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India Must Grow More Food

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It is almost an year since we met last for a similar purpose. As you are all aware, we have turned the corner and started pounding the Axis. Last week, Italy dropped her pilot and Mussolini left the scene. While we are happy and hopeful about the outcome of the War, our living conditions have been causing much concern to the public at large and the Government. We have had a year of famine. Our food production had been insufficient to meet the demands. At the same time, unscrupulous people hoarding the grains without consideration for the starvation around them, have created difficulties by reducing the supplies in the market.

The cry for food is great. The responsibilities of the Agricultural Department have become heavy and we are striving our best to increase the food supplies. We are trying to expand cultivation by bringing uncultivated lands under the plough. The ryots are permitted to grow grain crops on these lands free of assessment. Favourable terms for food cultivation as, free cultivation of tank beds with vegetables and certain dry crops when there is no water in the tanks, the cultivation of railway lands under reasonable rental, and free cultivation of backyards with dry food crops and vegetables, have been offered. We are offering free seeds and manures to poor ryots. We have opened our purse wide and are granting loans for sinking new wells or repairing old ones and making them fit for use. Government have granted remission of assessment for three years for the cultivation of food crops under such wells and have said that ryots may begin repaying the loan from the fourth year onwards. We are granting loans free of interest for purchase of manures and improved seeds up to a maximum of Rs. 50 in each case. With such a large number of concessions, Government have put before you the opportunity for growing more food crops and feeding the hungry people.

To understand properly the need for increased food production, it is necessary to know something about the peacetime situation. The principal food grains in our country are rice, wheat, jonna, sojja and grams, which

^{*} Lecture delivered on 1-8-'43 at Anantapur, during the inauguration of the 'Tree Planting cum Grow More Food' week.

between them, account for 80% of the total production of food crops in India, estimated to be about 600 lakh tons. Their shares are rice 265, wheat 102, jonna and sojja 92 and grams $35\frac{1}{2}$ lakh tons a year. In normal years, India is self-sufficient in respect of her food requirements except for about 14 lakh tons of rice representing a little over $5\frac{1}{4}\%$ of the total rice production and about $2\frac{1}{2}\%$ of the total food production of the country as a whole. Until the loss of Burma, we had been importing this quantity of rice.

There is now a gulf between the food that is produced and the actual requirements of food. We are trying to bridge the gulf by the application of agricultural science. The preservation of soil from loss by erosion, the application of well preserved and quality manures, and the use of improved seeds of crops are the three pillars on which the bridge rests. Over wide regions of the world, in the prairies of America, the steppes of Russia, and the bleak treeless expanses of our own Rayalaseema, continuous washing away of the surface soil has caused irreparable damage and immense losses. On an average, there is a loss of about 2% of land due to erosion, and considering only the black soils of this district, taking an average value of Rs. 100 to the acre, the loss to this district is to the tune of over 10 lakhs of rupees, or taking the annual rental value at Rs. 10 per acre, the loss to the ryot by rental is about a lakh of rupees annually. What can a ryot do if his wealth of surface soil is washed away leaving the less fertile or rocky subsoil only to be cultivated with crops? That is what is happening around us. In a ryot's life-time of 60 years, it is estimated that three inches of fine valuable surface soil is washed down into the vankas, and what will the future generation get but mere land without soil. Any amount of manuring the land can never make good the loss of soil that takes place year after year. The control of soil erosion is as important as anything else in agriculture and he who declines to regard this as a problem to be solved is not a good ryot. And, as long as the problem is left untackled, we are bound to lose by the much of reduced yield. Big and permanent bunds over large blocks of land, and smaller bunds in between is a solution to the problem. Bunding of the fields should become part and parcel of the ryots' practice like the other field operations as ploughing or working guntaka.

In the matter of manure, the potential loss to the country due to improper preservation of cattle manure is estimated at 600 lakhs of rupees. Just think of it and think of the number of fighter planes we could give with this amount. 600 lakhs of rupees worth of manurial matter is lost by disregard of the elementary principle that the cattle dung and urine should be kept preserved in covered pits. Consider how much increased food we can grow by applying all this manure to our fields. Here we are in a pretty situation, with a lack of food on one hand and wasting manure on the other. Then there are thousands of acres of paddy land that are hungry for green leaf manure. Ryots are spending Rs. 10 to Rs. 12 per acre for fetching green leaves from outside while they could actually grow it easily in their own lands. Already in this province, there are ove; two lakhs of acres of

paddy manured with green manure crops as sunnhemp, daincha and vempali, putting a profit of over 10 lakhs of rupees in the ryots' pocket, by producing about 5% increased yield. In our own district, there are about 13 lakhs of acres of paddy which could be made to yield 65,000 bags more paddy, or as much as 5,000 tons, by a judicious use of green manures and other manures like bone-meal and superphosphate. Considerable areas of stiff and alkaline lands in our district could be improved by growing daincha on them. There is a difference in yield of at least 5 bags of paddy per acre between a normal good soil and an alkaline soil. In our district of Anantapur, there are a number of groundnut expelling factories that produce oil cakes. These cakes are very good manures for paddy. For those ryots who are not in a position to purchase and apply them, Government are ready to grant takkavi loans for the purpose. It may interest you to know that several hundered tons of cakes from these factories are sent to Bombay and the southern districts for the very purpose of manuring paddy that is so neglected here.

Then there is the seed. Apart from the benefits of proper manuring, the improved varieties of seeds alone are capable of enhancing the yields of crops from 10 to 20 per cent. There are improved strains of jonna, ragi, sajja; korra and paddy that are used by ryots to a certain extent already in this district. The increased output of food grains by their use last year was nearly 1,500 tons in this district inspite of the failure of the season. In paddy alone, there are 70 improved varieties suitable for different conditions prevailing in the Presidency and these strains occupied more than a sixth of the total paddy area of this Province. At a modest estimate of 10% increase in yield, the use of improved strains of paddy alone would add to our food by over a lakh of tons of rice. If along with improved strains, better manures are applied, there is no doubt that 20% increase could be obtained.

* All the improved methods of increasing food production would be of little avail, if the damage by insect pests and diseases are not prevented. To mention only one instance, the smut on jonna is responsible for a considerable loss of grain annually. This loss could be prevented by a cheap remedy costing less than three pies per acre—the use of sulphur on the seed before sowing. A few thousand acres of jonna are being treated every year by the Department, but more and more ryots should adopt this treatment and save their crops from unnecessary loss. By carelessly storing grains, by storing them before they are completely dry, insect damage is encouraged. Due to one insect alone, the stored paddy in this province is estimated to suffer a loss of nearly a crore of rupees annually. This represents so much loss of food grain which would otherwise feed a large population. In a similar manner, rats have been estimated to damage our grains to such a large extent annually that it has been calculated to be a rupee per head of the population. This is not a small amount and while we know that rats are also responsible for the frequent outbreaks of plague, it is all the more necessary that every step should be taken to destroy them.

While mentioning food crops, it is necessary to remember the pulses like redgram and Bengal gram. There is an increasing demand for these products and more production is needed. It would be an easy matter to mix redgram with groundnut. It is also a good practice to sow redgram on the bunds in paddy fields and thus utilise the bunds to the best advantage.

Food habits need also to be overhauled to meet the situation. We should make the best out of our present rice and wheat stocks. Milling of rice and wheat leads to the loss of vitamins. Polished rice is deficient in vitamin B and so also is wheaten flour (maida). Hand-pounded rice is more wholesome and nutritive, besides giving about 4% more of rice than what the same quantity of paddy would give by machine hulling. A mixed diet comprising wheat, rice and millets is found to be better balanced than one based only on a single staple food, for example rice or wheat or millet. As none of the food grains can provide all the nutritive requirements, the inclusion of fresh vegetables in our diet to supply the minerals and vitamins is a matter of importance.

The Grow More Food campaign going on right through the world includes the growing of vegetables to a great extent. When an industrial country like England has brought under the plough more than a million acres of open spaces, lawns, and even tennis courts for growing vegetables, one could realise the necessity for our little effort to this great work. For, the duty of the civilians is no less important than the duty of the armed forces in the prosecution of the war, and the man or the woman who grows a patch of vegetables is as much a war worker as those who are in the battle fields. Those who have not got even that small plot of land, could also help in growing vegetables in baskets, broken mud pots or boxes of earth on verandahs or even roofs of houses. Vegetable growing is a simple matter. It is a hobby which every man and woman could easily take up. There is a pleasure in producing one's own vegetables. It is an occupation which is at once useful and healthy, and then you have the satisfaction of having helped the war effort. A home garden is therefore a victory garden and it is a pleasant occupation for the whole family since even the children can help. There cannot be an excess of vegetables even if every one of us starts growing them tomorrow. We ourselves require a lot of vegetables in our diet, as many of us are really not well nourished and could improve by adding more vegetables to our menu. At the same time, you will find that you cannot take as much grain food as formerly and thus the grain stock lasts longer and goes a little further.

This is bridging the gulf between scarcity and abundance. Those who own lands owe a duty to the landless to produce food. It is almost a crime to produce less food where it is possible to grow more of it. It is a crime against society to leave a well unused or a land fallow. The demands of the population are great. The opportunity for producing more food is equally great. Let us all set forth and help to our utmost in producing more food. Let us fight for the third freedom, the freedom from want. Food will win the war and write the peace.