World's Food Outlook

Food Famine Threatened, Unless Production Is Increased

Whether or not the world shall eat according to its hunger in the coming year is a question depending on the crops of last year, and all the factors that go to make the crops of the coming harvests. That the world will not face a famine is a reasonable conclusion to be drawn from present conditions, but it is equally clear that the margin of safety is small, says the Boston Bureau.

In 1916 the world production of cereals, rice excepted, was 1,200,000,000 bushels less than normal requirements. Also, in seven countries which produce 65% of the potatoes of the world, the total production was 1,600,000,000 bushels less than the average, while in other countries the outlook would justify an estimate of no more than 75% of a crop.

The United States may be taken as an example of world conditions, because it averaged better than the rest of the world taken together, and its surplus crops help feed that part of the world that is not self sustaining. Here is a comparison of the per capita production of wheat in bushels with normal requirements for food, feed, seed, and the production of former periods:

Consumption per capita	6.25
1916 production per capita	6.00
1915 production per capita	10.09
5-year average 1910-1914	7.61

World conditions averaged worse than this. Mankind is still setting its table because of the large reserves of food from the unusual crops of 1916. But when the new crop year begins in Europe—August 1—the available reserves will be exhausted, and all will depend upon the crops of 1917-18 without the help of any reserve supplies.

To feed itself comfortably and maintain a safe reserve, the world must produce the following amounts of the principal crops:

	Bushels.
Wheat	3,900,000,000
Corn	4,000,000,000
Oats	4,300,000,000
Barley	1,455,000,000
Rye	1,750,000,000
Potatoes	5,800,000,000
Sugar, lbs.	42,000,000,000

Besides 110,000,000,000 pounds of rice, and all the minor crops, fruits, vegetables, meat, poultry and dairy products.

Europe is the principal part of the world that does not raise sufficient food to sustain itself, and its needs may be measured by its demand for wheat. All European countries raise some wheat, and import the difference between their production and domestic requirements. Dealing now with only the countries whose ports are supposed to be open, the principal European crops of 1916 compare with the average of the five years preceding the war, and the estimate of the import requirements of those countries (in bushels):

	Production 1916.	Av. product 1909-13.	Imp't needs Yr. 1916-17.
United Kingdom	59,500,000	59,500,000	210,000,000
France	215,000,000	318,000,000	100,000,000
Italy	177,000,000	183,000,000	70,000,000
Spain and Portugal	161,000,000	138,000,000	8,000,000
Netherlands	16,000,000	20,000,000	50,000,000
Scandinavia	13,000,000	14,000,000	20,000,000
Switzerland	4,000,000	3,000,000	16,000,000
Total	645,500,000	735,500,000	474,000,000

Other countries whose ports are open, save for the attentions of the submarines, usually take about 100,000,000 bushels a year. As the European production has been progressively smaller every year since the war, and France, Italy and the United Kingdom have reduced acreages, and the weather thus far has been against the crop, the outlook is for a still smaller production this year. A world requirement of 600,000,000 bushels of imported wheat for the year beginning August 1, 1917, seems reasonable, if bread eaters are to eat to their fill of white bread.

WHERE THE BREAD GRAIN COMES FROM.

The importing countries obtain the principal part of their wheat from Russia, Roumania, India, Australia, Argentina, Canada and the United States. The two first named may be counted as impossible until the Dardanelles are open to commerce. When that time comes Russia may be able to furnish 400,000,000 bushels of wheat, but there is no certainty. All that is known is that Russia has not been able to ship wheat for three years, and before the war its exports averaged 125,000,000 bushels.

India's harvest comes in March and April, and ordinarily the wheat begins to arrive in Liverpool in July. It is now gathering a large crop, which compares with former crops as follows:

Crop growth year.	Production bushels.	Exports, year ending Mar. 31.
1916-17*	375,000,000	25,256,000
1915-16	318,000,000	25,900,000
1914-15	312,000,000	27,600,000
Avg. five year 1909-14	350,000,000	50,000,000

(*)—Estimated.

Exports vary with prices, as, when wheat is high, the natives eat coarser grains and sell wheat. If sufficient tonnage can be provided, India should furnish at least 75,000,000 bushels, but its availability depends upon the number of vessels afloat.

Argentina and Australia harvest in December. Australia has had two large harvests, but vessels are lacking to bring the wheat to market. Argentina's last harvest was but little more than sufficient for domestic needs. The crops of the two countries for a series of years are as follows, in bushels:

	Argentina.	Australia.
1916-17	77,000,000	149,000,000
1915-16	173,000,000	143,000,000
1914-15	168,000,000	94,365,000
Five-year avg. 1909-14	149,000,000	78,000,000

Argentine domestic requirements are 65,000,000 bushels a year and Australian 50,000,000. In the past three years Argentina has averaged 85,000,000 bushels. Since the first of January it has shipped but 21,624,000 bushels, and an embargo is now laid on further exports, on account of the small crop. There is a surplus of old wheat amounting to perhaps 15,000,000 bushels, and also some further amounts contracted for before the embargo.

It is expected that Argentina will, during the summer, permit wheat to go to Europe in exchange for Canadian wheat to be delivered later, in order to tide over any possible shortage before the next harvest. Operations for the new crop are under way, and the soil conditions are reported good. The government is assisting the farmers, and a larger acreage is expected. With average weather, that country should be able to furnish at least 90,000,000 bushels after next January.

Little news comes from Australia, but weather and soil conditions there have been favorable to agriculture. Although there is a large surplus of wheat on hand, the British government bought and paid fo 1915 crop, so it is likely the farmers will again respond to the appeal made them two years ago to exert themselves in raising all the wheat possible. Making it a patriotic duty increased the production 50%. The same thing this season would mean 100,000,000 bushels of new wheat early in 1918 in addition to the present surplus. With that wheat on the market there would be no question of scarcity. The world's food rests upon the shipyards as well as upon the farms.

BEET SUGAR PROGRESS.

The American beet sugar industry has progressed by leaps and bounds since the outbreak of the European war. According to figures compiled by the National City Bank, beet sugar production has grown from 5,000,000 pounds in 1890 to 1,642,000,000 pounds in 1916. Ten years ago only 10% of the sugar consumed in the United States was made from beets; now the total is 20%. Total capital invested in beet sugar property next season will be $200,000,000, compared with $20,142,000 in 1899.

European beet sugar production since 1914 has fallen off nearly one-half. Output in 1916-17 is estimated at 4,814,000 tons, against 8,341,000 in 1912-13. Production for 1916-17 is divided as follows: Germany, 1,500,000 tons; Russia, $1,250,000; Austria, 945,000; Holland, 270,000; France, 185,000; and Belgium, 100,000. Beet sugar crop of United States for 1916-17 is placed at 735,000 tons, which would give this country fourth place.

War has made necessary revision of figures showing per capita consumption of sugar. In the year preceding the war, per capital demand in United States was 89 pounds, England, 90, Germany 75 and Denmark 93. Restrictions in belligerent, and many neutral nations, have reduced the demand abroad to a minimum. In the U.S. the fall has been from 89 pounds in 1914 to 77 pounds in 1916, with the expectation of further decrease in 1917, due to prevailing high prices for sugar. High prices are caused primarily by political disturbances in Cuba, and large exports from United States and Cuba to Europe. Total exports in 1916 were 1,577,000,000 pounds, against 963,575,000 in 1915, 390,409,000 in 1914, and 51,772,000 in 1913. Refined sugar shipments from the United States last year were valued at $90,676,000, compared with $,1874,000 worth sent abroad in 1913.

War and Sugar Production

There has been general appreciation of the fact that the war has profoundly affected the world's sugar markets. But few persons realize that one-third of the world's sugar production in peace times has been raised in that great beet sugar area which is now inside the fighting lines. Germany, Austria, northern France, Belgium, Poland and Russia have an immense number of beet sugar factories which are within the fighting zone. As sugar producers their influence upon the world's sugar markets has ceased to be a factor. The German and Austrian factories are either producing for home consumption, or else in many cases have ceased to operate. Hundreds of French, Belgian and Polish factories have been blown to pieces. The following map gives a clear-cut picture of the immediate influence of the war upon European beet sugar production:

MAP SHOWING LOCATION OF EUROPEAN BEET SUGAR FACTORIES—ALSO BATTLE LINES AT CLOSE OF 1916.