hope and assurance that he will get more benefit. As the Professor has pointed out, he gets the lowest proportion of the wealth which he produces, and the rest goes to the series of middle-men. So that the only way in which it can be done is by protecting the agriculturist in each agricultural area and imposing a sort of toll or export duty on his product before the merchant takes it away, and thus supplementing the amount which

the agriculturist gets at the present moment. Then there should be an allocated local fund, taxing the merchant population of the area. It should not be carried over to the whole revenue of the State but made a local provincial revenue for the educational, agricultural, and economic development of the people in that area. I think that is the only practical way in which the rural population may be helped.

Mr. G. Heaton Nicholls, M.L.A., representing Zululand in the Union Parliament of South Africa :

I gather from the Professor's remarks that one of the chief reasons for the existing poverty in India and the lack of cultivation has its root in the fact that the cultivator has not sufficient money to carry him over, and that as a consequence he goes to money-lenders and borrows money at a high rate of interest. This difficulty, it seems to me, might be met by the establishment of a Land Bank for the natives.

Mr. H. Snell.—Before I ask Professor Gangulee to reply, I would like to assure him of how grateful we are for the information he has given us, and to tell him that the criticisms made are only given in the spirit of helping him in what he desires.

Reply.—Mr. Chairman and friends, I am deeply moved by your remarks and by the criticisms as well. Unfortunately Mr. Pilcher is not here now, but I want to tell you in confidence that I have been negotiating with the India Office on the question of an agricultural inquiry. The permanent officials there are very cautious, naturally, and they raised many objections. Two of these were referred to by Mr. Pilcher. That is, the extent of the country, and the difficulty of making an enquiry with such varying conditions in the different parts of India. These two points of criticism I have answered in the form of a memorandum to the Secretary of State. Mr. Pilcher's arguments are familiar to me. Since my own letters appeared in *The Times* a number of friends and many Indian Officials wrote to me about the subject. Some repeated these criticisms, but when I sent them my developed arguments in favour of an inquiry, they simply wrote back and said they had realised that there was something in the proposal,

Four friends here have made suggestions as follows :—Mr. Pilcher proposes greater activity of the agricultural department : Dr. Guest desires greater activity in the medical department : Mr. Saklatvala suggests protection of some sort : and Mr. Nicholls advises us to establish Land Banks. All these forward movements need one fundamental thing ;—that is, public opinion ; and you cannot carry public opinion of the country with you unless you stimulate it. You cannot assume that it is there yet in a sufficient degree.

Take the suggestion for the floatation of a loan. Mr. Das himself urged it as one of his conditions for responsive co-operation with the Government. But this is a matter which requires public opinion. We do not hear of it any more. If the Royal Commission cannot do anything else it will do this,—create public opinion and stir it up. You have had many Commissions in this country for the diagnosis of different problems. You have had two Commissions in the last ten years on Indian public services. There have been Commissions for industry and commerce, Commissions with regard to Famine, Irrigation and administrative work ; we ask for an Agricultural Commission. We are beginning to be suspicious when you want to shelve this sort of a suggestion. Is it because you will discover the amount of neglect which has reduced rural life to this state or is it because of the vested interests of the landlords and the moneylenders, and also of the bourgeois class created by the Government. Are you afraid of them? That is the suspicion I have in my mind.

I have suggested various points in support of this proposition in a further Memorandum after an interview I had with our Viceroy-Designate. I need not repeat some of the reasons here—the time allotted to this meeting is now over—but I maintain that in order to achieve what you have suggested this evening—greater activity of the agricultural and medical departments—for all that what is most needed is public opinion in these constructive national programmes and arrest our attention on the need of removing some of the most fatal deficiencies in the agricultural economy of the country. Better farming would mean better living. And any

step towards rural uplift is sure to make way for political evolution of the country. I thank you for your interest and for the attention with which you have listened to this very brief discourse.

IX.

Among the Indian Rural Folks.

[The following address was written for The British Broadcasting Company, London. I am indebted to Mr. J. C. W. Reith, the Managing Director of the Company for the encouragement and sympathy he showed in my efforts to bring to the notice of the British Public the conditions of life of the Indian peasant.]

Ladies and Gentlemen,

It is a rare privilege to have an opportunity of speaking to you through this wonderful transmitting apparatus. Within the time allotted to me, I shall try to give you an account of the life and labour of the millions of your fellow citizens of the British Commonwealth.

The Indian Nation, it is said, dwells in cottages. The vast plains of the country are dotted with villages and there are very few towns and cities. If places which have a population of more than 1,000,000 are taken as cities, India has only 30 cities with a population of about 7 millions, that is, 2.2 per cent. of the total population. While the tendency to urban aggregation is marked in the areas adjoining industrial centres, the fact that 71 per cent. are engaged in agriculture indicates that the greater portion of the Indian population lives in villages.

An Indian village contains a mixed populace almost of all castes and professions so as to make the communal life of the village complete by itself. Brahmins (priest caste), Sadgopas (agriculturists), Kavirajes (Physicians), Carpenters, potters, weavers, washermen, silversmiths, blacksmiths, fishermen, goalas (Dairymen) and "untouchables" castes like Chamar (shoemakers), Haries, Bagdies, Chandals, Doms (Sweepers)—all live within the village area. Besides these, there may be a Mahomedan colony.

Such a conglomeration of different castes and creeds in a single village area is indeed a striking indication of the process of social crystallization that has been going on unconsciously in our rural society. It shows that the proverbial village community aimed at social cohesion among the diverse peoples creating a solidarity on which the structure of rural civilisation could be raised. But antagonistic forces were at work, and it became impossible to withstand the impact of an organised economic pressure followed by a great political upheaval. The domination of India by a Western power has been a menace to the evolution of the synthetic ideals which India aspired to realise among her diverse peoples and numerous castes.

Let us visit an agricultural village of Bengal nestled within the thick luxurious foliages of trees and the dense bamboo groves. The huts lie scattered within the village boundary, their density being the greatest at the centre, in the neighbourhood of which the village temple and other places of communal interest are generally situated. There is not much brickwork in the village except the houses and offices of the landlord and the temples built by him. All the other dwellings have earthen walls two to three feet thick and are thatched with straw. The condition of the agricultural classes is largely shown by the circumstances in which they live. In Eastern Bengal, known as the granary of Bengal, they live in some degree of comfort, and therefore their houses are roofed with corrugated iron and substantially built with a number of doors and windows.

The homesteads are clean in a way, but it cannot be ignored that the people are completely ignorant of the principles of sanitation. The tanks attached to the homesteads are often kept in a very insanitary condition and they become sources of infection when epidemics break out. There is no suitable tank or well from which drinking water could be supplied, and one wonders why these villagers should contribute to the revenue if the State fails to give them such fundamental necessities as good drinking water and easy and reliable means of communication.

The roads that pass through the village are not metalled and during the rains they become impassable. Palanquins and bullock-carts are the only conveyances that are available; but, as

it is impossible to make through muddy roads, the village becomes segregated from the rest of the world during the rainy season. Rural isolation is a real evil; and unless it is overcome, you cannot extend the civilising influences to the rural community. Good roads as you know are a prime requisite for rural betterment.

The conservative habits of the villager are largely due to this isolation. The new forces which are at work in the cities have not been able to change his traditional habits and ideas. The methods of cultivation are as primitive as ever. The use of manure, the selection of seeds, the adoption of the most suitable farm implements are beyond the ken of the ordinary cultivator. He is averse to any change in the methods of preparing the soil, of transplanting and weeding, or of harvesting, thrashing and storing the grains unless their benefits are clearly proved to his satisfaction. It is not, however, always his ignorance that prevents him from accepting any innovation. The means of the Indian cultivator are very limited and in most cases do not permit of capital expenditure involved in the adoption of scientific methods of cultivation. Perhaps, the most distressing feature of Indian peasant life is his indebtedness. Another drawback is the size of his holdings.

Amid extraordinarily diverse systems of landholding in India two main types should be clearly distinguished, *viz.*, the landlord and non-landlord type. Rural Bengal falls under the former group whose characteristic is that there is in it a powerful joint-body of proprietors "who form a close oligarchy in relation to the general mass of inhabitants." The Landlord collects rents either on the basis of a proportion of the crop or on the acreage cultivated by the tenant-farmer. Peasanthood is a remnant of the feudal system ,but the chains of feudalism are riveted rather firmly upon our rural districts. The power wielded by the village landlord (or a group of landlords) is immense in all spheres; and so long as he lives in the village, no one grudges him the privileges to which he may be entitled. But, many of the landlords of Bengal are absentees, their country houses being now mere places of retreat after the Calcutta season. Indeed, they have forfeited their enviable and dignified position in the village community.

Without going into the details of the system of village administration under the present Government, it may be remarked that the organisation of the ancient village community has lost much of its internal cohesion. The administrative duties are now transferred to the District and Local Boards, and the indigenous institutions which once rendered useful service to rural Bengal are practically extinct. Whatever may be the merits of the present system of Government, it has not done much by way of stimulating local initiative and of developing the sense of responsibility even among the educated villagers.

You may be surprised to know that the best men of the village are now unwilling to take charge of important " official " duties. They realise that they are more the servants of Government than of the community. I recall an incident which is related by Mr. Fielding Hall, the well-known author, in his book, " Passing of Empire."

" There was a small village in my district, on a main road, and the headman died. It was necessary to appoint a new one. But no one would take the appointment. The elders were asked to nominate a man, but no one would take the nomination. I sent the Township officer to try to arrange; he failed.

"Now, a village cannot get along without a headman. Government is at an end ; no taxes can be collected, for instance ; therefore, it was necessary a headman be appointed at once. I went to the village myself and called the elders and gave them an order that they must nominate some one. So next morning, after stormy meetings in the village, a man was brought to me and introduced as the headman-elect. He was dirty, ill-clad, and not at all the sort of man I should have cared to appoint; nor one whom it would be supposed the villagers would care to accept. Yet he was the only nominee.

" What is your occupation," I asked. He said he had none.

" What tax did you pay last year?" I asked him in order to discover his standing, for men are rated according to their means. He told me that he had paid five shillings less than a third of the average.

" You are willing to be headman," I asked. " No," he said frankly, " but no one would take the place and the elders told me I must. They said they would prosecute me under the ' bad livelihood ' section if I did not. I could take my choice between being headman or a term in prison."

The case cited above is, of course, an extreme one, but it would show that the village corporate life has, to a large extent, been destroyed by the present system of government.

The problem of resuscitating the germ of rural corporate life is now rendered difficult by ignorance " that is far more prevalent, and indeed, far more dangerous and destructive than even malaria." At present only 7·5 per cent. of the population of Bengal are literate. One of the state officials reviewing the progress of primary education in Bengal admits that " though there has been a great increase in the number and percentage of the children at school, the number of illiterates in the country is larger than it was twenty years ago." This is one of the depressing features in rural Bengal. The state spends about 7*d*. per head on education. Four in every five villages lack educational facilities of any kind, and the most recent statistics show that 80 per cent. of the children of school age are receiving no instruction.

The village school, or Pathsala, as it is called, is generally made of mud wall and grass-thatched roof. The clay floors are crusted with cow-dung mixed with earth, and they look quite clean. The furniture sometimes consists of a chair for teacher and a few benches; but in most cases, ordinary mat-pieces are considered to be sufficient. The equipment is almost always either defective or absent. There is usually not even a map of India for the Geography class!

The teachers are poorly qualified and ill-paid. As a relic of the time-honoured connection between the village schoolmaster and the community, I may mention that the custom of paying him by assignments out of the periodic harvest, besides gifts on the occasion of a marriage or other ceremonies, still prevails in rural Bengal. In fact, the Guru (teacher) has to depend mainly on various forms of perquisites offered to him for his maintenance.

While the Hindu Pathsala (village school) aims at a secular education, the Hindu imparts through the Epics such education which indeed exerts permanent influence on the lives of boys and girls. Unless one has the intellectual sense " to feel the spirit of a people " it is difficult to appreciate the depth and extent to which this influence has penetrated into every part of the country, every stratum of society, and every grade of education.

Tramping through the rural districts of Bengal, one often meets the village minstrel who resembles the rhapsodist of ancient Greece chanting from the Mahabharata and the Ramayana before an assembly of villagers. The sight is picturesque, and inspiring in its simplicity. The minstrel sits on a raised platform decorated with lights and flowers, and the audience squats on the mats below. He introduces his theme by invoking God's blessing and with a preamble to the story he has selected from the Epics. The people listen hour after hour to the "sacred" tales, and as at the end of each portion of the story, the minstrel cries out the name of the Hero or Heroine, they all join in chorus. The village women concealed behind screens at the back of the minstrel's seat bow their heads to the earth and utter the name in silent devotion. Thus, the people are brought up on the inspiring Epics which characterise the ideals and conduct of life, although the numbers who can read these poems either in original Sanskrit or in translations are very few. It is wonderful to contemplate how much the characters of the legendary tales have contributed to the moulding of domestic life of the masses!

Besides the village temple, almost every Hindu home has a place of worship. There absorbed in her offerings to the family god or goddess, the Hindu woman would pray, " Make me a woman like Savitri,* make me a wife like Sita,* adorn me with the noble character of Gandhari."*

From all round the village at dawn and at sunset would come the sound of conchshells and bells in the Puja-ghar of each family announcing the hour of worship. The elderly women bathe before offering their Puja, while the younger ones keep themselves busy bringing flowers, incense and holy water. Religious faith dies hard in the village, and therefore its primitive character is still

* Some Ideal Types of Womanhood depicted in the Epics.

prescribed in numerous rituals and ceremonies. Superstitious belief in deities of all kinds, in ghosts, and witches predominates in the daily life of the villager. He will not sow on an inauspicious day; he will not plant a cocoanut tree if there is any bereavement in the family; he will not kill a snake because it is the incarnation of the goddess Basuki; if his child frets very much, he attributes it to the influence of an evil spirit. Sudden stoppage of the flow of milk in a cow is explained as the result of unpropitious influence of a spirit over the unfortunate milch cow. Deities are everywhere around his life, and in order to propitiate them, he performs elaborate ceremonies and offers goat-sacrifices.

Whatever may be the criticism of the simple, crude, animistic faiths of the villagers, it cannot be denied that they have an extraordinary vitality, retaining the main features amidst convulsions of all descriptions. The normal religious life of rural Bengal flows in the channels of simple devotion and service. To the villagers every act is a sort of sacrament. The peasant before he goes to his day's work bows his head at the temple; soon after the monsoon when he must till his land for rice crop, he worships Vishwakarma, the God of arts and crafts; and at the harvesting season, he celebrates Nabanna, a festival in honour of the goddess Annapurna, the mother of nourishment. At the harvest festival, the whole of rural Bengal resounds with carols to the Mother, and with its elaborate mode of worship, one is reminded of man's dependence on the Creator for his subsistence.

While admiring the pagan festivals so common in rural Bengal, I am not defending orthodoxy which, deep-rooted as it is, stands in the way of any progressive movement. What I do wish to impress on your mind is that the impulse dominating the domestic life of the villagers is maintained by a strong force of religious tradition and is supported by an ancient culture.

If you stroll past in the evening you will see an old woman sitting with beads in her hands surrounded by a group of children. They are listening to the folk-tales. You pause to catch a word or two of the tales. The old woman is, perhaps, narrating the story of Karmasutra, the story illustrating the inevitableness of fate. At the end of her narration, the children will chant in chorus.

" Matulo yasya Govindah, pita yasya Dhananjayah, sobhimanyu rane sete, niyati kena badhyate?"

Meaning : —

" Though Krishna* was his uncle, and Arjuna* his father yet Abhimanyu* lies low on the battlefield. Who can resist Fate?"

Besides folk-tales, there are many " Chevy-Chase " ballads which are current in the rural areas of Bengal, and you can always hear the village beggar chanting them from door to door. Even in these simple and quaint songs, one may discover the elements of Hindu philosophy !

Of all the rural institutions, the weekly market called " hat " and the annual fair called " mela " are very interesting. Here one can obtain a glimpse of the civic life of the village. The mela is the chief event of the winter in a Bengal village and is talked of for weeks beforehand. The villagers do a little extra work and the women weave or make baskets, so that they might be able to enjoy the mela festivities.

The peasants garbed in coloured shawls of red and orange, pink and green, purple and magenta, stream in from all the neighbouring hamlets. The bullock carts bring in their produce. The drum and fife announce the beginning of the festivities, and the silent Bengal village throbs with life and gaiety.

Each trade has a shed to itself specially erected for the occasion. The massed tropical fruits and vegetables on the stalls, the brightly coloured toys manufactured by the village potters arranged so tastefully under straw-thatched sheds, and the quaint rustic music give the country fairs an appearance which is indeed unique. The lavish display of various sweets draws a large crowd of the village urchins, and the womenfolk enjoy gossip in the huts where the betel-leaves are sold. Everything is in keeping with the weather as the rains are over and the weather is cool and clear. The work in the fields is also suspended for a time, harvesting being finished.

By the side of the village stall-holders chattering over their indigenous wares, you will find the shrewd city merchants resorting to all kinds of advertising devices for their commodities, such

* Certain Characters from the Mahabharata.

as cheap European utensils, foreign cloth, patent medicines, numerous trinkets and articles of luxury; and then you will realise how completely India, defenceless as she is, " has become a host to the parasite of European trade."

Unfortunately gambling, drinking and vulgar amusements often find their place in a country fair, and these excrescences have really obstructed the true significance of this meeting place for the country-folk. Its social and economic significance is of considerable importance in a scheme for rural reconstruction. Here in the ' mela ' men of different castes and creed jostle each other good-humouredly, and discuss current village topics most freely; here they meet the wandering sadhu; here they listen to the rhapsody of the wandering tellers; and here in this mela, they are reminded of the exquisite stories of the Ramayana and the Mahabharata through quasi-dramatic representation of the myths.

Besides the annual affair, the villagers have festivities during each of their holy days, and round the centre of the village temple, local fairs are organised. " What if the people make merry, too, if they make their holy days into holidays, is that any harm?" Such was my thought as I once returning home from a village fair celebrated during the great car festival. Amidst the dull joyless life of the villager, these festivities come like blessings.

If the ancient joys of rural life in Bengal have vanished, if they are crushed out by poverty and disease, Nature has not denied her richness of beauty. We say in the words of her Poet, "its unobstructed sky is filled to the brim like an amethyst cup, with the descending twilight and peace of the evening; and the golden skirt of the still silent noonday spreads over the whole of it without let or hindrance. Where is there another such country for the eye to look at or the mind to take in? "

I thank you, Ladies and Gentlemen, and wish you all goodnight.

X

Real India.

[During the sittings of the League of Nations Assembly at Geneva in the month of September, 1925, " Federation Universitaire Internationale " organised a series of lectures on various subjects. The following speech was delivered at the Genieve Conservatoire under the presidency of Professor Zimmern.]

Professor Zimmern, Ladies and Gentlemen,

You have done me a great honour by asking me to address this International gathering of students. On an occasion like this, and while we are in the midst of " Geneve atmosphere," the narrow domestic walls of nationalism seem to fade away. We feel here the pulse of humanity and realise that above all nations there is the ideal of service for humanity.

But our conception of internationalism becomes colourless and unrelated to realities of life if it is not blended with the spirit of nationalism. Therefore, it may be considered to be a pardonable intrusion both upon your time and attention if I make an attempt to lay before you to-night certain facts in regard to my country.

Those of you who are wise enough not to miss the morning lectures of Professor Zimmern on the subject of the Development of British Empire,—here I must congratulate you, Sir, on your comprehensive survey and bold criticisms of the politico-economic policies of the Empire—must have realised what an important part India plays in the making of this British Empire and how she helped " this Realm, this England " to gain political supremacy in the world to-day. Historians have described India as the pivot of the British Empire. A place was allotted to her in the League of Nations and the Imperial Government impelled by circumstances arising out of post-war conditions declared a policy of " progressive realization " of self-government for India.

While political reforms are of great importance to India in finding her " a place in the sun," we are faced with the question of how modern democratic institutions can work in India as long as the conditions of life of the majority are so backward. Poverty

is fundamentally an economic fact, but its growth and persistence may be due to factors dominant in the socio-religious life of the people.

The other day at the office of a tourists' agency I found a number of illustrated leaflets with attractive titles such as "Picturesque India," "Happy India," "The land of Dream" and so on. But I shall not introduce you to India of the tourists. Away from their tracks, there is India with her millions of rural population whose welfare must be the ultimate concern of any government, indigenous or foreign. In England, roughly one-fourth of the population is classed as rural, in the United States one-half, but in India 90 per cent. of the 320 millions live in villages. To one of these villages, I once invited an American tourist, and here is his account of the impression of that visit:

"An Indian who was graduated from the University of Illinois and is now a professor of Agriculture at the University of Calcutta once offered to take me to an Indian village. He wanted me to see something, he said, of real Indian life. The village was about 20 miles from Calcutta, and although it was off the rail-road line, its proximity to a large city may have subjected it to conditions other than those generally to be found in the mofussil. Nevertheless it was typical, at least in outward semblance, of many places I saw in India. It was as stagnant as its square, sunken water-tanks. Bengali women who came down the steps to kneel and scur with wet earth their brass pots, or to fetch water for cooking, or to wash their clothes or bathe, had first to clear away the green scum in a little circle around themselves. The roads were partly under water, from the rains of a week before. It did not surprise me to learn later that in many districts of Bengal the death-rate exceeds the birth-rate, owing to the ravages of malaria. In the whole of this town which comprises four thousand households, there was but one village industry, offering employment to about fifty women and children and a handful of men—a jute-rope factory. The principal toddy-shop was owned by the biggest money-lender. When I was informed that money-lenders not infrequently charge two annas per month for the loan of one rupee (a rupee at par is worth $33\frac{1}{3}$ cents and equals to 16 annas) thus exacting 150 per cent. a year, I understood one reason for the helpless poverty of the masses. Bengal happens to

be caught in the clutches of a powerful land-owning class, known as the Zemindars, and few peasants actually own land. They are the tenants of absentee landlords, paying four or five rupees rent a month. But it appeared that, because many of them had no money to buy seed they had no money to pay rent. In order to keep their mud roofs over their heads they generally had recourse to the money-lender. Only too often the landlord himself turned money-lender, adding interest month by month to the amount of his tenants' indebtedness, the system resulting in an ever-widening vicious circle.

" When people tell me, as they frequently do, that Indians are in reality sufficiently well off, and that they have plenty of money buried in the ground or invested in jewelry worn by their women, I find myself thinking of the poor wretches I saw in that Bengali village. The road was so bad that we finally chose the lesser of two evils, got down from our dirty springless ghari and walked. My guide interpreter wished to see how some of his friends were getting, for it seemed that he had adopted the whole village and was devoting much of his time and energy to the experiment of an attempted regeneration. Presently we came to a little clearing where two mud dwellings stood facing each other. Out in the glaring sun, on a dirty blanket, a young man was lying. His eyes were dull with fever. His legs and arms were incredibly thin, mere bones, held in place by a loosely drawn envelope of skin. An old woman with straggling hair fanned the burning sticks laid in a depression in the space between the houses. A glance through the doorways showed the entire contents of each—a few rags by way of bedding, a brass water jar and an earthen pot. In one of the houses the youngman's father, squatting on his haunches, was shoveling rice into his mouth. He entered into explanation. Yesterday there had been no food because there had been no work. To-day there had been a little work, and consequently they were eating well. To-morrow? well, to-morrow must look to itself. It was not within their power to shape its course. But the boy outside was very bad. They had used up all the medicine that the gentleman had left them when the gentleman came two weeks ago.

" On the way back, a loud droning, like bees on a hot afternoon, led us to a narrow veranda, where grouped around a young Hindu teacher, the plutocrat urchins of the village were learning

to read. All except one, the teacher reported, were paying a rupee a month for their schooling. There they sat with their little legs crossed under them, waving backward and forward, each in his own way, at his own speed chanting in a loud sing-song from a paper-covered book the valorous achievements of some ancient hero, more god than man. Gandhi's name was mentioned. " Gandhi is a saint ! " the young Hindu remarked quietly. . . The water may stagnate in the pools ; the people may die of malaria, still, there is hope that the Zemindar will not press too hard for the unpaid rents. Or if they will not lend the money themselves, surely the rich wine merchant or the two bearded Afghans in their strange red clothes who appeared suddenly in the village the other day, offering to lend money, will come to the rescue. If there is no work and no rice to-day, to-morrow will produce both. Or perhaps it will not be necessary to work.

" Twenty miles away was the Englishman's city of Calcutta, with its wide streets and impressive buildings, its Victoria Memorial and its Government House, its hotels and its race-course. Calcutta had looked shabby enough at times ; compared with this, it was magnificence itself ! But my host had said he was taking me to see ' real Indian life.' Was this it, and if so, who was to blame? The English for remaining aloof? The Indians, for so misgoverning themselves? I looked at that young American University graduate who perceived that India was less in need of political than of social and economic reform, and I marvelled at the courage which could set itself the task of trying to push back the green scum.'

Making due allowance for journalistic exaggerations the above picture of an Indian village cannot be said to have been overdrawn. Let us now take a closer view.

Nine-tenths of the people in India live in villages and three-fourths of the entire population depend on agriculture for their livelihood. Owing to this preponderance of agriculture, the density of the population varies greatly, the average for the whole of India being 177 per square mile. The variation depends to a great extent on regional characteristics, and thus nearly half the population lives on one-sixth of the total area. India is not densely populated as a whole ; but, the " level tracts," such as the well-watered plains of the north and the coastal plains of the penin-

sula carry the largest population. That narrow strip of the Ganges valley is perhaps the most densely populated area of the earth's surface. The census Commissioner has rightly pointed out that the economic aspect of density of population resolves itself into the question of the relation between the population and the productivity of the land. In his admirable report he has shown that there is a close correlation between density of population and development of resources, but none between density of population and undue pressure of population.

" Economic pressure may exist at any degree of density, and the chief stimulus to progress is the overtaking of the existing material resources by the expansion of population when there is land still awaiting cultivation, or when more crops, or more profitable crops, can be grown on land already under cultivation, or when circumstances favour industrial development. In parts of Eastern Bengal, which is freely drained and healthy, the density exceeds 1,000 per sq. mile, and goes on increasing, and the standard of living is higher than in parts of West Bengal, where the density is below 500 and is stationary or declining owing to the prevalence of malaria. In parts of Cochin and Travancore, a population of 1,200 per sq. mile is maintained in comfort owing to the substitution of cocoanut, rubber and tea for rice. On the other hand, the maximum density has probably been reached in most parts of North Bihar, where it would appear that the agriculturist is, on the present system, getting all he can out of the land. But taking India as a whole, and apart from possible industrial development, there cannot be serious over-population in these days of easier communications, so long as there are still large areas of cultivable land, estimated in 1911 at a quarter of the whole, not yet under cultivation."*

The total net cropped area in British India is about 230 million acres; but a large area is still available for cultivation. Even from an extensive point of view, Indian agriculture is awaiting further development, and until its potentialities are explored we cannot ascribe the conditions of the peasantry to over-population.

* Review of the Census Report, National Geographical Magazine, page 439 (1925).

Well, friends, the history of agricultural development in India during the last quarter of a century clearly indicates what can be achieved by removing some of the limiting factors to plant growth and by introducing improved agricultural processes. The tracts in which not a blade of grass can grow have now been put under cultivation by irrigation works. The total irrigated area of British India is about 48 million acres.

As regards the application of scientific knowledge to farming industry, a great deal must needs be done before any real progress could be effected. Conditions precedent to such application have to be fulfilled; that is (1) a comprehensive system of agricultural research has to be instituted; and (2) an effective means of dissemination of knowledge has to be adopted.

I see in this gathering a number of friends from the United States of America. The fact that agricultural researches in India began with a munificent gift from an American millionaire may be gratifying to them. Truly, Lord Curzon's foresight and Mr. Henry Phipp's gift laid the foundation for a well-organised agricultural research centre in India. I see a great future for this growing Institution at Pusa which is sure to play a significant part in the development of her agricultural resources.

In order to give you some idea of Indian agriculture, I may perhaps reproduce here comparative figures showing per acre in lbs. of various crops in different countries.

TABLE

Country.	Wheat.	Barley.	Maize.	Rice.	Cotton.	Linseed.
United Kingdom ...	1,861	1,550	...	...	...	...
France ...	1,185	1,015	882	534	...	429
Italy ...	900	775	1,354	3,500	...	463
U. S. A. ...	775	1,077	1,684	1,755	151	330
Canada ...	748	1,077	3,046	...	...	321
Australia ...	775	802	1,425	...	...	347
Japan ...	1,318	1,496	1,487	3,232	347	401
Egypt ...	1,496	1,425	2,013	2,610	294	1,033
British India ...	677	994	1,163	1,336	89	255

Compiled from the International Year-book of Agricultural Statistics (1909-1921).

So much for the yield of some of the principal crops. The average yield of an Indian cow does not exceed 800 lbs. during the lactation period.

You will, thus, realise that low agricultural production is one of the potent causes of poverty in India. If we take the value of crops to be about four hundred million pounds, an average annual income per head of the agricultural population comes to £2.4*s*. This subject of estimating an average income of the people is controversial and is often based on inadequate statistics. I, therefore, ask you to look to other sources for obtaining accurate information in regard to Rural India.

Now, the fundamental requisites for a human being are food, house and clothing. In colder climate he needs an additional item—heating The food production of India is considered to be inadequate for providing her population with the required ration. It is estimated that nearly half of the total population do not eat more than once a day, and that malnutrition is indeed the chief cause of disease in India.

The house of an average Indian peasant is one in which no European farmer would allow his cattle to stay. It is built of mud, bamboo and thatching grass. In fact, in Rural India "it is quite common to find cattle and human beings living under the same roof."

Without going into further details of the life of the majority of Indian population it may be stated that the present condition is universally recognised as unsatisfactory. As a natural consequence of that condition, agriculture which is the mainstay of the people remains almost in its primitive stage.

But the tragedy lies not so much in poverty, backwardness and misery. It is the state of hopelessness that renders our rural problem so extremely difficult. Somehow a dead weight, as it were, has been placed on the springs of action.

I ask your permission to discuss as briefly as possible the questions relating to education, sanitation and community organisation in Rural India.

As early as the first quarter of the nineteenth century, Lord Bentinck remarked: "It is impossible not to deplore the same defective state in the agricultural, as in every other science in this country. Look where you will—poverty, inferiority, degradation

in every shape. For all these evils, knowledge, knowledge, knowledge, is the universal cure." The situation to-day is no better. The illiteracy of the masses of India offers irresistible obstruction to all progressive movements. From the last census report we find that the literate population of India was only 59 per thousand. Strictly speaking this figure does not represent the actual state of education. If we calculate the percentage of scholars (taking into consideration the period spent at school) to population, the figure is 3·4. The neglect of primary education in the rural areas has no justification whatsoever; and this neglect has become so chronic that even when permission was given to local bodies for introducing compulsory elementary instruction, they did not show any anxiety to avail themselves of the benefit of the legislation. As regards the educational expenses of the Government of India, it is estimated at 7*d*. per head per annum as against £2.0.8*d*. in the United Kingdom, £6.10*s*. in Canada and 18*d*. in Japan.

You may well imagine how difficult it is to generate the dynamic forces in the socio-economic life of the country without an adequate provision for education. Both the state and the people must realise the truth of Disraeli's saying—Ignorance never settles a question. Conditions arising out of ignorance and traditional static social institutions tend to paralyse energy, hinder improvement and act as prolific sources of discontent.

Let me pass on to the question of rural sanitation. Here also poverty and ignorance dominate the situation. The following account taken from the Indian Year Book throws some light on the rural health problem :

" The reason lies in the apathy of the people and the tenacity with which they cling to domestic customs injurious to health. While the inhabitants of the plains of India are on the whole distinguished for personal cleanliness, the sense of public cleanliness has ever been wanting. Great improvements have been effected in many places; but the village house is still often ill-ventilated and over-populated; the village sites dirty, crowded with cattle, choked with rank vegetation, and poisoned by stagnant pools; and the village tanks polluted, and used indiscriminately for bathing, cooking and drinking. That the way to improvement lies through the education of the people has always been recognised."

Admitting that the apathy of the people is largely responsible for deplorable rural sanitation, it cannot be said that Government have paid adequate attention to this question on the solution of which the health of the great bulk of the population depends. They have not succeeded as yet in setting up the right kind of organisation in rural areas.

Medical relief for the masses is hopelessly inadequate. Hospitals in rural areas are few and far between ; dispensaries and clinical facilities are available to rural communities very rarely and in the event of the outbreak of an epidemic no effective arrangement is made to protect them.

Death rate from preventible diseases shows no abatement. Specific fevers, cholera, plague and other ailments due to malnutrition take a heavy toll every year. His Majesty King George once remarked, " The foundations of National Glory are set in the homes of the people." In our rural homes, we see fatal symptoms of vital decay and waste.

This question of rural health and sanitation must be viewed from the standpoint of National Economy. For, here in India in spite of all her natural sources the majority of the population are despicably poor. The fundamental requisites for the exploitation of the resources of a country are (1) efficient labour and (2) sufficient capital. In our case, efficiency of the farmer or the artisan is undermined by bad health and no-education. You will agree with me that the loss of efficiency is a serious handicap to economic production. The economic strength of the country is thus being gradually weakened, and if this process remains unchecked India will be reduced to an uneconomic factor in the British Commonwealth. Perhaps you know the story of a French Admiral who gave an account of Siam to Louis XIV. When the Conte de Forbin, who served as Grand Admiral of Siam returned to France, he was asked by Louis XIV if Siam was a rich country. " Sire," replied the Count, " it is a country which produces nothing and consumes nothing." " That is saying a great deal in a few words," rejoined the king.

I believe I have said enough to show that in matters of rural industries, rural education and rural sanitation, India is still in the mediaeval stage and that her poverty is really appalling. When I say this, I do not suggest that there was no poverty in India before

British rule and that it is growing since the days of the East India Company. But the real mischief lies in the fact that on the conditions of life fundamentally different from those of the West has been superimposed a highly developed system of an alien mechanism of European trade and commerce. The contact with the West was all too sudden not to have seriously affected the roots of organic communal life of the country. Thus, India was disabled from readjusting her socio-economic life to the circumstances under which Destiny placed her.

It was necessary for an alien government to perfect the administrative machinery by centralising all functions, and as a result of superimposition or substitution of western political structures, the framework of an internal autonomous administration was seriously damaged. The sense of corporate life dominating self-contained rural communities was gradually undermined by the influence of a strong centralised government. Recent historical researches reveal records of the existence of many representative institutions in India essentially democratic in character, which safeguarded the economic interests of the people. Take the case of the village Panchayat system. It is an institution which has an abiding place in the socio-economic structure of India. As the name of the system implies, it is a council of five (Panch) elected by the chief residents of a village area. Agricultural organisations were linked with the village Panchayat. The periodical distribution of holdings, control of common lands and irrigation channels, settlement of disputes arising out of occupation or sale of agricultural lands, communal apportionment of revenue charges, administration of cheap and speedy justice--all these were some of the functions discharged by the village Panchayat. With the growth of political consciousness of the educated classes and when the day came for introducing representative form of government in India, it was realised that the basis of representative institutions indigenous to the peoples of India, should be restored and remodelled in order to give effect to a scheme of popular government.

Fortunately, there still survive some characteristic elements of the village Panchayat in the socio-economic life of the people. These remnants should be utilized for the construction of a suitable edifice of rural organisation in India. We have also

to take into consideration various factors that have been introduced into our social and economic life through the world-wide commerce and political forces of a highly organised nation. The dream of an arcadian India is incoherent ; India must secure her place in a new era of scientific advance. To attain that end, she must regenerate such forces of life and progress *within* as would effectively remove the inhibiting influences which are undermining the vitality of the nation. This, to my mind, is the next stage of political evolution in India—the revitalisation of her rural life. I thank you, friends, for giving me a patient hearing.

XI

The Common Task before us.

[At the invitation of the Calcutta branch of the Rotary International, the following address was delivered on March 9th, 1926, at its weekly meeting at the Grand Hotel. Rotarian Atkinson was in the Chair.]

Mr. Chairman, Ladies and Gentlemen,

I am fully conscious of the privilege you have extended to me by inviting me to your meeting this afternoon. None familiar with the activities of the Rotary Club of Calcutta can fail to appreciate the part it plays in creating public opinion on questions relative to the civic and political life of India. The fact that your President and Directors ask me to speak to you on the subject of "rural reconstruction" indicates how closely you follow the trend of public mind which has recently revived its interest in the problems of Indian rural life. The subject embraces some of the most insistent and complex problems of India, and therefore, I have much pleasure in introducing a discussion on certain aspects of rural reconstruction in India.

It is difficult, in the midst of the immense chaos that characterises nearly the whole of India's economic life, to disentangle the factors operating on rural economy; every effort therefore should be made not to cause further confusion by such bias as may arise out of abstract political theories or party prejudices. It is necessary to examine the present status of the Indian peasantry mainly as an economic problem. The other day in his Presidential address at the Asiatic Society of Bengal, Sir Rajendranath Mookerjee asked his countrymen to realise that "the peasant forms the biggest problem of Indian economics. In formulating any scheme or plan for his general uplift essential factors, such as his poverty and ignorance, his material condition, his modes of living, his habits of mind in relation to his environment must be taken into consideration." Coming from one who is regarded as unquestionably the ablest Bengali industrialist of our day, his remarks deserve careful consideration. Indeed, there can be no prospect of efficient

rural reconstruction unless and until the peasant—the man behind the plough—arrests our attention and his welfare becomes the chief concern of the state and of the conscious public opinion of the country. At this stage of our politico-economic life, it will serve no useful purpose to ignore the fact that the upper classes known as the intelligentsia have not adequately done their share for the betterment of the lot of Indian peasants. We may declare in our public utterances that—" we are of them and they are of us; we are all of the same bone and flesh;" but illiteracy, disease, social tyranny and abject poverty, furnish a picture that reveals conspicuous symptoms of abnormality in the physiological growth between the two parts " of the same bone and flesh." Organisations supported by well-equipped forces of vested interests flourish, but the villages decay. The truth is, the Indian peasant knows us chiefly as money-lenders, land-owners, agents to absentee land-lords, touts to lawyers, dealers in agricultural produce, shopkeepers, quack doctors, priests and recently as candidates to legislatures from rural constituencies. We may turn to him when we need his alliance for a demonstrative political movement; we may seek his support for the purpose of forcing the hands of the Government to yield to political demands of which he may have the least idea; we talk about him and his problems when political platitudes fail to receive much applause from the crowd. Thus, so far as his own welfare is concerned, the Indian peasant is " the forgotten man "; and had we not forgotten him, the disintegration of Indian rural life would not have reached such a deplorable state in India.

Of course, the phenomena are not peculiar to India. In every civilised corner of the world, the village as the natural unit of socio-economic life has been exposed to the impact of new forces released by modern industrial conditions. While they brought into play such factors working at cross purposes with integrity and harmony of rural life, it was soon realised that any maladjustment between urban and rural interests would fundamentally affect the development of " national being." Therefore, since the beginning of the twentieth century the attention of even the most industrially advanced countries of the West has been drawn to problems of rural reconstruction. Let me cite one instance from the southern States of America. Referring to the people of North

Carolina, the late American Ambassador Page wrote to President Wilson : "What have the upper classes done for the education of the average man? The statistics of illiteracy, the deplorable economic and social conditions of the rural population furnished the answer. The forgotten man remained forgotten. The aristocratic scheme of education had passed him by." The situation in other parts of the States was no better, and with a view to making a proper diagnosis of the causes that seem to inhibit any process of rural revitalisation, President Roosevelt appointed the Country Life Commission. Thus, the true nature of the rural problems was carefully analysed, and what was more important, the conscience of the educated classes was sufficiently roused. It was realised that as all wealth is the creation of man, if the opportunity of North Carolina farmers was not extended and their surroundings not improved, the economic loss must be enormous. Though the final responsibility for the most depressing conditions rests with the State, it was found that the taxable resources were not sufficient to support a comprehensive scheme for rural reconstruction. It was clearly a case for mutual dependence of State-aid and voluntary efforts. Consequently a plea was made for the development of the principal rural industry, rural education and rural sanitation, largely through the efforts of Mr. Page, then a famous journalist. A General Education Board was organised. Its activities were first directed towards the elimination of wasteful and unproductive farm practices, thus building up the basic industry of the people on a sound footing. The task was not an easy one. Social and traditional influences that encourage inertia were dominant among the people, with the result that they themselves became definite opponents of advanced ideas and ideals. And yet if they could only be convinced of the economic advantages of a measure, they would readily adopt it. So Mr. Knapp planned out his scheme of agricultural demonstration work. He would select a particular farmer and persuade him to work a portion of his fields for a period according to methods which he and his colleagues would prescribe. If the selected area yielded a profitable crop or gave an increased outturn, the farmer would require no further inducement for directing farm operations on improved lines. Thousands of agents are now engaged in the southern States of America with such demonstration work for the purpose

of introducing " better farming " in the country. But, the economic salvation of " better farming " depends on " better business." Therefore, such rural organisations as may be necessary for placing the business of farming on a better *business* footing are brought into existence. Then comes the problem of " better living." The General Education Board, referred to above, organised free public training of both the hands and the mind of every child in the rural community ; but the root-cause of rural deterioration in the southern States was found in the physique of the people. Dr. Stiles, the sanitarian of the Country Life Commission, suspected that much of the mental and physical sluggishness was due to still unclassified species of a parasite now known as hookworm. He was then ridiculed as having discovered " the microbes of laziness."

My purposes in dwelling upon the work of rural reconstruction in the southern States of America is to illustrate some of the principles and methods which must be followed not only in arresting the process of deterioration of rural life, but in furthering the task of building up the basic structure in which that life may find fuller expression. Within the time allotted to me, it is difficult to discuss at length the various aspects of this complex problem of rehabilitating the rural life of India. Therefore, I shall content myself with a few remarks on the essential pre-requisites for working out any scheme of rural reconstruction. In the first place, there must be sufficient men and women among the educated classes who, in the midst of our excited political controversies, would bear in mind that the stability of a political structure in India depends largely on the quality of its relationship with the rural communities. Mere consciousness as to the needs of rural life may well fill the void in our political thoughts, but cannot supply the necessary impulse to the labour of rural reconstruction. While the administration of the country by an alien government brings about a psychological state of mind resulting in excessive political pre-occupations of the educated classes, it must be realised that for a vast population living as they do in an underworld of misery bound in economic fetters, mere freedom to vote cannot gain for them bread and water. Agriculture which sustains them, though traditional, has failed to adjust itself to new politico-economic organisations of the twentieth century. Thus, the disparity between the condi-

tions of Indian agriculture and those of commerce and industry which have overtaken it, is, indeed, enormous. Like his Irish brother the Indian peasant may also be described as "the primitive economic cave man." While the fruits of his labour supply the needs of a twentieth-century commerce and industry, his own social and economic life is limited to the conditions of the fifteenth century. Now, the task before the rural reformer is to lead him out of his cave and make him a real partner in the social and economic order of the present age. This task is obviously not an easy one; and before it may lend itself to any solution, a beginning must be made in the direction of reorganising village life. Wherever there is a symptom of rural decay, its source lies mainly in the disintegration of socio-economic organisations. The trend of movements brought into being by a centralised from of government and accelerated by the impact of industrial forces naturally disturbed the traditional basis of Indian village commune. But whatever of worth that basis might have produced in the past should now be valued in terms of the altering circumstances; in other words, the ideals and structure of the specific type of our rural organisations must be adjusted to the new conditions emerging out of the political and economic development of India. How that process of adjustment has to be evolved, is perhaps, the most important and difficult question that must engage our attention if any scheme of rural reconstruction is expected to function properly.

Judging from the quality of thought which is now and then brought to bear upon it, one cannot honestly say that we have any definite idea as regards what should be done for making efficient readjustments of the various forces now at work in rural India. Either we entertain a pious hope of building up an Arcadian India, or allow our mind to be so obsessed with the success of the Western industrial systems that we accept them as our models for economic regeneration. Such confusion of ideas would account for the fact that none of our leaders has yet been able to draw up a settled plan for the revival of rural organisations. Therefore, I am inclined to attach much importance to a comprehensive study of the problems involved in the task. We should have access to a wide economic knowledge of the conditions of life in which the Indian peasant lives.

In his attempt to revive rural organisations the rural reformer will, of course, come into contact with the various State departments designed for the welfare of rural inhabitants. It is essential that he should have a clear conception of what these departments are doing.

Now a department of agriculture has the most active part to play in the restoration of the economic life of a country. It is especially true of India where agriculture provides three out of every four people with some sort of occupation. The agricultural department was first inaugurated during the viceroyalty of Lord Mayo, but no definite step was taken for its improvement till Lord Curzon worked out a policy of research and education which, after two decades, gave a direction to the agricultural development of the country. A scheme of veterinary education has also been inaugurated with the result that to-day the toll from epizootics is steadily on the decrease. Then, on the business side of farming, agricultural co-operation has been introduced chiefly with the object of shaking the impregnable position occupied by the village money-lender. Advance is also being made towards co-operative purchase and sale. A scheme of co-operative irrigation by the cultivators has been developed in Bengal and Madras. Taking a survey of the progress of the co-operative movement throughout India, one is impressed with the fact that the traditional spirit of rural communalism helps the people to grasp the principles of co-operative organisation. Here then lies the solution of many of our problems in rural areas.

But, however elaborate these departmental organisations may be, they cannot function properly if they are to be nurtured only by State Official and their underlings. The State may formulate policies for rural betterment, or give legislative protection, or direct research, but in the task of rural reconstruction which involves a deliberate and energetic overhaul of the dominant factors of our socio-economic life, there must be active co-operation between the State and public opinion of the country. How can we account for the fact that " agriculture has not yet attracted a fair share of the brains, capital, and enterprise available in the country? " Can it be said of our educated classes that they have spontaneously rallied round the co-operative movement, which they know, is extremely helpful to the peasantry and artisans? Or

what help have they rendered to the department of industries whose object is to revive rural arts and crafts?

I am convinced by what I have seen in Europe and America that the central pillar of a comprehensive scheme of rural reconstruction is the co-operative organisation—and that, in order to make it effective there must be mutual dependence of state-help and self-help. I have made a brief reference to the work in the southern States of America. Examples may also be cited from small beginnings already made in this country. Anti-malaria societies in Bengal, co-operative dispensaries in the Punjab and the attempts to establish arbitration societies in the areas greatly affected by litigations, are the most encouraging instances of what may be achieved by the co-operation of voluntary organising bodies with the departments established by the State.

But, in India, we have to recognise the difficulties that often stand in the way of developing a spirit of co-operation with the State departments. They are chiefly concerned with administrative functions and discharge them with mechanical precision. With all the good intentions, the rural reforms undertaken by them are usually of a piece-meal nature, and as such they fail to inspire the public mind. Bound in water-tight compartments, leakage from which consists of proceedings of committees, bluebooks, reports and memoranda, the various departments do not approach the problems of rural life simultaneously. No adequate attention is also given to the importance of taking the public into confidence as regards the policies and methods of departmental activities. These considerations lead me to suggest that a co-ordinating organisation should be established in each province for bringing into closer touch all the activities of the State departments, district boards, village unions and such non-official bodies as may be associated with the task of rural regeneration. The success of the General Education Board in the southern States of America, or of the Irish Agricultural Organisation Society in the most backward parts of Ireland, or of similar organisations in Denmark, Belgium and Holland, should at least have some inspirational value for us.

In Bengal we need an organisation—let us call it the Bengal Rural Organisation Society—which would function as the directing centre of all necessary reforms. It would provide facilities to the rural industries, departments of agriculture, co-operative

societies, primary education and sanitation for the purpose of formulating a comprehensive scheme of rural reconstruction. And, if properly constituted, I feel confident that it will attract the educated public. Only such combination of efforts can offer effective resistance to forces of deterioration so active in rural life.

It is not possible here to enter into the details of the proposed organisation ; but I should like to explain, if I may, my object in making this suggestion before you. As most of you are engaged in fostering British and Indian trade relations, I ask you to consider whether any commercial enterprise may continue to flourish any length of time in a country where a majority of its population live in abject poverty. How largely the Indian peasant is engaged in supplying the needs of Indian export trade is well-known to you. Nearly 75 per cent. of the total jute produce, 56 per cent. of cotton, 15 per cent. of wheat, and 8 per cent. of rice are exported every normal year. With that part of the agricultural produce which he sells, he gets just the bare necessaries of life. So numerous are the handicaps to his economic activities that his purchasing power has not appreciably increased ; thus, the productive capacity of India remains low and the distributive agencies extremely deficient. But, this state of things cannot benefit either India or England. For the sake of economic stability, then, the Indian peasant must be our immediate concern and in the task of rural reconstruction in India the commercial community must also share some responsibility. Let us, therefore, face the realities of the situation and combine all our efforts to establish a central organisation as suggested here. In Bengal, we are particularly fortunate in having a Governor who is deeply interested in the problem of rural life. The official departments that have much to do with rural problems are now anxious to undertake the task in right earnest. All shades of political views are also beginning to realise that " politics is not the only game of human life," and that our social institutions must be readjusted for the purpose of creating such forces within, that would undoubtedly react on the political evolution of the country. Let us not miss the opportunity *now* of finding a common platform where the official departments, non-official organisations and the educated public may co-operate in helping the Indian peasantry to help themselves. I spoke of the Indian peasant as the forgotten man. As long as he was content to be for-

gotten, the vested interests were secure. But he is no longer content to be neglected by those who profit by his backwardness. To those of my critics who charge me with unbalanced patriotism for giving so much emphasis upon the urgency of rural reconstruction in India, I venture to commend the following lines from an Irish author: "The National idealism which will not go out in the fields and deal with the fortunes of the working farmers is false idealism. Our conception of a civilisation must include, nay, must begin with the life of the humblest, the life of the average man or manual worker, for if we neglect them we will build in sand. The neglected classes will wreck our civilisation."

Ladies and Gentlemen, I thank you for your kind attention with which you have listened to me. If I have chosen the occasion for soliciting your assistance in developing a rural reconstruction scheme in Bengal, I have done so without any hesitation; for, the other day Sir Hugh Stephenson gave us the assurance that Rotary was a school for raising humanity to a higher level.

XII.

Rural Bengal.

Mr. President and Gentlemen,

One by one grim and disagreeable apparitions hidden in the dark chamber of our national life are being revealed to light. We knew of their existence but we deluded ourselves into thinking that they would not seriously molest us. However, when the day came for making political readjustments, we found our household haunted by these apparitions that have not lost their context of life. We chanted political formulae; we took to penitences and vicarious fasts; we made all possible "gestures" but they refused to be exorcised. The worst of all—যে শর্ষের সাহায্যে ভূত ঝাড়াইব, সেই শর্ষেকেই ভূতে পাইয়া বসিল;—that is, the devil-exorcising mustard seed itself has become possessed. The disintegrating forces active within the life of our social organism not only render various political devices ineffective, but the wrangling over them serves to intensify some of the fatal deficiencies militating against national solidarity. The communal differences are becoming acute; various devices designed for Hindu-Moslem unity are breaking down on the slightest pretext; the cult of orthodoxy revolts against the removal of untouchability; the symptoms of estrangement in the relations between the landlords and the tenants can no longer be ignored; the sense of trust and harmony that existed among various groups participating in the economic life of the community is being replaced by a feeling of distrust and discord.

Our repeated failures in carrying out the political programme must lead us to search for the causes of sterility in the organic life of the country. We must ask ourselves why the emotional outbreak in the country does not supply adequate energy for constructive work, and why the political activities suffer periodically from "slump."

While several factors may have conspired to bring about the state of affairs, it has to be admitted that we ourselves are largely responsible for the maladjustments in almost every sphere of our

life. The time has therefore come for us to reflect seriously on the truth of Tagore's saying " Do not mind the waves of the sea, but mind the leaks in your vessel."

Amidst our political wranglings, one hears that in India the basis of a suitable constitutional structure must be a strong rural community. Admitting that it may be the correct view of a possible political edifice for India, our attention must be directed to the task of constructing a stable foundation on which it may rest. That task may furnish a common platform where all political parties can unite. It may also offer adequate opportunities for our legislative bodies to introduce revitalising elements in Indian rural life. The question of revitalising rural life in Bengal is of such paramount importance that I feel justified in repeating before you some of its features with which you are already acquainted. The persistent neglect in solving the rural problems of Bengal has at last developed such striking tendencies that they cannot but fail to arrest the attention even of a superficial observer. We know that the decline of the rural population in Bengal, as in other provinces, grows partly out of economic conditions and partly out of failure to adjust the structure of its social life to that of modern times. The disintegration of village life is evident not so much in the rural exodus as is the case of most of the industrially advanced countries, but in the physical and moral deterioration of the population itself.

The prevalence of malarial disease is a common feature in rural Bengal. An idea of the effect of malaria in Bengal may be formed from Dr. Bentley's estimate in his 1922 report that over 28,000,000 cases of malaria require treatment each year in this province. He says that before railways were introduced into central and western Bengal, malaria was a relatively mild disease, and almost entirely absent from many areas which are now absolute death traps. He is of opinion that fifty years ago superabundance of flood water ensured immunity from the larvae of the malarial mosquito; but that since the drainage of the country has been obstructed by the construction of railway embankments, the fulminant type of malaria has become a serious menace to the people. Obstacles to the natural drainage system leads to serious insanitary conditions, and one is surprised to find such a large number of shallow, stagnant pools and ditches within the small

area of a village. These, as you will be told by the villagers, are the veritable death traps for them. The real problem before India is how to make the rural population escape the grip of death.

Recent economic survey of certain rural areas in Bengal shows that there is a remarkable correlation between the health of the population and their economic condition. The data suggest that mortality rates " tend to be relatively low on fertile soil and to increase as fertility of the soil diminishes."*

But the low resisting power caused by mal-nutrition and repeated attacks from malaria, kala-azar, hookworm and other preventible diseases has a serious effect on the efficiency of the peasantry. In considering any scheme for improved agriculture, one must take into account not the death rate but the most fatal consequences of the diseases mentioned above on the physique as well as the mind of the victim. " Compared to tuberculosis," says an Italian authority, " malaria kills less frequently and less rapidly, but it inexorably destroys the more lively energies of men. It impoverishes the blood, causes all the forces of man to droop and wither, takes away the desire for the possessions of the earth and the joy in living. Malaria impresses not only physical marks, but, above all, physical degeneration on the race it smites. Distrust towards works of a social character, diminished will power, diminished liking for work, restricted vision towards all the phenomena of life are special characteristics of those with chronic malaria and the peoples who have long suffered from the infection."

The question of the increasing fertility of the soil and hence the production of food crops, bears, then, an intimate relation to the question of public health in India. Malaria is on the increase and mortality from kala-azar is as high as 11·9 per cent. of the total mortality in Bengal in 1924. Unless and until public health reforms are taken in right earnest simultaneously with the efforts for economic development, we cannot hope to lay even the foundation of reconstructing rural Bengal. One of the fundamental causes of low production either in agriculture or in industries is undoubtedly the physical deterioration of the people.

* Dr. Bentley : The Effect of Poverty on the Public Health in India (Bengal Economic Journal, Vol. I, No. 1).

In this connection the following remarks in a report of the Public Health Department of 1924 should be noted :—

"This increase of malaria in Eastern Bengal districts appears to be associated with the great increase of the water hyacinth, an extensive multiplication of village roads raised considerably above the surface of the country and railway extension in certain areas, notably Mymensingh, all resulting in an interference with flow of flood water in the beels and water-courses and across the surface of the country."

The second factor that keeps the level of production extremely low is insufficiency of capital.

Agricultural capital is essentially necessary in a country where holdings are very small. Therefore, the place of the clever village usurer in the rural economy is assured, and in his anxiety to get hold of the produce, he offers cheap credit to the people. While agriculture lives on facile credit, the latter does incalculable harm if the people do not understand or have the advantage of utilising the borrowed money in some productive works.

A very large proportion of the population particularly those belonging to the agricultural class, exist in a state of indebtedness and it is practically of a permanent character, loans being considered by the cultivator as the normal source of his capital. "The lesson of universal agrarian history," says Sir Frederick Nicholson in his famous Report on Land and Agricultural Banks, "is that an essential of agriculture is credit. Neither the condition of the country, nor the nature of the land tenures, nor the position of agriculture affects the one great fact that agriculturists must borrow. This necessity is due to the fact that an agriculturist's capital is locked up in his lands and stock, and must be temporarily mobilised. Hence credit is not necessarily objectionable, nor is borrowing necessarily a sign of weakness." The mischief lies chiefly in the exorbitant rates of interest charged by the usurers. The rates, which depend largely on the security offered, the necessity of the peasant and the season of the year when the loan is required, ordinarily in vogue are 24 per cent., $37\frac{1}{2}$ per cent., and even 75 per cent., the average being approximately 45 per cent. per annum.

The high rate of interest at which the cultivator is compelled to borrow agricultural capital leads naturally to agricultural

bankruptcy ; and once he is in the clutches of the usurer, he seldom gets free. Any one familiar with the rural life of India can fully realise the extreme gravity of the problem of agricultural indebtedness of the peasantry. It is this canker that is eating into the vitals on which a prosperous and rural population must live. No peasant hopelessly in debt can ever do any justice to himself or his land.

It is to be admitted that the total indebtedness does not represent investments in agricultural industry. Thriftlessness, ceremonial extravagances, and the litigious spirit of the cultivator often lead him into the traps set up by money-lenders. After a successful harvest he is tempted to spend the entire proceeds ; and with the approach of the rainy season, when he must buy cattle and seeds for agricultural operations he borrows again.

We must however warn ourselves against the common notion that this plague of indebtedness comes about only through a number of common forms of extravagance, and that the Indian ryot is a reckless fellow and consequently will always be in debt. While in social matters a great deal of reforms is necessary by way of modifying various external practices that involve heavy expenditure, the place of ceremonies and celebrations in the development of the life of a people cannot be altogether belittled or ignored. " After all," says Hume in his brochure on Agricultural reform in India, " this (referring to marriage) is the poor fellow's only extravagance ; these are almost the only white days in his dull-coloured life of toil and pinching, and unless he is singularly blessed (or unblessed?) there are not many of them, and for the rest, a more careful frugal being is not to be found on earth." From a closer study of the problem, one can diagnose the various accentuating causes that compel the cultivator to borrow from the village *mahajan* (usurer) or *bania* (merchant). Let us hear one Haran Mandal, who was, as he says, once upon a time the village headman. The case is reported by Mr. Ascoli, then the District Magistrate of Dacca : " I owned a large holding of some twenty acres. Twelve years back I had to borrow the small sum of Rs. 25 on the occasion of my son's marriage. After three years having repaid neither capital nor interest, I was asked to execute a fresh bond for Rs. 50, which I gladly did. After the lapse of another three years my creditor demanded repayment, or in lieu

thereof, the cession to him of one acre of land. I refused to part with my land and borrowed from another man the sum of Rs. 100 to repay the loan. This amount being less by Rs. 12-8 than the principal and interest due was refused by the money-lender. Just about this time, my uncle died, and to perform the *Sradh* ceremony I had to spend the whole amount. The result is that my debts now exceed Rs. 500—the 12 years' growth of a loan of Rs. 25."

Now, Haran Mandal's case is a typical one, it throws some light on the nature of the growing evil of indebtedness, but, for its root causes we have to look to the administrative as well as socio-economic organisations of the country.

I should like to draw your special attention to Haran Mandal's statement to the effect that he was unable to repay the small sum of Rs. 25 within the period of three years, although he farmed an area not less than twenty acres. As a rule the ryot hates debts and is eager to free himself from the grip of the usurer. In most cases the explanation of his inability to clear himself from debt may be found in his low agricultural income which, among other reasons, is due to low agricultural production. While in some instances, agricultural industry in Bengal may have touched the point at which further employment of labour or capital cannot be made profitable, in greater part of the agricultural land of the Province the poor yield per bigha is certainly due to inefficient labour, lack of capital and many other uneconomic conditions from which the principal industry of the country cannot easily extricate itself. One of the many such conditions is the character of agricultural holdings, scatteredness and fragmentation of which have reached a point at which they jeopardise the agricultural efficiency of a vast tract of cultivable soil. Subdivision of holdings combined with fragmentation makes cultivation costly and management difficult. The average size of the cultivated field, for instance, in one district in Bengal is less than half an acre, each cultivator possessing six fields. (The figures are quoted by Mr. Ascoli, once Magistrate of Dacca.) It is clear that the creation of such diminutive units is bound to have an adverse influence on the adoption of improved agricultural methods such as the use of improved ploughs,

the maintenance of the breed of draft cattle and the efficiency of farm operations.

Here I shall not attempt a diagnosis of the causes that underlie this process of excessive subdivision and fragmentation of holdings; but I do wish to point out that the evils arising from this process must be fully recognised. It cannot be denied that the laws of inheritance and succession amongst the Hindus and Mohamedans have greatly influenced the tendencies of subdivision and fragmentation of holdings and that these laws have not been adjusted to the inevitable changes that are taking place in the economic organisation. The Hindu law of inheritance which provides that every male of a family is, from the moment of his birth, a sharer in the family's ancestral property and may demand its partition—much as did the Prodigal Son—whenever the idea enters his head. But the entire blame cannot be laid at the door of Manu or the Prophet. The truth is, our agriculture is overcrowded and demands relief.

Considering the average density of population in the whole of Bengal and calculating the average value—(in one of the richest districts of Bengal, the average value is Rs. 57 per acre) of agricultural produce per acre, it becomes clear that agriculture alone is entirely inadequate for the sustenance of the people and that the revival of village industries for the purpose of providing additional employment for them is essentially necessary. Weaving has been the special industry of Bengal, but it has never been organised so as to be able to defend itself against the aggressive forces to which it has been subjected since the advent of the industrial era. The new conditions of life were imposed on the entire social economy, and here again our inability to adapt ourselves to them gave rise to a phenomenon described by our economists as "the loss of equilibrium of occupations in the economic organisation of the country."

Now, that equilibrium must be restored if the life in rural Bengal has to be revitalised. In the Western countries, the balance is redressed by recognising the importance of industry. "The greater the predominance," says the Rural Report of the Liberal Land Committee in England, "of industry over agriculture the more carefully must the nation, and industry itself, look to the

soundness of its rural foundations.'' In India, our problem is to seek correction of the economic tendencies by organising such industries as may absorb certain percentage of the population. Cottage industries that thrive only in a disciplined industrial system possess greater potentialities than industries based on the factory system. Our attention must be directed to the task of organising the village industries of Bengal on economic lines ; for, want of diversity of occupations is considered to be one of the main causes of poverty in India.

Referring to this point, the Famine Commission of 1880 clearly stated that with a population so dense as that of India the development of industries is of very great importance, and they are rendered still more serious by the fact ''that the numbers who have no other employment than agriculture, are in large parts of the country greatly in excess of what is really required for the thorough cultivation of the land.'' The fact is now well recognized ; but the methods advocated for reorganising subsidiary village industries do not adequately take into consideration the need of adapting them to new conditions arising out of India's entry into the world market. We have now to move with the times.

But it does not mean that we must fully accept the form of western industrialism. In order to be able to face the foreign markets it is necessary, in some instances, to introduce the methods of large-scale production. The solution of the problem, however, cannot be reached unless we are able to bring about readjustments between our agriculture and industry. If we consider the economic position of the spinning wheel, it will be clear to us that its successful working depends, among other complicated factors, on the supply of suitable cotton at a low cost. That supply can only be secured through wider cultivation of cotton in Bengal.

I have indicated above some of the fundamental handicaps to agricultural progress in Bengal. Inefficient labour, insufficient capital, heavy indebtedness, undue pressure on agriculture for want of suitable industries, all contribute to low agricultural production in Bengal. We have now to consider the question of rural education ; for, the chief obstacle to any progressive movement lies in the illiteracy of our rural population. The history of other

countries shows that the village school forms the basis of any scheme of rural regeneration and yet this essential requisite is becoming less attractive to our children. The number of primary schools in India increased by 13,000 and the pupils by 350,000 during the five years, 1917-1922. The number of primary schools in Bengal in 1920-21 was 35,703 and the pupils attending them numbered 1,456,865. It has been calculated that in British India 3 villages out of every 4 are without a school-house and that 20,000,000 children of school-going age are growing up without any instruction. As regards the quality of the existing schools, I need only say that they cannot in any way exert any influence on the community. Mere teaching of the three R's has no special value and cannot hope to widen the outlook of the rural pupils. What can be achieved by rural education for an essentially agricultural people is best illustrated by the example of Denmark. The problem of rural education recently came in for discussion in England; all the three political parties paid visits to that country. His Excellency Lord Irwin during the tenure of his office as a Minister of Agriculture of England and Wales visited Denmark and obtained first-hand knowledge of Danish rural organisations. One of the reports comments on the peasant schools of Denmark as follows :—

"The influence of the Danish High Schools on Danish agricultural activity, and the reaction of agricultural activity on these schools is a remarkable example of the inter-action on human life of economic and spiritual forces."

But, friends, to achieve this end the first requisite is the educationist by whose hands the rural education policy has to be moulded. There are ample materials yet available for building up our rural education scheme; but they can neither be discovered nor can they be properly utilised unless and until our literate youngmen and women seriously undertake the task. Only under their guidance, may we hope to adapt the indigenous systems of mass education. I refer chiefly to Kathakata which is a familiar institution among the Hindus of all sects and also to Milaudsarif which is the prototype of the above among the Mohamedans. Such institutions have vast possibilities if they could only be modernised

in the directions required by the country to-day. The superstructure of rural and agricultural reforms which we may hope to erect on the existing basis cannot possibly be effective without a thorough overhauling of the system of education now in vogue in our rural areas.

I now pass on to the question of agricultural production of the country popularly known as Golden Bengal.

Rice is the main crop of Bengal. Of about 24 million acres of cultivated land, more than 21 million acres are under rice cultivation. The estimated average yield for the last ten years was about 8,056,400 tons. The yield per acre has not appreciably increased in Bengal during the last decade and in many instances it falls far below the so-called standard or normal yield per acre of cleaned rice. According to official statistics of Bengal the standard or normal yield per acre of cleansed winter rice is 987 lbs. If we compare the district averages with this standard, we find that 7 districts come under and 19 above the figure calculated to be the normal yield for Bengal winter rice. For instance, the estimated yield of Bogra, which is 837 lbs. per acre is 150 lbs. below, while the estimated yield of Hooghly, which is 1,278 lbs., is 291 lbs. above the standard.

Of the 19 districts whose yield is above the standard, 11 districts are so situated that their outturn will easily fall below the normal under very slight adverse conditions : in other words, the margin is precariously narrow. Making due allowance for climatic and other uncontrollable factors that govern our agriculture, it is evident that the soil of Bengal is being rapidly exhausted and nothing is being done to recoup or increase its fertility.

Perhaps my point will be clear to you if I deal further with the question of yield. The observation made above is based on what official reports determine to be the standard or normal yield of winter rice in Bengal. That figure is very much lower than that obtained in other rice-producing countries. However, instead of confining our remarks to the winter rice alone, if we take the average of all the seasonal varieties of rice, grown in Bengal, we find as shown in the following table that the average of rice-yield for the last quarter of a century has not been more than 984 lbs.

TABLE I.

Showing Quinquennial Average of Rice-yield in Bengal.

	1901-02.	1906-07.	1911-12.	1916-17	1921-22.	Average for 25 years.
Winter Rice	1,234	1,234	983	1,036	1,029	...
Spring Rice	823	800	1,104	1,179	1,156	...
Autumn Rice	823	800	807	871	888	...
Average	960	944	965	1,029	1,024	984

I now place before you comparative figures, compiled from the International Year-book of Agricultural Statistics, of rice-yield in different countries.

TABLE II.*

Production of Cleaned Rice per acre in the Different Countries of the World in Pounds :

Countries.		Average 1909-1913.	1920.	1921.	1922.
Spain	...	3,188	3,281	3,150	3,275
Italy	...	1,806	2,217	2,243	2,151
Egypt	...	2,132	1,714	1,456	...
Japan	...	2,163	2,591	2,257	2,477
Korea	...	1,133	1,227	1,202	1,239
Farmosa	...	1,183	1,231	840	1,459
United States	...	922	1,083	1,134	1,090
India	...	957	785	912	911

* Year Book of U.S.D.A., 1923, pages 718-719.

While the peculiar limitations imposed on our agriculture by climatic conditions may depress the yield to a certain extent, the discrepancy, as shown above in the comparative figures, cannot be explained away without attributing it to some of the fatal handicaps that are obviously obstructing the process of agricultural development in Bengal. The agricultural researches of the Department indicate some of the methods by which "better farming" may be introduced; it is claimed that by the adoption of some hybrid races of paddy increased yield may be obtained. But, the fact remains that our agriculture is in a medieval stage and the inevitable burden of a twentieth-century commerce and of an expensive form of government rests on this primary industry of the country. Conscious as I am of the dangers latent in such top-heaviness of mechanism of the world commerce, I do not believe it is possible to bring these conditions down to the level of the fifteenth century. The only remedy lies in raising the basic industry of the country to the standard of the present time.

The poor yield of our staple food has to be viewed from two points: (1) fertility of the soil, and (2) the food supply of the people. As I consider that there can be no greater calamity for a nation than the exhaustion of the fertility of its soil, may I be permitted to make a brief reference to the conclusion one may derive from the data of rice-yields of Bengal? If we take the average yield per year for the last 20 years and plot these figures on a graph, it will be noticed that, ignoring the abnormal seasonal variations, the curve is practically confined within the same level. That is, there is no significant indication of gradual increase or decrease of yield. We might have, however, got such indications if we could have obtained data for every year from plots which were being cultivated over a number of years. At any rate, even from the data now available, we discover such tendencies that have shown themselves in a series of classical experiments in the famous Rothamsted Station, England. On a plot of land wheat has been grown without manure every year since 1843. During the first few years, there was a gradual drop in production, but the yield became practically constant for the last sixty years. In other words, the production has touched a constant level showing that continuous cropping without replenishing the soil with the essen-

tial manurial ingredients reduces its fertility to a minimum level. In Bengal, the total output of rice is now obtained not from increased productivity of the soil, but from the extension of cultivation by breaking fresh land. This has, as you may realise, reacted on agricultural economy by robbing cattle of necessary pasture land. Even this process could not go on for any length of time and the day of reckoning was bound soon to arrive. And that day of reckoning has come. From 1911 to 1923, the area under rice cultivation in Bengal has not materially increased. The average for the last ten years is 20,565,800 acres.

Thus, with an almost constant acreage and a low yield, Bengal is faced with the problem of how best to feed her population. While an attempt to support by statistics that Bengal, the granary of India, does not produce sufficient staple food (which is rice) to feed her population may not be quite successful owing largely to the insufficiency of agricultural data, I have ventured to place before you certain figures based on official publications from which the general tendencies of the actual state of affairs may be realised.

Taking the average of the total annual optput of rice for the last 10 years, it is known that Bengal produces 8,056,400 tons, that is, 225,576,200 mds. Our requirements throughout the whole year may be computed as follows :

1. Seed.

Seed requirements @ 12 seers per acre would amount to 6,169,740 mds. for the average total area under rice cultivation in Bengal.

2. Cattle Food.

It is known that milch cattle are partly fed on rice, especially during the milking period. According to the livestock census, we have in Bengal about 8,378,319 milch cows and cow-buffaloes. Assuming that 50 per cent. of the total may be dry, and therefore not fed with rice, we would have to allot to the other 50 per cent. one seer of rice per head per day. The quantity required for the purpose would then be approximately 37,125,000 maunds.

3. Wastage.

In calculating the total rice available for human consumption, an allowance has to be made for wastage which according to some investigators runs as high as 10 per cent. of the total production. While rats (black rat population of India is estimated at 375 millions) alone are made responsible for 1·5 per cent., the deficient methods of transport and storage, and the damages caused by insect-pests undoubtedly enhance the loss in wastage. But, let me set the percentage down to 5 per cent., that is, a total of about 11,278,960 maunds of rice.

4. Export.

Lastly we must take into account the quantity exported from Bengal, the average* of which for the last 10 years (1914-1924) is 109,843 tons or 3,075,604 maunds.

Thus, the total requirements for seeds, milk-cattle and export trade, together with the amount of wastage, reach the figure of 57,649,304 maunds. Deducting this from the total output of rice, we get about 168 million maunds only available for human consumption in Bengal.

The question that at once comes to our mind is whether this quantity is sufficient for the rice-eating population of the province. We, therefore, proceed to find an answer to this question.

In the first place, we have to decide upon an average ration for each person of a specified age. As there is considerable divergence of opinion in the matter of *per capita* consumption, it is necessary to make a brief reference to the various estimates recognised by the Government.

Table.

	Famine Code.	Jail ration.
Labouring adult male	...	13 chataks.
Workers: Diggers	16 chataks.	...
Carriers	12 ,,	...
Workers: Children	8 ,,	...
Non-labouring Adult	10 ,,	9 ,,
All prisoners under the age of 16 years ...	... ...	9 ,,
Children (10-14)	7 ,,	...
Children (7-10)	5 ,,	...
Children under 7 years	4 ,,	...

* The pre-war figures are considerably higher than this average.

If, from the above estimates, we determine what may be called an average ration, we would certainly be correct in our estimation and the standard of consumption thus fixed cannot be criticised as being too generous in feeding the population whose diet practically consists of rice and very little else. We may, therefore, take the following as the basis of our calculation :

Adult @ 13 chataks per day.
Grown-up children (5-15) @ 9 chataks per day.
Childern (3-5) @ 4 chataks per day.

The last census shows that Bengal has a population of 47·5 millions out of which Bengalee-speaking peoples are estimated at 43 millions. Leaving 4·5 millions to feed themselves with the food-grains other than rice, we may be safe to accept 43 millions as the total rice-eating population.

Now, about three million infants from the age 0-3 should be left out, although in the absence of any other suitable food they have to depend on some sort of rice preparations. The following table shows the quantity of rice required for human consumption in Bengal :

TABLE.

Total rice-eating population.	Rate per day per head.	Quantity required per year per head.	Total quantity per year.
3 million infants (3-5) ...	4 Chataks	$2\frac{1}{4}$ maunds	6·75 million maunds.
13 millions children (5-15) ...	9 Chataks	$5\frac{3}{40}$ maunds	66·3 million maunds.
24 millions adults (15 over) ...	13 Chataks	$7\frac{1}{4}$ maunds	174 million maunds.
		TOTAL ...	247 million maunds.

As the quantity available is calculated at 168 million maunds, there is a deficit of about 79 million maunds of rice in Bengal. Some part of this deficiency is met by import of rice from Burma and other provinces, but the quantity imported does not exceed 7 million maunds. Thus, we have reason to believe that a considerable portion of our population remains underfed and that the

primary condition of existence, *viz.*, the provision of an adequate foodsupply, is not fulfilled by our agricultural economy. It is not, however, necessary to arrive at this conclusion only from this statistical examination of the available agricultural data; any one familiar with rural life knows the conditions under which the bulk of our peasantry lives.

In suggesting a solution of the insufficiency of production of rice in Bengal, it is often asserted that restriction on the export of rice and the shrinkage of the area under jute cultivation would satisfy our requirements. While it is clear that in Bengal we do not have any "exportable surplus" of rice, the quantity exported in a normal year cannot possibly make up the deficiency.

Those who advocate methods of restriction on the export of food-grains, should bear in mind the fact that India is an economic unit in the international trade and consequently she has to follow the directions dictated by the world's market. Her import demands, as well as the claims of a highly organized administration necessitate exports; and in the absence of industrial products, almost the entire burden of export trade falls on the agricultural produce of the country.

After all, so far as Bengal is concerned, even if it were possible to check the upward tendency for increased export from our insufficient stock of rice without any derangement of the normal course of international trade relations we might have only saved some three or four million maunds of rice. In this connection it is to be remembered that shortage of food supply in these days of easy and quick transit is not an evil by itself. The truth is, as observed by the Fiscal Commission, that "it is not really the insufficiency of the total food supply so much as the fact that certain classes of the population are too poor to buy all the food they require."

Here I ask your permission to make a brief reference to the cultivation of jute. It is a money-crop, and as such it has undoubtedly added to the income of the peasantry belonging to the jute-growing districts of Bengal.

The popular impression—that often receives blessings from our pseudo-politicians—that the cultivation of jute is prejudicial

to the cultivation of rice and that the area under the former is fast increasing, cannot be supported by a careful investigation of the actual position. The total acreage under jute in 1910 was 2,937,800 and in 1920, 2,502,273. Taking the average for the last ten years, the figure does not exceed 3 million acres.

Thus, we are driven to the conclusion that the problem of rice production cannot be solved either by embargo on rice export or by the reduction of the area under jute. The true solution lies in the increased yield of food-crops per unit area. The cultivation of non-food crops for which demands exist in the international market is not an uneconomic practice. On the contrary, the inevitable tendency towards commercialisation of agriculture necessitates the practice of mixed farming; and from the scientific as well as from the economic point of view, it is justified. As an illustration I may cite here the example of the farmer of the southern part of America. What has happened there since the introduction of diversification in farm practices is strikingly shown by the following statistics of increases in acreage and yield of various crops in the cotton belt of America in 1917 as compared with 1909:

TABLE.*

Crops.	Percentage of increase in 1917 over 1909.	
	Increase in acreage.	Increase in yield.
Cotton	4	8
Corn	28	47
Wheat	143	162
Oats	87	133
Hay	105	109
Potatoes	46	67
Sweet Potatoes	60	67

Friends, looking at Bengal and her agriculture, then, we must, first of all, engage our attention to the immediate problem of increasing her agricultural production. We must fully grasp the gravity of the conditions on which the farming industry of the province has to depend. Now, we must organise that industry

* Figures by Mr. O. T. McConnell, U. S. D. A.

ourselves on a footing that will gradually stabilise rural life and labour. No piece-meal reforms, no pseudo-economic formulae, no attempts at the readjustment of the superficies of things, no short-cuts—but a sound beginning with the ultimate purpose of offering our peasantry the economic advantage of organisation and scientific management will solve the problem. Whether we grow rice or jute, the fact remains that the fertility of our soil is not maintained and in some instance it is almost at its lowest level. Therefore, we must wake up to the immediate necessity of handling our agricultural land with foresight, skill and common-sense. We must realise that we hold the land not exclusively for our own purposes but as a trust for future generations. With the figures of low yield of rice as shown before we must ask ourselves if the methods now employed in agriculture are consistent with the welfare of the community of to-day and of to-morrow. The task of bringing about such conditions as may lead to efficiency in agricultural production of Bengal may not be attractive to us as yet, but there can be no genuine constructive programme of work without it. " Better farming " means better life and " better life " in rural districts means better chance for democracy.


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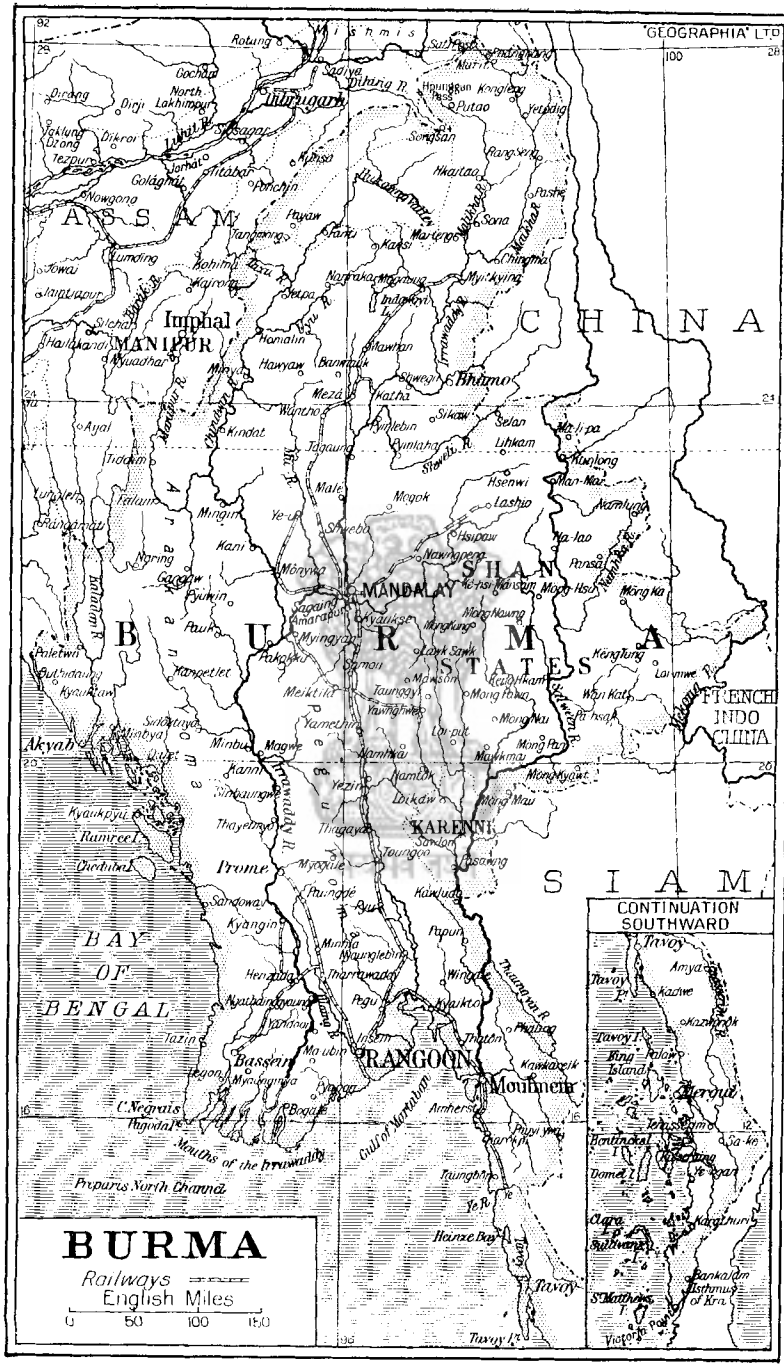
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