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by

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Friends,

India is a vast country and although its two outstretched wings on the north-west and north-east have been cut away and fallen into Pakistan, it still covers 1,573,000 square miles and has a population of more than 320 millions. It has all varieties of climate—varying from extreme cold of the snow-capped Himalayas where there is perpetual snow to the burning heat of the torrid zone—although the predominant weather in a greater part of the country may be said to be tropical. The land has all varieties of soil from the rich and fertile river valleys to what are more or less rocky or sandy waste. The people generally speaking are hardworking, resourceful and cultured, although not equipped with the art of reading and writing except for a small percentage. It is an agricultural country supporting and maintaining 70 per cent of its population by agriculture. The method of cultivation is as varied as its population and ranges between the primitive method of shifting cultivation still followed by the tribal people in hilly tracts known as the **Jhum** system and the modern method of large scale farming with the help of machines and chemicals. The bulk of the cultivation, however, is of small holdings carried on according to old traditional methods. Let no one run away with the idea that the traditional method is primitive or ignorant. If that were so, it should not be possible to grow all kinds of crops, herbs and fruits. The fact is that there is no variety of crop or fruit that cannot be and has not been raised according to the nature of the soil in some part of the country or the other. The Indian peasant knows the art of agriculture and has practical experience. He knows all the technique required, such as, rotation and combination of crops, the value of allowing land to remain fallow to regain its fertility, the value and method of irrigation and manuring, the art and method of ploughing and cultivating the land in diverse ways and directions so that the entire soil may be turned upside down etc., etc. He does not know, except in a small way the use of modern chemical manures and and modern machines. That is because they are beyond his resources. He has invented various devices for drawing water from rivers, tanks and wells for irrigation and some of the old works of irrigation can com-

pare with the most modern irrigation projects of today. They are all the more wonderful as they do not depend on electric or steam power and have been operated by man since time immemorial. The Indian peasant is not unreasonably conservative, although he is cautious. If he can be convinced that a new method can give him better return or save labour or is otherwise useful, he does not hesitate to adopt it, if it is within his resources. I may mention one or two instances to show this as it is very often said without justification, I believe, that he is conservative and does not care to adopt improved methods. In the province of Bihar from which I come sugarcane has come to be extensively grown during the last 20 years or so on account of the establishment of large sugar factories. Not that sugarcane cultivation was not known before. The fact is that sugarcane has been grown in large tracts from time immemorial and the soil is also suited to it. It was because of these facilities that industrialists established their factories and this has led to an extension of sugarcane cultivation. When once the peasant saw that sugarcane cultivation brought in more money than other cultivation, he changed over to sugarcane from other crops without hesitation. He is calculating and shrewd enough to increase or decrease the area under sugarcane according as the price of sugarcane rises or falls from season to season. He has shown a remarkable adaptability not only in adjusting area according to the market requirement but has also adopted the variety of cane that has been demonstrated to be most profitable in existing conditions. Just as the area varies from year to year, the quality of the cane also varies almost from year to year. In the whole province one can hardly find the variety of cane that used to be grown—say 20 or 25 years ago—which had softer rind and was more suited for crushing in mills worked by bullock power and now we have the modern varieties with harder rind but having larger sucrose content capable of being crushed easily in power-worked machines but most difficult for bullock-operated mills to crush. Similarly whenever he has seen a new variety of cotton or jute or wheat or paddy which brings in better return, he has not hesitated to adopt it. What is needed therefore is to demonstrate to him and satisfy him that a new method or a new variety gives a larger yield and profit and he will adopt it.

With all these advantages the country is faced today with the problem of shortage of food which may well appear inexplicable. Such statistics as are available make out that there is a shortage of cereals and as a matter of fact we have been importing large quantities of food-grains from foreign countries, especially during the period following the World War II. We used to import rice even before the war very largely from Burma in pretty large quantities—to the tune of 1.5 million

tons on an average according to the nature of the season and weather and the consequent crop affected by it in the two countries. But it used to be done in the ordinary process of trade and the ordinary man never thought or cared about it. But during the last four or five years we have been hearing such a great deal about the shortage of food, the necessity of importing it, the steps taken to import it and the hundreds of crores required to pay for it and subsides its distribution. Our imports have gone on increasing. In 1946 they were 2.25 million tons, in 1947, 2.32 million tons, in 1948, 2.83 million tons and in 1949, 3.69 million tons or 11.0 million tons in four years or nearly 2.8 million tons annually which is very nearly double the average of previous imports. The price paid for it in 1946-47 was Rs. 89 crores, in 1947-48, Rs. 108 crores and 1948-49, Rs. 131 crores. The amount paid by Government to subsidise food was Rs. 20.59 crores in 1946-47, Rs. 17.12 crores in 1947-48 and Rs. 26.50 crores in 1948-49. We have a very large staff to deal with food, its procurement from within the country and from outside, control of its price, its storing, stocking and movement, distribution and rationing. With all this prices have risen higher and higher. There is so much talk about hoarding and black-market, control and corruption, scarcity and disappearance of stock from the market.

It is therefore worthwhile probing into the causes of this most remarkable and apparently inexplicable problem. We have many difficulties which render such effort almost fruitless and futile. There is generally speaking a lack of reliable statistics. This arises from the very nature of the material which has to be handled by statisticians. We have millions of small tiny holdings on which all kinds of crops are grown. Not an inconsiderable number of these tiny plots are left fallow. Similarly a large number of them have double crops on them. Only a small proportion of the cultivated land can depend on irrigation, has great bulk of them depending entirely on the monsoon. Plot to plot survey and recording of crops actually raised is most difficult, if not impossible, on account of the vastness of the task. Nor is the staff employed in collecting the basic information so well trained. Such information as is collected is not available for a great part of what used to be Indian States in the country where no attempt is made at collecting the information. Even in the Provinces, there is no uniformity; nor is every Province equipped with a regular department for this purpose. In many places the work is divided between several departments. The method of collecting information by random sampling which statisticians regard as capable of giving fairly accurate information has recently been adopted in some provinces and it is hoped that with its extension more reliable statistics will become available. I have stated this difficulty

about correct and reliable statistics at length only to point out that planning becomes difficult, if not impossible, both in respect of any satisfactory scheme for increasing the yield and for its proper distribution.

I do not desire to burden this address with figures which can be gathered from Government publications or from the *Eastern Economist* which has brought together and published very valuable material in a handy and easily accessible form. It is generally assumed on the strength of such statistics that there is an overall deficit of 4 million tons of foodgrains. In the face of these figures and statistics it may appear foolhardy for any one to challenge the existence of a large deficit. But one thing is known to be the experience of any one who comes to verify facts for himself. Go to any town or city and you can buy what grain you require in the black-market if you are prepared to pay the price. Prices are high not only in cities but also in villages for those who have to purchase but there does not appear to be absence of stock generally speaking. In any case there is no relation between the deficit that exists and the very high prices that are charged under control, not to speak of the black-market prices. So many factors enter into the price of a commodity that it is difficult to analyse and distribute the increase under various heads. But this much can be said without fear of contradiction that shortage of supply is not responsible for the 300 per cent rise in prices of foodgrains as compared to pre-war level. Even before the war, India imported annually nearly 1.5 million tons of rice on an average. That deficit did not affect the price structure to any appreciable extent; it is difficult to understand why the present deficit should upset it so completely. It is clear that the present production with the import of 4 millions tons of foodgrains should not leave any food problem to be solved, and there need not be any occasion for control and rationing. But the fact remains that in spite of this huge import of over 2.8 million tons in 1948 and of 3.7 million tons in 1949 control and rationing on a very extensive scale are considered to be necessary. If our production together with the import nearly covers and meets our requirements this year, why should it be necessary to have controls at all and why should it not be sufficient to arrange for the imports and leave the process of distribution of the produced and imported grain to work itself out? The fact that control and rationing are considered necessary even when we have a sufficient supply (taking internal production and imports together) shows either that the deficit of 4 million tons is an understimate or that in spite of procurement, control and rationing, distribution is defective and inefficient, and whatever element of scarcity enters in the price is due not to an inconsiderable extent to the whole of the production not being made available for distribution—in other words, to hoarding or larger consump-

tion by certain sections of the community. The problem therefore reduces itself, as of old, to one of distribution, if the imports are assumed.

In the above discussion I have taken the deficit to be 4 million tons and the imports in 1949 being nearly that, it is clear that the deficit has been wiped out. We cannot afford to continue these heavy imports which cost us no less than Rs. 108 crores in 1947-48 and Rs. 131 crores in 1948-49, and the subsidy on these imported foodgrains met by the Government of India came to no less than Rs. 20.69 crores in 1946-47, Rs. 17.12 crores in 1947-48 and Rs. 26.59 crores in 1948-49. Steps have, therefore, to be taken so to increase our own production as to cover this deficit. Now the average production of all foodgrains for triennium 1946-49 comes to 42.6 million tons, and the deficit is therefore less than 10 per cent. It means that even if no fresh lands are brought cultivation, and if only 11 maunds are produced where 10 maunds are produced today, the deficit would be wiped out. It should not on the face of it be difficult to produce 11 maunds where 10 maunds are produced today. The experience of any one engaged in agriculture will tell us that provided he can be assured of water supply and manure, more than 1 maund can be added to 10 maunds. We can also take advantage of improved seed and better methods of cultivation with the help of better tools and better organisation even within our present resources. Apart from these there are vast tracts which can be reclaimed and cultivated and further vast tracts which can be cultivated if only irrigation can be provided. It is, therefore, worthwhile considering in detail how this improvement in yield can be effected.

Water supply for irrigation where we have to depend on the vargaries of the weather and also to supplement what is given by nature in the shape of rains holds the key to more yield per acre. We have a long array of big hydro-electric projects for controlling our rivers costing hundreds of crores, some actually in hand and others being investigated and planned. They will take time to be completed and will require enormous costs and amounts of material and equipment which it is not easy to procure. We may not therefore take them into account for meeting this deficit which is an urgent and pressing necessity. Our population is also increasing and they may very well be left over to cover future deficits which are bound to arise on account of the increase in the population. This present deficit should be met by small irrigation projects, such as, sinking ordinary wells and tube wells, utilising the water available from small rivers and rivulets and channels, repairing and putting up bunds and embankments for storing rain water to be utilised when required, draining off water from where it accumulates and damages crops or renders their raising impossible. I can say from the experi-

ence that I have of villages in my province and generally from what I have seen in other parts of the country that there is very extensive scope for this kind of small projects, and I have no doubt in my mind that if we could concentrate on this and give it top priority in every respect we should be able to a very considerable extent to implement such projects in a short time. We have had plans and the government have been spending large amounts on such projects and on subsidising them. But we have not so far succeeded and we have to find out what the causes of failure have been. Speaking as a lay man I can say that our efforts have not been co-ordinated to give us the best results.

The next in importance is the question of manure. Here also we have a large project of producing chemical manure which the Government has in hand. It is costing an enormous amount to put up the factory at Sindri and it is taking longer time than was expected. Even when it is completed it will meet but a fraction of our requirement and can at best only supplement other sources and kinds of manure which can be more easily and locally produced without anything like the heavy investment required and all that is implied in concentrated production of any article on a large scale. I am glad that increasing attention is being paid to the utilisation of what is not only wasted, but is also a source of danger to the health of the people by converting it into manure. People have to be familiarised with improved methods of utilising this waste and provided with the wherewithal to do it. The excreta of human beings and animals together with vegetable matter that is allowed to rot and go waste give us very valuable material for compost. Human excreta are not much utilised and animal excreta of our cattle are also not fully used for this purpose. A great part of the latter is used as fuel or not used at all for any purpose or if used at all not used in the best way. We must find and supply to the people cheap alternative fuel and demonstrate to them better methods of utilising them. We must teach them how to utilise human excreta and try to get over the prejudice which attaches to their handling by many persons by teaching them better methods and providing them with means which may make their handling less irksome and dirty. I have no doubt that a drive on the right lines approved by scientific research in this direction can give us immediate results as nothing else can. Compost, green manure supplemented by chemicals and various kinds of oilseed cakes can work wonders in increasing production.

Similarly improved seeds and improved methods of cultivation with improved implements can also help much.

But in all these we should be able to utilise the results of scientific research which should be directed in this direction also. As I have said

earlier our peasant will adopt all or any of these if he can be satisfied that he will get better returns for his labour in adopting these. We have our research institutions but they have on the whole devoted more attention to and therefore succeeded in what may be called money crops, even though sugarcane is incidentally also a food crop. Our research institutes have given us numerous varieties of sugarcanes which have become more and more money crops on account of their being better suited for large factories. It is a curious phenomenon that in a province like Bihar and in large parts of the U.P. where sugar factories abound, the ordinary peasant who grows the sugarcane eats less sugar today than he used to do when he grew much less sugarcane. When he used to crush his own sugarcane with the help of his own bullock **Kolhu** to convert it into **gur** he and his children used to take sugar in all possible forms starting with the cane juice produced by the **Kolhu** or by human teeth and ending with the **gur**, and also to a small extent with refined sugar. He does not have that opportunity today, as the rind of the improved variety is very often too hard for his teeth and the bullock mill and the entire crop of cane passes on to the factory. His cattle also do not derive all the benefit they used to get in pre-factory days, as the cane has to be cut for supply to the factory in such quantities that his bullocks cannot consume all the green leaves of it when they are available and the bagasse which also has some sugar in it is not available to them at all. Nor can he afford to buy refined sugar for his cattle which used to get a share out of the **gur** that was produced. We have by concentrating research on improving the cane for the factory thus succeeded in depriving the producer—both human and cattle—of the sugar that they used to get and in marketing for others sugar without that vitamin content and organic salts which used to form part of gur. If a part of the attention had been given to improve the other variety of sugarcane, I have no doubt that equally good results would have been obtained.

We have also succeeded in introducing improved varieties of cotton and jute and tobacco which are all money crops. Nothing like similar results have been obtained regarding food-crops like rice, wheat, maize, bajri, jawari, gram and pulses. To the extent improvement has been secured as a result of research our people have not hesitated to adopt the results of such research, if they have been made known to them and brought within their resources. I know of ordinary cultivators changing the variety of wheat and paddy which they grow if it appears to them that the newer variety will give better results and if seeds are made available. Other grains like maize, bajri, jawari, gram and pulses have received practically no attention at all worth mentioning. Our research institutions have therefore to devote more and more attention

to needs and requirements of the small cultivator. It is for them to give him better varieties which will give more yield. It is for them to find out the varieties best suited to the particular kind of soil in every locality. It is for them to devise the best methods of converting waste into manure, to make irrigation from wells, tanks, and channels and rivulets easily available and within the reach of the peasant's resources. With small improvements the instruments now used can be made to give much better results and it is for research workers to invent and popularise them. Research in this direction should not be conducted with a view to the profit of the manufacturer of such implements but for the benefit of the peasant. I know that researches in connection with compost, green manuring, mixing organic and inorganic manures, improving implements of cultivation and generally the method of cultivation have yielded good results. But there are some inherent defects from which many such efforts suffer. Many of them are beyond the resources of the ordinary cultivator and are too costly for him. Even where they are within his means, there is no systematic propaganda and practical demonstration to make him familiar with them. Our demonstration farms are not as successful and useful as they should and can be made. It is no use having a demonstration farm which only demonstrates its own inability to be run economically, that is, which costs more than it earns in spite of all the advantages it has in the farm of technical skill, mechanical equipment, large size and finance. I consider that to be the best demonstration farm which can show how a farm of say 10 acres, if not even of less, with a pair of bullocks, one or two milch cows and buffaloes, a well and improved village implements of agriculture can with the labour of two or three adults of a family give the family sufficient grain and milk, edible oil, vegetables and local fruits, condiments like chillies, ginger, tamarind, etc., gur or sugar to feed the family and sufficient cotton to clothe them when spun and woven. It should supply further sufficient fodder with such additional grain, gur and oil cake as may be required to supplement the fodder for the cattle. It should also be able to give him sufficient cash to pay the rent or revenue and meet other requirements such as, purchase of salt, kerosene oil, etc., and something to lay by to meet emergencies and to meet religious, social and other expenses, in connection with birth, marriage, death, etc.

We know that 80 per cent of holdings of cultivators are less than 10 acres and 60 per cent less than 5 acres in many parts of the country. The average area under foodgrains is less than 0.7 acre per head in the country as a whole, and very much less in the most densely populated parts where the land is generally more fertile. No research can be of

much avail unless it can serve these small holdings and its results can be brought within the means of the cultivator who owns them. It is a most difficult task to abolish small holdings and amalgamate them so as to make large-scale farming with all the advantages of modern machines, chemical fertilisers and mechanical irrigation possible. Nor is it demonstrated beyond question that such large-scale farming gives higher yield of grain per acre than intensive cultivation by a peasant proprietor of a small holding, although large farms may in some instances be shown to have brought good dividends in money and to employ less labour, if machines are used. Mechanisation of agriculture on any large scale in India is at any rate in present conditions impossible. The size of holdings and large scale unemployment consequent on its adoption rule it out. Collective farming in Soviet Russia has struck an average of 1,600 acres for a farm, the size varying in different regions from below 600 acres to three times that size. "For a 40 H.P. tractor to remain usefully employed for 2,000 working hours in a year a minimum size of 200 acres for a cultivable unit is irreducible" says Mr. K. K. Banerji. "As against this a cultivator holding in the Gangetic plains of Bengal, Bihar and U.P. comes to less than 3 acres on the average" and fragmentation is going on. If mechanisation is introduced, not more than one-fourth of the population now employed in agriculture will be employed. Further it is not possible to get the machines in anything like the quantities and numbers required within a reasonable time even if we can find the exchange to pay for it, which is another almost impossible condition. But deep ploughing machines and use of chemical manures on an extensive scale are not regarded by all scientists as best suited to long term agricultural industry. In adopting them India has to circumspect and to see that what has been described in hectic language as the rape of the earth does not take place. Our agricultural economy has been raised on a well worked out natural balance of restoring to the earth what is taken from it and this is largely responsible for our land bearing intensive cultivation for thousands of years without any very appreciable deterioration in its fertility if ordinary care is taken. This cannot be said about modern countries which have come under cultivation within the last 100 years or so and where it remains to be seen whether they are able to stand intensive cultivation by machines for any great length of time. We will do well therefore not to go in headlong for mechanisation and to the extent we consider introduction of modern power-driven ploughs and cultivators necessary, we must see to it that deep ploughing is avoided. To meet the present emergency we cannot depend upon mechanisation and have to improve the yield of the small holdings as best we may. The few large farms and new land freshly brought under cultivation may

be used experimentally for mechanisation, if considered necessary, but it is certainly not worthwhile creating a crisis by attempting forcible amalgamation of holdings for the sake of mechanisation.

To my mind co-operative servicing of farming by supplying to the members of a village society improved variety of seeds, improved implements which an individual may not be able to afford, movable water-pumps and wells for irrigation purposes which are not within the resources of most peasants, technical advice regarding utilisation of waste, preparation of compost and improved methods of cultivation offer better chances of larger yield within a reasonable time. They are more likely to be accepted by the villager than large scale farming necessitating amalgamation of holdings and consequent loss of personal interest by each peasant in the improvement of his holding making that which will be everybody's business to be nobody's business. They will also offer better facilities for the utilisation of every material and labour now available in the family of the cultivator and reduce to a minimum the evils of division of holdings which is constantly going on by reason of the operation of the laws of inheritance. They may also, in course of time, lead to the emergence of larger holdings by amalgamation or otherwise without creating a crisis in the even tenor of village life.

All this will be possible only if the peasant is given security and continuity of his tenure, freed from illegal and unauthorised exactions and extortionate interest realised by the landlord or the money-lender. Congress Governments have been trying since 1937 when they first came into office to give relief in all these directions. The tenancy legislation in the permanently settled parts of the country like Bengal, Bihar and Orissa had for a very long time given occupancy rights to what are called settled ryots which made their holdings heritable, with rent enhancible within certain strict limitations, and from which they could be evicted except when it was shown that they had rendered them unfit for cultivation. Arrears of rent could be realised only by intervention of courts and by sale of the holding in execution of a court decree and could not be made a ground for eviction. But there was no right to transfer the holding without the landlord's consent, although courts had held that portions thereof could be transferred. Legislation undertaken by Congress Governments in 1937-38 in Bihar reduced the rent by 25 per cent on an average in the province as a whole, gave free right of transfer of occupancy holdings on payment of a small fee to the landlord, made only such portion of a holding liable to sale for arrears of rent as would be considered sufficient by court to cover the amount due. In the United Provinces occupancy rights were granted and eviction for arrears of rent abolished and other reliefs given. In Madras the government

appointed a Committee which after a prolonged enquiry suggested abolition of permanent settlement. In the Bombay Presidency where the ryotwari system prevails reforms were introduced which improved the position of sub-tenants and sought to prevent the creation of conditions similar to those in temporarily settled zamindari areas. After coming into power in 1946, Congress Governments have undertaken and completed legislation for abolition of Zamindari in Bihar and Madras and Bills for the same purpose are before Legislatures in the United Provinces, Orissa and the Central Provinces. Unions of States have not lagged behind and have under active consideration the abolition of Jagirdari. One weakness was discovered in the proposed legislation for abolition of zamindari in Bihar and Madras and that was that the Bills made no provision for any land reforms after the elimination of the Zamindar. The effect of the absence of such provisions was to replace the Zamindar's agency for collecting rent by a government agency without in any other way improving the position of the cultivator. As a result of a Conference of Revenue Ministers of the various Provinces the President of the Congress appointed a Committee to inquire into and report about the condition of the cultivator and make recommendations that might be considered necessary. The Committee has after a prolonged investigation submitted a report which is at present being considered by the Working Committee.

In most provinces legislation for scaling down and conciliation and settlement of agricultural debts has been passed and indebtedness considerably reduced, maximum rate of interest fixed and other relief given. Thus the conditions required to give security of tenure, and freedom from illegal exactions and extortionate interest on debts have been created. The question of amalgamation of holdings to enable collective farming on a large scale with machines has not yet been tackled on any extensive scale, although consolidation of holdings and prevention of further fragmentation have in some place been encouraged by legislation or otherwise. The position therefore is that if improved methods of cultivation which will bring better yield can be demonstrated and brought within the reach of the cultivator, there is no reason why larger yield sufficient to cover the deficit of 10 per cent cannot be obtained, especially when we know that the yield in India per acre is miserably low as compared with other countries and has perhaps been going down further.

Our yield per acre of rice land is 716 lbs. as against 2,112 lbs. per acre in the U.S.A., 2,668 lbs. in U.S.S.R. and 2,767 lbs. in Japan and of wheat 567 lbs. as against 973 lbs. in U.S.A., 1,720 lbs. in U.S.S.R. and 1,508 lbs. in Japan.

Government plans for growing more food have been conceived on right lines and aim at giving more facilities for irrigation by means of small projects, supplying better seed, encouraging making of compost and supplying chemical manures, improved implements, etc., and giving financial aid to the cultivator. But the high hopes from these plans have not been realised and it is necessary to find out the causes of this failure and remove them. The causes are manifold but can in one word be summarised to be the failure of the human element to rise to the occasion. Government agency has been found insufficient to deal with this tremendous task. It is not its fault. It has never been required before to handle such a problem and is unable to get out of routine and red-tape and to establish that intimate relationship with the cultivator which is necessary to win his confidence and rouse his enthusiasm. It continues to be as wooden as it was more than thirty years when Mr. Montague, the then Secretary of State for India, described it as such. There is also lack of co-ordination among different departments which renders quick decision and peremptory implementation of decisions difficult, if not impossible. Only one illustration may suffice to show this. It is admitted on all hands that irrigation facilities, agricultural implements whether improved or not, etc., are necessary for the success of any "Grow More Food Campaign." Irrigation can be improved by constructing new wells, embankments and sluice-gates, opening new channels, power pumps, rahats, etc. These require bricks, which require coal for burning them, steel and cement. Those have to be transported from one place to another. For making bricks coal has to be obtained and transported from the coalfields and this requires transport facilities which can be given by the Transport Ministry. Steel and cement have to be obtained from the Supply Ministry and have to be transported with the help of the Transport Ministry. Both the Supply Ministry and the Transport Ministry have many demands to meet. Shortage of steel and cement requires rationing after adjustments of claims of industry, house building—public and private—defence department, agriculture, etc. Transport Ministry has similar adjustments to make and has besides to make provision for moving millions of tons of food from ports and from one part of the country to another. Delays and even conflict in view-points regarding priority have inevitably intervened with the result that either essential material and transport have not at all been available, or made available only too late for proper or any use at all. The human element has had its own share in creating or at least in not solving these difficulties. Apart from the method and procedure followed in Government Secretariats which lends itself to procrastination and delay where quick decision and action are absolutely necessary, it is a fact which cannot be denied

that not in a few cases other considerations than the mere merits of a case do influence decision. This is what is called in ordinary language corruption which is not confined to the Government agency but today pervades practically the entire structure of our society. No one seems to be content with his legitimate remuneration for the work he does or service he renders, whether he is a government servant, a merchant, a trader, a producer, a supplier. Even a consumer resorts to it to get preference over other consumers. It does not mean that every government servant, every merchant, trader, producer, supplier or consumer is corrupt; it only means that the honest ones, too, are unable to prevent or even to check corruption. To make the "Grow More Food Campaign" successful the following steps are absolutely necessary:—

On the Government side (a) at higher levels elaborate red-tapism should be avoided; strict co-ordination eliminating delay in decision and implementation of decisions should be ensured if it is found impossible to unify command in this respect; (b) those in charge of execution should be required to show results which should be checked by an independent agency; (c) complaints should be quickly attended to and redressed; (d) corruption should be strictly and drastically dealt with where proved and not ignored or passed over when detected but not proved; all concerned should be made to understand that it is not enough to be above suspicion, but that every one should in fact be above suspicion and should be acceptable to those with whom he has dealings as being above suspicion; (e) mere paper reports, however satisfactory and encouraging, should not be accepted in the face of facts which contradict them; (f) research or at any rate some of it should descend from its high pedestal to the level of discovering what will suit the ordinary peasant with his small holding and very limited resources; (g) results of such research should be demonstrated and brought home to the small peasant in a practical manner in small government farms, run by people who can mix with the peasant, understand and sympathise with his difficulties and render him such help, technical or otherwise, as he may require and in a way which he can understand, appreciate and adopt, and this should be done without any unauthorised *quid pro quo;* (h) implements and steel from which it can be made by the village blacksmith and other necessary articles should be made available through channels which have no bottle-necks and through agencies which can be kept free from corruption and corrupt influences; (i) monetary aid whether by way of loan or grant where required, should be made available and that quickly and without leakage. On the side of the people there should be a realisation that agricultural and food production are a national concern and should not be looked upon as merely personal affairs of the individual engaged in it who is free

to produce or not to produce or to produce what and in whatever quantity he likes. It must be realised by every peasant that he has to produce food not only for himself but for the country at large and after having produced it, he has to make available what he does not need himself for the use of the nation at large, taking for himself only a reasonable remuneration for what he has done. He should be told not to yield to threat or temptation and while insisting upon his right not to be mulcted he should be prepared to do his duty to the country by putting forth the best he has in him in its service. Much of what is required of government agency and of the people at large can flow only from a proper appreciation of moral values and discarding greed and low selfishness which is clearly distinguishable from enlightened self-interest—in other words, we require character and a tolerable, if not a high, moral standard. But organisational and institutional safeguards against lapses of individuals should also be provided by the Government and by society generally. It is possible to provide them if we can get at least some people who can serve as leaven and bring about a general uplift. The future of the country in this as in all other respects depends upon its capacity to produce such men of character. We have so many complaints about control and black-marketing. Control and rationing have proved a blessing in other countries where there was a shortage of supplies. But if enforced when they are unnecessary or enforced inefficiently and dishonestly they can also prove a curse. Efficient, effective and honest enforcement of controls depends mostly on the quality of the agency employed and on how the various parties play their part. Apart from the governmental agency the other parties are the producer, the distributor and the consumer, and the failure of controls to give satisfaction has to be attributed to all these parties in varying degrees, that is, to the human element. Let us hope and pray that a free India will throw up that human element which will be able to rise above the prejudices and legacies of the past and carry the country at large on the crest of a wave of renaissance—a new birth. Mahatma Gandhi's *"tapasya"* did create heroes out of clay and threw up elements which carried the country out of the slough of despond to the heaven of freedom. Let us hope that the moral and spiritual resources of Bharat will be able to meet the new challenge and make that freedom not only secure but also fruitful by providing means for comfortable contented life among which food is the foremost.

No discussion on the agricultural problem can have any claim to completeness unless it deals also with the question of animal husbandry both as a source of additional food and as supplying bullocks on which our agricultural economy depends to such a large extent. But that opens up a big question which may not be considered here beyond stating that

the policy of developing breeds of cows which give more milk regardless of the bullock which you may get from them has to be reversed and we have to concentrate on double purpose breeds.

JAI BHARAT

LOW-INCOME AND SUB-MARGINAL FARMERS AND PROBLEMS OF THEIR REHABILITATION.

by

SIR MANILAL B. NANAVATI

To-day, India's population is estimated at about 325 millions. Nearly 120 millions of this number have been added during the last 7 decades alone, in spite of famines and epidemics. The situation has been intensified by the decline in the number of industrial workers who have gone to swell the ranks of agriculturists during the last century and more. Obviously, such non-agriculturists who take to cultivation help only to lower agricultural efficiency.

Land resources, on the other hand, have increased relatively at a much slower rate. The cultivated area has increased by 15 per cent whereas the population has increased by 34 per cent. While figures for comparing the trends of population and cultivated area during the past 4 or 5 decades in the Dominion of India are not available, it may be pointed out that for undivided India the man : land ratio (i.e. the number of people supported by 100 hectares) has gone up from 250 to 389.

The consequences of these unhealthy trends manifest themselves in various forms. Firstly, the agricultural proletariat comprising the uneconomic holders, tenants, sharecroppers and farm labourers is continuously on an increase. As many as 60 to 70 per cent of our cultivators are uneconomic holders. Sub-division and fragmentation of holdings still continue apace. Tenancy is widespread in every Province, about 50 to 60 per cent of the cultivators being tenants. Lands are passing on a large scale from agriculturists to non-agriculturists; between 1926-27 and 1936-37, agriculturists in Bombay Province alone lost as much as 5 million acres, or 20 per cent of the total cultivated area, to non-agriculturists. The landless labourers number nearly 40 millions or more than a third of the total employed in agriculture. The health of the rural masses has been seriously impaired and their low vitality and poor physique make them easy prey to diseases. The expectation of life in India is only 27 years which is less than half of that in the U. K. or the U. S. A.; it has remained unchanged during the last 75 years and