

of a people by itself has a meaning and a reality ; but such a thing as government of one people by another does not and cannot exist. One people may keep another for its own use, a place to make money in, a human cattle farm to be worked for the profit of its own inhabitants." England did not wish to maintain India as a "human cattle farm," and the only way in which England could improve the condition and promote the prosperity of India was the method she had so successfully followed in all her Colonies—namely, giving the people themselves some real share in the administration of their own concerns. (Applause.)

The address, which took an hour to deliver, was listened to with the greatest interest, and frequently interrupted by cheers.

At its conclusion, numerous questions were asked, which afforded Mr. Dutt an opportunity to repeat, illustrate, and amplify his remarks. Several speakers, including Mr Pearsall, Mr. Bland, Captain St. John, and Captain Rolleston then spoke, and were followed by the Chairman, Mr. Macrosty. Mr. Romesh Dutt replied to their observations, and the meeting, which began at 8 p.m., concluded after 10 p.m., with the usual vote of thanks to the lecturer.

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## VII. FAMINES AND THE FAMINE

### COMMISSION OF 1900.

[*Speech delivered at Liverpool on October, 18, 1901.*]

ON Friday afternoon, in the Common Hall, Hackins-  
Heys, a public meeting was held for the purpose of hear-  
ing an address by Mr. R. C. Dutt, Lecturer in Indian  
History, University College, London. Sir Edward Russell  
presided, and among an attentive and appreciative  
assemblage and pretty numerous attendance were Arch-  
deacon Madden, the Rev. E. N. Hoare, Dr. Permewan,  
Mr. J. Hope Simpson, Mr. J. Samuelson, Mr. W. H.  
Russell, Mr. E. W. Cropper, Mr. Allan Bright, Mr. F.  
Salisbury, Mrs. Stewart-Brown, Mrs. W. H. Russel, Mr.  
J. W. S. Callie, Mr. Sam Reeves, Mr. and Mrs. W. C.  
Bonnerjee. and their daughter Mrs. Blair. As the  
Chairman remarked at the close of the proceedings, the  
demonstration and its signal success were owing to the  
patriotic efforts of Mrs. Blair, assisted by some English  
ladies. The following report appeared in *India*.

The Chairman, in his introductory remarks, said they  
were assembled to be instructed in a subject which  
deeply concerned humanity, and which as deeply con-  
cerned the interests, the reputation, and the honour of  
the British Empire. (Hear, hear.) He need scarcely  
say, both on his own account and on behalf of many  
in that room, that they were not there to dogmatise—  
in fact, that they were incapable of dogmatising on the

subject upon which they were to be addressed. But they hoped instructed by a man whom they knew to be thoroughly possessed of the facts of the case, to have formed strong opinions upon it, and to have great hopes of a reform in the management of such affairs as tended to the supply of food in India and the avoidance of the catastrophes which they had so deeply to regret. The real thing they started with that afternoon, he hoped, was a disposition to increase and to cultivate in themselves the feeling of responsibility which should come to them as members of the great Empire which had India under its control. (Applause.) There was a great deal indeed to lament in the past in the apathy with which such occurrences as they had had to deplore had been regarded. It was almost a proverb in this country that Indian affairs had not received the attention to which their magnitude and the extent to which India was bound up with our honour and credit entitled them. Let them make at the very onset the resolution that that meeting should be the beginning of a different state of things, at all events, as regarded themselves. It was impossible to listen to, or to read of, the terrible famines that had occurred in India, the loss of life, and the lives of abject misery that were led, without feeling that it was a state of things for which, if they were in any degree responsible, they should at once, as far as they could, try and devise some remedy. There were various ways of looking at the matter. They might regard famines as things to be prevented, or they might regard the occurrences during famine as evils to be mitigated

and sufferings to be lessened as far as they could. But the whole matter had been plunged into the mystery in which such great catastrophes of Nature were involved. All they could hope for was that they might be enabled, by the information they might derive, and by the impulses given to them in the direction of responsibility and in the direction of improvement, to create a real interest in the subject, which should make it a constant effort on their part, in reference to Parliament and in reference to public opinion, to produce such a change as they must all desire. (Applause). They were about to hear a lecture by a gentleman who was a master of the subject. He was not only acquainted with the subject and had studied it, but he was known to and knew all those best entitled to speak upon it. He (Sir Edward Russell) was sure they would listen with deep interest, great anxiety, and profit to all Mr. Dutt had to say on the matter. (Applause.)

Mr. Romesh Dutt said : When he was asked a few weeks ago to speak on the subject of famines in India in that great city of Liverpool, he felt some natural hesitation in undertaking the task. The subject had been so constantly before them during the last three or four years, and had been so frequently dealt with in the Press and on the Platform, that he felt some misgivings in bringing the matter before them once more. Nevertheless there were grave reasons which induced him to accept the kind offer. Indian famine was an Imperial question, and the gravest of all Imperial questions. (Applause). Indian famine was a serious problem which



Englishmen would have to face again and again till it had been satisfactorily solved. There was no man or woman in that hall, or in the United Kingdom, who had not felt humiliated by the recurrence of these distressing famines under British rule in India, and who did not desire to do all that was humanly possible to avert these great and terrible catastrophes in the future.

#### INDIAN FAMINES DURING FORTY YEARS.

Famines were a thing of the past in all well-administered Western countries in the world. They read of famines in past centuries in France, Germany, Ireland, and other countries, when hundreds of thousands of people perished for want of food. Those days were gone, he hoped for ever, and the introduction of better government and a sounder system of finance had made famines on a large scale impossible in these countries. In India, unfortunately, the reverse was the case. Not only had famines continued after a hundred and forty years of British rule, but they had become more frequent, more widespread, and more fatal. He would not trouble them with the history of these hundred and forty years that afternoon, but he would mention that within the period which he could well remember—within the last forty years—there had been in India ten or twelve desolating and wide-spread famines, and nearly 20 millions of people had perished of starvation. He remembered the great famine of 1860, when they, as schoolboys, were asked to contribute their humble mite

to save the lives of hundreds of thousands of people who were then perishing in Northern India. He remembered the famine of 1866 when the Province of Orissa lost one-third of its population, and the city of Calcutta was filled with starving emigrants from that Province, men and women with children in their arms dying in the streets, in spite of every possible endeavour to relieve them. He remembered the famine of 1874, when he had the honour of being employed as a Relief Officer, and when through the noble exertions, of Lord Northbrook, then Viceroy of India, loss of life was prevented in the stricken provinces of Behar. (Cheers.) Then came the more dreadful Madras famine of 1877, which in a single year carried off more than five millions of people—a population equal to that of Scotland or of Ireland perished in one Indian province in one year. Then followed the famines of 1878, 1889, and 1892; and lastly came the disastrous famine of 1897, which they all remembered, and which was more widespread than any previous famine had ever been in India. They then thought that it was the worst calamity which could happen to any country in any single year. But they were mistaken. In 1899 followed a still more widespread—and what was worse, a more continuous—famine, for it had lasted these three years, and was not quite over yet. Nothing in the history of India, or of the world, was more appalling than the recurrence of these famines claiming their victims by the hundred thousand or the million, every third or fourth year. No story of wars and invasions in modern or ancient times was more tragic than the

story of deaths of twenty millions of silent uncomplaining sufferers in India, within the last forty years of British rule.

#### **PREVENTION OF FUTURE FAMINES.**

These were facts which all Englishmen would have to face. All Englishmen of all classes and all political persuasions were determined that if famines could be stopped by human wisdom and endeavour, they should be stopped in India. There was a school of writers and speakers, some of whom existed to this day, who represented that India was the natural home of famines, that famines were the work of God, and that human endeavours to prevent them were unavailing. To him such a creed appeared to be not only untrue and unmanly, but even blasphemous. (Loud applause) There was a manlier and honester school of writers who had candidly held that these famines were mainly due to human blunders, and that they could be, and should be, prevented by human wisdom and endeavour. They pointed out that there never had been in any year a deficiency of food supply in all India; that it was the poverty of the people which had prevented them from buying food from neighbouring districts and provinces when the crops failed in any one province, and that famines could be prevented by removing this poverty and enabling the people to buy food from their neighbours in bad years as they in England did in all years. The obvious and radical remedy for famines was to improve the material condition of the people—(1) to lighten the burdens on the land, (2) to save crops by irrigation, (3) to revive

the industries of the people, and (4) to reform the financial arrangements of the country.

### THE LAND TAX.

Let them take the Indian Land Tax first. India to-day was not a great manufacturing country or a great commercial country, but a great agricultural country ; and four-fifths of the population depended directly or indirectly on the produce of the soil. It followed that that if the soil were lightly taxed, the people might be prosperous ; but if the soil was heavily assessed the people must be impoverished. In Northern India the cultivators generally paid their rents to landlords, and the landlords paid the Land Tax to the Government ; while in Southern India—in Bombay and Madras—the cultivators paid the Land Tax direct to the State, there being generally speaking, no intervening landlords. They had urged again and again that in Southern India—in Madras and Bombay—where the State levied the tax direct from the peasant proprietors, the assessment was too heavy ; that in many cases it swept away the whole economic rent of the land ; that it made the cultivator unable to save anything even in good years against years of bad harvest ; that it left him resourceless and indebted and an easy prey to famines. On the other hand the apologists of the Indian Government had denied this charge ; they denied any connexion between land assessments and famines ; they had denounced criticism as uninformed and foolish. Well the critics demanded a public enquiry ; they asked for a Commission to enquire

into the incidence of the Land Tax in India, but no such public enquiry had yet been made. However, something was conceded, a Famine Commission was appointed in December last to enquire into the methods of relief operations in India, and this Commission was permitted incidentally to enquire into the subject of land assessments. The Famine Commission, headed by Sir Antony MacDonnell, the ablest administrator now in India, submitted their report on May 8 last, and though five months had elapsed since, that report had not yet been published in England. All that they had been permitted to see yet was a summary of that report which had appeared in Indian and English newspapers; and this summary proved that their criticisms were neither uninformed nor foolish; that heavy land assessment in Bombay together with its rigorous collection was one of the main causes of the poverty and indebtedness of the cultivators of Bombay. The Famine Commissioners said that in Bombay the land tax, such as it was, could not be collected in short years without forcing the Ryots into debt. They said that the land tax was "full" in Gujrat, and that its rigidity in hard times forced the cultivators into debt. They said that "unless provision for suspension and remission of revenue and rent . . . be an integral part of the revenue system in any province, the cultivator will be forced to borrow on conditions incompatible with his solvency and independence." And they added that "nothing can be more useful in anticipation of famine than improvements in the material condition of the cultivators whereby they may be enabled

to withstand the pressure of hard times " These were admissions, made now for the first time in an official document, clearly establishing that connexion between famines in India and its Land Tax which they had urged again and again within the last few years, and which the apologists of Indian administration had hitherto ignored. He did not say that the Commission had yet arrived at the whole truth. The Commission's figures representing the produce of the soil in the different Provinces of India were admittedly guess work, and obviously incorrect ; and they could prove the produce to be vastly over-estimated if the cultivator was allowed to adduce evidence as to the average produce of his field before any Court of Enquiry, or any Commission appointed for the purpose. But nevertheless, what the Commission had stated in its report showed that public criticism was helpful to the cause of truth and of good administration in India, as it was in every other part of the world. Those who denounced all criticism on Indian administration forgot that every Government in the world needed the aid of criticism, and that the best Government on earth would degenerate into blind and blundering despotism if there was no public opinion and no public criticism. Now that the connexion between the Land Tax and famines had been acknowledged, the public would demand, not only remissions and suspensions of the tax as the Famine Commission had recommended, but also the moderating of that tax in places where it was excessive. He understood that such a revision of the land tax had already begun in the Central Provinces of India.

## IRRIGATION.

Next he came to the subject of Irrigation ; and here also they would find that well-informed criticism was absolutely in the right India would have been safer from famines by this time if that criticism had more influence with the Indian Government. The old Hindu Rajas and Mahomedan Governors had left them magnificent irrigation works in all parts of India ; and they had urged again and again that while railways had been overdone in India under British rule, irrigation had been neglected Two hundred and twenty-five millions sterling had been spent on railways, while only 25 millions had been spent on irrigation ; and out of over 200 million acres of cultivated land in India only about 20 millions were protected by irrigation works. Their cry had been a cry in the wilderness. Capitalists and speculators had always brought pressure on the Indian Government for more railways out of the public revenues or under guarantee of profits from the public revenues ; and down to the present year the Government of India was spending more on railways than on irrigation. Let them mark what the Famine Commissioners said. Railway construction, they said, had played its part in the policy of famine insurance. On the other hand, there was a wide field for the construction of irrigation works. And, confirming the opinion of the previous Famine Commission, this Commission gave its "cordial approval to a departure in famine policy which would place irrigation works in the place

that protective railways have hitherto occupied in the famine insurance programme." This was clear and emphatic. If this departure had taken place twenty years ago, when the Famine Commission of 1880 recommended it, India to-day would have been less subject to famines and deaths from starvation.

#### DECLINING INDUSTRIES AND THE ECONOMIC DRAIN,

There were one or two other matters on which he would have liked to dwell at some length if time permitted, but he could only make a bare mention of them. One of the great sources of a nation's income was its industries and manufactures. For centuries before the British occupation of India, that country was renowned for its excellent manufactures which found their way to all the great markets of Asia and Europe. It was unfortunately true that under British rule Indian manufactures had declined, and the people of India had been forced to agriculture as the one remaining source of their national existence. This was a state of things which could not be good for the people of India, or of any other people, and one of the most serious problems was to find means to promote the indigenous manufactures of India, to diversify the industries of the people, and to add to their resources. Another great evil from which India suffered at present was the financial arrangement under which a large portion of the revenues of India was drained away from that country year after year. They in England were a rich and a prosperous people, and raised an immense revenue from



taxation for public expenditure ; but the whole of this revenue was spent in the country, flowed back to the people in one shape or another, and fructified the trades and industries of the people. But if one-half of their public revenue was annually drained out of England, and spent in Germany or France or America, England, rich as she was, would soon be a land of famines. Yet this was precisely what was happening in India ; on the one hand her industries had declined and her agriculture was over taxed ; and on the other hand a large proportion of the taxation so raised was not spent in India, but was drained out of that country, leaving her poorer every year. This, in the words of Lord Salisbury, who was Secretary of State 25 years ago, was the "bleeding" of India ; and it was necessary to stop this process if they desired to restore to that country life and prosperity. It was an act which was enjoined by their highest ethics, to do unto others as they would others should do to them ; and it was an act which was enjoined by their own interest. Their trade with India could not prosper so long as India continued in her present impoverished state. Within the last ten years the average annual import of merchandise into India had been between 47 millions and 49 millions sterling, and it was possible that about 30 millions of this was British goods. Thirty millions among a population of three hundred millions gave an average of two shillings per head of the population ; and he said without hesitation that they could double this rate if India were prosperous. In this way they could easily

double their exports, add a new India to their possessions, and extend their empire and trade without firing a cartridge. Their duty was the same as their interest ; and as history had shown time after time the honestest policy was also the best policy, for nations as for individuals. (Applause)

#### THE INDIAN FAMINE UNION.

He would not detain them longer. He thanked them sincerely for the attention with which they had listened to him, and he had no doubt the subject was one which would receive their continuous and urgent attention. They would reflect with pain that the calamities which had visited their fellow subjects in India within this generation were unsurpassed, and perhaps unprecedented in the history of any period or of any country in the world. They would reflect with concern that these fatal and disastrous famines were not the work of God, but were the results of human blunders which could be rectified. There was a right way of profiting by an empire, and there was a wrong way. Honest equitable trade was the right way ; to drain a subject country by annual contribution without a direct return was the wrong way. Rome pursued this wrong way ; she impoverished Egypt and Sicily and other Provinces, and Rome fell at last, a victim to wealth and luxury. Spain too pursued the wrong way ; she impoverished South America ; and the Duke of Alva boasted that he sent a stream of gold, a yard wide, flowing from the Netherlands to Spain ; the result was that Spain fell, a victim to wealth and moral

tuipitude. England might yet pursue the right path ; she might reduce the Home Charges and the Economic Drain from India ; she might establish an equation between the exports and imports of India ; she might thus relieve India while doubling her own commerce. These were the salutary remedies which they recommended, the needed reforms they looked forward to. The same economic laws led to wealth or to poverty in all parts of the world, and the measures which had prevented famines in other parts of the civilised world would have the same beneficial results in India, if they had the wisdom and determination to adopt and pursue them in that country. A Union had been formed in London called the Indian Famine Union, with the object of enquiring into the causes of Indian famines and adopting measures for their prevention. A Memorial addressed to the Secretary of State for India to institute such enquiries had been signed by some of the foremost men in this country. He rejoiced to find the names of the Archbishop of Canterbury, the Bishop of Liverpool, and the Dean of Manchester among the signatories. Further action would be taken by the Famine Union in due time. The people of Lancashire were as deeply interested in the welfare of India as the people of any other part of the United Kingdom, and it was not unlikely they might wish to form a Union among themselves. He had not the least doubt that the opinions and the influence of Lancashire would effectually promote the object they all had in view—to take measures to prevent the recurrence of famines in India, and to

promote the prosperity and happiness of the three hundred millions of their Indian fellow subjects. (Prolonged cheers).

The CHAIRMAN, in proposing a vote of thanks to Mr. Dutt for his lecture, said he trusted they would all feel the sympathy which the lecturer had expressed for the exertions being made in London for due enquiry into this great subject. They had felt how very broad and statesmanlike must be the policy that had to deal with the great evil they had to contend with. They had also felt that there were many aspects, even beyond that of famine, in which the statesmanship which dealt with Indian affairs needed great reformation. (Hear, hear.) It was a point for them all to keep in their minds, whether the financial arrangements with India were equitable, whether they were worthy of the boasts which we made about our Indian Empire, and whether it might not be an object for our statesmen to place the relations of India, both economically and constitutionally, on a basis more consistent with the reputation of our Empire. (Applause.) He was afraid it was a fact, as was hinted to them in the lecture, that our consciences in this country were much more active when there was anything to be got than when there was anything to give. (Laughter, and hear, hear, and a Voice : "South Africa.") Let them hope, however, that one of the consequences of the great change which had lately taken place in a sort of acceleration and intensification of the Imperial feeling would be that the conscience as well as the ambition of the country would develop—that they would

not only develop the ambition which tended to increase the greatness of the country, but that with that would come a conscience for the duty which that Empire involved. (Applause.)

The Ven. Archdeacon MADDEN, in seconding the vote of thanks, said he did not think that mere charity from England was what was wanted in India. In his opinion, the remedy for these famines seemed to be in assisting to make the people of India self-supporting and self-reliant. (Applause.)

Mr. SAM REEVES expressed the belief that the government of India by English officials, whom he described as "carpet-bagger," was prejudicial to the prosperity of the country. His view was that it would be better if Native Indians were allowed to take a more responsible official part in the government of their own country. He urged that before the condition of India could be improved the people of that country would have to "kick," as the people of other countries had had to do in times gone by, before they obtained the reforms they needed.

Sir EDWARD RUSSELL here mentioned that the originators of the meeting were most anxious to hear from any one willing to assist in the formation of a branch to gain information and to stimulate public opinion. He added that that demonstration was entirely the result of the efforts of a lady—Mrs. Blain—assisted by some other ladies.

The proposition was then carried with enthusiasm.

Dr. PERMEWAN wanted to know from the lecturer whether private capitalists might not provide the desired irrigation works, considering the 5 per cent. profit spoken of.

Mr. DUTT replied that the Government would not permit of the intervention of private capitalists in irrigation works, expenditure in which received its return from an irrigation rate. Of course, this did not apply to landlords dealing with their own estates. Answering a question from another gentleman, as to more direct Parliamentary representation for the people of India, Mr. Dutt said it would be impossible for a British Parliament, even if it had more time to give, to understand Indian questions from the bottom, and to discuss with the local knowledge they ought to have. What was looked forward to was that there should be an executive council in every province, and that some representative Indian or Indians should find place in each of these, and that the legislative councils of India should be expanded. The Indian Civil Service were an able body of administrators; the official members of the present councils were able and experienced men; but good government was impossible in India until and unless popular opinion was fairly represented in those councils. Mr. Dutt said he had urged this to the Viceroy himself two years ago.

Mr. JAMES SAMUELSON, in proposing a concluding vote of thanks to the chairman, which was duly honoured, accentuated a remark of the lecturer as to the effici-

ency of the Indian Civil Service by asserting, on the authority of a personal visit to India, that the higher one got in that service the more intense became the sympathetic interest in the Native populations.

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## VIII. THE ECONOMIC CONDITION OF INDIA.

*[Speech delivered at the Philosophical Institution, Glasgow,  
on September 4, 1901.]*

MR. ROMESH DUTT said : Last Monday, my esteemed and distinguished friend, Sir John Jardine, gave you a general account of that great country which now forms an important portion of the British Empire. He gave you an account of India and its people, told you of the different Provinces into which British India is divided, and also of those States which are ruled by their own Native Princes. To-night, we shall look into the state of things in India from a different standpoint. We shall enquire into the economic condition of the people—their industries, their trades, their agriculture. We shall try to ascertain how far the sources of national wealth in India have been developed by railways, and how far the annual harvests of the people have made safe by irrigation works. We shall examine the incidence of the Land Tax on the agricultural population of India, and the present state of the finances of that country. In a word the material condition of the vast population of India, forming a sixth of the human race, will form the subject of our enquiry this evening.

This is a subject which must always receive the attention of all thoughtful men and women in this country, but recent events in India have invested this subject with



a special importance. There is not a man or woman in Great Britain who has not felt grieved by the accounts of recent famines in India. Within the memory of men who are still in their middle age, within the last 30 years, there have been no less than ten desolating famines, causing the deaths of fifteen millions of people in India. And to-night, when we are assembled in this hall, half a million of people are assembled in the different famine camps in Western India, and that country is passing through its third year of a continuous famine. It is necessary, therefore, that we should enquire somewhat minutely into the material condition of the people of India, and find out how far it is possible to prevent or minimise the effects of famines in India in the future, as they have been prevented in other parts of the British Empire.

#### I. AGRICULTURE AND THE LAND TAX.

The material well-being of the people of India, as in every other part of the world, depends on successful agriculture, on flourishing industries, and on sound system of finance. I take agriculture first, because four-fifths of the population of India depend directly or indirectly on agriculture. It is the main industry of India, the main source of subsistence for the people. This is an important fact which we should always bear in mind in speaking about India. India, today, is essentially an agricultural country. If agriculture flourishes, if the crops are safe-guarded, if the land is moderately taxed, the people are prosperous. If any of these conditions

is wanting, the people must necessarily be on the verge of starvation, and must perish in years of bad harvest.

The land system of India is different from the land system of this country. Here you are familiar with the landlord who owns land, the farmer who holds farms, and the agricultural labourer who is paid by wages and has no permanent rights in the land he cultivates. In India, on the contrary, the actual cultivator, by immemorial custom, had some proprietary and heritable rights in the field which he cultivated. Sometimes, as in Bengal, he lived under his landlord, paying rent to the landlord, but owning his hereditary field from which he could not be evicted so long as he paid the customary rent. In other instances, as in Northern India and in Madras and Bombay, he lived in his village community, that ancient system of village self-government which prevailed in India for thousands of years. The landlord or the village community paid the Land Tax to the State; the individual cultivator paid his rent to the landlord or his share of produce to the community, and held his ancestral field from generation to generation, without let or hinderance. Such was the ancient land system of India—the land belonged to the nation, not to any privileged class.

How has this system been affected by British rule? In Bengal and some other places, the ancient system has been preserved and strengthened. The British Government levies the Land Tax from the landlords, and the amount of this Tax was permanently settled a hundred years ago—between 1793 and 1805. But in Northern

India, as well as in Madras and Bombay, where the village community system flourished down to the early years of the nineteenth century, that old institution exists no longer. That ancient form of village self-government has unfortunately perished under the too centralised system of British administration. In Northern India, landlords have taken the place of these communities; in Madras and Bombay, generally, the cultivators are directly under the State. Therefore, if you ask me what is the actual position and status of the Indian cultivator at the present day, I can roughly describe it in one sentence. In Northern India the cultivator lives under landlords, and the landlords pay the Land Tax to the State; in Southern India the cultivator lives directly under the State, and pays the Land Tax to the State. There are exceptions to this general rule, but it will be enough for our purpose this evening to remember this broad distinction. In Northern India it is the landlord who pays the Land Tax to the State; in Southern India it is the cultivator who pays the Land Tax to the State.

Now what is this Indian Land Tax? You are aware that in England a Land Tax was raised during the wars of the Spanish Succession at the rate of 4s. in the £ of annual value, i. e., 20 per cent. on the rental; and that it was reduced after the Peace of Utrecht to 2s. in the £ and then 1s. in the £, or 5 per cent. on the rental.

The Land Tax in England varied between these limits, until it was made perpetual and redeemable by Pitt's Government in 1798. For a hundred years, therefore, before it was made perpetual, the Land Tax

averaged between 5 and 20 per cent. on the rental in England. In India the Land Tax ranges between 35 per cent. and 100 per cent. of the rental! Let me explain this to you in a few words.

In Bengal, where the Land Tax was permanently fixed over a hundred years ago, it now bears a proportion of 28 per cent. on the rental of estates. To this should be added a newer tax of  $6\frac{1}{4}$  per cent., also assessed on the rent, so that the total tax on land in this Province comes to about 35 per cent.

In Northern India, the Government of Lord Dalhousie declared as far back as 1855 its intention to limit the Land Tax to 50 per cent. of the rental. In his own words, the Government was determined "to limit the demand of the State to 50 per cent. or one-half of the average net assets." This was a heavy tax, but it was a clear and definite limit. I regret to state that even this high limit has now been exceeded. A number of new taxes are now surcharged on the Land Tax, and the Land Tax itself came to be assessed at 50 per cent., not on the actual rental, but on the prospective rental of estates. In other words, if a landlord's rental is £1,200, the Government demanded a Tax, not of £600, but may be of £700, on the ground that the rental may rise hereafter. Is this not paltering with the people of India in a double sense, keeping the word of Dalhousie's promise to the ear and breaking it to the hope?

In the Central Provinces of India, Lord Dalhousie's rule of limiting the Land Tax to half the rental was accepted in 1855, but was evaded in 1863. And then

the rule was openly abandoned in 1888, and the Government demanded a Land Tax up to 60 per cent of the rental; in addition to other taxes also assessed on the rent.

Lastly in Madras and Bombay, the rule of limiting the Land Tax to half the rent was also declared in 1856 and 1864, but has been evaded in practice. The Directors of the East India Company wrote in their despatch of 1856 that the "rights of the Government is not a rent, which consists of all the surplus produce after paying the cost of cultivation and the profits of agricultural stocks, but a land revenue only." And after the Company was abolished, Sir Charles Wood, the first Secretary of State for India, wrote in his despatch of 1864 that he desired to take only a share, and generally a half share, of the rent as Land Tax. This is the rule; but in practice the Government often takes one-third of the field produce as Land Tax, and this is not 50 per cent., but approximates to 100 per cent. of the economic rent of the field. For in a small farm yielding £12 a year, the cost of cultivation and the profits of the agricultural stock generally exceed £6 or even £7 in the year; and the Government by demanding £4 as Land Tax sweeps away nearly the whole of the economic rent. How is this practice reconciled with Sir Charles Wood's principle? In this way. The Government says in effect to the cultivator: My good friend, we assume the cost of cultivation and the profits of agricultural stock to be £4; we assume the economic rent to be £8, and our Land Tax of £4 is therefore half the rent! Is this not

once more, keeping the word of Sir Charles Wood's promise to the ear, and breaking it to the hope?

These details are quite enough. They will give you an idea how the Land Tax is levied in different parts of India, in Bengal, in Northern India, in the Central Provinces and in Southern India. It is the heavy incidence of the Land Tax, and especially its uncertainty, which has a depressing effect on agriculture, which prevents land improvements and any saving, and impoverishes the people. Whatever the Land Tax may be, let it be clear, definite, intelligible. Except in Provinces where it is permanently fixed, the Land Tax is recognized by the British Government, all over India, to be one-half the rent. This rate is recognized by Lord Dalhousie's rule of 1855, by the Court of Directors' despatch of 1856, and by Sir Charles Wood's despatch of 1864. This rate is heavy enough in all conscience, but let us at least religiously and conscientiously adhere to this rule, and not seek to evade or exceed it. Thoughtful and moderate Englishmen demand this, and educated and public-spirited Indians desire it also. In December last, a Memorial was signed by a number of retired Indian officials pressing this recommendation on the Secretary of State for India. The Right Honourable Sir Richard Garth, late Chief Justice of Bengal, was one of the signatories; Sir John Jardine, who spoke here last Monday, was another; and several other retired officials, including myself, signed it. The unrepresented people of India demand for the British Government a faithful observance of those clear and definite rules

which were laid down by the Government itself 40 or 50 years ago.

## II. RAILWAYS AND IRRIGATION.

Gentlemen, I now turn from the important subject of the Land Tax to the Railways and Irrigation Works of India. The construction of Railways has, I need hardly remark to this audience been highly beneficial in India, as it is beneficial in every other part of the world. It has shortened distances, made travelling and traffic cheaper, and what is of great importance, it has made transport of food grains from one province to another ~~in~~ times of distress quicker and easier. Nevertheless, railways in India have been constructed with doubtful wisdom out of the revenues of the country, or under guarantee of profits out of such revenues. When the State undertakes railway construction or guarantees profits out of public revenues, the concern is never as paying as when undertaken by private companies on their own risk. And so it happens that the entire railway system in India has resulted, not in profit, but in a total loss of forty million pounds sterling to the revenues of India. This loss has added to the public debt, and the tax-payers of India are paying, year after year, a heavy tax as interest on the debt thus piled up. During the last year there was no loss, because the railway earned much by conveying vast quantities of food grains to the famine-stricken provinces. What was a wide-spread calamity for the people was a gain to the railway. We all hope the famine will not last long; and I much fear the profits of the railways will

disappear with the famine. In any case it is extremely doubtful if the Indian railways will ever make sufficient profits to wipe off the past loss of forty millions ; and generations of Indian tax-payers will continue to bear the burden of taxation in consequence of this loss. —

The total length of railways in India open to traffic by the end of 1898 was 22,500 miles. In that year the Indian Famine Commission stated in their published report that the lines required for famine protection purposes had been completed, and that preference should be given to irrigation works in the future. The advice was unheeded. There is a continuous pressure put on the Indian Government by capitalists and speculators for the construction of fresh railway lines out of the Indian revenues. And thus in spite of the advice of the Famine Commission of 1898 and the earlier commission of 1880, the Indian Government has shewn more activity in the construction of railways than in irrigation works. The total length of railways open to traffic up to the end of 1900 was 25,000 miles.

The railway system does not add one single blade of corn to the food supply of the country, while irrigation works double the food supply, save crops, and prevent famines. Nevertheless, while 225 millions sterling have been spent on railways, only 25 millions have been spent on irrigation works. Irrigation works are either canals or storage tanks or wells. Canals are only possible in level tracts of the country, along the basin of large rivers. Storage tanks and wells are possible elsewhere. During a century



and a half of British rule the whole country could have been covered with irrigation works. All provinces, could have been protected against the effect of droughts. The food supply of India could have been increased and made constant; famines and deaths could have been absolutely prevented; loss of revenue could have been obviated. But by a fatal unwisdom and want of foresight, railways have been fostered and irrigation neglected in India. Out of 220 millions acres of cultivated land in India not much over 20 millions are protected by irrigation works. Many of these works are the works of old Hindu Rajas and Mahomedan Governors which have been preserved up to date. If you read Dr. Francis Buchanan's narrative of his journey from Madras through Mysore to Malabar—performed just a hundred years ago—you will find mention of old canals and storage tanks, made and maintained by the old Hindu and Mahomedan rulers, in every part of their dominions. In spite of their frequent wars, in spite of rude systems of Government, they knew the value of irrigation works. If the more enlightened British Government had followed their example in this respect, they could have covered the whole of India with irrigation works within a hundred years, and they could have made famines impossible under British rule. Let us hope they will take the lesson to heart to-day; that they will henceforth devote all the available resources of the Indian Empire to irrigation works, so that famines will be impossible 20 or 30 years hence.

## III. INDUSTRIES AND MANUFACTURES.

I have dwelt so long on agriculture because agriculture is the one national industry of India at the present day. Fourfifths of the population of India depend upon this one industry. Other industries flourished in India in past centuries, but the history of those industries under British rule is a melancholy one ; many of them have declined and some have perished altogether. If you read the account of India in the 17th century written by the eminent Frenchman, Francois Bernier, who resided there many years, you will find that in spite of the arbitrary administration of those days, the people of India were a great manufacturing nation, and exported vast quantities of cotton and silk fabrics to the markets of Asia and of Europe. And if you read the statistical account of Eastern India, recorded a hundred years ago by Dr. Francis Buchanan and edited by Montgomery Martin, you will find that one-half the women population of India found employment in spinning and weaving in those days, and earned something from day to day and from year to year, which they added to the earnings of their husbands, their fathers, or their brothers. It is a lamentable fact that practically the whole of this industry has died out in India, and the profits from this industry are lost to the people. It first declined under the illiberal and ungenerous commercial policy of England in the early part of the nineteenth century, when prohibitive duties were imposed on Indian manufactures exported to Europe,

while English manufacturers were imported into Indian almost duty-free.

"It is a melancholy instance," writes Horace Hayman Wilson, the well-known historian of India, "of the wrong done to India by a country on which she has become dependent. It was stated in evidence (in 1813) that the cotton and silk goods of India up to the period could be sold for a profit in the British market at a price from 50 to 60 per cent. lower than those fabricated in England. It consequently became necessary to protect the latter by duties of 70 and 80 per cent. on their value, or by positive prohibition.....British goods were forced upon her without paying any duty, and the foreign manufacturer employed the arm of political injustice to keep down and ultimately strangle a competitor with whom he could not have contended on equal terms."

Later in the century, the prohibitive duties were abolished, after they had done their fatal work. Hand-loom weavers were replaced all over the world by steam, and steam-mills were started in Calcutta and in Bombay. They prospered for a time, but the imposition of an excise duty on the production of Indian mills in recent years has greatly interfered with their success. It is a duty unknown in any other part of the civilised world; it hampers our infant steam industry, and makes it difficult for us to compete with our Asiatic competitors, Japan and China. It is an unwise and illiberal tax by which the British Government disables its British subjects in India from competing on equal terms with other Asiatic nations in the markets of the world."

What has been said about the spinning and weaving industry of India applies to some extent to other old Indian industries. Dying and the manufactures of dyes, tanning and leather work, working in iron and other metals, the weaving of shawls and carpets, muslins and brocades, the manufacture of paper and stationery articles—all have declined. Millions of the Indian population who made a livelihood from these industries are now compelled to agriculture as the one remaining source of their subsistence ; and responsible statesmen in the present day, in the House of Commons and outside, and trying to think out how they can undo the mischief done in the past, and again diversify Indian industries. I have myself, during the many years of my service under the Indian Government, visited villages and towns which were once the homes of flourishing communities of weavers—those who produced that famous Indian muslin which was once the wonder of Europe. Those villages are now deserted and desolate ; the great lakes excavated in the olden times are silted up ; the temples and religious edifices are in decay ; the streets are covered with jungle ; and the old weaver families have migrated elsewhere to seek a scanty subsistence, and their old ancestral villages know them not.

Gentlemen, you hear very little in this country of this decline of the old national industries of India. Your attention is naturally attracted to those industries only in which British capital is employed. You read of tea and coffee, of indigo and jute, of coal mines and gold mines, which are worked by British Companies. We

wish well to all these industries, for they give employment to hundreds of thousands of Indian labourers. But you cannot improve the condition of the people of India without fostering their own industries, carried on by themselves, in their towns and villages. You cannot add to the wealth of the Indian people except by wise legislation, tending to promote and help their own national undertakings. And unless you improve the material condition of the people of India, they will be but poor customers of your own commodities. Our interests and yours are closely allied and not divergent. If our manufactures were revived, and industrial prosperity once more restored to India, the three hundred million people of India could become the largest customers of your manufactures. But if they remain poor, resourceless, starving agriculturists, all your efforts to increase the consumption of your goods in India will utterly fail. India ought to be the greatest market for British goods; India could be so, if her people were prosperous under British rule.

#### IV. TRADE.

Under the present circumstances of the people of India, your imports into India show no rapid improvement. The average annual import of merchandise into India, most of which was from Great Britain, was 708 millions of rupees, or 47 million pounds, during the five years ending in 1894. In the succeeding five years ending in 1899 the average annual import into India was 736 millions of rupees or 49 million pounds. An export of 49 million of pounds to a population of 300

millions means a consumption of 3s. per head of the population. If the people of India consumed your goods at the rate of 5s. or 6s. a year per head of population—and this is a moderate estimate even for a poor Asiatic nation—your exports into India would be doubled, and you would carry on a trade with India exceeding your trade with any other country in the world. Therefore, I say that your trade interests and those of the people of India are closely allied and not divergent. It is not by restrictive excise duties on the manufactures of India, nor by draining her resources, that Great Britain can gain in the long run. It is by making the population of India prosperous that your trade with India can prosper.

#### V. FINANCES AND THE ECONOMIC DRAIN.

Gentlemen, I have spoken to you of the agriculture and the Land Tax of India, of her railways and irrigation works, of her industries and trade. I have only one word to add about the financial administration of India. The net revenues of India for the current year have been estimated at 42 millions sterling. Roughly speaking you can say that 20 millions out of this comes from Land Revenue, 20 millions from other taxes including Salt, and two millions from Opium. In other words, the trades and industries of the country bring little revenue, because the trades and industries are on the decline—one half the revenue of the country is tax on land and tax on salt, and is raised from the food of the poor. If you examine the figures thus closely, you will

find how little reason there is for congratulation on the increase of revenues in India; that increase does not mean increasing prosperity, but only an oppressively increasing taxation on the food supply of the people. Twenty-six years ago, our present Prime Minister, Lord Salisbury, was Secretary of State for India, and condemned in the strongest terms this undue taxing of the food of the people. He wrote in 1876:

"So far as it is possible to change the Indian system, it is desirable that the cultivator should pay a smaller proportion of the whole national charge. It is not in itself a thrifty policy to draw the mass of revenue from the rural districts where capital is scarce..... The injury is exaggerated in the case of India, where so much of the revenue is exorted without a direct equivalent. As India must be bled, the lancet should be directed to the part where the blood is congested, or at least sufficient, not to those which are already feeble from the want of it."

These remarks of Lord Salisbury apply with greater force than they did 26 years ago. You are bleeding the agricultural population of India at a time when they are suffering from repeated, continuous and widespread famines; and you are exporting a larger portion of that revenue out of India without a direct equivalent to day, than you did 26 years ago. You are draining India annually of sixteen millions sterling for what are called "Home charges"; while the total of charges which India has to remit annually to this country without a direct equivalent is over twenty millions! Do you think that any country can prosper under such a system

of finance? Do you think Great Britain or the United States, or Germany or France or any other country could prosper if an amount equal to one half of her annual revenues was sent out of the country, year after year, to be spent in a foreign country? Do you think England is doing justice to India under a financial arrangement through which the food of 20 millions of people in India is annually sent away to England without a direct equivalent?

I have said the net revenue of India for the current year is estimated at 42 millions. The expenditure, roughly speaking is this: 17 millions for the Army, 17 millions for the Civil services, and 8 millions more for other charges. Of all these three heads the cost of the Army is felt to be most unjust and oppressive, because the great army maintained in India is not merely for the defence of India but for the defence of Great Britain's possessions in Asia and in Africa. 30,000 troops were lately sent out of India to China and to South Africa; and this proves beyond a doubt that the Indian Army is maintained as much for Imperial purposes as for India. That being so, it is only just and fair that Great Britain should pay a portion of the cost of the army maintained in India, and not try to run her empire on the cheap by throwing the whole cost of the Army on the unrepresented and famine-stricken population of India.

#### VI. FAMINES AND THEIR REMEDIES.

Ladies and Gentlemen, I thank you for listening so patiently and with so much interest to this account of



the economic condition of India. It is a subject of the greatest importance ; I do not think there is a question of graver import connected with any part of the British Empire than the present condition of India. Called upon to deal with the subject within the limits of one speech, I should have but ill discharged my duty if I had merely gleaned some facts and figures from official reports, and placed them before you without explaining their bearing on the condition of the people of India. Great Britain can look back on the past history of Indian administration—if not with unalloyed satisfaction—at least with legitimate pride. If blunders have been committed in the past, much good work too has been well and honestly done. Great Britain has restored peace and security of property to the vast population of India after a century of disorder and disturbance. Great Britain has introduced into India Western methods of education which have had the happiest results among an ancient and intellectual people. And if Great Britain has too hastily and unwisely swept aside some of our old self-governing institutions, she is making us familiar with newer methods of enlightened administration. These are results which we can contemplate with just pride and sincere satisfaction ; but there are matters in which the success of British rule has not been so conspicuous ; and we cannot honestly feel the same satisfaction in contemplating the economic condition of the people of India in the present day. No impartial observer in India, no unprejudiced critic in this country, can think of the wretched and almost universal poverty of the vast population of India ;

without a feeling of commiseration and sorrow, or can read of the frequent and fatal famines of that country without a feeling of pain and of humiliation. These are facts which tell their own tale; roseate pictures of Indian prosperity, so often painted and so sedulously circulated, convince no one, and deceive no one. To you, such representations of Indian prosperity appear like an endeavour to conceal defects in administration which should be remedied and not concealed; to the mass of my countrymen, who live in a chronic state of poverty of which you have no conception, such roseate pictures painted in this country appear like an unfeeling mockery of their misfortunes. The evil is undoubtedly there; Englishmen and English women desire to know the reasons of the frequent and fatal famines in the past; and they desire also to see no more of them in the future. Therefore, standing before you tonight to speak of the economic condition of my country, I have sought to lay before you, as clearly as I could within my brief limits, the causes of this undoubted evil, and the remedies which are needed. Moderate the Land Tax within reasonable and intelligible limits; extend irrigation works all over India; revive the industries and manufactures of the people; reduce the financial drain which is impoverishing India; and admit the people themselves into some reasonable share in the control of the administration of their own concerns; and you will hear as little of famines in India in the future, as you hear of famines in Great Britain or famines in the city of Glasgow. An Empire has its

responsibilities as well as its glory ; and the happiness and advancement of the people of India are the highest responsibilities of Great Britain and her most glorious mission in the east.

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## IX. INDIAN AGRICULTURE.

{*Paper read at Mansfield House, Canning Town, London;  
October 27, 1901.*}

ON Sunday, October 27, Mr. Ramesh Dutt, C.I.E., formerly of the Indian Civil Service, delivered a lecture at Mansfield House, Canning Town, London, upon "Indian Agriculture." There was an excellent audience, and the meeting proved most successful.

MR. DUTT said:—The subject of my lecture this evening is Indian Agriculture. The subject is one of great importance, because, as you are all aware, India is a vast continent equal in extent and population to the whole continent of Europe, if you leave out Russia. And the people of this great continent of India is mainly agricultural. You in England were also mainly an agricultural people over a hundred years ago, and by far the greater part of Englishmen lived with their families in farms. But your splendid supply of coal and iron gave you a start in industries after the invention of steam, and long before the middle of the nineteenth century you had distanced all other countries of the earth in the extent and the excellence of your manufactures. The result was that you gradually neglected your agriculture and swarmed to towns and factories till at the present time more than half the population of England live in towns and depend

on trades and industries, and you buy your corn and vegetables, and even meat, mostly from other nations. I do not myself know if this state of things is good for a nation, or if it can be permanent. Already your supremacy in trades and manufactures is threatened by the rivalry of Germany and America, and what those nations will ultimately achieve no man can foresee.

We in India have gone to the opposite extreme. If you have depended too much on your manufactures, we have depended too much on our agriculture, and four-fifths of the great population of India depend directly or indirectly on the produce of the soil. Our national industries, specially spinning and weaving, have declined within the last hundred years, firstly through the illiberal policy of the East India Company, and secondly by competition with the steam and machinery of Europe. Agriculture is our one national industry now; if agriculture prospers, the people are well off; if crops fail, there is famine in the land.

I myself believe that a civilised nation prospers best if it is mindful both of its agriculture and its industries. And I also believe that both England and India will need some re-adjustment of their industries in the near future. You in this country will have to be more mindful of your agriculture with the growing competition of other nations in various industries. And we in India will have to develop our manufactures by the help of steam and machinery, so as not to be entirely dependent on our crops. The soil is the gift of Heaven to each nation as well as skill in manufactures; and it is

a healthy state of things when a large proportion of a nation are engaged in cultivating the soil, while a fairly large proportion of them are also engaged in industries.

In speaking now of our agricultural system in India, I must premise by informing you that our land system is entirely different from yours in England. You are familiar with the landlord who owns his estate, the farmer who takes lease of his farm, and the labourer who tills the soil and is paid by wages. Our system is just the opposite of this. It is the tiller in India who virtually owns his holding of five or ten acres, who inherits it from his father, sells or mortgages it at will, and hands it down to his sons when he dies. Sometimes the tiller pays a rent to a superior landlord; in other instances there is no superior landlord, and the tiller pays the land tax direct to the State. But in both cases the humble tiller is the virtual proprietor of his small holding; and as long as he pays his tax or his rent, he cannot be evicted from his heritable and transferable property. I cannot but think that this ancient land system of India is better than your modern English system; for the soil in India belongs to the nation, and not to a few individuals.

#### SKILL, AND INDUSTRY OF INDIAN CULTIVATORS.

It is generally believed in this country that the Indian tiller, whom we call a Ryot, is a thoughtless primitive creature, ignorant of his own interests, antiquated in his methods of agriculture, and altogether a

poor relic of the prehistoric past whom it is necessary to instruct and to modernise. Impressed with this idea the Government of India have often been fired by the benevolent desire to teach the Indian cultivator better methods of cultivation ; but before they proceeded very far, the Government discovered that they had more to learn than to teach. They found out that under the local conditions of India, it was scarcely possible to improve on the methods which the Indian agriculturist had adopted from the experience of thousands of years ; and that while it was possible to improve the supply of water and the supply of manure, it was scarcely possible to improve on the art of growing wheat and rice which the Indian cultivator practised. This is generally the opinion expressed by English scientists who have carefully examined the systems of Indian agriculture. As early as 1832, Dr. Wallick, who was Superintendent of the East India Company's Botanical Gardens at Calcutta, gave his evidence before a Committee of the House of Commons to this effect : "The Bengal husbandry, although in many respects extremely simple, and pre-nival in its mode and form, yet is not so low as people generally suppose it to be ; and I have often found that very sudden innovations in them have never led to any good results. I have known for instance European iron ploughs introduced into Bengal with a view to superseding the extremely tedious and superficial turning of the ground by the common Bengal plough. But what has been the result ? That the soil which is extremely superficial.....has generally received the

admixture of the under soil, which has deteriorated it very much." And with reference to rice cultivation in Bengal, Dr. Wallick remarked: "If we were to live another thousand years, we should hardly see any improvement in that branch of cultivation."

This was said nearly seventy years ago; and let us turn to a more recent opinion,—the latest scientific opinion that is available to us. Dr. Voelcker, consulting chemist to the Royal Agricultural Society of England, was sent out to India in 1889 to enquire into Indian agriculture, and submitted a report which is the most valuable and authoritative work we have on that subject. And at the very commencement of his report, Dr. Voelcker bears his testimony to the skill of the Indian agriculturist in these words:—"The ideas generally entertained in England, and often given expression to even in India, that Indian agriculture is, as a whole, primitive and backward, and that little has been done to try and remedy it, are altogether erroneous.....Taking everything together, and more specially considering the conditions under which Indian crops are grown, they are wonderfully good. At his best, the Indian Rayat or cultivator is quite as good as, and in some respects the superior of, the average British farmer; while at his worst it can only be said that this state is brought about largely by an absence of facilities for improvement which is probably unequalled in any other country, and that the Rayat will struggle on patiently and uncomplainingly in the face of difficulties in a way that no one else would. Nor need our British farmers be surprised at what I say,



for it may be remembered that the Natives of India were cultivators of wheat centuries before we in England were. It is not likely, therefore, that their practice should be capable of much improvement. What does, however, prevent them from growing larger crops is the limited facilities to which they have access, such as the supply of water and manure. But to take the ordinary acts of husbandry, nowhere would one find better instances of keeping land scrupulously clean from weeds, of ingenuity in device of water-raising appliances, of knowledge of soils and their capabilities as well as the exact time to sow and to reap, as one would in Indian agriculture, and this not at its best alone, but at its ordinary level. It is wonderful, too, how much is known of rotation, the system of mixed crops, and of fallowing. Certain it is that I, at least, have never seen a more perfect picture of careful cultivation, combined with hard labour."

#### MIXED CROPS AND ROTATION.

A few words will explain the system of mixed crops and of rotation, as practised in India. A grain crop-like Juar is often put on the ground with a leguminous crop like Arhar. The grain crop grows rapidly and keeps the other back, and when it is reaped the leguminous crop extends itself, grows apace, and in due time is reaped. This system is followed year after year, and while to the casual observer it seems like a continuous cropping, there is really a perfect system of rotation all the time. Sometimes three or even four kinds of seed are sown

at the same time, for instance, wheat, barley, grain, and rape seed. Wheat and grain often occur together, so also wheat and linseed. Sometimes again the mixed cropping is more complicated than even this. For instance there are deep-rooted plants, and there are surface feeders which grow together, drawing their nourishment from different layers of the same soil; there are plants which require shelter, and will not thrive without the friendly neighbourhood of other plants. All this is clearly understood by the Indian cultivator—the heir to the knowledge and experience of thousands of years of tiling—who to the casual British observer appears so ignorant, so improvident, so like a relic of the prehistoric past.\*

The one crop with which rotation is seldom practised is rice. The reason is that rice grows best on soil the fertility of which is annually renewed by the silt of inundating rivers. The Ganges and the other great rivers of India not only bring their annual supply of water to thirsty crops, but also bring a vast amount of fertilizing silt which they gently deposit on the soil—the finest and richest manure provided by Nature, over millions of acres, without the toil of man. To utilize this manure, the Indian cultivator practises surface ploughing only; any deep ploughing, such as is practised in England, and which has been sometimes stupidly tried in India, only destroys this manure, and turns up the sand below. Over this inundated and annually renewed soil, rice grows year after year without the need of mixed cropping or rotation. Yet I have

seen some mixed cropping on such lands also ; the rice ripens early, and is reaped early ; and the oil seed or pulse sown with it then flourishes in the winter months, and is reaped in February and March.

These few remarks will illustrate the skill and knowledge of the Indian cultivator, and the suitability of his methods and implements to the local conditions of India. Deep ploughing would be injurious to Indian cultivation ; and steam ploughs are out of the question where the average field is from half an acre to three or four acres. And I, for one, do not wish to see these small holdings enlarged. The land in India belongs to the nation ; each petty cultivator is provided for with his three or four or ten acres ; and I would not like to see these humble cultivators squeezed out by capitalists, and small fields turned into extensive areas of cultivation.

I may only add here that where improvements are possible, consistently with the Indian land system and cultivation, they are eagerly adopted by the so-called thoughtless and primitive Indian cultivator. I have myself seen the Indian sugar-grower discarding his awkward sugar mill and adopting a mill invented by Europeans in India, which pressed the cane better, and produced more sugar. Teach him to make cheaper manure or to make better appliances for the supply of water ; teach him to make a better selection of seeds, or a cheaper method of threshing ; and he will adopt your improvements quickly enough. But propose to him reforms inconsistent with the conditions of Indian

agriculture and Indian peasant life, and he will decline your advice with thanks.

#### GEOLOGICAL TYPES OF SOIL.

HAVING spoken so far of the Indian cultivator, I wish to say one word more of his skill in distinguishing the different kinds of soil suitable for different crops. There are an infinite variety of soils in India, but nevertheless the geological types of soil may be classified into three broad classes. The Alluvial Soil predominates over the whole of Northern India, along the basin of the Indus and the Ganges, and consists of mud and sand. Away in the west, virtually throughout the province of Bombay, a basaltic formation called the Black Cotton Soil predominates, and is peculiarly fitted for the growth of cotton, for which Western India has always been famous. And all along the East and South, from the hills of Chota Nagpur and Orissa, right through the dominions of the Nizam of Hyderabad, to the undulating plains of Madras, Mysore, and Travancore, the Red Soil predominates, consisting of archæan and metamorphic rocks. These are the three grand geological divisions of the Indian soil ; but as I have said before, there are endless varieties within these three classes ; and nothing can exceed the skill with which the Indian cultivator distinguishes the different varieties of soil suitable for different varieties of crops. Chemistry and modern science have yet added nothing to the skill, acquired through the local experience of centuries.

## WANT OF MANURE.

The great need for improvement in Indian agriculture is not new implements and new methods of cultivation, but a sufficient supply of manure and a sufficient supply of irrigation water. There is great apprehension in the minds of thoughtful and scientific observers that the soil of India is being exhausted, not through ignorance of rotation or proper methods of cultivation, but through the failure of manure. Cattle manure has always been, and is to this day, the universal fertiliser of Indian lands, and the only cheap and available manure. But with the destruction of forests and scarcity of firewood, in these days, cattle manure is now largely dried and made into cakes for use as fuel, and thus the supply of manure for land is growing less and less. You can go to no part of India without seeing thousands of women drying these manure cakes, and taking them on their heads to towns for sale as fuel ; and all that is thus consumed in towns as fuel is a loss to the country and to production. Dr. Voelcker has recorded : "As the result of my enquires I feel I may safely assert that where the practice of burning dung as fuel prevails among the genuine cultivators, it arises, in eight cases out of ten, from the scarcity of firewood." This is a serious and a growing evil ; and the only possible remedy for it is in the hands of the Indian Government. Forests must be preserved, not merely for the sake of the valuable timber which is now the principal care of forest officers, but also for the supply of sufficient and

cheap firewood for all the cultivators in the country. The rules of the forest department must be brought more in touch with the needs of the agricultural population, and the people must be allowed to obtain—as they always did obtain in past centuries—an ample supply of firewood from jungles, so that their cattle manure may be saved for its proper purpose.

Another cause of the failure of manure in India is the vast exportation of oil seeds from the country to Europe. Under the present system of administration, India has to remit to England a large sum, estimated at over twenty millions annually, without any direct equivalent. This not only impoverishes the people of India directly, but it impoverishes the soil of the country, which is now virtually the sole means of the subsistence of the people. For a large portion of the remittance has to be made up by the exportation of oil seeds. If the oil was manufactured in India, and then exported, the evil would be less; for the oil itself has no manurial properties. But to export the entire seed, or the refuse after the removal of the oil is, in the words of Dr. Voelcker, "to export the soil's fertility."

#### WANT OF WATER.

Another great need for Indian agriculture is the want of a sufficient supply of water. Except in tracts of lands which are annually inundated by rivers, crops in India depend on the annual rainfall or on irrigation works. The rainfall is always uncertain, and so in old times Hindu Rajas and Mahomedan Emperors construc-