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## AGRICULTURE AND THE WAR

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Agriculture has been given the job in the national emergency of producing food for our armed forces, for our civilian population, and also in no small measure for our allies. The importance of this task has been expressed by Mr. Wickard, our national Secretary of Agriculture, in these words, "Food will win the war and write the peace."

How different the situation today from a few years ago when agriculture was suffering from an over production of crops. The loss or severe contraction of the export demand had resulted in great excess stocks of certain commodities, including cotton, wheat, tobacco, rice, and certain livestock products. Prices for farm products dropped according, so that in 1932 the gross farm income was less than half of that of 1929, while fixed charges, including interest and taxes, were not proportionately lower. In the following years, through the co-operation of the farmer and the government it has been possible to cut down on the surplus production of crops through reduction in acreage, to increase the production of soil conserving crops at the expense of soil depleting crops, and to work out procedures for the orderly marketing of crops, with a net result of an increase in the farmer's income.

To meet the needs for 1942, goals in crop production have been set. The greatest increase is in crops to supply vegetable oils, more than half of which have in the past come from the far east. The production of soybeans has been set at 154 per cent of that for 1941, peanuts—155 per cent, and flaxseed—134 per cent. Production goals for livestock products include milk—107 per cent of the 1941 production, hogs for slaughter—114 per cent, cattle and calves—108 per cent, eggs—113 per cent, and chickens—110 per cent. To give this production there will be needed an increase in food crops. This means more corn, more hay and more pasture. Also more vegetable crops will be needed. The production of tomatoes for canning has been set at 118 per cent, and peas—132 per cent. More vegetables for home consumption, both fresh and canned, will be required. It

should be noted that there is no call for increases in staple crops like wheat and cotton, because of the present surplus.

This gives some idea of the job which has been given agriculture for 1942. In attaining these goals certain limiting conditions enter into the situation.

The supply of farm labor is one of the limiting factors in crop production. This is especially acute in industrial areas where there has been a great movement from the country into industry. Moreover, many farm boys are now with our military forces.

The production of farm machinery will be curtailed. New equipment for 1942 has been limited to an average of 83 per cent of that produced in 1940, although repair parts may be produced up to 150 per cent of the 1940 production. Old machinery must be made usable by attention to repairs.

Fertilizers, which can aid in increased production, will be available in limited amounts. Fortunately, the supply of mixed fertilizers available for the spring planting in 1942 is slightly above that for 1941. The greatest deficiency in fertilizer materials will be in nitrogen fertilizers, as the munitions industry is making heavy demands on our nitrogen supply. The production of superphosphate will be limited by the amount of sulphuric acid available for treating the rock phosphate. This acid is used in numerous other essential industries. The domestic production of potash is ample for our needs. The supply of burlap for fertilizer bags is very limited. Great quantities have been ear-marked for use in sand bags and for other war purposes. It is reported that sufficient paper bags have been allocated to the fertilizer industry to make up for the shortage, at least for the present.

In achieving the goals set for Agriculture in 1942, it is highly important that they be attained without impairing the productivity of the soil, since there is every prospect that the needs for 1943 will be even greater than the high production goals set for 1942, with a progressive rise from year by year throughout the emergency. Also for the post war period need for these products will inevitably follow.

To attain the needed production, in spite of the limited supply of labor, of machinery, and of fertilizer, it will be necessary to utilize to the fullest home developed plans to make use of the farm resources. Attention must be given to the selection of adapted seed of the best varieties and hybrids available, to timeliness in planting and harvesting, and to improved tilth through careful tillage. The production of better forage, soil improving and pasture crops will require in many cases a greater use of lime. While the application of lime has been on the increase in Ohio during recent years, the total amount used to date is still far short of that which could be used profitably. Forage and pasture crops are of first importance in the production of livestock and livestock products. Legume crops, grown on fertilized and limed land, will be high in protein content, and will supply a large amount of calcium and other minerals needed in livestock feeding rations. Moreover, the production of better legume crops will result in the addition to the soil of more organic matter, and the nitrogen supply will be increased, thus offsetting the shortage of fertilizer nitrogen.

By the proper care and use of farm manure, its full value in crop production can be realized. Too often one third or more of its value is lost by improper handling—largely as the result of leaching away of its valuable constituents.

Soil erosion must be kept at a minimum. Any change in the cropping system which might result in needless soil erosion should be avoided, and means for the control of erosion should be continued and strengthened.

Another means for increased production might seem to be in an increase in total cropped acres. This method was followed in 1917 and after, and led to a serious increase in soil erosion and soil deterioration. This came about primarily through the use of land for unadapted purposes. Such use will certainly result in low yields for the present, and soil destruction for the future. Increased crop

production secured in this way, will be at a high acre cost, and with a use of labor all out of proportion to the returns received. In the present emergency this is to be avoided if it is at all possible. The mistakes of the past must not be repeated.

Only by the use of measures which will insure maximum efficiency in production, and at the same time conserve and build the soil resources, will it be possible to produce the needed supplies of food. There is nothing radically new in this program for Agriculture. Only time tested means for insuring maximum, economical production for this year and the years ahead are suggested. To this end the American farmer can be counted on to do his part, even though it may take long hours to get the necessary work done.

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