

HOOVER TELLS OF FOOD SITUATION

Administrator Issues Message on Conservation.

IS GREAT PROBLEM OF WAR

America's Production and Needs of the Allied Nations Set Forth—What We Must Do to Keep Wolf From the Door.

Washington, Aug. 20.—Herbert C. Hoover, United States food administrator, today issued to the American public his statement covering the food situation as it now exists and the necessity of conserving the food resources of the nation to provide for the future during the continuance of the war. The statement follows:

Food is always more or less of a problem in every phase of its production, handling and consumption. It is a problem with every farmer, every transporter and seller, every householder. It is a problem with every town, state and nation. And now, very conspicuously, it is a problem with three great groups of nations, namely, the allies, the central empires and the neutrals; in a word it is a great international problem.

The food problem today of our own nation, therefore has as its most conspicuous phase an international character. A sufficient and regular supply of food for the maintenance of the great field armies of our fighting allies and of their no less great armies of working men and working women in the war industries, and finally for the maintenance of the women and children in the home, is an absolute necessity, second to no other, for the successful prosecution of the war for liberty. In the providing of this food for the great allied food pool, the United States plays a predominant part.

With the present diversion of tens of millions of men from the farms into the fighting and industrial armies, resulting in a marked lessening of food production, and the present necessity of increasing the daily ration of other millions of men turned from sedentary occupations into those of strenuous physical labor, resulting in a marked increase of consumption, this deficiency between the food needs and the food production of the allies becomes greater than ever, with the consequence of a large increase in the food quantities imperatively needed from the United States if the allied armies are to be able to "carry on."

World's Larder Examined.

This is a general statement of a condition which only needs to be elaborated in detail to show just what we have to do. The time has come when this detailed statement can be made. Our harvest and the harvests of Europe can now be forecast. We can also survey our combined stocks of food animals; in other words, the size of that part of the world's larder on which we and the allies can draw for the next twelve months can now be estimated. This estimate shows at once that it contains too little for our own and our allies use unless we all administer the supply with the greatest care and wisdom. The allied peoples are energetically undertaking this administration. It lies now with us to do our part. If we fail, the people of the allies cannot be maintained at war. Their soldiers cannot fight without food. A certain definitely determinable part of that food must come from us. Let us then examine carefully the world's larder as it appears today, or so much of it as is at our disposal.

I propose to review the situation first, as regards the cereals, second, as regards food animals and their products, third, as regards sugar, fourth, as regards vegetables, fifth, as regards fish and sea foods, and, finally, as regards our duty in the matter.

Cereals.

The 1917 harvest is now so far advanced that we may compare it with previous production, and with the demands which are going to be made on it.

Table No. 1 is given to show the normal peace sources of the annual supplies of France, Italy, the United Kingdom and Belgium, being an average of the three-year pre-war period.

It will be seen from this table that the normal imports of wheat are 381,000,000 bushels and of other cereals 345,000,000 bushels. The estimate of the 1917 harvest in the allied countries based upon crop reports from these countries, is as follows:

Commodity	Probable 1917 production	Av. normal production	Deficiency due to war
Wheat	333,770,000	590,675,000	196,905,000
Corn	24,454,000	121,109,000	96,655,000
Oats	137,225,000	170,890,000	33,665,000
Barley	33,586,000	125,301,000	91,715,000
Rye	41,732,000	78,973,000	37,241,000
Total	560,788,000	1,488,448,000	927,660,000

In order to provide normal consumption it would therefore be necessary to import in the next 12 months a total of 577,000,000 bushels of wheat and 674,000,000 bushels of other cereals.

The prospective position of our own and the Canadian harvest is given in table No. 2.

Our crops, especially our corn crop, cannot yet be considered as certain, but if all mature safely, North America will have an apparent surplus of wheat of 208,000,000 bushels and of other cereals of about 950,000,000 bushels.

Demand on Our Crops.

The allies are isolated from those markets, other than Canada and the

Commodity	Production	Imports Net Imports			
		U. S.	Canada	Other	Con- sumption
Wheat	590,675,000	79,426,000	112,900,000	188,476,000	574,485,000
Corn	121,109,000	19,311,000	11,900,000	15,500,000	266,596,000
Oats	170,890,000	4,783,000	16,590,000	88,612,000	683,865,000
Barley	125,301,000	4,946,000	6,600,000	63,030,000	199,793,000
Rye	78,973,000	567,000	60,000	11,327,000	90,637,000
Total	1,488,448,000	102,533,000	136,300,000	487,134,000	2,214,276,000

Commodity	Probable U. S. 1917 Consumption	Add possible		
		Normal U. S.	U. S. Surplus	Canadian Surplus
Wheat	678,000,000	590,304,000	88,000,000	120,000,000
Corn	1,124,000,000	2,663,688,000	470,000,000	63,000,000
Oats	1,453,000,000	1,148,713,000	304,000,000	80,000,000
Barley	214,000,000	178,829,000	36,000,000	9,000,000
Rye	56,100,000	35,866,000	20,300,000	18,000,000
Totals	5,525,100,000	4,907,410,000	917,300,000	239,000,000

United States, on which they were accustomed to rely before the war. The Russian supply cannot be got out. Bulgarian and Roumanian supplies are in the hands of the central empires. The voyage from Australia and India is three times as long and therefore requires three times as many tons of shipping as is required from North Atlantic ports. It is also twice as dangerous because of the longer exposure to submarine attack. There has been a large failure in the South American countries and the new harvest from that quarter will not be available in Europe until next spring. As already said, all the allied countries are and have been for some time rigorously administering and economizing their food. In Belgium, the relief commission has been compelled to reduce the consumption of cereals by nearly 50 per cent; this brings the food supply so low that the population are incapable of labor.

From the above tables it will be seen that on normal bases of consumption the total allied wheat import requirements are 577,000,000 bushels against a North American surplus of 208,000,000 bushels—and from our United States supplies we must reserve a certain amount for neutrals and also an amount to protect our stocks better next year than this last. There is therefore on normal consumption a deficit of over 400,000,000 bushels. In the other cereals used in Europe mostly for animal feed, the import necessities of the allies on normal consumption basis are about 674,000,000 against a North American surplus of 950,000,000. But again a reserve for neutrals and increased "carry over" will absorb all the margin. In any event it means we must multiply our exports of these cereals 20 times. However, upon the basis of our present crop prospects we should be able to supply their requirements in cereals other than wheat.

Wheat Situation Difficult.

The situation in wheat is one of great difficulty and concern, and must be met by an elimination of waste and reduction of consumption on the part of the allied peoples and ourselves, in one word, by an effective administration of the available supply.

The allies are unable to use other cereals alone for bread. They can use them only as added to wheat flour to make the war bread now in universal use in European countries. Except in Italy, whose people normally consume much corn, our allies have few corn mills and cornmeal is not a durable commodity and therefore cannot be shipped in great quantities.

Moreover, for generations they have bought bread from the bakeries; they have no equipment nor do they know how to bake in the household. Every American knows that it is infeasible to distribute corn bread from bakeries, and it is therefore necessary for us to furnish our allies with sufficient wheat to enable them to have a wheat basis for the loaf. However, they can use and must use other cereals for mixture in their war bread, and by this substitution and by savings on their part a great deal can be accomplished. On the other hand, a deficit of 400,000,000 bushels can be at least partially overcome if we can increase our exports from 88,000,000 to 220,000,000 or nearly triple. This can be accomplished if we will substitute one pound of other cereals for one pound of wheat flour weekly per person; that is, if we reduce our consumption of wheat flour from five pounds per week to four pounds per week per person. It will be no privation to us and will reduce the privation of our allies.

Food Animals.

Owing to the ascending standard of living, the world was already strained to supply enough animal products to meet the demand before the war began. The war has injected into an already difficult situation a number of vicious conditions which are jeopardizing the ultimate animal products supply of the world. The production of fodder in Europe has been diminished by the diversion of productive labor to war, and its import has been curtailed by shortage in shipping and by the isolation of markets by belligerent lines. From these causes not only are the actual numbers of animals decreasing in Europe, but the average weight and the annual output of dairy products per animal, are decreasing. A careful estimate of the world's food animal position shows the following position:

Commodity	Increase or decrease		Decrease in other countries		Total net
	United States	allied nations	including United States	allied nations	
Cattle	7,000,000	8,420,000	26,750,000	28,000,000	55,170,000
Sheep	2,000,000	17,500,000	34,000,000	54,500,000	98,000,000
Hogs	6,275,000	1,100,000	31,000,000	32,425,000	40,700,000
Total	15,275,000	19,020,000	92,750,000	115,000,000	130,000,000

The problem facing the American people is not only one of supplying the immediate demand of the allies, but one which is more far-reaching in its future significance. As the war goes on there will be a constant lessening of the capital stock of food animals of the world. Among our western allies the demand outruns further every

day the decreasing production, as shipping becomes further shortened by continued submarine destruction, less tonnage can be devoted to fodder, and further reduction of the herds must ensue. These destructive forces have given rise to reactions in many directions. The world's supply of meat and dairy products, of animal fats and industrial fats, wool and hides, are all involved not only now, but far into the future.

Meats.

The immediate problem is to furnish increased meat supplies to the allies to maintain them during the war. An important factor contributing to the present situation lies in the disturbance to the world's trade by destruction of shipping resulting in throwing a larger burden on North America, the nearest market. Shipments from the Australasian, South American and from the continental countries into the allied countries have been interfered with. Their contributions must be replaced by increased shipments from North America.

The growth of American meat exports since the war began, most of which have been supplied by allied nations, is revealed by the following figures:

Three-year pre-war average, 493,848,000 pounds.
Year ending June 30, 1916, 1,330,193,000 pounds.

The impact of European demand upon our animal products will be maintained for a long period of years after peace. We can contemplate a high range of prices, for meat and for animal products for many years to come. We must undertake to meet the demand not only during the war, so as to enable our allies to continue to fight, but we must be prepared to meet the demand after the war. Our herd cannot be increased in a single night or in a single year. Our producers will not only be working in their own ultimate interest in laying the foundation of larger herds and flocks, but will serve our national interest and the interest of humanity, for years to come, if the best strains of young animals are preserved. The increase in herds can only be accomplished if we save more of our roughage and raise more fodder grains. It is worth noting that after the war Europe with lessened herds will, pending their recuperation, require less fodder and will therefore produce more bread grains and import less of them, so that we can after the war safely reduce our bread grain production to increase our fodder. But we must lay our foundation in the meantime to increase our herds.

There is only one immediate solution to the short supply of meat for export pending the increase in our herds and flocks which will take years. During the course of the war, we can, just as with the cereals, reduce the consumption and eliminate the waste particularly among those classes which can best afford it. In the meantime, in order to protect all of our people, we must carefully control our meat exports in order that the people shall not be denied this prime necessity of life.

Dairy Products.

The world's dairy supplies are decreasing rapidly for two important reasons. First, the dairy cattle of Europe are diminishing, for Europe is being driven to eat its cattle for meat; second, the diversion of labor to war has decreased the fodder supplies and the shortage of shipping has limited the amount of imported fodder and therefore the cattle which can be supported and the productivity of the individual cow have been reduced. Even our own dairy supplies are not keeping pace with our growth of population, for our per capita milk supply has fallen from 90 to 75 gallons annually in the past 15 years. Yet today we must ship increasing amounts of dairy products to our allies.

The dairy supplies of the allies in normal times came to a considerable degree from western Scandinavia, Holland and Switzerland, but under German pressure these supplies are now partly diverted to Germany. The men under arms and the wounded must be supplied with condensed milk in large quantities. The net result of these conditions, despite rigorous reduction of consumption among the adults of the civil population in Europe, is that our allies are still short of large quantities and again the burden of the replacement of this shortage must fall on North America. The growing exports of dairy products from the United States to the allies are shown in the following table:

Commodity	Three year average		Year ending June 30, 1913
	1910-12	1913-15	
Butter	4,467,000 lbs.	13,467,000 lbs.	13,467,000 lbs.
Cheese	3,780,000 lbs.	44,284,000 lbs.	44,284,000 lbs.
Cond. milk	17,732,000 lbs.	192,577,000 lbs.	192,577,000 lbs.

The high price of fodder and meat in the United States during the past few months induced by the pressing European demand has set up dangerous currents in this country, especially in those regions dependent upon butter and the sale of milk to municipalities having made it more profitable to sell the cattle for meat than to keep them and produce dairy products. Therefore; the dairy cattle are decreasing

in some sections. The only sections in which dairy products have had a rise in price in appropriate proportion to the increase in most of feeds are those producing condensed milk and cheese.

Our home milk and butter supplies are therefore looked at in a broad way, decreasing while our population is increasing. This deficiency of dairy butter is shown by the increased sales of margarine, which show an increase of several million pounds per month over similar periods in 1915. Dairy butter, however, has qualities which render it vitally necessary for children. Milk has no substitute and is not only intrinsically one of our cheapest animal foods, but is absolutely fundamental to the rearing of the children.

The dairy situation resolves itself into several phases. First, it is to be hoped that the forthcoming abundant harvest together with a proper restriction upon exports of feeding stuffs will result in lower prices of feed and diminish the impetus to sell the cattle for meat. Second, the industry needs encouragement so as to increase the dairy herd and thus our dairy supplies, for the sake first of our own people and second of the allies. The people must realize the vital dependence of the well-being of their children, and thus of the nation, upon the encouragement and upbuilding of the industry. Third, we must save the wastes in milk and butter during the war if we are to provide milk supplies to all. We waste large quantities of our milk value from our lack of national demand for products of skimmed and sour milk.

Pork Products.

The hog is the most efficient of machines for the production of animal fat. The hog not only makes more fat from a given amount of feed, but also the products made are specially capable of preservation and most economical for commercial handling.

The swine of Europe are rapidly decreasing and the consumption demand induced by the war is much increased, this particularly because bacon, ham and lard are so adaptable for military supplies. Moreover, our allies are isolated from many markets and a large amount from northern neutrals is being diverted to Germany.

While our hogs have increased in number by 3,000,000 animals, the average weight at slaughter is falling and our production is probably only about maintained. The increasing demand upon us since the war began is shown by the following figures of comparative exports:

Three-year, pre-war period, 1,055,614,000 pounds.
Year ending June 30, 1916, 1,512,376,000 pounds.

Wool and Leather.

Our national supply of both wool and leather are less than our needs, and we are importing them more and more largely, as shown by the following figures:

Imports of wool and manufactures of wool (value) for the three-year pre-war period, 802,457,965; for the fiscal year ending June 30, 1916, \$158,078,271.

Imports of value of hides, leather, and manufactures of leather average of the three-year pre-war period, \$133,171,308; for the year ending June 30, 1916, \$177,880,902.

At the present time the world's demand for these products has increased far above the peace level owing to the extra consumption in supplying the armies. This demand is now again increased by the mobilization of a large American army. In the face of this, not only is the European herd decreasing, but also American sheep have decreased about 3,000,000 since the war began. After the war is over, the various countries of the world from which we formerly drew our wool are likely to retain it for their own use until their flocks again become normal.

Sugar.

The sugar supply on which our allies in Europe normally draw has been tremendously reduced, so that they must have recourse to other sources. In consequence of the shipping situation the area from which they must draw is also curtailed and, as a result, they are driven into those markets from which our own supply normally arises. Furthermore, their own production has been greatly diminished. Before the war, Europe supplied in a large measure its own needs, through the production of beet sugar, as will appear from the following table showing the average yearly production and consumption for the five years before the war (1909-1913). In some of the chief countries of Europe:

Country	Prod'n. (short tons)	Consump. (short tons)	Surp. (short tons)
Germany	2,235,899	1,299,558	1,123,814
Austria	1,531,889	679,304	874,685
Russia	1,539,947	1,232,286	307,661
United Kingdom	2,056,000	2,056,000	0
France	762,642	704,830	57,812
Italy	211,050	190,000	21,050
Belgium	279,918	120,588	159,330
Holland	246,146	131,538	114,608

As appears from the table, France, Italy, Russia and Belgium were self-supporting, while the United Kingdom drew its entire sugar supply from exterior sources. The supply of the United Kingdom came to the amount of about 70 per cent from countries from which it is now cut off by the war. Ten per cent came from the East Indies and 20 per cent from the United States and the West Indies.

The prospective 1918 crop in France has diminished to 207,000 tons and that of Italy to 75,000 tons, and they are therefore short 590,000 tons. The displacement of United Kingdom supplies amounts to 1,435,000 tons; and therefore, in total, these three allied countries must import about 2,700,000 tons in order to maintain their normal consumption. Of this, 2,000,000 tons must come from new sources.

The disturbance of shipping reduces the tonnage available and drives the demand to a large degree upon the

nearest markets, the United States and the West Indies. This field has since the war increased its production by 1,000,000 tons per annum. How far this demand will interfere with the American supply of 4,000,000 tons is difficult to forecast, first, because some increased supplies may be obtained by the allies from the East Indies, and, second, because the allies have reduced their consumption to some extent.

In any event, if all the enemies of Germany are to be supplied, there must be economy in consumption everywhere. The normal American consumption is about 90 pounds per person per annum and is just double the French consumption.

Vegetables.

We have this year a most abundant crop of vegetables for our use as a result of a patriotic endeavor almost universal throughout the country. Our potato harvest alone promises an increase from 285,000,000 bushels last year to over 400,000,000 bushels this year. The other vegetables are likewise enormously increased through the planting and extension of millions of gardens. The sweet potato crop promises to be from 10 to 20 per cent above what it was last year, and the commercial crop of sweet corn for canning purposes is estimated to be from 20 to 30 per cent above that of last year. The commercial crop of tomatoes for canning purposes will probably be somewhere between 10 and 20 per cent above what it was last year. There is an increase in the acreage of late onions of about 54 per cent over the area harvested in 1916.

Fish and Sea Foods.

The waters of our coasts and lakes are enormously rich in food fish and shell fish. Our streams, too, contribute a great quantity of fish. Many varieties are now not used for human food, but are thrown away or used for fertilizer. Habit has confined our use of fish to a few varieties, and inadequate methods of commercial handling have limited our use of these largely to only certain days in the week. With better marketing facilities, with better understanding of how to use the most varieties, with proper preservation by salting and canning, we can increase greatly our supply and thus relieve largely the pressure due to the inadequate supply of meat. We only have to harvest our own fish supply. It feeds itself. Every fish eaten is that much gained in solving the present problem of living. The products of the land are conserved by eating those of the sea.

Our Duty.

I have endeavored to show in previous articles that the world is short of food; that Europe is confronted with the grim specter of starvation unless from our abundance and our waste we keep the wolf from the door. Not only must we have a proper use of our food supply in order that we may furnish our allies with the sinews with which they may fight our battles, but it is an act of humanity towards fellow men, women and children.

By the diversion of millions of men from production to war, by the occupation of land by armies, by the isolation of markets, by belligerent lines, and by the destruction of shipping by submarines, not only has the home production of our allies fallen by over 500,000,000 bushels of grain, but they are thrown upon us for a much larger proportion of their normal imports formerly obtained from other markets. They have reduced consumption at every point, but men in the trenches, men in the shops, and the millions of women placed at physical labor require more food than during peace times, and the incidence of their saving and any shortage which they may suffer, falls first upon women and children. If this privation becomes too great, their peoples cannot be maintained constant in the war, and we will be left alone to fight the battle of democracy with Germany.

The problem of food conservation is one of many complexions. We cannot, and we do not wish, with our free institutions and our large resources of food, to imitate Europe in its policed rationing, but we must voluntarily and intelligently assume the responsibility before us as one in which everyone has a direct and inescapable interest. We must increase our export of foods to the allies, and in the circumstances of our shipping situation, these exports must be of the most concentrated foods. These are wheat, flour, beef, pork and dairy products. We have other foods in great abundance which we can use instead of these commodities, and we can prevent wastes in a thousand directions. We must guard the drainage of exports from the United States, that we retain a proper supply for our own country, and we must adopt such measures as will ameliorate, so far as may be, the price conditions of our less fortunate. We might so drain the supplies from the country to Europe as by the high prices that would follow to force our people to shorten their consumption. This operation of "normal economic forces" would starve that element of the community to whom we owe the most protection. We must try to impose the burden equally upon all.

Action Must Be Voluntary.

There is no royal road to food conservation. We can only accomplish this by the voluntary action of our whole people, each element in proportion to its means. It is a matter of equality of burden; a matter of minute saving and substitution at every point in the 20,000,000 kitchens, on the 20,000,000 dinner tables and in the 2,000,000 manufacturing, wholesale and retail establishments of the country. The task is thus in its essence the daily individual service of all the people. Every group can substitute and even

the great majority of thrifty people can save a little—and the more luxurious elements of the population can by reduction to simple living save much. The final result of substituting other products and saving one pound of wheat flour, two ounces of fats, seven ounces of sugar and seven ounces of meat weekly, by each person, will, when we have multiplied this by one hundred million, have increased our exports to the amounts absolutely required by our allies. This means no more than that we should eat plenty, but eat wisely and without waste.

Food conservation has other aspects of utmost importance. Wars must be paid for by savings. We must save in the consumption in commodities and the consumption of unproductive labor in order that we may divert our manhood to the army and to the shops. If by the reduction in consumption of labor and the commodities that it produces and the diversion of this saving to that labor and those commodities demanded by the war, we shall be able to fight to eternity. We can mortgage our future savings for a little while, but a piling up of mortgages is but a short step toward bankruptcy. Every atom that we save is available for subscription to Liberty bonds.

The whole of Europe has been engaged ever since the war began in the elimination of waste, the simplification of life, and the increase of its industrial capacity. When the war is over the consuming power of the world will be reduced by the loss of prosperity and man power, and we shall enter a period of competition without parallel in ferocity. After the war, we must maintain our foreign markets if our working people are to be employed. We shall be in no position to compete if we continue to live on the same basis of waste and extravagance on which we have lived hitherto. Simple, temperate living is a moral issue of the first order at any time, and any other basis of conduct during the war becomes a wrong against the interest of the country and the interest of democracy.

The impact of the food shortage of Europe has knocked at every door of the United States during the past three years. The prices of foodstuffs have nearly doubled, and the reverberations of Europe's increasing shortage would have thundered twice as loudly during the coming year even had we not entered the war, and it can now only be mitigated if we can exert a strong control and this in many directions.

We are today in an era of high prices. We must maintain prices at such a level as will stimulate production, for we are faced by a starving world and the value of a commodity to the hungry is greater than its price.

As a result of the world shortage of supplies, our consumers have suffered from speculation and extortion. While wages for some kinds of labor have increased with the rise in food prices, in others, it has been difficult to maintain our high standard of nutrition.

By the elimination of waste in all classes, by the reduction in the consumption of foodstuffs by the more fortunate, we shall increase our supplies not only for export but for home, and by increased supplies we can help in the amelioration of prices.

For Better Distribution.

Beyond this the duty has been laid upon the food administration to co-operate with the patriotic men in trades and commerce, that we may eliminate the evils which have grown into our system of distribution, that the burden may fall equitably upon all by restoration, so far as may be, of the normal course of trade. It is the purpose of the food administration to use its utmost power and the utmost ability that patriotism can assemble to ameliorate this situation to such a degree as may be possible.

The food administration is assembling the best expert advice in the country on home economics, on food utilization, on trade practices and trade wastes, and on the conduct of public eating places, and we shall outline from time to time detailed suggestions, which if honestly carried out by such individuals in the country, we believe will effect the result which we must attain. We are asking every home, every public eating place and many trades, to sign a pledge card to accept these directions, so far as their circumstances permit, and we are organizing various instrumentalities to ameliorate speculation. We are asking the men of the country who are not actually engaged in the handling of food to sign similar pledges that they shall see to it, so far as they are able, that these directions are followed. We are asking all who wish us well and who undertake our service to become actual members of the food administration, just as much volunteers in national service as we ourselves are, so that thus the food administration may not be composed of a small body of men in Washington and a small representation in each