

clusive of the Cracow district, there was in 1912 a production of 22,458,000 bushels of rye, 144,974,000 of potatoes, 22,848,000 of wheat and 30,820,000 of oats.

Crops in Belgium

In Belgium in 1912-13 there were produced of wheat 15,348,000 bushels, net imports 51,272,000, net export of flour in equivalent quantity of wheat of 3,184,000 bushels, leaving a total quantity available for consumption in Belgium of 63,436,000. The same operation for the year 1913-14 yields a total for consumption of 63,357,000.

For potatoes Belgium, with a production in 1912 of 100,000,000 and in 1913 of 117,614,000 bushels, has had sufficient for her own uses. In 1913 she produced 22,000,000 bushels of rye and imported 6,600,000. Having up to the present been the battlefield of western armies with the prospect of continuing so to the end of the war, the problem of providing for her 7,571,000 inhabitants, minus the refugees and the combatants with the allies, is a momentous one.

In considering the prospective supplies from next season's growth, it will be conceded that both Germany and Austria-Hungary will—besides experiencing great difficulty in securing any appreciable help from neutral States, which nearly all prohibit export—be hampered because of the lack of labor and horses for seeding and planting, as well as harvesting and transporting the crops to where needed. Without referring to the lack of customary bank advances of funds for present and prospective operations, there was for last fall's ploughing a serious lack of coal and benzine for steam motor ploughs, which are very extensively used. With the Galicia source of supply cut off for petroleum the enormous quantities of oil and coal required in both land and sea operations explain the deficiency already experienced. Potato spirit might replace benzine to some extent, but this would result in an additional strain on the food supply already threatened by a short crop.

High Prices in Vienna

With the price of wheat at \$2.25 a bushel October 31 in Vienna and prices of food products everywhere rising to the extent that the government have fixed maximum prices, the food problem for the present year is not going to be easily solved.

That the conditions in both hostile countries have already become serious and threaten to grow exceedingly acute later, may be inferred from a brief survey of prices and decrees relating to the baking of bread. According to a notice issued in Austria-Hungary on November 1, from December 1 onwards only war bread was to be baked, the same to contain 70 per cent. of rye or wheat flour and 30 per cent. of maize or potato flour.

On November 24, 1914, a decree was issued for the city of Berlin and the province of Brandenburg which set forth that it is the duty of every one to supervise with care the use of wheat flour. Bakeries, hotels and restaurants using wheat flour must finish their baking before 2 p.m. every day, and they may not begin preparations for baking previous to 8 p.m. Wheat bread may not be placed freely at the disposal of guests in inns, cafés and restaurants.

At Berlin and Budapest

The range of prices at Berlin and Budapest on October 31 are given in Broomhall's Corn Trade News of November 10, 1914, as follows:—

In Berlin wheat flour was \$7.10 to \$8.50 per barrel of 200 pounds; rye flour from \$6.40 to \$6.82. In the week October 13-20 rye rose from \$1.40 to \$1.47 per bushel.

In Budapest, Hungary, the price per bushel of wheat was September 19, \$1.98; September 26, \$2.06; October 31, \$2.16 to \$2.28. On the same respective dates rye sold at \$1.38, \$1.45 and from \$1.58 to \$1.64. The German government were, therefore, amply justified in fixing maximum prices about the end of October for wheat at \$1.68 per bushel, and for rye at Königsberg \$1.26, at Berlin \$1.32, at Strassburg and Aix la Chapelle \$1.42. At the same time the maximum price of barley was fixed at \$1.05 to \$1.08, and oats from 77 cents at Berlin to 85 cents at Strassburg.

Some of the writers, who have since the outbreak of hostilities dealt with the subject of food supply, are of the opinion that the Teutons will be relieved from the threat of a serious shortage because of their enormous potato crop. It will therefore be of interest to consider that crop in some detail.

The final official estimates of production of potatoes in these countries are given as follows:—

Year.	Germany. Bushels.	Austria-Hungary. Bushels.
1910	1,597,174,000	701,638,000
1911	1,263,024,000	614,940,000
1912	1,844,863,000	686,307,000
1913	1,988,611,000	603,633,000

German Crop Was Large

For 1914 there are official data, for Prussia only, indicating a crop of 1,198,840,000 bushels against a production in 1913 of 1,440,915,000. The production of Prussia in 1913 was about 72½ per cent. of the total German crop; assuming the proportion to be the same last year, the total German crop would be about 1,653,500,000 bushels, or almost exactly the average of the years 1908-12 which is given officially as 1,653,403,000 bushels, with a per acre yield of 202.5.

The decrease from 1913 would be, therefore, 335,000,000 bushels. Compare the amount of this decrease with the total production of the United States for 1914, viz., 406,288,000 bushels, and the Canadian crop for the same year, 85,672,000 bushels.

The German crop of 1913 was, therefore, exceptionally large, and its influence would extend to 1914 through the animals fed, chiefly swine. The December 31 census shows an increase of 3,735,438 pigs as compared with the same date in 1912.

The deficiency for 1914-15 threatens most serious consequences. Some writers have referred to the importance of retaining in Germany the portion of the crop usually exported, but that export for 1910 was only twelve million bushels, 1911 nine million and 1912 four million bushels; to which might be added what is exported in the form of starch dextrin and related products, about 50,000,000 bushels. Even if, as has been reported, 20 per cent. of potato flour is being used with wheat and rye flour for the bread consumed by the German armies, it would simply mean the diversion of the crop from other essential uses.

Uses of the Crop

Let us examine the uses the crop was put to in the period 1908-12 just referred to. Then 28 per cent. was being used for human food, 40 per cent. fed to farm animals, and 12 per cent. set aside for seed purposes, viz., the relatively large quantity of 24 bushels per acre. About 100,000,000 bushels, or a little less than 6 per cent. of the total crop, was being made into alcohol and used for industrial purposes and to replace petroleum products. Over 50,000,000, or about 4 per cent., were made each year into