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WORLD WHEAT PROSPECTS

Indications are that the world's supply of wheat for the 1930-31 season is likely to be about the same as it was last year. For the Northern Hemisphere, outside Russia and China, crop prospects early in July indicated that total production in 1930 was likely to be only 50 million bushels in excess of last year. More recent unfavorable growing conditions in important regions indicate a smaller production, and a continuance of such conditions would result in a Northern Hemisphere crop smaller than last year. Production in the Southern Hemisphere cannot now be forecast, but if yields should be about average instead of low, as they were last year, the total world crop for 1930-31 would probably be around 100 million bushels in excess of last year's. As the carryover from last season is about 100 million bushels less than it was a year ago, this decrease would offset the increase in the crop. Prices of cash wheat in the United States are now about 50 cents per bushel lower than they were a year ago and these low prices will tend to stimulate the use of wheat for feed and in many countries to increase human consumption. The increase in consumption is likely to be further augmented by improvement in business conditions as the year progresses. With total supplies about equal to those of last year increases in consumption would further reduce the world carryover. World trade of the coming year will probably be increased not only by an augmented consumption, but also through importing countries building up their stocks of wheat. Indeed exports thus far in July indicate that world trade is already beginning to recover from its recent low levels.

The present burdensome carryover had its origin in the large world crop of 1927-28 which resulted in a large carryover into the crop year 1928-29. Very large crops in 1928-29 greatly increased the already large carryover, and the world carryover last year was by far the largest on record. A year ago, however, it had become evident that the wheat crop of Canada and the spring wheat crop of the United States would be small, and the wheat trade generally recognized that the world crop of 1929-30 would be a comparatively small one. At that time it appeared that the small crop might result in the amount carried over in the 1930-31 crop year being reduced to about normal levels. However, a combination of circumstances including a world-wide business depression accompanied by falling prices of all commodities, restrictions placed by many importing countries upon imports of wheat from other parts of the world, the decline in silver exchange, and large crops of other foodstuffs and of feed grains in Europe, resulted in a reduction in the amount of wheat consumed during the past year and in an even greater reduction in the amount of wheat which the importing countries have taken from other parts of the world. As the 1929-30 crop season was drawing to a close, the realization that wheat stocks in exporting countries had not been reduced to normal levels added to the discouragement of an already over-burdened wheat trade and prices in the United States have sagged to the lowest levels since 1914.

Despite the world-wide business depression and other unfavorable circumstances, last year's carryover has been reduced by about 100 million bushels. If the world crop should turn out as now seems probable, a total disappearance equal to last year's would leave the carryover about the same next July as it is this year, but it does not seem likely that the combination of circumstances which resulted in a reduced wheat consumption during the past year will again hold consumption to as low a level. Both a recovery from the present business depression

and the normal upward trend in world wheat consumption are likely to result in an increased use of wheat. Hence, it seems altogether probable that a year from now the world carryover may be much below its present level.

World production, acreage and crop conditions

Crop and weather condition reports indicate that the Northern Hemisphere wheat crop exclusive of Russia and China may be about 50 million bushels greater this year than in 1929 but well below the record crop of 1928. Production in the 15 countries so far reported totals 1,923,694,000 bushels against 1,860,877,000 bushels in 1929. Practically all of this increase is in India. The July 1 conditions in the United States indicated a crop of 807 million bushels, approximately the same as the crop harvested in 1929. The crop in Canada is now at the critical period of growth and although present conditions would indicate a crop of perhaps 60 to 75 million bushels greater than the 300 million bushels harvested in 1929, much will depend on weather conditions during the next few weeks. A continuation of the hot dry weather experienced during the early part of July would reduce the prospects materially.

Eight European countries have reported a total production of 651 million bushels against 645 million bushels a year ago but indicated reductions in other countries would reduce the total European crop, aside from Russia, about 70 million bushels below last year. Harvesting of the winter crop had been started in the Danubian countries by the middle of July and the yields and the quality of the grain are reported to be surpassing previous expectations. Germany has seeded the largest acreage since the war and the outlook is for a better crop than last year and probably equal to the good crop harvested in 1928. In Prussia, which furnished about 60 per cent of the total German wheat crop, production has been officially estimated at 85 million bushels against 72 million bushels in 1929. In France and Italy, the two most important producing countries aside from Russia, weather conditions have been unfavorable to the crop during a large part of the spring and summer. The Italian crop has been officially estimated at 220 million bushels, but some trade estimates are as low as 200 million bushels compared with 261 million bushels harvested in 1929. No official estimate of the French crop has been issued but trade estimates now range from 248 to 257 million bushels, compared with the 1929 official estimate of 320 million bushels which many believe was too low. Latest reports from Denmark and the Scandinavian countries were favorable.

The State Planning Commission of the U. S. S. R. in a report issued July 1 stated that the condition of the wheat crop, especially winter wheat was considerably above average.

Algeria, Morocco, and Tunis report a total crop of 58 million bushels, 20 per cent below the 1929 crop and 14 per cent below the 1928 crop. About 75 to 80 per cent of the wheat crop in these countries is durum.

The outlook for the feed grain crops in both Europe and North Africa is for smaller crops than last year which would tend to increase the demand for wheat.

It is too early to forecast the crops in the Southern Hemisphere. A record acreage has been reported sown in Australia, but this may include wheat sown for hay and hence may not be comparable with acreages reported as harvested for grain. According to reports received through the International Institute of Agriculture, growing conditions in Australia are favorable. Conditions in Argentina are also generally better than a year ago.

The total wheat acreage in 26 countries so far reported is 205,293,000 acres against 205,333,000 acres in 1929. The acreage in 24 Northern Hemisphere countries is reported at 186,647,000 acres, a decrease of 1.5 per cent from the 189,482,000 acres in 1929.

Wheat: Acreage, average 1909-1913, annual 1927-1930

Crop and countries reported in 1930 1/	Average:					Percentage
	1909-1913	1927	1928	1929	1930	1930 is of 1929
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	Per cent
United States.....	47,057	58,784	58,272	61,103	59,024	96.6
Canada.....	9,945	22,460	24,119	25,255	24,583	97.3
Total North America(4)	59,236	82,578	83,694	87,669	84,844	96.8
Europe (14).....	63,571	59,754	60,570	60,617	61,331	101.2
North Africa.(4).....	6,571	7,168	8,358	8,392	8,140	97.0
Asia (2).....	30,124	32,313	33,152	32,804	32,332	98.6
Total North Hemis.(24)	159,502	181,813	185,774	189,482	186,647	98.5
Chile.....	1,003	1,842	1,715	1,758	1,646	93.6
Australia.....	7,603	12,279	14,840	14,093	17,000	120.6
Total South.Hemis.(2)	8,606	14,121	16,555	15,851	18,646	117.6
Total above count.(26)	168,108	195,934	202,329	205,333	205,293	100.0
Est. world total excl:	:	:	:	:	:	:
Russia and China.....	204,200	240,100	244,800	244,400	:	:
	:	:	:	:	:	:

1/ Figures in parenthesis indicate the number of countries included.

The weather and the Canadian wheat crop

A study of the relation of weather to wheat production in Canada using correlation methods indicates that the rainfall in the months May to July is the most important factor in making the wheat yield per acre in Saskatchewan and Alberta, which two provinces produce most of the Canadian crop. September to November precipitation preceding planting is also indicated to be an important supplementary source of moisture for the plants. 1/

During the present season rainfall in Saskatchewan has been not far from average in the September to July period when past experience has shown rainfall to be an important factor in determining yield, and the yield per acre for Saskatchewan indicated by the study is 18.5 bushels or above average. In Alberta on the other hand a below average yield of 15.6 bushels is indicated. On the basis of these indicated yields and the Canadian estimate of acreage the total Canadian crop would be about 425,000,000 bushels. Two factors enter in, however, to point to a much smaller harvest this year than that indicated by the above studies.

The first is an important deficiency of soil moisture at the beginning of September and the other is the possibility of reduction in acreage due to wind damage late in May.

The ground at the beginning of spring was unusually dry in spite of a nearly average precipitation in the autumn, as a result of the unusually dry summer in 1929. Rainfall from April through August in 1929 totaled only 5 inches in Saskatchewan which is the lowest reported in that period in all of the 25 years studied, and about half of the average rainfall in the period. The next lowest was in the summer of 1917 when rainfall from April to August was about 7 inches. In view of the abnormal deficiency in subsoil moisture a reduction of the indicated yield in Saskatchewan to 16.5 bushels appears justified, and the crop thus indicated in all Canada by the Government estimate of acreage would be about 390,000,000 to 400,000,000 bushels.

1/ A straight line multiple correlation for Saskatchewan using seven weather factors ending with July gave a correlation of $R=.962$, $\bar{R}=.943$, $Se=1.54$. Among the factors used, May to July precipitation gave a per cent determination of +39.6, September to November precipitation +19.8, January to March precipitation -19.0, and average daily temperature in June and July -4.5, of a total of 92.6 per cent of the variations in yield theoretically accounted for by the weather factors studied. In Alberta a combination of 4 weather factors used in a curvilinear correlation ending with July theoretically accounted for about 77 per cent of the variations in yield, the total precipitation in the period May to July plus that of the preceding September-November, being the most important factor. $R=.916$, $\bar{P}=.877$, $Se=3.28$.

The acreage of wheat in Canada is reported officially at 24,583,000 acres according to the reports of July 10. There is some question as to whether this estimate took account of the probable abandonment reported in trade accounts as a result of the heavy wind damage late in May and early in June. Some reduction in estimate of the crop appears justified in the light of a possible reduction in the acreage estimate and further slight reduction to account for possible reduction in yield on the remaining acreage. It thus seems possible that the Canadian crop this year may not be more than 360,000,000 to 375,000,000 bushels.

Canada, precipitation and temperature preceding harvest and wheat yield per acre, average 1904-05 to 1927-28, annual 1927-28 to 1929-30

Item	Saskatchewan				Alberta			
	Average		Average		Average		Average	
	1904-05 to 1927-28	1927-28	1928-29	1929-30	1904-05 to 1927-28	1927-28	1928-29	1929-30
Precipitation, total for period-	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
Apr.-Aug. preceding planting...	10.3	11.0	9.1	5.3	10.5	16.7	11.7	7.0
Sept.-Nov.	3.0	5.2	1.1	2.9	2.8	4.9	0.8	2.0
Dec.	0.6	0.4	0.4	1.3	0.7	0.9	0.3	0.8
Jan.-Mar.	2.0	1.1	2.0	1.2	1.9	1.7	1.7	0.8
Apr.	0.9	0.9	0.5	1.0	0.8	0.8	1.8	1.8
May-June.	5.1	5.7	3.8	1/(-5.2) 4.5	5.1	6.7	3.2	1/ 3.8
July.	2.4	2.0	0.6	2/ 1.3	2.5	2.9	1.5	1/
Temperature, average daily, Farenheit.	Degrees	Degrees	Degrees	Degrees	Degrees	Degrees	Degrees	Degrees
Apr.	39.6	33.4	37.0	45	42.1	37.0	37.0	46
May.	51.1	57.6	47.5	50	51.9	57.7	50.0	49
June.	60.2	57.3	60.4	1/(-60)	59.5	56.3	58.0	1/ (58
July.	65.3	65.2	67.4	3/ 66	64.7	64.2	65.7	3/

- 1/ Preliminary figures for June, subject to considerable revision.
- 2/ Rainfall was below average in both Saskatchewan and Alberta the first half of the month according to preliminary reports.
- 3/ Temperatures the first 16 days averaged above the daily average for the month.

European feed grain and potato crops

The present outlook is for smaller feed grain crops in Europe than those harvested last year. The acreage under each of the grains, barley, oats and corn shows a reduction as compared with 1929. The prospects for the barley and oats crops were definitely reduced toward the end of June as a result of the hot, dry weather. The acreage sown to barley in eleven European countries which represent about one-half of the estimated European total aside from Russia is 0.4 per cent below 1929. Production in the seven countries which have reported so far totals 274 million bushels, a reduction of 2 per cent from 1929. The finer types of barley in the central European countries have been damaged by the heat and drought, but the feed barley of the Balkans appears in better condition. Germany, the most important barley producing country, has reduced acreage 2.1 per cent. The July 1 forecast of production in Prussia which accounts for about 55 per cent of the total German crop was 73 million bushels, a decrease of 10 per cent from 1929. The Rumanian crop has been officially estimated at 113 million bushels, about 12 million bushels below the 1929 harvest, but trade reports anticipate a crop above this figure. The production in Spain is estimated at 104 million bushels against 98 million in 1929.

The acreage sown to oats in seven countries which represent about half of the total European area is 22,425,000 acres, a decrease of 2.5 per cent from 1929. Germany reports an area of 8,401,000 acres, a decrease of 4.5 per cent from 1929 and the lowest since 1923. France reports a total of 8,583,000 acres the lowest since 1927. None of the more important producing countries have issued estimates of this year's crop. Five countries, Netherlands, Spain, Hungary, Rumania and Finland report a total production of 217 million bushels against 232 million bushels in 1929. The July 1 official forecast of the production of oats in Prussia where about 70 per cent of the German crop is grown was 289 million bushels compared with 359 million bushels in 1929 and 341 million bushels in 1928. The condition of the crop in Great Britain on July 1 was above average. Czechoslovakia also reported an above average condition on that date, but Austria, Poland and Germany reported conditions well below average.

Conditions in the corn producing countries would indicate crops below the record harvest in 1929. Agricultural Commissioner Steere at Berlin reported on July 18 that the corn crop in Rumania was developing favorably but rain was needed in many parts of the country. Rumania, however, has reduced the acreage to 10,540,000 acres, more than 1,500,000 acres less than the harvest area in 1929. France and Italy have made reductions of 10 and 8 per cent, respectively as compared with 1929. Hungary and Yugoslavia have not reported acreage. Trade reports mention deterioration in both countries due to the drought.

The outlook in the rye producing countries is for a total production approaching that of 1929. The crops in Germany and Poland showed marked deterioration during June, but the condition of the winter crops in both countries on July 1 was above average. Hungary and France also reported damage to the rye crop, but good conditions are maintained in Rumania, Yugoslavia, Czechoslovakia and Austria.

Wheat including flour: Exports from principal exporting countries
April, May and June 1929 and 1930.

Country	Apr.		May		June	
	1929	1930	1929	1930	1929	1930 1/
	1,000	1,000	1,000	1,000	1,000	1,000
	bushels	bushels	bushels	bushels	bushels	bushels
United States	9,151	7,438	16,128	10,270	9,003	8,990
Canada	10,554	5,460	31,153	16,047	29,794	21,679
Argentina	22,381 1/	10,572	24,218 1/	9,028	25,391	10,219
British India 2/.....	320 3/	210	443 1/	0	499	1,456
Australia	17,619 1/	4,518	7,808 1/	7,204	6,975	4,300
Russia 1/.....	0	1,688	0	376	0	1,064
Danube & Bulgaria 1/...	88	376	384	664	32	464
Total	60,113	30,262	80,135	43,589	71,694	48,172

Compiled from official and trade sources.

1/ Preliminary.

2/ Net imports: April 1929 were 3,133,000 bushels, May 1929 were 1,473,000 bushels and June 1929 were 531,000 bushels.

3/ Sea-borne trade only.

Wheat including flour: Shipments from principal exporting countries

Country	Total shipments or exports		Shipments, weeks ending		Total shipments or exports from July 1-	
	1928-29	1929-30 1/	July 5	July 12	1929-30	1930-31
	1,000	1,000	1,000	1,000	1,000	1,000
	bushels	bushels	bushels	bushels	bushels	bushels
North America 2/.....	499,942	301,342	5,254	8,084	15,982	13,338
Canada 4 markets 3/	458,649	193,380	4,726	6,431	7,905	11,157
United States	163,687	149,822	2,157	1,284	3,677	3,440
Argentina	217,139	161,368	1,624	782	9,640	2,406
Australia	107,937	60,185	1,512	1,000	2,560	2,512
Russia	8	5,672	0	352	0	352
Danube & Bulgaria 4/	33,975	18,640	80	168	120	248
British India	5,687	4,171	472	592	56	1,064
Total 6/.....	864,688	551,378	8,942	10,978	28,358	19,920
Total European						
shipments 7/.....	705,396	490,448	11,320	---	10,840	11,320
Total ex-European						
shipments 7/.....	220,664	141,904	1,568	---	2,944	1,568

Compiled from official and trade sources.

1/ Preliminary.

2/ Bradstreet's weeks ending Thursday, including flour converted at 4.5 bushels per barrel.

3/ Fort William, Port Arthur, Vancouver and Prince Rupert.

4/ Hungary, Yugoslavia, Rumania and Bulgaria.

5/ Net imports for year 1928-29 were 21,729,000 bushels.

6/ Total of trade figures include North America as reported by Bradstreet's.

7/ Totals as reported by Broomhall's Corn Trade News.

United States: Exports of wheat and wheat including flour, by weeks 1929 and 1930.

Week ended	Wheat		Wheat including flour	
	1929	1930	1929	1930
	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
Apr. 5	274	842	1,430	1,538
12	718	329	1,414	808
19	867	563	2,075	1,442
26	2,130	545	3,108	1,175
May 3	745	939	1,685	1,747
10	1,537	1,363	2,129	1,889
17	2,358	2,082	3,171	3,271
24	2,110	1,329	2,796	1,973
31	1,486	925	2,276	1,893
June 7	939	1,031	1,761	1,647
14	1,570	1,603	2,566	2,214
21	594	1,619	1,243	2,305
28	1,031	1,828	2,197	2,824
July 5	1,202	1,541	1,696	2,157
12	839	809	1,981	1,284
19	1,551	3,962	2,379	4,944

Compiled from weekly report of the Department of Commerce.

Wheat Prices

After making a slight recovery about the first of June, wheat prices sagged a little and then about the middle of the month declined markedly. During the latter part of June futures prices reached the lowest levels since 1914 and about the middle of July slightly lower levels than those of June were reached. At Chicago the lows of futures reached on July 14 were as follows: July, 85 7/8, September 88 3/4, December 94 3/4 cents per bushel. Thus far the recovery from the low levels has been small, closing prices on July 22 being 88 3/8 cents for the July futures, 91 1/2 cents for the September futures and 97 3/8 cents per bushel for the December futures.

Cash prices of all representative wheats at the principal primary markets averaged below \$1.00 per bushel for the week ending June 18. At Minneapolis No. 1 dark northern spring averaged 97 cents per bushel which was the same as for the previous week and 62 cents per bushel below the level of a year ago, while No. 2 amber durum averaged 87 cents per bushel compared with 146 cents during the corresponding week of last year. No. 2 red winter at St. Louis averaged 83 cents per bushel and No. 2 hard winter at Kansas City, 79 cents; both of these winter wheats were 2 cents per bushel below their levels of the previous week. No. 2 red winter at St. Louis was 60 cents per bushel below its level of a year ago and No. 2 hard winter at Kansas City, 51 cents below the average for the corresponding week of last year.

Wheat: Closing prices of September 1/ futures

Date	Chicago	Kansas City	Minneapolis	Winnipeg	Liverpool	Buenos Aires
	1929:1930	1929:1930	1929:1930	1929:1930	1929:1930	1929:1930
	Cents	Cents	Cents	Cents	Cents	Cents
June 5:	113	110	105	102	110	108
12:	111	106	103	98	108	105
19:	117	100	109	92	113	99
26:	116	95	108	88	114	95
July 3:	125	94	117	86	125	94
10:	127	92	119	84	127	92
17:	146	90	140	83	148	90
24:	146	91	140	84	149	91
31:	147		141		149	
Aug. 7:	135		130		136	

1/ October futures for Winnipeg and Liverpool. 4/ July futures.
 2/ Prices are of day previous to other prices. 5/ Price for July 10.
 3/ August futures.

Wheat: Weighted average cash prices at stated markets

Week ended	All classes and grades	No. 2 hard winter	No. 1 dk.n.spring	No. 2 amber durum	No. 2 red winter	Western white
	six markets	Kansas City	Minneapolis	Minneapolis	St. Louis	Seattle 1/
	1929:1930	1929:1930	1929:1930	1929:1930	1929:1930	1929:1930
	Cents	Cents	Cents	Cents	Cents	Cents
May 30:	95	102	94	102	112	110
June 6:	100	103	98	101	118	111
13:	103	100	102	98	120	110
20:	104	92	102	90	123	102
27:	110	87	109	84	130	98
July 4:	115	85	113	82	137	99
11:	119	83	117	81	141	97
18:	134	82	130	79	159	97
25:	133		129		155	
Aug. 1:	135		131		156	

1/ Weekly average of daily cash quotations basis No. 1 sacked 30 days delivery.

The course of wheat prices indicates the great change which occurred in market prospects during the past year. As shown in the accompanying Table of weekly average closing prices of wheat futures at Chicago, December futures during the latter part of last July averaged about 150 cents per bushel. The latter part of July marked the high point for December futures, but it did not mark the end of the expectation that cash prices would rise higher than those currently prevailing. During the month of August and even up into the first part of September, May futures at Chicago averaged around 150 cents per bushel or above, December futures and September futures were lower by more than their usual spread because of the serious congestion of elevator space.

Wheat: Average closing prices of futures at Chicago, by weeks, 1929-30

Week ended	Sept. futures	Dec. futures	May futures
	Cents	Cents	Cents
1929			
June 7	110.2	115.1	
14	111.5	116.6	
21	113.5	118.4	
28	118.4	123.6	
July 5	123.5	129.0	
12	126.7	132.5+	
19	142.4	148.3	
26	143.5-	150.6	
Aug. 2	146.2	153.9	
9	136.1	144.2	152.3
16	134.6	142.8	151.9
23	135.8	144.5+	153.9
30	131.8	141.1	150.8
Sept. 6	133.2	141.9	151.6
13	134.6	142.8	152.0
20	131.3	139.2	149.1
27	128.6	135.4	145.4
Oct. 4		134.4	144.7
11		135.5	146.3
18		132.1	143.2
25		125.4	136.6
Nov. 1		127.0	137.9
8		123.0	133.7
15		116.0	126.6
22		122.1	133.0
29		124.0	135.4
Dec. 6		128.6	139.7
13		122.2	133.6
20		119.4	130.2
27		123.9	133.6
1930			
Jan. 3			135.7
10			132.0
17			128.5
24			127.8
31			123.6
Feb. 7			120.1
14			122.1
21			116.6
28			111.5
Mar. 7			112.8
14			110.0
21			108.4
28			109.1
Apr. 4			111.8
11			114.3
18			108.3
25			104.1
May 2			102.6
9			101.0
16			103.5
23			104.7
30			106.5

During the week ending August 9 the average of September, December and May futures was 144.2 cents per bushel.

The course of May futures from August 1929 to May 1930 shows a general downward trend in prices throughout the entire period. After averaging about 150 cents per bushel during August and early September, the May future declined to about 145 cents by the first of October, 134 cents for the first week in November, 140 cents for the first week in December, and so on until finally during the month of May it averaged but 103.7 cents per bushel.

During the course of the present year three principal things have been of great importance in depressing wheat prices. Of primary importance is the world-wide business depression and the decline in the general price level. In the United States this depression may be said to have started about mid-summer of 1929. However, it was not generally recognized that there would really be a business depression until well along in the fall, and not until the spring of 1930 was the extreme severity and the world-wide scope of the depression fully recognized. The depression has tended to reduce actual wheat consumption through affecting the buying power of consumers, but more important still it resulted in a marked decline in the general price level and has reacted upon the speculative sentiment to which the wheat market is peculiarly susceptible. As a result of the business depression together with certain other factors, it now appears that wheat consumption during the 1929-30 season was over 200 million bushels less than during the previous year.

In addition to the depressed business conditions it became evident as the season progressed that stocks of wheat in European countries were abnormally large a year ago. This, together with the fact that the crops of France and Italy were at first underestimated, resulted in European supplies being much larger than was at first counted on, and as time passed the prospect of large exports to Europe were lessened.

Still another factor was the amount of supplies remaining in Argentina a year ago. It was not generally thought that Argentina would be able to ship out as large a quantity of wheat from July to December as actually turned out to be the case. Official crop reports of Argentina have been subject to error, and while it was generally recognized a year ago that the 1928-29 crop in Argentina had been underestimated, the extent of the underestimate was not realized.

The above mentioned factors together with the efforts of many importing countries in Europe to restrict imports from abroad resulted in the marked decrease in the demand for wheat from Canada and the United States and deeper and deeper discouragement of those who were counting upon exports to Europe to relieve North America from the very large stocks of wheat which had been accumulated.

The world wheat carryover

The world carryover of old crop wheat as of July 1, 1930 appears to be about 100 million bushels smaller than it was the year before. The stocks in the United States and Canada, however, are somewhat larger. The increase in the United States including both domestic and Canadian grain probably amounts to a little more than 20 million bushels, while the increase in Canadian stocks is about 10 million bushels. Australia also appears to have somewhat larger supplies of wheat than a year ago but stocks in other positions are much smaller. The decrease in the exportable surplus remaining in Argentina as of July 1 is estimated at 75 million bushels. The amount of wheat afloat was smaller by about 15 million bushels and United Kingdom port stocks were about 2 million bushels below their level of a year ago. Aside from Argentina, the biggest decrease appears to be in stocks of continental Europe which are estimated by the Foreign Service of the United States Bureau of Agricultural Economics as 55 million bushels under the level of July 1, 1929. The accompanying Table shows the estimates of stocks in different positions.

Wheat: Stocks and exportable surplus of old crop as of
July 1, 1929 and 1930

Country	1929	1930
<u>United States -</u>		
Domestic	245	275
Canadian	23	16
Total	268	291
<u>Canada -</u>		
Domestic	125	133
United States	3	5
Total	128	138
Argentina	125	50
Australia	33	45
United Kingdom - (Port stocks)	8	6
<u>Afloat -</u>		
To United Kingdom	8	11
" Continent	31	17
" Orders	14	10
Total	53	38
TOTAL	615	568
Continental Europe	<u>1/</u> (155)	<u>1/</u> (100)
TOTAL	(770)	(668)

For the United States, the figures represent total accounted for stocks; for Canada, Argentina and Australia they represent quantities remaining for port and carryover. 1/ Figures for Europe do not represent an actual estimate of stocks but are only to show estimated reduction of stocks of 55 million bushels

In the United States the total stocks of old wheat are tentatively estimated at 275 million bushels for July 1, 1930. The estimate for July 1, 1929 was 245 million bushels which included stocks in 5 different positions. At the present time figures are available on stocks in only three of these positions for July 1, 1930. Consequently, it appears that the best estimate which can now be made for July 1 stocks is on the basis of comparative stocks as of March 1, 1929 and 1930. On March 1 total stocks of wheat in the United States were estimated as almost exactly 20 millions larger than in 1929. While complete data on mill grindings and exports are not yet available, it appears that during the months from March to June of this year these items were somewhat smaller than last year and total stocks of old crop domestic wheat in the United States are consequently estimated to be about 30 million bushels larger than a year ago. Stocks of Canadian grain stored in the United States are official figures as compiled by the United States Bureau of Agricultural Economics.

For Canada two methods of figuring exportable surplus as of July 1 are available prior to the issuance of official figures on the carryover as of July 31. Both of these are shown in detail in the accompanying Table on following page. It will be seen that the one method results in a figure of 139 million bushels for exportable surplus as of July 1 and the other method, a figure of 128 million bushels, exportable surplus. There seems to be no good reason for preferring one of these methods to the other as both are based on official estimates which are considered generally reliable. In view of this, a figure between the two may be used, and consequently it seems reasonable to estimate total quantities of domestic grain available for export and carryover as 133 millions. To this is to be added stocks of United States grown wheat in Canada which are reported as amounting to 5 million bushels.

Wheat: Calculation of exportable surplus in Canada as of July 1, 1930

Method I		
	<u>1,000 bushel</u>	<u>1,000 bushel</u>
1. Gross crop		299,520
2. Loss in cleaning (3 per cent)		<u>16,028</u>
3. Net crop		283,492
4. Carryover Aug. 1, 1929		104,383
5. Imports (estimated)		<u>500</u>
6. Total available for distribution		388,375
<u>Domestic consumption--</u>		
7. Seed	42,000	
8. Food	<u>44,000</u>	
9.		<u>86,000</u>
10. Available for export as of Aug. 1		302,375
11. Exports wheat including flour, Aug.-June.....		<u>163,434</u>
12. Total remaining for export July 1		138,941

Items 1 to 10 are taken from the April Monthly Bulletin of Agriculture Statistics of the Dominion Bureau of Statistics, p. 107.

Item 11, exports, are computed from Summary of Exports of Canadian Grain and flour for June 1930 of the Dominion Bureau of Statistics.

Method II		
	<u>1,000 bushel</u>	<u>1,000 bushel</u>
1. Stocks, Mar. 31, 1930		228,837
2. Seed.....	42,000	
3. Food - 4 months.....	<u>16,000</u>	
4.		<u>58,000</u>
5. Available for export April 1.....		170,837
<u>Exports wheat including flour -</u>		
6. Apr.	5,460	
7. May	16,046	
8. June	<u>21,679</u>	
9.		<u>43,185</u>
10.		127,652

Items 1 to 3 are taken from the April Monthly, see p. 107. Items 6 to 8 are computed from data of the April, May and June issues of Summary of Exports of Canadian Grains and Flour.

The remaining exportable surplus of Argentina is about 50 million bushels. This is estimated on the basis of a production of around 170 to 175 million bushels and a carryover of 25 million bushels, as shown in the accompanying Table giving the supply and distribution of the last two wheat crops of Argentina. The official estimate of the production of Argentina is only 137 million bushels, but this seems to be an under-estimate, probably due largely to the under-estimation of the area in wheat. The evidences of under-estimated acreage together with correlation studies of wheat yields in Argentina, indicate a production well above the official estimate but not more than 175 million bushels. The resulting estimate of a 50 million bushel exportable surplus compares with an exportable surplus of 125 millions a year ago.

Argentina: Supply and distribution of the wheat crops, 1928-29
and 1929-30

Item	1928-29	1929-30
	<u>1,000 bushels</u>	<u>1,000 bushels</u>
Production	350,000	170,000
Carryover	<u>12,746</u>	<u>25,000</u>
Total supply	362,746	195,000
Home consumption	85,980	85,000
Available for exports or carryover	276,766	110,000
Exports:		
Jan.-June	151,999	63,000
Surplus, July 1	124,767	<u>1/</u> 47,000
Exports:		
July-Dec.	97,931	
Balance, Dec. 31	26,836	

The official estimate of the 1928-29 production was 307,362,000 bushels and of the 1929-30 crop was 137,435,000 bushels. The estimates given above are based on studies of the Division of Statistical and Historical Research. The estimates of carryover on January 1, 1929 and the home consumption for the year 1929 are official data published in the "Times of Argentina," August 19, 1929. Official reports of exports for the year 1929 were compiled from Boletín Mensual de Estadística Agropecuaria. Estimates of exports for the period, January - June, 1930 are unofficial reports compiled from trade sources.

1/ Broomhall estimated the 1929-30 production at 180 - 190 million bushels. On this basis surplus on July 1 would be 20-30 million bushels greater than the figure here indicated.

In Australia, basing the estimated exportable surplus including carryover as of July 1 upon the official estimate of production, we would arrive at a figure of 49 million bushels as shown in the accompanying Table. Trade estimates, however, indicate that the official estimate of the Australian crop is too large by about 10 million bushels. If this be true, the actual exportable surplus amounts to only 39 million bushels. In view of the discrepancies between official and nonofficial estimates of the crop, it seems advisable to take a rough mean between them and figure the exportable surplus as 45 million bushels.

Australia: Supply and distribution of the wheat crop, 1928-29
and 1929-30

Item	:- 1928-29	:	1929-30
	<u>1,000 bushels</u>	:	<u>1,000 bushels</u>
Production	159,679	:	126,477
Carryover	7,000	:	10,000
Total supply	166,679	:	136,477
Home consumption	50,000	:	50,000
Balance for export or carryover ..	116,679	:	86,477
Exports:		:	
Jan. - June	83,583	:	37,324
Surplus, July 1	33,096	:	<u>1/</u> 49,153
Exports:		:	
July - Dec.	22,879	:	

Production estimates compiled from the Quarterly Summary of Australian Statistics, March 1930. Estimates of carryover at the beginning of 1929 and exports during the year 1929 compiled from the Monthly Crop Report of the International Institute of Agriculture. Estimates of carryover at the beginning of 1930 and exports January-June are unofficial estimates compiled from trade sources.

1/ Unofficial estimates of the 1929-30 crop average about 115 million bushels. On this basis the surplus on July 1 would be about 38 million bushels.

The Oriental situationChina

Reports from Mission stations indicate that the wheat crop in the lower Yangtze Valley will be above average this year according to a cable to the Foreign Service of the Bureau of Agricultural Economics from Agricultural Commissioner P. O. Nyhus at Shanghai. Heavy rains caused some damage in the low lying districts but favorable weather has resulted in generally high yields in the Great Plain. Some Missions report the best wheat crop in many years, resulting in generally low food prices.

Much of the wheat may find difficulty in moving to market because of restrictions upon river and rail transportation due to warfare in the north. However, Tientsin and other northern mills may be fairly well assured of very liberal supplies of domestic wheat, which, together with the unfavorable exchange rates, will limit the importation of foreign flour to small quantities. The administration of flour shipments between Shanghai and Tientsin have been complicated with the seizure of the Tientsin customs office by the northern government and by an edict of the Nanking government prohibiting exports of flour to this so-called rebel port of Tientsin. Although these measures have temporarily disturbed the trade, shipments can be made to ports near Tientsin and then be taken to Tientsin by rail or native boats, without any serious restriction to Shanghai flour shipments according to Mr. Nyhus.

Flour: Price per bag of 49 pounds at Tientsin,
China on specified dates, 1929-30

Date	American	Canadian	Japanese	Shanghai	Locally milled
	Cents	Cents	Cents	Cents	Cents
June 30	142	126		133	
July 31	145	129		138	
Aug. 23	145	130	133	141	155
Sept. 20	140	123		136	147
Oct. 31	138	117	120	132	147
Nov. 30	139	116	124	132	148
Dec. 31	138	120	122	130	144
Jan. 31	133	122	130	129	139
Feb. 28	128	112	120	120	132
Mar. 31	129	112	128	122	137
Apr. 30	126	110	125	125	134
May 31	108	104	104	110	114

Compiled from cabled reports from Consul General Gauss at Tientsin.

Price of wheat at mills and the wholesale price of
flour at Tokyo, Japan, July 1, 1929-July 1, 1930

Date	Wheat			Flour
	United States western white No. 2	Canadian No. 5	Australian	
	Cents per bushel	Cents per bushel	Cents per bushel	Cents per bag
July 1	160	155	162	157
Aug. 1	181		185	179
Sept. 1	174	173	175	180
Oct. 1	168	171	178	180
Nov. 1	168	170	178	180
Dec. 2	174		174	180
Jan. 3	168	174	183	183
Feb. 1	166	168	183	179
Mar. 1	161	150	164	175
Apr. 1	160	148	165	171
May 1	151	145	163	160
June 1	151	152	163	162
July 1	140	133	142	146

Compiled from cables received from Consul General Garrels at Tokyo.

Shanghai millers consider that the supply of domestic wheat is quite large but that a shortage may possibly develop by late December. All the mills are now operating. Prices at Shanghai in terms of gold are 80 cents per bushel for July wheat and 91 and 93 cents respectively per 49 pound bag for flour, for July and November delivery. Because of the depreciation in silver, some of these prices represent record prices in terms of silver. American wheat on the basis of 98 $\frac{3}{4}$ cents for December delivery at Chicago is quoted at \$1.14 per bushel, c.i.f. Shanghai.

India

Exports of wheat from Karachi, India, from January 1 to July 1 have amounted to approximately 2,300,000 bushels, the greater part of which has gone to the United Kingdom, although recently some shipments have been made to the Levant and other Mediterranean ports, according to a cable to the Foreign Service of the Bureau of Agricultural Economics from the Consul General McNiece at Karachi. Shipments during July are expected to amount to about 2,000,000 bushels. Stocks of wheat at Karachi at the present time are about 5,600,000 bushels. There is a strong disposition on the part of both dealers and growers to dispose of surplus holdings because of favorable weather and indications of a good crop of the cheaper summer cereals. The low price of wheat and the general economic depression has placed the Indian wheat dealers in a critical financial condition and the failure of several important firms is reported imminent.

The Continental European situation during June 1930 1/

June opened with fairly active business on continental wheat markets, but buying slackened as the month progressed because of the favorable crop reports from North America, accompanied by weakening overseas prices. Buyers again reverted to the policy pursued for months past, the limitation of purchases to the lowest levels possible, because of indications that requirements could be covered later at more favorable prices. Only in countries where demand for domestic grain was strengthened artificially by milling, tariff and other measures was the market sustained, prices on other markets weakening in sympathy with overseas, though to a less extent.

These developments do not indicate any reduction in Europe's actual current requirements for foreign wheat or needs in months to come. The supply situation with respect to domestic wheat on the Continent has become less favorable in the past month through further heavy absorption of remaining stocks and somewhat less encouraging prospects for the new crop.

Continental weather conditions and crop developments during June, while varying widely, have not been very favorable on the whole. Prospects in France and Italy have become more unfavorable as a result of excessive rain, though the weather has been perhaps not as bad for crops as it was in May in those countries. In northern central Europe, across Germany, Czechoslovakia and Poland, the weather has been unusually warm and rainfall considerably below normal throughout most of the month, but particularly during the first half. Present indications are that the effect of the drought has varied greatly according to crops and types of soils, but with a probability that yields of oats, barley and rye will be reduced, especially those on light soils. Wheat will probably be affected less than other grains, but final judgment is not yet possible. Recent reports from Poland are even less favorable than for Germany. In the Danube Basin there is promise of unusually good crops with wheat likely to exceed last year's production by a considerable margin, though 1928 yields do not seem likely to be reached. Corn prospects at the moment are less promising, as the crop is in need of rain in several sections, but the carryover is quite large. Crop reports from Scandinavia and the Baltic States are generally favorable for all grain crops as drought has not affected these regions. Considering Europe as a whole, the wheat crop outlook remains generally good, although a smaller production than last year is indicated, but chances seem to favor reduction rather than increase in estimates later on.

The relatively small reaction in continental wheat prices which has accompanied the decline in North America is due to the reduced state of domestic supplies of grain in Europe, as well as to the existence of numerous official measures for the support of the market. In Germany, for example, the flour mills have encountered considerable difficulty in obtaining the volume of domestic wheat necessary to meet the 50 per cent milling requirements and, as a result, the Government reduced the required percentage of domestic wheat to 30 per cent beginning July 1. The tendency of prices under these conditions has been such as to make parity with overseas more attractive for the purchase of American wheat. At present low price levels and with continental stocks greatly reduced, there would doubtless be a sharp and heavy increase in continental purchases in the event of an upward turn in the market.

1/ By Agricultural Commissioner Loyd V. Steere, Berlin, Germany, June 28, 1930.
Supplemented by cable July 19th.

Wheat: Price per bushel in specified European cities

Date	BERLIN	PARIS	VIENNA	HUNGARY
	"Markischer" wheat spot	Domestic wheat nearest month	"Vienna Boden" wheat spot	"Tisza" wheat 79/80 kg spot
	:1928-29:	:1929-30:	:1928-29:	:1929-30:
	:1929-30:	:1929-30:	:1929-30:	:1929-30:
	Cents	Cents	Cents	Cents
Sept. 6	139	150	163	154
Dec. 6	134	158	163	141
Jan. 10	134	160	165	150
Jan. 31	140	155	166	142
Feb. 28	142	149	169	142
Mar. 31	145	166	167	141
Apr. 15	145	172	167	142
Apr. 25	147	180	165	135
May 6	146	186	165	128
May 20	143	189	162	140
June 6	138	202	165	138
June 20	140	196	162	142
July 4	159	188	1/169	1/148

1/ July 3.

Wheat: Price spread per bushel between Chicago and specified European cities 1/

Date	BERLIN	PARIS	VIENNA	HUNGARY
	"Markischer" wheat spot	Domestic wheat nearest month	"Vienna Boden" wheat spot	"Tisza" wheat 79/80 kg spot
	:1928-29:	:1929-30:	:1928-29:	:1929-30:
	:1929-30:	:1929-30:	:1929-30:	:1929-30:
	Cents	Cents	Cents	Cents
Sept. 6	+ 30	+ 18	+ 54	+ 22
Dec. 6	+ 19	+ 31	+ 48	+ 23
Jan. 10	+ 18	+ 31	+ 48	+ 21
Jan. 31	+ 16	+ 40	+ 44	+ 26
Feb. 28	+ 19	+ 39	+ 46	+ 32
Mar. 31	+ 28	+ 57	+ 40	+ 33
Apr. 15	+ 23	+ 64	+ 44	+ 34
Apr. 25	+ 33	+ 77	+ 51	+ 31
May 6	+ 34	+ 86	+ 54	+ 28
May 20	+ 41	+ 84	+ 57	+ 35
June 6	+ 31	+ 96	+ 59	+ 32
June 20	+ 31	+100	+ 50	+ 46
July 4	+ 39	+ 97	+ 54	+ 56

1/ Above (+) or below (-) Chicago.

The continued slow rate of importation into most European countries, and the small overseas shipments for some time past, indicate that the deficit on the Continent during the season 1929-30 will prove to be slightly smaller than hitherto anticipated - possibly 7,000,000 bushels below estimates at the end of May. Actual imports of the Continent for the season now promise to reach only about 250,000,000 bushels as compared with 390,500,000 bushels in 1928-29.

The indicated decrease of about 140,000,000 bushels in Continental imports this year is explained to the extent of some 22,000,000 bushels by the increase in production on the Continent, unless crops were underestimated. Assuming that they were not, the balance of 118,000,000 bushels was accounted for by decreased human and animal consumption and by the fact that there was a reduction instead of an increase in stocks. The latter is undoubtedly by far the most important factor. Analysis of production and trade figures and such stock statistics as are available, as well as trade opinion on the subject, indicates that about 83,000,000 bushels of the decrease in imports is due to changes in stocks. Of this amount, about 55,000,000 bushels represents the apparent decrease in stocks as of July 1, 1930, compared with July 1 last year, and about 28,000,000 bushels the extent to which last season's imports went to increase stocks as of July 1, 1929 in comparison with the previous July.

Changes in stocks, at best, are difficult to estimate, but it appears from study of the crop outturns, imports and exports, past disappearance, scattered stock figures, and trade reports, checked by private information from numerous correspondents in the grain trade, that stocks in practically all countries except France, and possibly Poland, are indicated to be exceptionally low as the season ends. The reduction in the Danube is particularly striking. Exports from the Danube this season have exceeded expectations based on the crop by an amount possible only through withdrawal from stocks carried over, which were important a year ago, and through substitution of corn for wheat in home consumption to some extent.

It also appears that allowance must be made in the stocks calculations for an increase during the 1928-29 season in the deficit countries of about 18,000,000 bushels at the end of the year. Imports were generally large during the last months of the season, and trade information that stocks were important, and even large, has been received from several countries, notably Italy. It is also believed that the carryover in the Danube on July 1, 1929 was around 10,000,000 bushels greater than a year earlier.

The remaining 35,000,000 bushels unaccounted for in the decrease in imports this season, can apparently be charged to reduced consumption of wheat by humans and livestock. Authorities on the grain trade in various parts of Europe have stated repeatedly that plentiful and cheap vegetables, rye and corn have cut down wheat requirements, and that feeding of wheat has been curtailed by cheap prices of feed-grains and the fact that the wheat crop was of exceptional quality.

The reduction of wheat stocks in the deficit countries applies equally to both domestic and imported grain, according to all reports. Recent increases in supplies at Antwerp and Rotterdam are only due to more or less temporary quietness in German demand. There is little reason to expect the present generally small port stocks to rise in the immediate future, with shipments from overseas continuing so small. It appears that Continental imports from May 15 to June 30 will average only about 4,600,000 bushels weekly as compared with 9,000,000 bushels during the same period. Imports from July 1, 1929 to May 15 amounted to about 4,800,000 bushels per week against 7,200,000 bushels during the same period last year.

Wheat: Stocks at certain continental European points

Date	Antwerp	Rotterdam	Hamburg <u>1/</u>	Berlin	Hungarian warehouses
1929-30	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Oct. 31.....	3,800	2,800	-	710	4,800
Jan. 15.....	1,500	1,300	1,100	710	4,200
Jan. 31.....	880	1,200	1,100	880	4,000
Feb. 15.....	-	1,300	1,800	-	3,700
Feb. 28.....	960	1,400	1,800	1,000	3,500
Mar. 15.....	2,000	1,500	1,500	-	3,000
Mar. 31.....	1,500	480	1,700	920	2,600
Apr. 15.....	-	660	1,100	-	2,000
Apr. 30.....	1,500	290	920	880	1,700
May 15.....	1,200	170	620	-	1,200
May 31.....	680	550	290	550	740
June 15.....	890	800	260	-	510
June 30.....	-	700	220	220	400

1/ Rough estimate.Wheat: Average weekly net imports into
the Continent of Europe

Season	1928-29	1929-30
	<u>1,000 bushels</u>	<u>1,000 bushels</u>
Estimate July 1 - June 30	7,496	4,777
July 1 - Dec. 15	7,532	4,189
Dec. 15 - Jan. 15	7,716	6,430
Jan. 15 - Feb. 15	4,997	4,005
Feb. 15 - Mar. 15	4,446	2,352
Mar. 15 - Apr. 15	10,950	7,018
Apr. 15 - May 15	8,635	4,960
Estimate May 15 - June 30	9,039	4,630

Germany

The wheat market was characterized during June by rather sharply rising prices for domestic grain in relation to overseas quotations, a development apparently based upon the reduction of stocks of domestic grain to a point where millers were having difficulty, or expecting difficulty, in securing wheat to meet the 50 per cent milling regulation. For a time, so little native wheat was offered in Berlin that it was not officially quoted. The market relaxed again following the Government's entertainment of proposals for revision of the milling regulations, and its eventual reduction of the percentage for domestic wheat to 30 per cent, effective July 1.

Import demand for wheat has remained restricted since the final increase in the tariff on April 26, but port arrivals are showing some increase in recent weeks. It is hard to see how somewhat larger takings can be avoided in the next two months, but buyers can be expected to take as little as possible as long as prices remain weak and uncertain. The uncertainty about the Government's grain policy with the new crop is also causing buyers to exercise caution. These tactics mean, however, that all stocks will be reduced to a minimum at the end of July or mid-August when the new domestic crop comes on the market. It is even possible that the 30 per cent milling percentage may have to be revised before the new crop is available.

Germany: Price per bushel of domestic wheat and
rye, April 9 - July 2, 1930

Date	Wheat			Rye
	Hamburg <u>1/</u>	Breslau <u>2/</u>	Berlin <u>3/</u>	Berlin <u>4/</u>
	Cents	Cents	Cents	Cents
Apr. 9	182	167	171	100
16	180	167	173	101
23	189	175	178	101
30	193	178	185	100
May 7	194	180	185	98
14	192	178	183	99
21	195	180	188	105
28	200	185	193	105
June 4	209	194	199	106
11	215	194	-	106
18	210	193	-	106
25	203	185	190	106
July 2	200	180	186	106

1/ Wheat of any German district of at least 58.7 pounds per Winchester bushel.

2/ Wheat of any German district in carloads of 370 bushels of at least 58.7 pounds per Winchester bushel.

3/ "Markischer" wheat of 59-60 pounds per Winchester bushel.

4/ "Markischer" rye of at least 56 pounds per Winchester bushel.

France

The French wheat market in June was largely under the influence of domestic crop reports. Closing the month of May on a tone as a result of the unfavorable weather, the market weakened again the first week of June when better growing conditions appeared, but since the 10th has again strengthened. The return of the unusually rainy weather France has experienced this spring has now apparently destroyed all hope for a good crop, and it seems probable that not more than average yields will be obtained. Good weather is needed to prevent further deterioration in both yields and quality. Serious lodging from numerous heavy thunderstorms is reported, in addition to unfavorable development of the grain itself. Present conditions do not seem to promise a crop of more than 257,000,000 bushels as below average returns are expected in some sections of the country.

Recent reports state that French farmers are now offering very little wheat, partly for reasons of reduced stocks and partly in expectation of higher prices. Since the firmer development of the home market, French wheat has been less in evidence on the markets of neighboring countries, and is not expected to be much of a factor hereafter unless crop prospects take a much more favorable turn than now expected.

Italy

Following active business at the close of May and early in June, the Italian wheat market has been comparatively quiet since the raising of the duty from 73.5 to 86.7 cents per bushel on June 5. The chief business has consisted of purchases for later delivery, the volume of which was not unimportant. The end of June has also brought some pick-up with overseas prices reaching new low levels.

Wheat imports in May showed a further increase after the longer period of much reduced takings, amounting to 7,000,000 bushels compared with about 5,500,000 in April and 9,900,000 bushels in May last year. With total imports for the period July 1, 1929 to May 30 amounting to 34,000,000 bushels, it appears, however, that takings for the year ending June 30 will reach only 40,000,000 bushels or a little over, as compared with 92,000,000 bushels last season. Italy has come through the season on such small imports due to an exceptional crop, reduction of stocks carried over, and some curtailment of wheat consumption, probably in favor of corn, which is an important item of food in Italy.

On the basis of present reports, Italy promises to have unusually large wheat import requirements in 1930-31, as she goes into the new year with a very small carryover, a comparatively small wheat crop in prospect, and with the corn acreage reported as only about 70 per cent of last year's. The wheat crop has been a great disappointment, after giving exceptional promise through April. May brought an extremely unfavorable turn in weather that lasted most of the month, to be followed in June by additional damaging thunderstorms over large areas of the country. Trade reports indicate further deterioration in the outlook since the official estimate of 220,000,000 bushels early in June. As nearly as can be judged from available information, a crop of 200,000,000 or 210,000,000 bushels is about all that can be expected, though such an estimate is to be regarded as subject to revision, probably in the near future. Damage to the crop is reported

from most parts of the country, north as well as south, and it appears that durum prospects have been definitely affected. An estimate of 15 per cent below last year has been heard, but this figure is probably conservative, particularly when quality is considered.

Netherlands and Belgium

Wheat markets in Holland and Belgium were active and firm at the end of May and early June, but thereafter were very quiet, with prices tending to decline in sympathy with world market developments. Sales during the month were confined largely to small quantities of first class overseas wheat for flour mills of western Germany, but June has seen a considerable increase in grain movements from Holland to Germany via the Rhine, doubtless as a result of earlier sales. At the very close of the month, a good revival of buying is indicated as prices have reached new low levels.

The port stocks at Antwerp and Rotterdam increased slightly from May 31 to June 15, but are still small. Trade reports state that there is no carryover of domestic wheat in Holland or Belgium, and stocks of foreign grain are definitely much reduced.

Danube basin

Wheat markets in the Danube surplus countries, and in Austria and Czechoslovakia in the Upper Danubian Basin, have been very quiet since the 10th of June, following a brisk and firm market in the first part of the month. Nevertheless, prices have been well maintained as compared with overseas during this period with the spread becoming much wider, i.e., more favorable for imports from overseas.

Wheat: Price per bushel, 79/80 kg. spot, at Vienna on specified dates, 1929-30

Date	Price at Vienna	Above (+) or below (-) Chicago futures, nearest month 1/
	Cents	Cents
Sept. 6	126.14	- 5.86
Dec. 6	129.50	+ 3.36
Jan. 10	128.84	+ 0.09
Jan. 31	132.88	+ 8.75
Feb. 28	131.92	+20.30
Mar. 31	122.78	+13.90
Apr. 11	124.70	+16.82
Apr. 25	124.70	+20.82
May 6	124.70	+24.40
May 20	123.74	+19.49
May 26	126.62	+21.87
June 20	132.37	+36.04

1/ Chicago prices for the preceding day.

Reports indicate that both Austria and Czechoslovakia have increased wheat imports to a considerable extent in the past two months, Austria partly in anticipation of a possible tariff increase, but Czechoslovakia probably more because of approaching exhaustion of supplies. May wheat imports of Czechoslovakia were larger than in May last year. Austrian takings are indicated to have been sufficient in the past two months to raise stocks of foreign grain to a point where they should be described as fairly important rather than low.

The surplus countries at the same time have continued to find wheat for export but with indications that such shipments are reducing stocks to exceptionally low levels, especially in Hungary and Yugoslavia. Rumania has shipped some wheat as the season closes but the amount has been relatively small, though the carryover is probably not quite so small as in the other countries.

Wheat and wheat flour: Danube shipments to European countries 1/

Four week period 2/	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30
	1,000	1,000	1,000	1,000	1,000	1,000
	bushels	bushels	bushels	bushels	bushels	bushels
Aug. 1-29	1,029	367	808	294	73	698
Aug. 30-Sept. 26	294	845	845	1,323	257	3,013
Sept. 27-Oct. 24	294	772	1,580	808	588	3,821
Oct. 25-Nov. 21	110	220	1,800	331	625	3,160
Nov. 22-Dec. 19	73	441	478	404	184	3,160
Dec. 20-Jan. 16	37	919	551	147	184	808
Jan. 17-Feb. 13	37	882	404	110	0	478
Feb. 14-Mar. 13	0	955	184	147	110	661
Mar. 14-Apr. 17						
<u>3/</u>	0	404	147	147	147	992
Apr. 18-May 22						
<u>3/</u>	0	1,029	184	37	367	661
May 22-June 19	0	2,094	294	0	37	478
Aug. 1-June 19	1,874	8,928	7,275	3,748	2,572	17,930

1/ Shipment down the Danube.

2/ For 1929-30. Other years nearest comparable period.

3/ Five week.

Agricultural relief measures in the Danubian countries should be watched. In Hungary, the parliament is considering legislation involving some new and unusual features for raising farmers' returns. It is contemplated making it compulsory for processors of grain to buy certificates from the tax offices which will be given to the farmer for his wheat in addition to the prevailing market price, the coupon to be used by the farmer in payment of his taxes. If the processor exports grain purchased he receives back the value of his certificate. The system, therefore, does not influence the price paid for grain exported and only raises the price for grain and grain products when consumed in Hungary. This proposed legislation also contains a number of other features. Rumania has just abolished the export duty on all grains, a measure which can be interpreted as favorable for increased exports whenever crops permit, as seems likely to be the case this year. Yugoslavia and Rumania have also set up export institutes to facilitate and encourage agricultural exports. It is also reported, confidentially, that discussion of a Danube grain pool by these and the Hungarian Institute is now going on.

Wheat: United States production, exports and prices, by classes, 1923-24 to 1929-30

Year beginning July	Production 1/						
	Hard red spring	Hard red winter	Durum	Hard red winter	Soft red winter	White	Total
	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels
1923	127	43.3	55	241	272	102	797
1924	192	37.4	66	365	189	52	864
1925	156	41.7	65	206	170	80	677
1926	121	39.7	48	360	229	73	831
1927	202	41.1	83	317	181	95	878
1928	203	50.2	102	385	139	86	915
1929	1473	40.0	56.58	344	1886	78	806
1930	1571	39.0	60.59	340	175	81	807

Exports 2/							
Year	Hard red spring	Hard red winter	Durum	Hard red winter	Soft red winter	White	Total
	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels
1923	2	19	27	11	20	79	79
1924	21	34	121	8	11	195	195
1925	5	27	10	2	19	63	63
1926	2	22	73	31	28	156	156
1927	6	31	65	14	30	146	146
1928	2	45	38	3	15	103	103
1929	2	12	55	3	18	90	90

Year beginning July	Price 3/			
	No. 1 dark northern spring Minneapolis	No. 2 amber durum Minneapolis	No. 2 hard winter Kansas City	No. 2 red winter St. Louis
	Cents	Cents	Cents	Cents
1923	124	106	105	107
1924	158	156	135	150
1925	165	144	163	169
1926	151	155	135	138
1927	141	132	135	149
1928	126	113	112	139
1929	129	119	120	130

1/ Estimates of production by classes are based on surveys made in 1920, 1923 and 1924 of the percentage of different varieties of wheat grown, supplemented by investigations and judgment of cereal specialists. All estimates are the result of applying percentages for each State to the production of each State as estimated by the Division of Crop Estimates save that durum estimates of four States are used directly. As there are changes from year to year in the relative amounts of the varieties of wheat grown and also changes in the relative yields per acre, these figures should be considered to be only rough approximations. 2/ Total as reported by the Department of Commerce. Distribution by classes made on basis of United States inspections for export by ports and inspections of United States wheat in the Eastern Division of Canada. 3/ Compiled by Division of Statistical and Historical Research. Prices are average cash price per bushel weighted by car-lot sales.

Wheat: Production in specified countries, average, 1909-1913,
1923-1927, annual 1928-1930

Country	Average : 1909- 1913	Average : 1923- 1927	1928	1929	1930 as of July 16
NORTH AMERICA					
United States	690,108	809,668	914,876	805,790	807,265
Canada	197,119	403,714	566,726	299,520	
Mexico.....	1/ 11,481	11,090	11,031	11,333	11,572
Guatemala.....	(200)	201	167	152	
Total.....	898,908	1,224,673	1,492,800	1,116,795	
EUROPE					
England and Wales.....	55,770	52,057	47,264	47,451	
Scotland.....	2,273	2,137	2,315	2,165	
Northern Ireland.....	287	191	183	142	
Irish Free State.....	1,310	1,111	1,186	1,184	
Norway.....	306	552	798	729	
Sweden.....	8,103	11,727	19,155	19,031	
Denmark.....	6,322	8,529	12,214	11,772	
Netherlands.....	4,976	5,646	7,336	5,467	7,165
Belgium.....	15,199	13,988	17,215	13,225	2/ 15,873
Luxemburg.....	615	498	713	305	
France.....	325,644	278,997	281,285	319,863	
Spain.....	130,446	146,581	119,685	154,249	160,568
Portugal.....	3/ 11,850	11,250	7,546	11,110	
Italy.....	184,393	210,456	228,598	260,659	220,000
Malta.....	196	279	289	293	
Switzerland.....	3,314	3,736	4,270	5,791	
Germany.....	131,274	105,962	141,593	123,073	
Austria.....	12,813	9,890	12,915	11,582	
Czechoslovakia.....	37,879	37,821	51,499	52,902	
Hungary.....	71,493	68,558	99,211	74,985	69,335
Yugoslavia.....	62,024	65,096	103,294	94,999	
Greece.....	3/ 16,273	10,620	13,085	8,502	
Bulgaria.....	37,823	34,771	49,153	34,418	53,682
Rumania.....	1/ 158,672	96,980	115,544	101,200	123,715
Poland.....	61,665	53,967	59,219	65,862	
Lithuania.....	3,264	4,204	6,327	9,329	
Latvia.....	1,475	1,977	2,499	2,336	
Estonia.....	354	799	1,037	1,268	
Finland.....	137	879	998	1,095	1,139
Total.....	1,346,160	1,239,289	1,406,626	1,435,027	
AFRICA					
Morocco.....	(17,000)	22,693	24,749	26,885	19,478
Algeria.....	35,161	27,542	30,302	33,307	29,174
Tunis.....	6,224	9,627	12,125	12,309	9,002
Egypt.....	33,662	38,513	37,296	45,223	
Total.....	92,047	98,375	104,472	117,729	

Continued

Wheat: Production in specified countries, average 1909-1913,
1923-1927, annual 1928-1930.- Continued

Country	Average 1909- 1913	Average 1923- 1927	1928	1929	1930 as of July 16
ASIA	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>
India	351,841:	344,729:	290,864:	317,595:	386,848
Syria and Lebanon....	(4,000)	13,115:	6,490:	16,343:	
Japan	23,635:	27,521:	30,812:	30,495:	
Chosen.....	6,898:	9,736:	8,595:	8,320:	8,878
Total.....	<u>386,374:</u>	<u>395,101:</u>	<u>336,761:</u>	<u>372,753:</u>	
Total N.Hemisphere	<u>2,723,489:</u>	<u>2,957,438:</u>	<u>3,340,659:</u>	<u>3,042,304:</u>	
SOUTHERN HEMISPHERE					
Chile	20,062:	26,628:	29,679:	37,052:	
Argentina.....	147,059:	228,492:	507,362:	137,435:	
Union of South Africa ^{3/}	6,034:	7,307:	6,693:	10,273:	
Australia	90,497:	136,604:	159,679:	126,477:	
New Zealand	6,925:	6,347:	8,833:	7,100:	
Total	<u>270,577:</u>	<u>405,578:</u>	<u>512,246:</u>	<u>318,337:</u>	
Total, 46 countries:	<u>2,994,063:</u>	<u>3,362,816:</u>	<u>3,852,905:</u>	<u>3,360,641:</u>	
Est. world total..					
excl. Russia and					
China	3,041,000:	3,451,000:	3,975,000:	3,459,000:	
Russia	758,941:	672,678:	793,289:	738,908:	

1/ Four-year average.

2/ Winter only, about 99 per cent of the total crop.

3/ One year only.

Wheat including flour: Shipments from principal exporting regions, specified dates, 1929-30

Date	Argentina	Australia	Danube	North America
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Dec. 7	3,408	524	736	8,153
14	3,312	1,056	360	5,350
21	2,208	1,036	1,240	3,626
28	3,208	2,132	144	3,417
Jan. 4	1,512	1,180	200	4,868
11	2,316	1,772	328	5,678
18	2,580	2,072	144	6,230
25	4,216	2,728	80	5,619
Feb. 1	2,732	1,220	128	6,212
8	2,416	2,056	16	6,136
15	2,892	1,592	272	5,203
22	3,048	2,064	96	5,540
Mar. 1	3,028	2,260	0	3,050
8	2,680	2,304	96	5,746
15	2,284	1,484	496	5,641
22	1,516	1,248	360	3,602
29	2,412	1,696	376	5,870
Apr. 5	3,152	2,012	88	5,586
12	4,124	868	120	4,886
19	1,696	1,248	40	4,183
26	1,600	390	128	3,902
May 3	1,572	1,536	120	5,912
10	2,500	1,904	144	5,121
17	1,092	960	112	7,813
24	1,760	1,204	144	6,724
31	2,104	1,600	144	8,153
June 7	2,344	1,336	104	8,348
14	3,080	468	80	7,441
21	2,672	1,840	160	5,448
28	2,123	656	120	6,757
July 5	1,617	1,512	80	5,254
12	1,029	1,000	168	---

Compiled from official and trade sources.

Wheat: Weighted average cash price per bushel at stated markets, by weeks, 1928-29 and 1929-30 1/

Week ended	:All classes: No. 2 : No. 1 : No. 2 : No. 2 : Western and grades :hard winter:dk.n.spring:amber durum:red winter : white :six markets:Kansas City:Minneapolis:Minneapolis: St. Louis : Seattle 2/ : 1928-:1929-:1928-:1929-:1928-:1929-:1928-:1929-:1928-:1929-:1928-:1929- : 29: 30: 29: 30: 29: 30: 29: 30: 29: 30: 29: 30											
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
July 5	137	115	136	113	153	137	132	116	172	123	140	119
12	132	119	128	117	149	141	124	123	155	124	135	122
19	129	134	126	130	146	159	119	146	151	143	129	134
26	122	133	118	129	138	155	117	144	147	141	124	132
Aug. 2	118	135	114	131	141	156	115	144	144	140	125	134
9	108	124	105	121	127	139	103	127	134	131	118	130
16	108	125	105	124	125	139	108	130	137	129	113	128
23	108	128	104	122	123	141	109	131	137	134	112	128
30	110	123	106	120	122	134	109	127	144	130	113	125
Sept. 6	110	128	106	125	125	137	104	132	147	138	113	126
13	107	130	105	126	123	140	104	131	143	137	115	126
20	108	128	107	125	126	138	107	127	145	134	116	123
27	111	125	110	123	130	133	109	121	148	135	117	120
Oct. 4	107	126	110	124	125	135	109	127	145	133	118	120
11	109	128	111	125	124	137	113	131	149	136	120	122
18	105	125	109	121	121	134	108	131	147	132	120	120
25	105	119	107	117	119	127	115	122	138	128	117	118
Nov. 1	110	121	112	119	124	128	121	122	140	131	117	119
8	108	120	110	118	122	130	114	118	141	130	115	119
15	109	115	113	113	123	125	110	111	146	122	117	116
22	110	123	114	120	125	130	118	119	145	129	118	121
29	109	125	114	121	125	132	116	121	145	132	118	125
Dec. 6	109	130	113	125	124	138	117	128	143	138	116	128
13	107	122	111	120	121	130	107	124	141	132	117	124
20	107	120	111	118	123	128	110	119	137	132	118	122
27	106	123	110	122	120	132	109	122	135	135	116	124
Jan. 3	105	126	108	125	123	136	111	124	135	137	115	126
10	108	123	108	121	125	133	---	122	141	136	116	126
17	115	121	114	118	130	131	122	118	141	134	118	123
24	118	122	119	118	132	131	138	119	142	133	120	123
31	117	118	117	114	131	127	132	115	144	129	118	120
Feb. 7	117	117	117	112	134	125	132	111	139	123	118	116
14	119	119	118	113	136	126	129	112	141	127	121	117
21	120	115	120	112	139	125	130	104	145	121	122	112
28	117	114	118	112	136	125	126	100	138	118	121	107

Continued

Wheat: Wighted average cash price per bushel at stated markets, - contd.
by weeks, 1928-29 and 1929-30 1/ - Continued

Week ended	:All classes: No. 2 : No. 1 : No. 2 : -No. 2 : Western :and grades :hard winter:dk.n.spring:amber durum:red winter : white :six markets:Kansas City:Minneapolis:Minneapolis: St. Louis : Seattle2/ :1928-:1929-:1928-:1929-:1928-:1929-:1928-:1929-:1928-:1929-:1928-:1929-											
	: 29:	: 30:	: 29:	: 30:	: 29:	: 30:	: 29:	: 30:	: 29:	: 30:	: 29:	: 30:
	:Cents:Cents:Cents:Cents:Cents:Cents:Cents:Cents:Cents:Cents:Cents:Cent											
Mar. 7	: 115	111	117	106	132	120	129	98	135	120	118	10
14	: 117	102	119	100	132	113	123	94	139	119	121	10
21	: 115	99	117	98	135	110	123	99	139	115	120	10
28	: 110	100	112	100	128	112	117	97	130	117	116	11
Apr. 4	: 109	103	110	102	129	114	---	101	130	120	117	11
11	: 112	108	114	107	130	118	118	103	130	120	117	11
18	: 112	102	113	101	133	113	---	98	128	117	118	11
25	: 107	99	107	98	125	109	119	94	122	114	116	10
May 2	: 107	99	107	97	128	110	112	96	118	113	115	10
9	: 101	97	104	96	123	108	113	94	122	111	110	10
16	: 103	101	103	98	124	110	109	98	118	115	109	10
23	: 101	102	100	100	121	111	114	99	116	115	108	10
30	: 95	102	94	102	112	110	102	99	110	115	104	10
June 6	: 100	103	98	101	118	111	114	98	111	113	108	10
13	: 103	100	102	98	120	110	125	95	121	108	108	10
20	: 104	92	102	90	123	102	109	88	121	101	111	9
27	: 110	87	109	84	130	98	112	85	127	93	116	9

1/ For early weeks of 1930-31 see page 11.

2/ Weekly average of daily cash quotations basis No. 1 sacked 30 days delivery.