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WORLD WHEAT PROSPECTS

The wheat crop of the Northern Hemisphere outside of Russia now being harvested is likely to be only slightly if any larger than that of the past season. Recent reports from Europe indicate that in many countries the outturn of the wheat crop is smaller and in many cases the quality of the grain is far below that of a year ago. North America is harvesting a larger crop of better quality than a year ago, but the increase in quantity and improvement in quality of the North American crop is probably more than offset by the reduction in quantity and quality of the European crop.

Russia is an important factor in the present situation. Reliable estimates of Russian production or probable exports are not available. Apparently southwestern Russia has a better crop than a year ago. Grain procurements to date are reported to be larger than for the corresponding period a year ago, but not equal to the amount planned for by the Government. Shipments of Russian wheat through the Black Sea ports after July 1 through the second week of September amounted to about 10 million bushels which exceeded the total shipments during the past season. In the 1926-27 season, however, Russia shipped 12 million bushels in the first four months of the season, and 49 millions for the entire season. One authority has estimated that Russian shipments for the present season may equal 48 million bushels.

A large world visible supply and large shipments of wheat from Canada are also important factors in depressing world prices. The large visible supplies are due in large part to large carryover of old wheat and to the early harvests and early marketings of new wheat in the United States and Canada. Receipts at markets in the United States are beginning to decline and Canadian receipts probably will reach a peak earlier in the season than usual. Consequently, the high point in the world's visible supply is likely to be reached earlier this year than last. The large exports of Canadian wheat are due to the harvesting of a larger crop to add to a large carry-over and to a weakening of the power of the Canadian producers to hold their wheat. Canadian wheat is being pressed upon the market as was the Argentine wheat a year ago.

The prospects for the Southern Hemisphere crop will begin to be the important factor in the market within the next two months. Average yields on the larger acreages seeded would result in an increase in production about sufficient to offset the reduction in the stocks of old wheat in Argentina and in Europe at the beginning of the season. The development of these crops will be watched closely during the next few weeks.

The world will use more wheat in the 1930-31 marketing season than in the past season. The reduction in the corn crop of the United States and the low price of wheat in relation to the price of corn will undoubtedly result in the feeding of a large amount of wheat. Europe also has a smaller supply of feed grains to feed more livestock. As a result it is likely that many of the southern European countries will consume less corn and more wheat for food and that the northern European countries will feed more rye and potatoes while they consume more wheat for food. The

requirements outside of Europe and the United States are likely to be about the same as in the past season.

Wheat prices appear to be low enough to stimulate the consumption of wheat both as food and feed where the price is a factor in consumption. The price of all classes and grades of wheat at six markets in the United States in August, for example, averaged only about 84 cents, as compared with about 127 cents in August, 1929, a decline of nearly 34 per cent in twelve months. In the meantime the all-commodity price level in the United States had declined only about 15 per cent. The world supply situation this season seems likely to be not very different from that of the past season, but record visible supplies in the face of continued restrictions upon imports by many of the European countries and uncertain business conditions tend to depress prices in the wheat markets of the world. Some relief from the present depression is likely to follow a turn in the business situation in some of the important producing countries and a reduction in the visible supplies of wheat. Some of the European countries probably will relax their import restrictions later in the season when domestic supplies have been reduced to a low level and domestic prices become relatively high.

In the United States the supply of wheat including carryover is larger than in recent years, but large amounts are being fed and exports are larger than last year. The feeding of wheat in the drought areas has resulted in some improvement in prices, particularly in the soft red winter wheat markets. The supply of soft red winter wheat east of the Rocky Mountains probably has been reduced already below domestic market requirements of this class of wheat. Considerable quantities of other classes of wheat may also have been used in feed mills as well as for feeding on the farm.

World wheat production

The Northern Hemisphere wheat production as reported by 30 countries totals 2,801 million bushels as compared with 2,645 million bushels in 1929 and 2,985 million in 1928. Conditions in other countries would indicate a total Northern Hemisphere crop excluding Russia and China of about 3,170 million bushels against 3,127 million bushels last year. The North American crop has been estimated at 1,234 million bushels which is 112 million greater than the harvest in 1929. During the past month the estimate of the United States crop has been revised upward 17 million bushels to 837,761,000 bushels. The first official estimate of the Canadian crop issued September 10 was 384,769,000 bushels against 304,520,000 bushels in 1929. The crop was favored by relative freedom from frost damage and by almost ideal weather for harvesting. The short straw and the extended use of the combines have helped to establish a new high record for earliness and volume of grain marketed during August. Inspections show the quality of the grain to be even above that of last year.

Table 1. - Wheat: Production, average 1909-1913, 1925-1927, annual 1928-1930

Countries reported in 1930 ^{1/}	Average 1909- 1913	Average 1923- 1927	1928	1929	1930	Percentage 1930 is of 1929
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	Per cent
United States.....	690,108	809,668	914,876	805,790	837,761	104.0
Canada.....	197,119	403,714	566,726	304,520	384,769	126.4
Mexico..... ^{2/}	11,481	11,090	11,031	11,333	11,274	99.5
Total North America (3).....	898,708	1,224,472	1,492,633	1,121,643	1,233,804	110.0
Europe (21) ^{3/}	995,391	936,373	1,094,523	1,086,254	1,081,245	99.5
North Africa (3)....	58,385	59,930	67,176	77,223	59,636	77.2
Asia (3).....	382,374	381,986	330,271	359,546	426,048	118.5
Total above coun- tries (30)..... ^{4/}	2,334,858	2,602,761	2,984,603	2,644,666	2,800,737	105.9
Estimated world tot- al excluding Russia and China.....	3,041,000	3,451,000	3,973,000	3,491,000		

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

^{2/} Four-year average.

^{3/} Does not include France where the crop has been reduced 100 million bushels or more. The official estimates of the Balkan countries which are included are probably too high.

^{4/} The Northern Hemisphere total exclusive of Russia probably will be about the same as in 1929.

Twenty-one European countries have issued estimates of production which total 1,081,245,000 bushels, which is less than one per cent below the 1,086,254,000 bushels estimated by the same countries last year. No official estimate of the French crop has been issued but a reduction of at least 100,000,000 bushels from last year is expected. Mr. Dawson of the Berlin office who made an inspection tour through the northern French wheat areas estimates the crop at 239,000,000 bushels and reports the crop to be much poorer quality than the 342,000,000 bushels harvested last year. A private estimate of 208 millions has been published recently. The latest Monthly Crop Report of the International Institute of Agriculture states that a reduction is anticipated in some of the preliminary estimates included in the above total as a result of the damage done after the date of the estimates. It therefore seems probable that the reduction in the 1930 European wheat crop excluding Russia may be somewhat more than the 100,000,000 bushels indicated by the above figures and the reduction of 140,000,000 bushels as estimated by Mr. Dawson or the 150,000,000 bushels estimated by a European trade paper are probably nearer correct. The quality of the crop in other countries as well as France appears to be much below last year. Weather conditions in Italy were similar to those prevailing in France and the quality of the crop is described as "the worst in years". Germany has reduced the weight of grain deliverable on the markets confirming the reports of lower quality in that country. Excessive rains also lowered the quality in Belgium, Netherlands and Denmark.

No estimate of the Russian crop has been received but a larger crop than last year has apparently been harvested. Rains late in August delayed harvesting in several regions and considerable quantities of unthreshed grain are reported to be lying on the fields in the southern regions. Procurements during July and August are reported to be more than 50 per cent greater than in the same period last year but below expectations.

Little change has been reported in either the North African or Asiatic crops during the past month.

Reports from the Southern Hemisphere continue much better than last year and prospects are favorable for good crops in both Argentina and Australia. Australia has seeded a record acreage estimated at 17,491,000 acres, nearly 25 per cent above last year. Some of this may be cut for hay or pastured. The International Institute of Agriculture cabled on September 17 that conditions in Victoria, South Australia and Western Australia are very promising with prospects for yields above average. In New South Wales minor damage was reported during August from frost and disease but otherwise the outlook is good. The acreage seeded in Argentina is estimated at 20,159,000 bushels which is 4 per cent above the area sown last year but below either of the two preceding years.

World trade

Wheat shipments from July 1 to September 13 from principal exporting countries were about the same as in the corresponding period of the past season. Shipments for Europe were larger but to non-European countries smaller than a year ago. The United States and Canada have exported 25 million bushels more and Argentina 39 million bushels less; Canada contributed most of the additional 25 million bushels. Increases from Russia, the Danube countries and British India made up the balance of the deficit from Argentina.

Table 2. - Wheat, including flour: Shipments from principal exporting countries

Country	: Total shipments : : or exports :		Shipments, weeks ending			: Total shipments or : exports from July 1 : to & incl. Sept. 13	
	: 1928-29 :	: 1929-30 : : 1/ :	: Aug. 30 :	: Sept. 6 :	: Sept. 13 :	: 1929-30 :	: 1930-31
	: bushels :	: bushels :	: bushels :	: bushels :	: bushels :	: bushels :	: bushels
North America 2/.....	: 499,942 :	: 301,342 :	: 10,340 :	: 8,212 :	: 10,063 :	: 69,832 :	: 94,125
Canada, 4 markets 3/.....	: 458,649 :	: 195,380 :	: 3,076 :	: 5,610 :	: 10,740 :	: 32,922 :	: 64,585
United States.....	: 163,687 :	: 149,822 :	: 7,325 :	: 3,974 :	: 3,875 :	: 39,202 :	: 44,083
Argentina.....	: 217,139 :	: 160,782 :	: 1,032 :	: 461 :	: 892 :	: 49,316 :	: 10,057
Australia.....	: 107,937 :	: 60,844 :	: 816 :	: 512 :	: 560 :	: 12,714 :	: 12,208
Russia.....	: 8 :	: 5,672 :	: 1,928 :	: 1,560 :	: 1,240 :	: 0 :	: 9,928
Danube & Bulgaria 4/.....	: 33,975 :	: 18,640 :	: 424 :	: 592 :	: 1,280 :	: 2,008 :	: 3,648
British India.....	: 5/5,687 :	: 4,171 :	: 384 :	: 360 :	: 72 :	: 1,383 :	: 4,760
Total 6/.....	: 864,688 :	: 551,451 :	: 14,924 :	: 11,697 :	: 14,107 :	: 135,253 :	: 134,726
Total European shipments 7/.....	: 705,396 :	: 490,448 :	: 13,912 :	: 13,184 :	: --- :	: 106,968 :	: 120,368
Total ex-European shipments 7/.....	: 220,664 :	: 141,904 :	: 2,160 :	: 1,192 :	: --- :	: 30,666 :	: 16,912

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/ Not 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.

The distribution of the crop in the present season, smaller supplies in Europe, and larger supplies in exporting countries, undoubtedly will cause the international trade to be greater than in the past season. The European deficit countries are likely to import about 600 million bushels, 100 millions more than in the past season and nearly as much as in the 1928-29 season. Non-European importing countries probably will take about the same amount as in the past season. Probably all of the principal exporting countries, including India and Russia, may participate in providing larger supplies for importing countries. Probably the increase in takings of importing countries will come mostly from Russia and Canada. The United States may contribute a supply somewhat larger than that of the past season unless demand for feeding in the United States becomes large enough to consume a very large part of the surplus of the United States.

Prices

Wheat prices have fallen to a low level throughout the world. The average farm price of wheat in the United States declined to 70.6 cents in July, then improved a little, increasing to 74 cents in August. The average of September farm prices may not be as high as in August. Prices of all classes and grades of wheat at six markets fell from 86 cents at the middle of August to 81 cents the first week in September and have remained at about that level during the past two weeks. In the second week of September the average was 49 cents below the corresponding week of a year ago.

The prices of each of the several classes and grades have fallen to a correspondingly low level. Soft red winter wheat prices are being held up to some extent by feeding demand. The Market News Service reported that in the week ended September 20 soft winter wheat at St. Louis brought premiums of 6 cents per bushel over the Chicago December futures price. No. 2 soft red winter wheat was quoted at Chicago at 88 cents against $83\frac{1}{2}$ for hard red winter. At St. Louis No. 1 soft red winter was quoted at 91 to 92 cents per bushel.

Minneapolis prices for red spring wheat appear to be above an export basis. No. 1 Northern spring at Minneapolis was quoted September 22 at 82 to 85 cents per bushel, which is higher than the prices for No. 1 Manitoba in Winnipeg and considerably higher than the price of No. 3 Manitoba with which this wheat is generally compared.

Hard winter wheat prices, on the other hand, have been on an export basis. Comparing No. 2 hard winter wheat in Kansas City with the price of parcels in Liverpool, it may be noted that in July the Kansas City price averaged about 26 cents below Liverpool and in August 27 cents. This margin is wider and more favorable to exports than a year ago when the margins were 16 to 19 cents.

It is interesting to note the shifts in the relations between some of the most important world markets. The margin between Liverpool and Winnipeg is much wider than a year ago, whereas that between Liverpool and Buenos Aires is much narrower. In August Rosafe wheat averaged only 11 cents below the price of No. 3 Northern Manitoba in Liverpool, whereas a year ago it averaged 30 cents below. Rosafe averaged 3 cents above No. 2 hard winter at Liverpool; a year ago 4 cents under the same wheat. These shifts in price relationships show very clearly that the position of any one market in relation to other markets is determined in some measure by the amount of wheat available for export from the country in which the market is located. The Argentine supply is short, whereas the Canadian supply is abundant, and the Canadian producers must sell. Consequently the price of Canadian wheat moves down to a basis that will induce foreign buyers to take larger amounts of the Canadian wheat.

WH-53

Table 3.- Wheat: Closing prices of December futures at specified markets

Date	Chicago		Kansas City		Minneapolis		Winnipeg		Liverpool		Buenos Aires 1/	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Aug. 7:	143	102	136	94	141	99	152	105	148	115	2/119	2/100
14:	144	95	137	88	142	93	154	96	149	107	3/122	2/96
21:	140	95	134	86	139	91	153	94	146	106	3/121	3/94
28:	142	91	135	85	140	88	153	89	145	103	3/118	3/93
Sept. 4:	140	87	134	81	140	85	151	85	148	99	3/123	3/87
11:	144	87	137	81	145	85	150	85	149	97	3/122	3/86
18:	139	87	133	81	140	85	151	82	144	96	3/118	4/82
25:	137		131		141		148		138		3/113	
Oct. 2:	133		126		137		142		138		3/114	
9:	135		130		137		148		141		4/126	

1/ Prices are of day previous to other prices.
 2/ September futures. 3/ October futures. 4/ February futures.

Table 4.- 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	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Aug. 1:	135	81	131	78	156	92	144	86	140	87	134	88
8:	124	84	121	80	139	95	127	93	131	88	130	92
15:	125	86	124	83	139	93	120	89	129	92	128	92
22:	128	84	122	80	141	91	131	85	134	90	128	89
29:	123	84	120	83	134	91	127	86	130	94	125	86
Sept. 5:	128	81	125	79	137	88	132	82	138	89	126	81
12:	130	81	126	80	140	90	131	79	137	90	126	80
19:	128		125		138		127		134		123	
26:	125		123		133		121		135		120	
Oct. 3:	126		124		135		127		133		121	

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

WH-53

Table 5.- Wheat: Price per bushel at important world markets, January-August, 1929 and 1930

Month	: Liverpool :		: Winnipeg ^{2/} :		: United :		: Buenos	
	: Parcels ^{1/} :		: States ^{3/} :		: Aires ^{4/} :			
	: 1929:	: 1930:	: 1929:	: 1930:	: 1929:	: 1930:	: 1929:	: 1930
	: Cents:	: Cents:	: Cents:	: Cents:	: Cents:	: Cents:	: Cents:	: Cents:
Jan.	131	140	112	123	114	119	109	119
Feb.	135	124	120	110	118	113	112	107
Mar.	131	119	119	100	116	102	112	100
Apr.	125	120	115	103	110	101	108	106
May	116	114	107	104	101	99	100	103
June	117	110	112	98	105	89	97	100
July	141	106	152	90	125	80	120	94
1st week..	133	107	129	91	113	82	106	93
2nd week ..	133	106	136	89	117	81	113	92
3rd week ..	141	106	160	90	130	79	119	95
4th week ..	147	108	163	93	129	81	126	95
5th week ..	148	105	167	88	131	78	127	94
Aug.	142	108	152	88	123	81	120	95
1st week ..	144	105	152	93	121	80	122	94
2nd week ..	139	112	151	91	124	83	119	98
3rd week ..	143	110	144	86	122	80	123	95
4th week ..	138	104	146	83	120	83	117	93

- ^{1/} Average of all parcels; from Broomhall's Daily Corn Trade News.
- ^{2/} No. 3 Northern Manitoba.
- ^{3/} No. 2 Hard Winter, Kansas City.
- ^{4/} Early Delivery futures; from the New York Journal of Commerce.

Table 6.- Wheat: Liverpool parcels price per bushel by classes

Month and Week	: No. 3 Northern :		: No. 2 Hard :		: Rosafe	
	: Manitoba :		: Winter :		: (62½ lbs)	
	: 1929 :	: 1930 :	: 1929 :	: 1930 :	: 1929 :	: 1930 :
	: Cents :	: Cents :	: Cents :	: Cents :	: Cents :	: Cents :
July (average)...	164	109	143	103	140	103
1st week...	141	109	132	103	127	103
2nd " ...	153	108	135	103	133	102
3rd " ...	164	107	145	102	142	104
4th " ...	180	109	149	104	147	104
5th " ...	184	105	153	103	149	105
Aug. (average)...	170	119	144	105	140	108
1st week ..	179	110	147	106	143	108
2nd " ..	168	115	141	108	139	111
3rd " ..	168	102	146	104	142	107
4th " ..	164	102	140	103	136	105
Sept.	:	:	:	:	:	:
1st week ..	163	:	142	:	138	:

Broomhall's Daily Corn Trade News.

The United States

The September increase in spring wheat forecasts added to the carry-over and previous estimates indicates a supply of domestic wheat of about 1,113 million bushels of wheat for the United States in the 1930-31 marketing season. The crop has moved to market at a rapid rate and the visible supply is very large, exceeding that of the corresponding dates last year. A shortage of feed grains, however, is increasing the demand for wheat in the United States.

Feeding wheat

Farm prices of wheat and corn are such as to encourage a great increase in the feeding of wheat. Prices reported as of August 15 indicated that in all States excepting Georgia and South Carolina the price of wheat per bushel was below the price of corn. The average for the United States was, wheat 74 cents and corn 90 cents. Since the feeding value of a bushel of wheat is greater than that of a bushel of corn it is obvious that this price disparity will encourage wheat feeding.

Data are not available to indicate accurately the amount of wheat fed to livestock in the past seasons. In the past 5 years the amount of wheat remaining after exports, carryover and mill grindings were accounted for, averaged 43 million bushels. This figure includes wheat fed, lost, wasted and variations in accuracy of estimates. The Food Research Institute has calculated similar figures for earlier years. In the 1901-2 season the figure was 92 millions, in 1913-14, 65 millions, and in 1923-24, 142 millions ^{1/}. Undoubtedly a large part of the variation of these figures is due to variation in feeding. Feed shortage for the present season is greater and wheat is relatively cheaper than in any of the previous seasons noted.

Should the September forecast and estimates of production be born out the feed grain supply for the 1930-31 season would amount to about 89 million tons compared with 105 last year and 108.5 for the 5-year average, 1924-28. About 500 million bushels of wheat would be required to make up for the reduction from the average consumption (1924-28) of corn, oats, barley and the grain sorghums, to say nothing of the shortage of hay and pastures.

^{1/}

Wheat Studies of the Food Research Institute - Vol. IV, No. 4.

Wheat consumption

The annual consumption of wheat by mills in the United States is fairly constant. During the past five years mill grindings have ranged from 547 to 569 million bushels. In the past four years grindings have ranged from 566 to 569 million bushels. The grindings of about 3 million bushels are required for Alaska, Hawaii and Porto Rico, and grindings of 61 millions for exports. The annual consumption of ground wheat in the Continental United States in the past five years has averaged about 502 million bushels, or 4.2 bushels per capita. The disappearance of flour in terms of wheat in the past season was only 499 million bushels or 4.1 bushels per capita.

The requirements of the United States for food and seed during the coming year seem likely to be about 585 million bushels. The disappearance for feed, loss, waste and variations in estimates from the actual outturn has averaged about 43 million bushels in the past five years. This would establish the normal requirements for the United States at about 628 million bushels, and undoubtedly wheat feeding will be much larger than normal in the 1930-31 season.

It would be difficult to forecast definitely how the remaining supply of wheat in the United States would be utilized. A considerable quantity must be carried over at the end of each year to supply the mills while the new wheat is moving to the mills and being conditioned for grinding. The smallest carryover in recent years was 99 million bushels following a short crop. A normal carryover for a moderate sized crop following a moderate carryover would seem to be about 125 to 130 million bushels.

The United States has a fairly constant export flour trade, part of which is supplied by the grinding of wheat imported in bond, but a large part of which is from domestic wheat. As indicated above, it requires about 60 million bushels to produce the export flour. A considerable amount of grain has already moved into export. In fact, the shipments of wheat and flour from July 1 through the week ending September 13 total 44 million bushels, 5 millions in excess of the exports in the corresponding period of the past season. Prices in the United States are low enough in relation to European markets to encourage exports. The net exports of wheat including flour from the United States in the past season amounted to 140 million bushels. Since the world supply is not likely to be very different from that of the past season and Europe will require more wheat, the United States may be called upon to contribute more than in the past season, unless the domestic demand raises the price in relation to foreign market prices so high as to check exports.

Table 7.-Wheat flour: Supply, distribution and per capita consumption in the United States, in terms of wheat, 1925-1930

Item	Year beginning July 1					
	1925- 26	1926- 27	1927- 28	1928- 29	1929- 30	1930- 31
	Million: bushels	Million: bushels	Million: bushels	Million: bushels	Million: bushels	Million: bushels
Supply	:	:	:	:	:	:
Stocks July 1 ^{1/}	:	:	:	:	:	:
Held by mills ^{2/}	17	16	18	18	19	18
Visible supply	9	10	9	9	13	20
Mill grindings	:	:	:	:	:	:
Commercial mills ^{3/}	557	556	558	567 ⁸	559	535
Custom and small mills	10	10	10	10	10	10
Imports	4 ^{4/}	4 ^{4/}	4 ^{4/}	4 ^{4/}	4 ^{4/}	4 ^{4/}
Total supply	573	592	595	604 ⁵	601 ⁴	583
Accounted for	:	:	:	:	:	:
Shipments to Alaska:	:	:	:	:	:	:
Hawaii, Porto Rico:	3	3	3	3	3	3
Exports	45	63	60	61 ^v	61 ^v	55
Stocks, June 30	:	:	:	:	:	:
Held by mills ^{2/}	16	18	18	19	18	14
Visible supply	10	9	9	13	20	7
Total accounted for	74	93	90	96	102	79
Balance available for consumption	499	499	505	508 ⁹	499 ⁵⁰²	504
Population Jan. 1, (millions)	116.3	117.9	119.3	(120.8)	(122.7)	:
Disappearance per capita (bushels)	4.29	4.23	4.23	4.21	4.07	:

^{1/} Estimates of flour stocks in all positions as reported by H. L. Russell, converted to bushels on the basis of 4.7 bushels to the barrel, as of July 1 in million bushels, are as follows: 1925, 28; 1926, 31; 1927, 29; 1928, 29; 1929, 38; 1930, 44.

^{2/} Census Bureau, Dept. of Commerce, raised to 100 per cent, based on the Biennial Censuses of 1923, 1925 and 1927.

^{3/} Includes small amounts of wheat ground, for purposes other than flour.

^{4/} Less than 500,000 bushels.

1931 2.82 9.68 47
 95
 -13-
 3 75

Movement of crop during July and August 95)

Receipts of wheat at 14 principal markets during July 1930 were heavier than for the same month for either 1928 or 1929 but for August 1930 receipts were lighter than for August 1929. The slowing up in marketing which started in August has been due in large part to low prices and the decreases in the condition of the spring wheat crop. Although there probably is more wheat on farms now than at this time last year, there may be less wheat to go to market during the remainder of the year. Relatively low prices of wheat with respect to prices of corn and other feed grains may cause many farmers to feed much of their wheat. There is evidence to indicate that much of the wheat being held on farms is located in sections in or near livestock feeding areas, therefore much of this wheat may never appear in the United States visible supply.

Shipments of wheat from these same markets for July and August have been considerably smaller than for these months last year and only slightly above shipments for the corresponding period 1928. With heavier receipts and smaller shipments more wheat has been held in store at these markets than last year. An increase in storage capacity during the year of about 40 million bushels has enabled these markets to handle this additional wheat without congestion or any serious discount in cash prices.

Receipts at Gulf ports have also been heavier this year than for July and August of either of the previous two years but exports have kept pace with receipts. Total exports of wheat for July and August 1930 were about 5 million bushels above exports for these months last year and 11 million above July and August 1928.

Table 8.- Wheat: July and August receipts at specified markets
 1928 - 1929 - 1930

Market	Receipts of wheat					
	1928		1929		1930	
	July	Aug.	July	Aug.	July	Aug.
	bushels	bushels	bushels	bushels	bushels	bushels
Chicago	3,469	11,065	8,078	13,502	11,854	6,405
Sioux City	396	667	362	628	673	603
Milwaukee	1,880	1,280	2,496	2,770	1,521	1,153
Minneapolis.....	4,892	12,257	8,473	22,901	5,290	20,092
Duluth	1,663	5,235	5,970	16,083	2,663	13,779
St. Louis	9,463	10,458	8,603	7,757	13,490	8,962
Toledo	764	2,342	2,055	3,094	3,408	1,815
Detroit	110	292	135	335	219	243
Kansas City ...	35,396	17,020	35,216	12,650	32,103	10,937
Peoria	234	587	269	552	659	266
Omaha	3,654	14,064	9,899	12,083	12,500	12,648
Indianapolis ..	225	966	1,505	2,023	2,409	661
St. Joseph	2,700	2,139	5,315	2,663	4,614	2,079
Wichita	13,387	2,641	10,839	4,182	9,855	3,280
Total	78,233	81,015	99,215	101,223	101,308	82,923

Compiled from daily receipts as published in the Chicago Daily Trade Bulletin

Table 9. - Wheat: Visible supply in the United States by weeks, 1929 and 1930.

Week ended on specified date, 1930, and the corresponding week in 1929	1929	1930
Week ended:	Million bushels	Million bushels
June 28	90	109
July 5	93	114
12	99	120
19	105	130
26	116	144
Aug. 2	136	162
9	156	173
16	172	184
23	179	195
30	186	201
Sept. 6	189	204
13	192	214
20	195	218
27	197	
Oct. 4	199	
11	201	
18	201	
25	203	
Nov. 1	202	
8	200	

Protein premium

Premiums paid for high protein in this year's crop of hard winter wheat have been relatively small because of the large supplies of wheat grading fairly high in protein.

During the five years 1925-1929 inclusive the highest protein premiums were paid in 1927 and 1928. It appears as though high premiums for protein in hard winter wheat have been paid when the supply of spring wheat (normally higher in protein than hard winter) was relatively small or the protein content of spring wheat was below average. The protein test of spring wheat of the 1927 and 1928 crops was below average. High protein premiums for hard winter wheat continued throughout the 1927-28 crop year and for the first few months of the 1928-29 year. The decline in premiums during the latter year in spite of the relatively low protein content of spring wheat can in all probability be traced to the larger supply of spring wheat for that year.

Owing to relatively high protein content of spring wheat and large carry-over for all wheat last year the premiums paid for high protein tended downward throughout the 1929-30 crop year. An exception to this tendency was wheat testing 13 per cent and above which commanded relatively high premiums during June 1930.

The spring wheat crop this year is estimated to be only slightly less than that of last year, the supply of spring wheat for milling purposes this year is probably larger than it was last. These supply factors together with the fact that the protein content of this year's spring wheat crop is reported to be well above the average, indicates that premiums for protein in hard winter wheat this year probably will be only moderate to low. The premiums for high protein in spring wheat are also likely to continue low. Occasionally premiums paid for wheat of high test weight or low moisture content, tend to obscure the protein premiums but there is no occasion for that this year with the unusually large supply of heavy dry wheat.

Table 11. - Licensed inspections of hard red winter wheat in Kansas, Texas and Oklahoma for the month of July 1925-1930, average 1925-1929

Kansas

Year	No. 1	No. 2	No. 3	No. 4	No. 5	Total	1/
	Per:	Per:	Per:	Per:	Per:	Per:	Per:
	Cars	Cars	Cars	Cars	Cars	Cars	Cars
	cent	cent	cent	cent	cent	cent	cent
1925.....	4,553:30.7	6,600:44.5	2,666:18.0	717 : 4.8	157 :1.0	14,836	100
1926.....	25,088:57.2	14,575:33.2	2,875 : 6.6	724 : 1.6	271 : .6	43,876	100
1927.....	12,751:50.6	8,649:34.3	2,449 : 9.7	922 : 3.6	217 : .9	25,212	100
1928.....	25,109:47.3	15,936:30.0	6,044:11.4	4,149 : 7.8	359 : .7	55,051	100
1929.....	10,396:18.3	21,000:37.0	16,266:28.6	3,139:10.8	1,134:2.0	56,781	100
5 yr. av.	15,579:40.2	13,352:34.5	6,060:15.6	2,530 : 6.5	423 :1.1	38,751	100
1930.....	22,514:45.5	17,963:36.3	5,749:11.6	1,952 : 4.0	665 :1.4	49,442	100

Texas

Year	No. 1	No. 2	No. 3	No. 4	No. 5	Total	
	Per:	Per:	Per:	Per:	Per:	Per:	Per:
	Cars	Cars	Cars	Cars	Cars	Cars	Cars
	cent	cent	cent	cent	cent	cent	cent
1925.....	1,086:25.8	2,138:50.9	805 :19.1	120 : 2.9	19 : .4	4,204	100
1926.....	14,106:53.2	8,024:32.0	2,169 : 8.7	331 : 1.5	79 : .3	25,037	100
1927.....	2,509:22.3	5,510:49.0	2,460 :21.9	456 : 4.1	139 : 1.2	11,247	100
1928.....	7,011:41.3	7,147:42.1	1,974 :11.6	534 : 2.3	133 : .8	16,953	100
1929.....	14,362:43.5	12,130:36.7	4,204 :12.7	792 : 2.4	303 : .9	33,046	100
Av. 1925-1929	7,815:43.2	6,990:38.6	2,322 :12.8	426 : 2.4	136 : .7	18,110	100
1930.....	15,242:60.8	7,424:29.6	1,311 : 5.2	452 : 1.8	334 : 1.3	25,037	100

Oklahoma

Year	No. 1	No. 2	No. 3	No. 4	No. 5	Total	
	Per:	Per:	Per:	Per:	Per:	Per:	Per:
	Cars	Cars	Cars	Cars	Cars	Cars	Cars
	cent	cent	cent	cent	cent	cent	cent
1925.....	868 :37.7	1,236 :55.9	114 : 5.0	13 : .6	12 : .5	2,299	100
1926.....	3,135 :62.0	1,635 :35.4	172 : 3.4	31 : .6	16 : .3	5,052	100
1927.....	2,185 :52.2	1,674 :40.0	226 : 5.4	47 : 1.1	33 : .6	4,187	100
1928.....	4,231 :46.1	3,344 :36.0	1,034 :11.7	405 : 4.4	23 : .3	9,279	100
1929.....	1,421 :13.3	3,837 :36.0	4,134 :38.7	973 : 9.1	123 : 1.2	10,663	100
1930.....	3,435 :47.8	3,168 :43.5	475 : 6.5	86 : 1.2	34 : .5	7,234	100
Av. 1925-1929	2,373 :37.6	2,365 :37.5	1,144 :13.2	295 : 4.7	43 : .7	6,296	100

1/ Includes figures for sample grade, not separately shown.

Minimum test weight per bushel for each grade of Hard Red Winter Wheat is as follows: No. 1 - 60 pounds. No. 2 - 58 pounds. No. 3 - 56 pounds. No. 4 - 54 pounds. No. 5 - 51 pounds.

Table 12. - Wheat: Protein content by States, 1925-1930

State .	: 1925	: 1926	: 1927	: 1928	: 1929	: 1930
	: Per	: Per	: Per	: Per	: Per	: Per
	: cent	: cent	: cent	: cent	: cent	: cent
<u>Spring wheat</u>						
Minn.	: 12.10	: 12.40	: 11.45	: 12.35	: 11.95	: ---
N. Dak.	: 11.95	: 13.20	: 11.70	: 12.15	: 13.70	: 15.07
Mont.	: 14.25	: 14.05	: 12.00	: 12.55	: 14.55	: 15.54
S. Dak.	: 12.95	: 13.60	: 12.40	: 12.65	: 13.65	: ---
Weighted average . . .	: 12.48	: 13.26	: 11.89	: 12.34	: 13.59	: ---
<u>Hard red winter wheat</u>						
Kans.	: ---	: ---	: 13.00	: 11.79	: 12.50	: 1/12.64
Nebr.	: ---	: ---	: 12.54	: 10.87	: 11.90	: 11.27
Okla.	: ---	: ---	: 12.98	: 12.00	: 12.00	: ---
Tex.	: ---	: ---	: 15.00	: 13.50	: 12.55	: 12.95
Weighted average 2/ . .	: ---	: ---	: 13.02	: 11.70	: 12.37	: 12.30

Spring wheat from data furnished by Col. Wilkinson's office (Minneapolis) except 1930 which is from Mr. Coleman's office. Winter wheat, from Missouri - Kansas Laboratories reports except 1930 which is from wheat inspections of the Grain Division, Bureau of Agricultural Economics.

1/ Missouri - Kansas State laboratories report a weighted average test of 12.42.

2/ Weighted average excludes Oklahoma.

Table 13.- Wheat: Number of cars and protein content inspected at Kansas City, Missouri, specified periods, 1930 1/2

Period	Cars	Protein content	
		Per cent	
Aug. 4 - 9	2,645	12.42	
Aug. 11 - 16	1,941	12.52	
Aug. 17 - 23	1,033	12.21	
Aug. 25 - 30	1,185	12.33	
Sept. 1 - 6	1,210	12.47	
Sept. 8 - 13	1,280	12.19	

1/ Supplied by Market News Service Hay Grain and Food Division.

Table 14.- Protein content of wheat in all line cars received at Minneapolis, as determined by protein laboratory of grain investigation, Minnesota grain inspection department, specified periods, 1930

Week ended	No. of cars	Protein content		
		High	Low	Average
Aug. 1	1,343	22.3	2.00	13.24
Aug. 8	2,715	20.4	2.10	13.24
Aug. 15	3,078	20.4	2.10	14.84
Aug. 22	5,531	20.2	2.20	14.24
Aug. 29	3,261	20.4	2.70	14.23
Sept. 5	3,474	20.0	2.10	14.41
Sept. 12	4,151	20.1	2.90	14.23

Table 15. - Wheat No. 2 hard winter: Average premiums paid per bushel for protein over the price paid for 11.25-11.45 per cent, by months, at Kansas City, 1925-1930

Year	Per cent protein														
	11.25-11.45(base) ^{1/}			11.75 - 11.95			12.25 - 12.45			12.75 - 12.95			13.00 - 13.45		
	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
1925....	153.3	166.0	158.0	.6	.6	1.4	2.1	1.7	2.2	3.0	3.1	2.9	4.1	4.3	4.5
1926....	135.0	130.4	131.2	.5	1.1	1.0	1.6	2.0	2.2	2.8	2.9	3.1	3.1	3.3	3.5
1927....	135.5	133.9	129.5	1.8	3.1	2.6	5.0	7.4	6.2	8.5	10.6	9.4	10.4	11.9	11.2
1928....	122.4	104.1	106.7	2.6	.7	.2	7.4	3.7	1.8	11.5	7.6	4.5	13.5	10.0	7.6
1929....	122.6	122.3	124.4	.6	.4	.0	3.1	1.3	1.0	6.6	2.6	.4	9.7	3.9	2.1
1930....	79.9	81.5	-	.1	.3	-	.6	1.2	-	1.6	2.6	-	2.9	3.3	-

^{1/} 1925-1927, the base is, 11.25 - 11.70 per cent.

Table 16. - Wheat No. 1 dk. no. spring ^{1/}: Average premiums paid per bushel for protein over the price paid for No. 1 northern spring (cash close), by months, Minneapolis, 1926-1930

Year	No. 1 northern spring cash close (base)			Per cent protein								
				12			13			14		
	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.	July	Aug.	Sept.
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
1926.....	168.3	150.9	140.8	5.5	4.0	3.3	8.1	7.1	6.6	10.4	9.4	9.1
1927.....	144.1	143.0	132.3	4.2	4.3	5.3	10.3	9.8	12.8	15.1	15.7	20.2
1928.....	132.8	112.3	110.9	8.9	6.6	6.3	22.8	16.8	15.9	32.9	24.8	25.3
1929.....	137.6	133.2	132.9	1.2	.9	1.0	9.1	5.1	2.4	17.3	7.6	3.6
1930.....	89.1	89.2	-	2.8	1.1	-	5.3	1.8	-	7.3	2.6	-

^{1/} 1926 - August 4, 1928, Classified as No. 1 wheat.

Wheat stocks

Visible supplies of wheat on September 20 were 218 million bushels, 23 millions greater than on the corresponding date of 1929. Throughout the season to that date, visible supplies have been maintained at from 12 to 28 million bushels above supplies at the corresponding periods in 1929. Last year the peak of visible supplies came the last week of October, having remained at nearly that level from about the middle of September.

Commercial stocks of all grain in store at the principal markets on September 13 were 240 million bushels which is 29 million above the level at the same markets on the corresponding date in 1929. For the past few weeks grain has been flowing to market much faster than during the corresponding period last year. In spite of the heavier stocks and larger receipts during the past few weeks there appears to be little danger at present of a recurrence of last year's experience in congestion at Minneapolis and Duluth. It is probable that the peak in stocks will come about the middle of October or a little earlier than last year when it came October 26.

Table 17. - Stocks of all grain, unfilled storage space available for storing new crop and per cent of total space filled at 14 principal markets on stated dates

Market	Sept. 14, 1929			Sept. 13, 1930		
	Stocks all grain	Per cent filled	Available space unfilled	Stocks all grain	Per cent filled	Available space unfilled
	1,000 bushels	Per cent	1,000 bushels	1,000 bushels	Per cent	1,000 bushels
Kansas City...	29,680	98	-	27,319	87	833
Hutchinson....	2,068	61	992	6,448	79	905
Wichita.....	2,064	83	172	3,666	93	-
Omaha.....	12,679	91	-	16,772	89	-
Chicago.....	41,848	88	-	42,837	82	1,493
Duluth.....	34,069	79	2,545	38,676	78	6,689
Minneapolis...	56,308	88	692	56,090	83	1,250
Milwaukee.....	5,672	75	767	7,890	110	-
St. Joseph....	6,446	81	709	6,952	70	1,505
St. Louis.....	5,033	66	1,938	9,520	81	1,113
Galveston.....	2,831	62	1,036	1/ 9,269	102	-
New Orleans...	3,594	66	1,299	4,367	80	284
Fort Worth....	7,037	76	876	7,828	64	1,315
Houston.....	1,574	79	126	2,100	70	450
Total.....	210,905	84	6,426	239,734	83	12,500

1/ The Galveston stocks as reported appears to be in error. Exports of wheat from Galveston exceeded receipts which leads to the conclusion that stocks on September 13 should be less than the 7,869,000 bushels reported a week previous.

Canada

The Canadian wheat crop is officially estimated at 385 million bushels as compared with 305 million in 1929. Weather reports indicate yields which, on the acreage officially reported for harvest, would produce about 370 million bushels. The actual outturn of the crop seems more uncertain than usual because of the great variability in yields and uncertainty as to the acreage that may have been abandoned. The crop in the western provinces was harvested without any appreciable frost damage and threshing has been proceeding rapidly under favorable conditions. A completion of threshing is expected in record time. Rust damage in Manitoba and eastern Saskatchewan will probably reduce the merchantable crop to some extent.

The quality of the crop is excellent and is reported to surpass even that of last year. Inspections during August included 93 per cent contract grades as compared with 88 per cent in August of 1929. No. 1 Manitoba hard and No. 1 Manitoba Northern comprised 63 per cent of the total this year as against 22 per cent in 1929.

Deliveries are much heavier than in the corresponding period last year. Western inspections in August amounted to 21 million bushels; last year only about 6 millions. Total receipts at Ft. William, Port Arthur, Vancouver and Prince Rupert from August 1 through September 13 totaled 33 million bushels compared with 8 million in the same period last year. The early marketing is attributed to the early ripening of the crop and good harvesting weather, and also probably to a greater pressure on the farmers to market this year than a year ago. In spite of the heavy marketing, stocks have not been piling up, amounting to 36 million bushels September 13 as against 43 million on that date in 1929.

Canadian wheat has been moving into export at a good rate. Shipments from four western markets since July 1 have been about double the shipments for the corresponding period of last season. Canada has largely taken the place of Argentina as the heavy shipper early in the season. Canadian prices are considerably below those of a year ago and are low relative to European prices. This is facilitating exports. The export movement will be checked with the closing of the Lakes which is usually in the second week of December.

The position of the Canadian wheat grower and the reduction in advances made by the Pool have undoubtedly been important factors in moving the new crop at a rapid rate. A year ago conditions generally were such as to encourage the Canadian producers and the Pool to hold their wheat. The Pool advanced \$1.00 per bushel on wheat delivered to it. A very short crop led Canadian producers and the Pool generally to expect relatively high prices for the crop. The world-wide financial and business depression, however, reduced prices to a low level toward the end of the season. The new season began with a large carryover of old wheat, a larger new crop and a very low general price level. The Canadian producer was not in position to hold for higher prices. Obviously the Pool was not in position to advance as much as a year ago. It is reported that toward the end of the season non-Pool farmers, realizing that the advance of the Pool on the 1929 crop was about equal to or greater than the cash value of the crop, began applying for membership in the Pool. The initial payments or advances were reduced to 85¢ per bushel on June 25, and later reduced to 70¢ a bushel. The harvesting of the new crop

brought the Pool face to face with the problem of financing that crop on a greatly reduced price level. It was finally agreed that the initial payment on the 1930 crop delivered August 26 and thereafter until further notice should be 60¢ a bushel on the basis of No. 1 Northern at Fort William. This is 25¢ below the lowest advance hitherto made by the Pool and 40¢ below the initial payment for wheat for every year but one since the Pool began operations.

The Canadian Grain Act

The Dominion Parliament has recently passed a revised Canadian Grain Act. As revised, the Act provides for a Board of Grain Commissioners consisting of three members. This Board is authorized to make the necessary rules and regulations for the operation of the Act. Two of the most significant changes are in adding a statutory grade No. 4, and in prohibiting the elevator mixing of certain grades. The previous Grain Act provided for four statutory grades and all the wheat not falling in those grades was subject to commercial grades. The revised Act established No. 4 Northern as a statutory grade. Under the revised Act a public terminal elevator is not allowed to mix any grades of grain. A semi-public terminal elevator or a private terminal elevator is not allowed to mix the four top grades.

Australia

Weather prospects in Australia are generally favorable and an average yield or better seems to be in prospect. The size of the actual harvest is in considerable doubt on account of weather uncertainties for the balance of the season and uncertainty as to the amount of harvested acreage.

The wheat acreage sown is reported as 17,491,000 acres which is a 24 per cent increase over the harvested acreage of 1929. There is little doubt of there being a big increase in wheat acreage but there is some question whether the increase reported is indicative of the increase in area to be harvested for grain.

A considerable increase in wheat acreage seemed probable in view of the poor returns from sheep in the eastern states in 1929-30. It has been stated by people familiar with conditions there that the returns from sheep, the most important farm product in some of these regions, has an important bearing on the wheat acreage sown and in 1929-30 wool prices were the lowest in recent years, being 40 per cent below the price for the preceding season. It has been stated that graziers who have not sown wheat in years put in large areas this season, in spite of low wheat prices. Government efforts to establish a Commonwealth Pool and a guaranteed price for wheat may have had further effect in increasing the acreage.

There is a possibility of a reduction of some 1,500,000 acres or more for wheat acreage used for hay and feeding off, but on the other hand later revisions may increase the final figure above the amount now reported. The wheat area for harvest as grain is usually reported about the middle of October after the effect of drought in the growing season has become apparent and it is known how much is to be fed off instead of cut for grain. The 17,491,000 acres above mentioned was reported about the middle of September, probably before this point was established. In New South Wales in the

period 1923-24 to 1927-28 the amount fed off varied from 22,000 acres in 1924-25 to 622,000 acres in 1927-28. The corresponding figures are not known for the other states but they are believed to be smaller. There is further question as to whether the acreage figure includes wheat sown for hay. The acreage usually reported in October is exclusive of area used for hay. In the five years 1923-24 to 1927-28 the average wheat area harvested for hay amounted to about 1,150,000 acres, the actual amount varying from a minimum of about 919,000 acres in 1926-27 to 1,228,000 in 1925-26. Following the failure of the bill to establish a minimum wheat price, it is possible that some of the acreage planned for grain harvest may be cut for hay.

If it is assumed that the 17,491,000 acres reported for 1930 includes the wheat for hay and amounts fed off, and an average allowance of about 1,450,000 acres for these purposes is made, the balance for grain might be reduced to about 16,000,000 acres.

Weather conditions through August have been favorable for an average yield or better, in the country as a whole. Rainfall during the planting and growing season in important parts of the wheat zone of the different states has been about average. The drought prior to planting may result in some lowering of yields but no great reduction is expected. Preliminary studies of the effect of rainfall prior to seeding time do not indicate any close relationship and reports on the appearance of the crop give no evidence of suffering from the previous drought. September rainfall is an important factor in determining yields, and in Western Australia, at least, the October temperature is important so no very close indication of the final yield can be made at the present time. Reports on the appearance of the fields have been favorable, and are indicative of average yields or better.

A yield of 12.3 bushels to the acre, the average for the past ten years, on the full sown acreage would give a harvest of 215 million bushels. On 16,000,000 acres this yield would give a crop of 197 million bushels.

The Orient

The market for American flour in Dairen is being stimulated by poor harvesting prospects in North Manchuria, but prospects at Tientsin are less favorable for American flour due to a good wheat crop in that district, according to cabled reports from Agricultural Commissioner, P. O. Nyhus at Peiping and Consul General Gauss at Tientsin.

In Northern Manchuria in spite of reports of increased acreage and excellent conditions on August 1, nearly three weeks of rainy weather following that date, reduced prospects materially, as nearly half the grain was either uncut or still remaining in shocks in the field. Mr. Nyhus observed quantities of grain growing in shock in the fields on a trip on August 28 and believes that if this situation is general as the reports state, the yield might easily be reduced 25 per cent as well as materially reducing the quality of the crop. Wheat production in Northern Manchuria in 1929 was estimated at 26 to 40 million bushels. Mr. Nyhus states that contracts have recently been placed for September and October shipments

of American flour. Quotations on American flour about the middle of September were more favorable than on Canadian flour. An improvement in exchange values would help further to stimulate trade.

Tientsin flour mills are now operating full time and supplying the bulk of the local flour demand and reducing the demand for imported flour. The local demand for flour appears to have declined to less than half that of formerly, but part of this decrease is explained by the fact that interior towns which formerly obtained supplies from Tientsin are now able to supply their needs locally from a good domestic crop. Imports of flour are comparatively small and present market conditions do not indicate any increase in the demand although some business may be done later in the season, providing exchange rates are favorable, and if American quotations are more favorable than Canadian. At the present time American and Canadian flour are quoted at nearly the same prices, but due to its lower quality, Canadian flour must sell at about 50 cents per barrel below American. Arrivals at the port of Tientsin during August were estimated at 250,000 bags of which 200,000 bags were from Japan and 50,000 bags from Canada. The embargo by the Nanking government on the shipments of Shanghai flour to Tientsin appears to be quite effective as no deliveries are being made at the present. Prices declined during the month. American flour was quoted at \$1.12 per bag on August 30, Canadian and Japanese at \$1.04 and local flour at \$1.13 per bag compared with \$1.17, \$1.08, \$1.05 and \$1.17 per bag respectively, on July 31.

India

Wheat exports from Karachi, India during the present season to September 15 are estimated at 7,467,000 bushels and the present outlook is for a fair volume of exports during the remainder of the season, according to a cable to the Foreign Service of the Bureau of Agricultural Economics from Consul General McHicce at Karachi. Prices at Karachi are slightly above world parity and dealers up country are holding for still higher prices. Indian dealers are persistently bullish and any marked demand would cause them to raise prices. At the present time, however, there is practically no demand for wheat and very little business is being done but if the monsoon continues favorable, there ought to be added pressure to sell. Railroad authorities recently declined to reduce the freight rates on wheat. Stocks of wheat in Karachi are now estimated at approximately 4,000,000 bushels.

Europe

Weather unfavorable for harvest has reduced both the quantity and quality of the crop in several European countries. The British wheat crop in several European countries. The British wheat crop is small and light in weight. The general tendency of revisions of the estimates of Continental European crops during the past month has been downward. The

French crop is a very important factor in the European situation. Recently a private report placed the crop at about 208 million bushels. Mr. Dawson still believes the crop to be larger than this but poor in quality. The carryover of wheat from last year is large. The stock of old wheat will go a long way in making up for the poor quality of the new crop but the total supply for the season is likely to be considerably below domestic requirements. Mr. Dawson believes that the official estimates for Rumania and Yugoslavia are also too high. Private reports seem to confirm his opinion that the official estimate of the wheat crop of Yugoslavia is too high. As indicated above, it is believed that the European wheat crop outside of Russia is at least 100 million bushels less than that of the past season and it may turn out to be as much as 150 million bushels smaller than the previous crop.

Production of feed grains, barley, oats and corn, in countries reporting to date is estimated at 36,622,000 short tons, in comparison with 46,028,000 in 1929, a decrease of over 20 per cent. The production may be somewhat less than in 1928, but a little larger than in 1927. In the past season large quantities of feed grains at low prices stimulated the production of livestock in some of the North European countries, particularly Denmark, Holland and Germany. The result is more livestock to feed from smaller crops. Probably potatoes and rye will be fed to a greater extent than in the past season. The rye crop appears to be somewhat smaller than a year ago and the potato crop is short in some countries. The result is likely to be a greater consumption of wheat in Continental Europe outside of Russia both as food and feed.

The imports of European deficit countries in the past season fell to a low level, about 132 million bushels below those of the previous season. Reviewing the present indications of the crop and considering that stocks have been reduced, it appears likely that imports during the present season will again approach the total of the 1928-29 season. High tariff duties and other restrictions upon imports will tend to hold imports in check, especially in the early part of the season. Scarcity of domestic supplies probably will result in some relaxation of import restrictions before the end of the season. Revised estimates of production and the probable imports or exports of European countries are presented herewith.

WH-53 Table 18. - Wheat: Estimated deficit of the United Kingdom and continental Europe, 1930-31

Country	Actual	Preliminary	Preliminary estimates
	net imports 1928-29	estimate of actual net imports 1929-30	of deficit 1930-31
	1,000 bushels	1,000 bushels	Million bushels
Germany	68,500	61,700	60-65
Italy	89,700	40,000	80-90
France	1/ 58,000	1/ 12,000	70-80
Belgium	41,400	42,600	40-45
Netherlands	23,800	30,200	30-32
Czechoslovakia	17,200	13,800	13-15
Switzerland	15,500	16,900	13-17
Greece	22,100	21,500	21-23
Austria	14,800	18,000	15-18
Denmark	17,000	7,800	9-11
Poland	3,800	0	-
Sweden	7,500	7,300	5-7
Norway	8,500	7,100	7-8
Finland	6,100	5,600	5-6
Latvia	2,800	2,400	2-3
Estonia	1,200	1,200	1-2
Lithuania	2/	0	-
Spain	18,400	4,400	5-10
Portugal	7,200	5,900	2-3
Total 19 countries	428,500	298,800	381-435
United Kingdom	204,000	201,900	200-210
Total 20 countries	632,500	500,700	581-645

Surplus of surplus countries

Country	Net	Preliminary	Preliminary estimate
	exports 1928-29	est. of net exp. 1929-30	of surplus
	1,000 bushels	1,000 bushels	Million bushels
Hungary	25,700	31,400	16-20
Yugoslavia	7,900	25,500	7-12
Rumania	1,700	1,500	10-20
Bulgaria	800	0	2-5
Total 4 countries	34,100	56,400	35-57

Net deficit of United Kingdom and continental Europe

Country	Impts. less	Impts. less	Deficit less surplus
	on 1928-29	on 1929-30	
	1,000 bush.	1,000 bush.	Million bush.
Twenty deficit countries			
less 4 surplus countries	598,400	444,300	546-588

1/ 7,000,000 bu. added to 1928-29 and deducted from 1929-30 because of change in method of compiling foreign trade statistics. 2/ Less than 500,000 bushels.

Table 19.-Wheat: Production in Europe, average 1925-1929, annual 1929 and preliminary estimates for 1930

Country	Average :		Estimates for 1930 ^{1/}	
	1925- 1929	1929	July 28	Sept. 4
	1,000	1,000	1,000	1,000
	bushels	bushels	bushels	bushels
England and Wales	49,459:	47,451:	43,456 :	43,456
Scotland	2,203:	2,165:	(2,200) :	(2,200)
Northern Ireland	178:	142:	(150) :	(150)
Irish Free State	1,139:	1,184:	(1,180) :	(1,180)
Germany	119,766:	123,073:	(132,000) :	131,174
Italy	239,334:	260,774:	(239,000) :	213,111
France	292,247:	341,713:	(231,000) :	2/ (239,000)
Belgium	14,799:	13,225:	(16,000) :	16,094
Netherlands	6,033:	5,467:	(6,000) :	4,887
Czechoslovakia	45,009:	52,902:	(51,000) :	53,094
Switzerland	4,388:	5,791:	(6,000) :	5,337
Greece	11,636:	8,502:	(13,000) :	(12,700)
Austria.....	11,313:	11,532:	11,464 :	11,942
Denmark	10,322:	11,772:	(11,800) :	(11,000)
Poland	60,508:	65,862:	(62,000) :	67,240
Sweden	15,803:	19,031:	(18,000) :	22,046
Norway	642:	729:	(700) :	(700)
Finland	1,002:	1,095:	1,138 :	1,189
Latvia	2,299:	2,336:	(2,400) :	3,674
Estonia	1,004:	1,268:	(1,100) :	(1,500)
Lithuania	6,079:	9,329:	(7,000) :	10,619
Spain	145,629:	154,244:	(147,000) :	145,099
Portugal	10,123:	10,600:	(10,000) :	13,154
Total 23 deficit countries	1,040,985:	1,150,237:	984,000 :	1,010,546
Rumania	105,531:	99,752:	(118,000) :	(114,000)
Yugoslavia	80,927:	94,990:	(77,000) :	(77,000)
Hungary	79,542:	74,985:	(77,000) :	70,621
Bulgaria	40,474:	33,192:	(48,000) :	(48,000)
Total 4 surplus countries	306,534:	302,928:	520,000 :	309,621
Total 27 countries	1,347,519:	1,453,165:	1,504,000 :	1,320,167

^{1/} Figures in parenthesis are production estimates of Assistant Agricultural Commissioner, Dawson. Others are official estimates. Official estimates received to date but not included in this table are: Bulgaria 53,700,000 bushels, Rumania 124,927,000 and Yugoslavia 80,005,000 bushels. Mr. Dawson believes that the official estimates of these countries are too high. ^{2/} It is believed that the quality of this year's crop is so poor that 230,000,000 bushels would mean only about 213,000,000 bushels compared with a harvest of 341,713,000 bushels of good quality wheat in 1929.

The Continental European wheat market situation during August. 1/

Continental wheat markets during the month of August were influenced chiefly by grain crop developments and the harvest outturn for bread grains in various countries and the early market crop movements. The first part of the month registered upward price movements chiefly due to reports of the greatly reduced corn crop in America and unfavorable harvesting weather in Europe, with reduced quality of bread grains resulting. Later on, with improved weather for saving the European grain crops still in the field and continued important Russian offers of good quality wheat, optimism on the general wheat price situation became weaker.

Although the market is still hesitant until the world situation becomes clearer, the basic situation appears to be stronger than at the beginning of the month. Crop prospects both for wheat and other important grain crops in Europe showed further declines in August, with threshing results giving stronger evidence of poor quality, compared with a year ago in important countries. The chief exceptions to poorer quality wheat compared with a year ago appear in parts of the Danube Basin. Rye is turning out poorer than expected both in quantity and in quality. Spring grain crops in important central sections, especially oats, were unfavorably affected by the drought and later by poor harvesting weather, with the result that returns are materially below a year ago.

The European wheat crop, outside of Russia, is now indicated at about 140,000,000 bushels below last year's harvest and on the whole is of poorer quality and stocks are also below last year. Russia's crop of wheat, however, as near as can be calculated so early in the season, promises to be materially above last year and, judging from the new wheat threshed to date, the quality seems to be very good. While Russian exports will be considerably larger than a year ago, nevertheless, the deficit in Continental Europe outside of Russia is so much larger than a year ago, that greater amounts from overseas countries are needed. Government restrictions and regulations in important importing countries, however, will reduce probable takings in comparison with the deficit indicated by the crop and reduced stocks.

Interest in the continental wheat market will be somewhat reluctant until important factors in the world situation, such as the effect of the deficit in the United States corn crop on its wheat requirements and, above all, the probable exports of Russia, which have begun in important volume, are better known. The cautious buying policy again evident this year is due in a large measure to the general economic situation and will be an important factor in wheat market developments this season.

Feed grain markets

European markets for feed grains under the influence of the unfavorable corn crop reports from the United States, were strongly upward and

1/ By Assistant Agricultural Commissioner Owen L. Dawson, Berlin, Germany, September 4, 1930.

active during the early part of August. Reports on a reduced outturn of south eastern European corn crops, as well as damage to the feed grain crops over most of Europe through very unfavorable harvesting weather further influenced the upward price movements. Later, however, a downward reaction in prices occurred with a complete abstinence of European buyers for feed grains, because of the break in the American rise which then was generally considered exaggerated and speculative by the feed grain trade on the Continent. Later improved harvesting weather in Argentina and increased Argentine corn shipments weakened the market for corn and also barley, the latter having been all the time in close sympathy with developments in corn. In the latter part of the month, price declines were pretty general on all feed grain markets, partly as a result of some price pressure from declining wheat prices.

The outlook for feed grain is somewhat improved compared with last month, because of the really important deterioration of crop prospects and crop returns both in America and Europe through heat and unfavorable harvesting weather. The chief factors affecting imports from overseas in the immediate future will be: (1) the progress of Russia in exporting wheat, (2) weather conditions affecting the completion of harvest of bread grains, (3) the outturn of the spring feed grain crops, (4) weather conditions affecting the late development of the corn crop, (5) government regulations affecting the importation and milling of foreign wheat, and (6) grain crop developments overseas.

Germany

The German market for wheat and wheat flour proved quite active over most of August with calmness prevailing toward the end of the month. Offerings of new wheat became more important and resulted, at the beginning of the month, in a considerable price decline because of slackening demand on the part of flour mills and traders. However, with the raise of the milling percentage from 40 to 60 per cent on August 15 for the period August 15 to September 30, 1930, prices increased along with a rather important increase in domestic wheat trading. Later, declining tendencies again prevailed. The market for foreign wheat also revived during the month, but import purchases are said to have remained restricted, and the hand-to-mouth policy continued to prevail.

The rye situation continued difficult also through August, with considerable activity of the supporting companies (Deutsche Getreidehandelsgesellschaft and Getreide-Industrie & Commissions-A.G.) to sustain prices because of a rather pressing offering of rye early in the month. Later, the situation improved greatly because of the reduced crop outlook and the development of a more optimistic view than prevailed heretofore, with respect to the 1930-31 rye campaign. Offerings decreased markedly. A new credit of \$14,292,000 for the Deutsche Getreidehandelsgesellschaft from which \$7,146,000 were available after paying back an old credit, added to the firmness of the market which showed a considerable price increase and a narrowing of the rye-wheat spread.

Table 20. - Germany: Price per bushel of domestic wheat and rye, July 9 - September 10, 1930

Date	Wheat			Rye
	Hamburg <u>1/</u>	Breslau <u>2/</u>	Berlin <u>3/</u>	Berlin <u>4/</u>
	Cents	Cents	Cents	Cents
July 9	203	180	-	106
16	193	183	-	106
23	202	185	-	103
30	200	162	-	97
Aug. 6	178	156	157	96
13	172	159	160	97
20	173	164	165	101
27	170	161	157	108
Sept. 3	165	158	162	113
10	159	156	161	113

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

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

3/ -"Markischer" wheat of 58-59 pounds per Winchester bushel.

4/ "Markischer" rye of at least 54-55 pounds per Winchester bushel.

Net imports of wheat during July amounted to 3,307,000 bushels compared with 3,319,000 in June, 1930 and 16,296,000 in July 1929 (the latter figure is, however, abnormal because of the heavy importing in anticipation of a tariff increase). Stocks of old crop and foreign wheat continued small. Port stocks at Hamburg and Bremen, as well as Berlin stocks are low. Farm stock figures as of July 15 are not collected and therefore not available; the next inquiry on stocks will be as of August 1 and will be published early in September.

No further government measures were taken in August. It is said that the bread-law raising the percentage of rye flour required in rye bread and setting a lower milling percentage for rye mentioned in our last report and in effect since August 15, had something to do with the firmness of the rye market during the second half of August. While no actual measures have been taken, the government has been active in advocating a reduction in rye acreage in favor of wheat chiefly. An inquiry made by the German Agricultural Council as to planting intentions of advanced farmers indicated a considerable decrease of rye acreage in favor of wheat for autumn 1930 sowings.

The latest official crop estimate as of early August 1930 indicates the following crop production in Germany:

Grain	1929	1930
	1,000 bushels	1,000 bushels
Rye	321,045	297,345
Wheat	123,073	129,630
Barley	146,089	121,575
Oats	508,633	376,849

Very bad harvesting weather was experienced in August and considerable grain was still in the field. Some deterioration has doubtless taken place, chiefly in quality. The spring crops were mostly affected. It is possible, however, that the official wheat crop estimate has been reduced too far. That the quality is expected to be poorer than last year is indicated by the fact that the weight per winchester bushel of wheat and rye deliverable on the Berlin produce exchange against spot purchases were reduced for 1930-31 to 58-59 pounds (from 58-60) in the case of wheat, and to 54-55 pounds (from 56) in the case of rye.

France

Restricted turnover was evident in the French markets over most of August, because of reduced offers during the first half of the month and the small milling percentage of 10 per cent for foreign wheat existing at present. Very poor harvesting weather and therefore very unfavorable prospects for the final outturn of the crop held domestic offers at a minimum, and prices advanced during the first half of the month. Later, the

weather improved considerably, offerings increased rapidly and a general decline in prices was the result.

Personal investigation of the French wheat crop and a review of the latest private estimates now indicates a crop of about 239,000,000 bushels, but of such poor quality that if it were to be compared with last year's harvest of 341,713,000 bushels of good quality wheat, a figure of about 213,000,000 to 220,000,000 bushels would be more comparable. However, stocks of good quality wheat from the old crop much heavier than normal reduce the deficit to some extent so that it appears France can get along with about 66,000,000 to 81,000,000 bushels of imports for this season. An increase in the milling per cent from 10 to possibly 30 percent seems necessary. With 10 percent now in force, a considerably smaller proportion can actually be milled because of the practice of certain mills handling little or no foreign wheat. Regarding durum wheat a large proportion of France's needs will come from Africa, altho some increased requirements from America are expected. The crop in North Africa is smaller than last year, but the carryover was of some importance in the exportable surplus this season.

Italy

Following rather quiet markets, there has been registered some demand for Russian and Danubian wheat during the second half of August, while the sale of North-American wheat was slow.

Crop reports of the government indicate a wheat harvest of 213,111,000 bushels. The summer has been quite favorable to corn and the condition was considered above average, but recently too much wet weather has been unfavorable. In view of early acreage reports the crop prospect appears to be below the large crop harvested last year.

Agricultural, as well as financial, circles were recently affected by the bankruptcy of the largest Italian company for agricultural enterprise, irrigation, livestock breeding, and land melioration. The government has taken steps to secure financial assistance to relieve the situation.

Belgium and Holland

The first ten days of the month of August was a period of considerable activity on the wheat and flour markets. Prices advanced in sympathy with overseas quotations and the whole tendency was under the influence of current unfavorable weather developments in North America. Business was particularly active with respect to Russian wheat which was offered in excellent quality of high gluten content, and sales were effected up the Rhine to Germany and other countries. Dutch flour mills also showed active purchasing interest. Trading became quieter and was very dull, however, following the recession in overseas markets and at times at a complete standstill during the second half of the month.

Port stocks at Antwerp decreased considerably from July 15 to August 15, while Rotterdam port stocks also remained low. Harvesting weather was generally very unfavorable and the crop outlook, especially in Holland, was greatly reduced as compared with estimates early in the month.

Danube Basin

Wheat markets in Danubian deficit as well as surplus countries quite generally exhibited considerable activity and a good current of business during the first ten days of August under stimulus from overseas market developments. However, business became very quiet later and toward the end of the month showed extreme dullness. Prices which had risen somewhat early in August because of the overseas rise decreased considerably.

Recently business in Hungarian wheat was somewhat impaired by arrivals of wheat with exceptionally low gluten content and it is thought that this is indicative of a quality much less satisfactory than previously expected.

Crop results in Austria and Czechoslovakia are quite good, though the harvesting weather was very bad and some damage not as yet recorded will appear in later figures. The wheat harvest in Hungary, Yugoslavia and Rumania still seems about on the levels previously reported - with some reduction in parts of Rumania. Corn crop prospects have declined considerably since early in the season and now appear fully a third less than last year. The carryover as a whole will partially offset the decline in production compared with last year. The reduced prospect for corn was an important factor in early August wheat market developments.

Date	: Hungarian wheat :	Date	: Viennese Boden wheat
	: <u>Cents per bushel</u> :		: <u>Cents per bushel</u>
July 24	95.3	: July 31	107.2
July 31	92.8	: Aug. 6	106.3
Aug. 7	95.2	: Aug. 15	107.2
Aug. 18	85.2	: Aug. 27	101.5
Aug. 27	80.2	: Aug. 30	97.6
Aug. 30	77.4	: Sept. 2	98.6
Sept. 11	75.7	: Sept. 12	95.7

Activity with respect to agrarian measures continued in the Danube countries. Czechoslovakia raised the grain supplement duties effective August 26, however, not in force toward most-favored nations because of a trade treaty with Hungary expiring December 15, 1930. A decline in the rye area as a result of propaganda is also expected in Czechoslovakia. Austria will distribute premiums or direct support to agriculture to the extent of \$13,507,200 this year, of which \$4,221,000 is for the purpose of abolishing the land tax, \$844,200 will be given to flour mills, \$1,125,600 to the mountain farmers for the improvement of cattle breeding and \$7,316,400 will be distributed as seeding premiums for grain areas. The introduction of a grain monopoly has been given further consideration.

On the other hand, the surplus countries have also been quite active. Recent movements toward agrarian cooperation in southeastern and eastern European countries are quite significant. During July, Yugoslavia, Rumania and Hungary held a conference at Bucharest which aimed at a joint reply of these countries to the memorandum of the League of Nations on the world crisis of agriculture. This reply was the recommendation for abolishing the most-favored-nation system for agricultural products - a one-sided suggestion, naturally of little practical interest. Much more important was a second conference held at Sinaia, between Rumania and Yugoslavia only. These two agrarian countries alone have, of course, been able to work out much more practical suggestions than in cooperation with Hungary, which is more industrialized and consequently must take into consideration industrial demands to a greater extent than the two former countries. The Sinaia conference ended with the resolution that Yugoslavia and Rumania should very closely cooperate in agricultural exports, should try to arrive at a duty union as quickly and as completely as possible in order to make a joint foreign trade policy with especial regard to exports of agricultural products to Central European industrial countries. Some system is planned whereby preferential trade treatment of Danubian agricultural products in European industrial markets, and of European industrial products in Danubian markets can be effected. It is understandable that agreements in foreign trade policy by a block of more than 30 million customers commands the attention of exporters in Central Europe much more actively than suggestions of either Yugoslavia or Rumania alone. Plans for an introduction of the grain monopoly in Austria a system that would enable preference of Danubian products within the frame of traditional trade customs doubtless show the reaction in Central Europe toward those suggestions. These movements toward cooperation are significant in view of the important interests of Central European industries in the agrarian Southeast.

A third conference held at Warsaw upon Poland's invitation, involving Poland, the Balkan countries, the Baltic countries and Hungary, as well as Czechoslovakia, is considered an action more political in nature, or possibly some action to counteract the rather effective plans of Sinaia. The work of this conference consisted chiefly of drawing up recommendations to the respective governments. It is obvious that so many countries with so many-sided interests cannot so easily be united in a uniform policy as is possible in the case of Rumania and Yugoslavia alone, who have more uniform interests. Some of the recommendations of the conference at Warsaw are: Statistical methods for the collection of agricultural export figures should be made uniform,

export premiums should be abolished through an international convention, a project for an intermediate credit system should be worked out, the most-favored-nation clause for European agricultural products should be replaced by a preferential clause; the agrarian conference shall be a permanent institution with yearly meetings.

These recommendations do not appear of especial importance so far as actual results are concerned at present. Those which can be realized will be of little help to agriculture; the others can hardly be realized, as a one-sided preferential system for European agricultural products will meet with no interest whatever in European industrial countries, and appears quite impossible.

Among all these movements toward agrarian cooperation, the conference at Sinia is considered the most important and will need the most careful watching.

Soviet Russia

Shipments

Shipments of Russian grain through the South Russian ports have been rather significant during the past weeks, with wheat predominating considerably at most times. Total shipments of the five main crops since the beginning of the new campaign (July 1, 1929) to August 27 amounted to 351,000 short tons compared with no shipments at the same time a year ago. August shipments of wheat ^{1/} were larger than during any of the preceding months having amounted to 187,000 tons as compared with only 26,000 tons shipped during July and 32,000 tons exported in May.

Total shipments through the South Russian ports for the agricultural season 1929-30 ^{2/} and July and August 1930 were as follows:

Grain	:	1929-30	:	July - August 1930
	:	<u>1,000 bushels</u>	:	<u>1,000 bushels</u>
Wheat	:	5,658	:	7,128
Barley	:	29,027	:	4,317
Rye	:	3,149	:	669
Oats	:	1,171	:	689
Corn	:	984	:	118

Foreign reports indicate that considerable tonnage has been booked by the Soviets for September and October, so it appears that exports will continue on the same rather high level, or may even increase, in the weeks to come.

^{1/} Including shipments up to August 27 - the latest date available.

^{2/} July 1, 1929 to June 30, 1930.

The 1930 crop

No estimates of the 1930 Russian grain crop have as yet appeared in the Soviet press and it is also interesting to note that the usual crop condition figures in per cent of "normal" have not been published this year, but a crop about average or better on an acreage larger than last year is expected. Some deterioration in crop conditions took place toward the end of July and the first half of August due to hot dry weather in the southeastern section of European Russia. This deterioration, however, falls chiefly to the share of late spring and truck crops, the development of which was influenced unfavorably by the drought and partly by dry winds prevailing during the first half of August particularly in North Caucasus but also in Lower Volga, Western Kasakstan and parts of Ukraine. Untimely ripening of the late spring crops and noticeable deterioration of their condition is reported from these regions.

Although harvesting was delayed in North Caucasus and Ukraine, it was completed under favorable conditions in the whole of the southern and southeastern section of the Union, Western Ukraine being about the only exception. Harvesting developed under less favorable conditions in the central consuming regions, which are rather important producers of winter rye, so that some deterioration in that crop has probably resulted.

Reports at the beginning of August indicated that the quality of the grain was generally good, with moisture content being only somewhat below last year's exceptionally dry levels. However, delayed threshing, continually complained of by the Soviet press, as well as considerable storing difficulties, will probably be reflected in the late threshing results and in the quality of the grain.

The wheat crop outlook is about as previously reported, barring some deterioration due to rains in Western Ukraine during the first days of August. Siberia is about the only region where early spring crops are still in the stage of maturing, and official and local reports continue to indicate average and above average conditions there. Some rains during the second ten days of August excepted, which have been not quite favorable to the ripening crops, favorable weather prevailed during most of the time in Siberia, so that the present favorable crop outlook for spring wheat there may offset the less satisfactory conditions in Kasakstan and Tartar Republic. It should be noted, however, that a considerable share of the Siberian spring wheat acreage had been sown very late this year, so that considerable risk of damage from early frosts still exists.

On basis of present conditions and information at hand, it seems that the 1930 crop of wheat for the Union as a whole will be materially above last year but crop reports are still too indefinite to permit an exact estimate. An increase in the rye production also seems probable due to the increased acreage. Developments in the Russian financial situation throughout the year will be extremely important in determining exports.

The grain procuring campaign

The 1930-31 grain procuring campaign began in July, but the procuring operations were considerably below the plan both in July and August. The Soviet press is showing signs of alarm because of this slow development of the campaign, which - it is emphasized - is one of greatest importance. It should be remembered, however, that procurings are running at a higher level than last year, so that the falling back of procurings from Government plans is due to the fact that this year's plans are raised considerably as compared with a year ago.

Autumn sowing campaign

Autumn sowing has started around the middle of August in the northern regions, but its progress was somewhat hampered by dryness prevailing in Bashkocria and Middle Volga during the second ten days of the month as well as by excessive rains in the Leningrad region. Dry weather during the last ten days of August also impeded sowing in the southeastern section of the Middle Volga and in the lower Volga region as well as in southern Hijai-Horvored.

The autumn sowing plan for all winter grain is fixed at 106,000,000 acres for the Union as a whole, of which 30.6 million acres fall to the share of winter wheat. While the total increase of autumn-sown acreage is to amount to 9.6 per cent for the Union as a whole, the plan provides for an increase of 12.3 per cent in Ukraine. Ukraine's readiness to export ports was probably an important factor in determining the above mentioned large increase there.

Up to September 1 16.6 million acres were sown, being 38.5 per cent of the plan for the regions where sowing had begun. An additional 425,000 acres were sown in the Ukraine and the eastern regions. The press is already beginning to complain of the slow development of sowing and anxiety is being expressed because the optimum dates of sowing are about to expire in some of the northern regions.

Probable effects of the new import certificate values in Germany on trade and prices of the commodities concerned 1/

Generally speaking, the import certificate system, particularly during 1930, has lost much of its original character as a device for equalizing price levels and making the tariff more effective in relatively remote parts of the country by allowing exports from behind tariff walls to natural markets outside.

It is now being used, in conjunction with an array of new regulatory measures, such as the milling law, the bread law, corn monopoly, etc., as a device for controlling or influencing domestic commodity markets through manipulation of imports and exports of these and related products. The system has now become a farm relief measure pure and simple.

1/ Report from Agricultural Commissioner L. V. Steere of Berlin, Germany - August 29, 1930.

The reduction of import certificate values for given products has the general effect of decreased inducement to export, particularly when a high import duty prevails for such products and is made effective by imports. The valuation of import certificates below the effective duty for the same product also discourages exports unless the domestic market is depressed relative to world price levels. The reduction of certificate values or a condition of low value of the certificate in relation to the duty, therefore, usually tends to make for lower prices of a given product.

The raising of import certificate values or maintenance of a high value in relation to the effective duty has the general effect of encouraging exports and, therefore, of raising the internal price level. Increases in the value of the certificate are particularly effective in stimulating exports when the domestic market is low.

Recent increases in German bran exports to the United States are probably due in no way to the effects of the import certificate system, as bran is not among the products included in the system. The increase in exports is probably due to a rye bran production in Germany somewhat in excess of the ability of the market to absorb under conditions recently prevailing. It does not seem likely that really important exports of bran to the United States are in prospect.

The effects of the German import certificate system 1/

Wheat

The large increases in German duty on wheat since the first of the year without alteration of the values of the import certificates has had the effect of removing practically all incentive for wheat exports. Some exports have occurred, but these have probably consisted of poor quality grain whose market value was somewhat in line with world prices. With an import duty of 97.24 cents per bushel and the value of the import certificate fixed at only 42.14 cents the same time that the country is importing considerable wheat, domestic price levels are forced sufficiently above world levels so that the deficit areas within Germany offer prices attractive enough to offset the lower cost of transportation between portions of Germany, such as East Prussia and certain natural foreign markets, such as the Scandinavian countries. The relatively high domestic price level tends to make for sale of wheat at home instead of abroad, though some exports of low qualities may still be possible.

In the case of wheat, however, the import certificate system has practically lost its significance as a result of the enactment of the milling regulations calling for the milling of a certain prescribed percentage of domestic wheat of all mills. This regulation has overshadowed practically all other price making factors in Germany since its enactment, although its success, of course, to an important extent is the result of the higher tariffs. It is entirely possible that rigid enforcement of the milling obligation, i.e., the retention of a high milling percentage throughout the important months of the season, would entirely nullify the import certificate system as far as wheat is concerned.

1/ Report from Agricultural Commissioner L.V. Steere of Berlin, Germany, August 29, 1930.

The problem of Russian wheat exports 1/

For more than a decade Russia has been an uncertain factor in the world wheat situation. A definite forecast with regard to the future of Soviet Russia in the world wheat trade is extremely difficult at this juncture. Nevertheless, it may be worthwhile to survey the wheat situation in that country as the basis for judging possibilities of future production and exports.

During the past five years, Russian wheat production appears to have been somewhat above pre-war for the present territory of Soviet Russia but the increased production has not been equal to the increase in consumption. Production in the period 1925-1929 averaged 5 per cent above pre-war but in the meantime population had increased about 8 per cent. Furthermore, per capita consumption of wheat has increased in recent years. Urban per capita wheat consumption increased by 47 per cent between the years 1923-24 and 1926-27 before the advent of wholesale rationing and rural consumption increased 67 per cent. This increase in per capita consumption apparently has been due in part to replacing rye with wheat. The urban and rural consumption of rye declined by 54 and 18 per cent respectively during the same period. Population is continuing to increase at a fairly rapid rate and a further replacement of rye by wheat in the absence of rationing may be expected along with improvement in living conditions.

Producers of wheat have greatly increased consumption and one result of the increase in consumption has been a great reduction in the amount of wheat appearing in commercial channels.

The government procurements of wheat for the domestic deficit areas and for export purposes during the period 1925-1929 amounted to only about 10 per cent of pre-war exports.

Increase in consumption and inefficient distribution has prevented Soviet Russia from resuming the role of a large exporter of wheat. In fact, the production of 1928 was not sufficient for domestic requirements and the government experienced serious difficulties with the domestic bread supply which led to the rationing of the breadstuffs supply.

Before the late war wheat was a very important factor in Russian foreign trade. In the absence of long time foreign credits or other large physical exports resumption of wheat exports is a matter of first importance to Soviet Russia. It is essential to the development of the Soviet program for the extensive industrialization of Russia.

1/ This is a brief summary of a study by L. Volin which will be published in full at some later date.

The Soviet government has a monopoly of all foreign trade and practically a monopoly of the domestic grain trade. As a consequence, the government possesses the initiative in the matter of wheat exports. The objectives of the Soviet government in exporting are somewhat different from those of private grain traders. Availability of foreign exchange is a serious problem for the Soviet government, and the need of exchange encourages the government to export even at low prices which might be unprofitable for private producers and exporters.

In the face of a tendency to increase the domestic consumption, the Soviet government can obtain a surplus for export only by rationing or increasing production, or by both. A permanent rationing policy that would curtail consumption sufficiently to provide large exports appears to be quite impracticable even in Soviet Russia.

The physical possibilities for expansion of wheat production in Russia are apparently large. Even a small increase in the average yield, which at present is a little over 11 bushels per acre and is among the lowest in Europe, would on an area exceeding 70 million acres make for a substantial increase in the output. Finally, with the improvement of transportation facilities, there is a possibility of the extension of acreage in new sparsely settled regions. Completion of the Turkestan-Siberian Railroad for instance, traversing Kazakstan with its more than 60 million acres of grass land, will facilitate the process of bringing new land under the plow. Some of these lands which may have been formerly considered ill adapted for growing wheat under the condition of small-scale peasant cultivation may be suitable for the crop under large-scale lower-cost methods which are being introduced by the Soviet government into Russian agriculture.

The basic obstacles to the expansion of wheat production, especially commercial production during the post-war period lie in the inefficiency and economic self-sufficiency of the prevailing petty peasant farming, aggravated by certain aspects of the Soviet economic policy which tended to arrest the normal economic evolution of Russian agriculture on individualistic lines, although it might have alleviated the grain crisis. The agrarian revolution of 1917-18, which led to the break-up of large estates and farms, gave a strong impetus to the growth of small peasant farming. The number of holdings increased from some 19 million on the eve of the war to about 26 million in 1929 when Russian small-scale peasant cultivators began to be seriously challenged by the rising tide of collective farming. The significance of the change in the form of agricultural exploitation from the standpoint of wheat exports consists in the fact that the smaller, less efficient, poorly supplied with livestock and equipment and more self-sufficient peasant units of the post-war period were not in a position to replace the considerable share of the exportable surplus which used to be contributed in the pre-war period by the larger holdings.

The tendency towards self-sufficiency, strong in any case among small peasant farmers, was accentuated by the disparity between agricultural prices and prices of manufactured goods. This phenomenon, accompanied by frequent shortages and poor quality industrial goods, diminished the purchasing power of the peasants and offered little incentive for them to produce for the market. As a result they found it more advantageous to concentrate on the raising of commercially less important crops such as rye, for instance, than on cash crops like wheat. As a matter of fact, the 1925-1929 rye acreage was 12 per cent above 1909-1913, while the 1925-1929 wheat acreage was 2 per cent below 1909-1913.

The central feature of the price disparity in Soviet Russia has been its intimate relation to the economic policy of the Soviet government. The latter largely determines through its pervasive control of practically all phases of Russian economic life and its price-fixing activities the terms of exchange and price relations of agriculture and manufacturing industry. It is, of course, instrumental in adopting the policy of industrialization embodied in the now celebrated "five-year plan". Such a policy of accelerated industrial development, with its emphasis on the nurture of so-called heavy industries producing capital goods and the rigid protectionism which it implies, necessarily involves, at least during the initial stages, a certain disparity between agriculture and manufacturing industry. Only in this way can sufficient capital be secured for industrial expansion in a predominantly agricultural country like Russia without the aid of foreign borrowing. While increased efficiency of the manufacturing industry and of the distributive system may diminish the spread in prices and shortages of goods it can hardly be expected that they will be completely eliminated within the next few years.

Even more directly has the Soviet government blocked the path of economic advancement of individual peasants and consequently a possible avenue to an increased commercial output by its oppressive policy towards the more prosperous peasants, known as "Kulaki". This attitude was dictated by fear that an untrammelled economic development of the more prosperous strata of the peasantry would lead to the restoration of capitalism in Soviet Russia. The Soviet authorities have been engaged in a tug of war with the "Kulaki" for a number of years past, but during the last two years its anti-"Kulaki" policy became stiffened and the struggle assumed a more intense character. It reached its culminating phase last winter when a widespread and ruthless campaign was waged for a wholesale liquidation of the Kulaki, i.e., their complete economic annihilation.

To offset the unfavorable consequences of the grain crisis described above, the Soviet government has put forward its own scheme of far-reaching agricultural reorganization which is embodied in the proposals for the collectivization and industrialization or mechanization of Russian agriculture, purged of the "Kulaki" and all traces of capitalistic development, a program known as that of the so-called "socialist reconstruction" of farming. In fact if high prices, shortage of manufactured goods, and the struggle with the Kulaki are the negative aspects of the Soviet economic policy of accelerated industrial development and class struggle in the village, then it may be said that the twin principles of collectivization and industrialization of agriculture are the positive aspects of the policy. It is aimed by the Soviet government to reorganize Russian agriculture on a large-scale collectivist basis, to replace the horse by the tractor as a source of power on the farm, to introduce more modern methods of cultivation and equipment, and ultimately to do away entirely with the prevailing system of petty peasant farming. In this manner it is hoped to increase the efficiency of farming, and at the same time gain control over agricultural production similar to that exercised by the Soviet state over manufacturing and mining industries and other branches of the so-called "planned economy".

To gain this objective, the Soviet government has striven on the one hand to introduce tractors and increase the amount of agricultural machinery of various kinds on farms and on the other hand it has pushed energetically, even ruthlessly, its program of agricultural collectivization. The number of tractors on farms in Soviet Russia increased from some 2,600 on October 1, 1924 to 34,000 on October 1, 1929. Since that date more than 20,000 tractors have been purchased in the United States and shipped to U.S.S.R. A new tractor factory was recently constructed at Stalingrad on the River Volga, construction of another tractor plant was started in Cheliabinsk, Siberia, and it was decided to speed up the construction of a similar plant in Kharkov with a capacity of 50,000 tractors per year. By concentrating the tractors in large units under a single management it is possible to serve a larger area, but the utilization of tractors in many cases is inefficient.

In the sparsely settled regions, where uncultivated land is available, the Soviet government has proceeded since 1928 with the organization of large grain tractor farms, owned and operated entirely by the Soviet state. There are at present 130 such farms and the area cultivated in 1929-30 exceeded 2,500,000 acres devoted largely to spring wheat. The program for 1930-31 calls for the organization of 80-85 new farms of this type, and the increase of the cultivated area to about 11 million acres. At the same time the Soviet authorities have pushed a campaign for combining small peasant units which predominated in Russian agriculture into greater collective farms. The speed with which this campaign was carried on can be judged from the fact that while in 1929 approximately only about 4 per cent of all the peasant households were combined into collective farms, with variations which were considerable from region to region, it was officially reported that on March 1, 1930 more than one-half of the peasant households have joined the collective farms. In some regions the number of collectivized peasant households reached 80 per cent.

This speedy wholesale collectivization of peasant farming is not a healthy growth. A great deal of the success achieved was on paper only; was not accompanied by proper organization and was frequently accomplished by coercive methods which provoked serious discontent among the peasantry. To avoid disaster the Soviet government took measures on the eve of the spring sowing campaign to slow up the pace of the collectivization and to correct the numerous excesses committed in the course of the drive during the fall and winter of 1929-30. Since then the collectivization movement suffered a setback, due to the numerous recessions of peasants from the collective farms. Although the number of peasant households in collective farms has declined substantially from the high water mark reached during the early spring, especially in the new regions of collectivization, nevertheless, a considerable advance has been made in the collectivization of Russian peasant farming, as can be seen from the fact that collective farms accounted for about 40 per cent of the area sown to all crops this spring as against less than 4 per cent in 1929.

This review indicates the controlling importance of the Soviet state in the Russian wheat situation, because of the effect which its policies have on both the production and marketing of wheat. In general it is still too early to say what will be the outcome of the efforts of the Soviet government to develop collective and state farming on a large scale as a cornerstone of its agrarian policy. It is a question of its ability to build up an efficient farm and marketing organization and to provide, in the face of a probable low level of world wheat prices, adequate economic incentives for the utilization of the abundant natural resources for commercial wheat production which are at its disposal. In the last analysis the prospects of Russia becoming once more a large surplus wheat producer and exporter, operating on the world market not sporadically but continuously, depend largely upon the success of the agricultural policy of the Soviet government.

The tremendous magnitude of the task of farm and marketing organization and management undertaken by the Soviet state under conditions of a bitter internecine struggle in the Russian village, the novelty of the experiment, the increasing domestic consumption of wheat, the need of providing out of domestic resources large capital expenditures both for agricultural rationalization and for industrial development and finally, the adverse fact of low world wheat prices all combine to make the resumption of wheat exports on a large scale a very difficult problem.

Table 21. - Wheat including flour: Exports from principal exporting countries, June, July and August 1929 and 1930

Country	June		July		August	
	1929	1930	1929	1930	1929	1930
	1,000	1,000	1,000	1,000	1,000	1,000
	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>	<u>bushels</u>
United States.....	9,003	12,463	13,784	16,377	17,558	18,226
Canada	29,794	21,579	20,779	22,833	13,051	1/16,889
Argentina	25,391	2/10,288	14,463	2/4,892	25,292	3,812
British India	499	2/1,448	575	2/2,448	768	1,880
Australia	6,975	2/4,296	4,346	2/6,324	5,264	4,612
Russia 2/	0	1,064	0	898	0	6,252
Yugoslavia &						
Bulgaria 2/	32	464	456	408	504	1,368
Total	71,694	51,722	54,403	47,854	62,217	53,219

Compiled from official and trade sources.

1/ Shipments from Fort William, Port Arthur, Vancouver and Prince Rupert.

2/ Preliminary.

Table 22. - United States: Exports and imports of wheat including flour

Item	July 1, 1929	July 1, 1930
	to	to
	Aug. 31, 1929	Aug. 30, 1930
	<u>1,000 bushels</u>	<u>1,000 bushels</u>
EXPORTS:		
Wheat	20,785	27,267
Flour in terms of wheat	10,331	8,968
Total	31,116	36,235
IMPORTS: (JULY ONLY)		
Wheat	1,226	1,336
Flour in terms of wheat	1/	1/
Total	1,226	1,336
NET EXPORTS:		
Wheat	19,559	25,931
Flour in terms of wheat	10,331	8,968
Total	29,890	34,899

1/ Less than 500 bushels.

Table 23. - United States: Exports of wheat and wheat including flour, by weeks 1929 and 1930

Week ended	Wheat		Wheat flour		Wheat including flour	
	1929	1930	1929	1930	1929	1930
	bushels	bushels	barrels	barrels	bushels	bushels
June 7	939	1,031	175	131	1,761	1,647
14	1,570	1,603	212	130	2,566	2,214
21	594	1,619	138	146	1,243	2,305
28	1,031	1,828	248	212	2,197	2,824
July 5	1,202	1,541	105	131	1,696	2,157
12	839	825	243	111	1,981	1,347
19	1,551	3,962	180	209	2,397	4,944
26	3,558	2,782	290	175	4,921	3,604
Aug. 2	1,762	3,827	151	228	2,472	4,899
Aug. 9	2,678	1,388	144	145	3,355	2,570
16	3,885	2,704	210	242	4,872	3,841
23	4,493	3,104	187	295	5,372	4,490
30	5,004	6,361	186	205	5,878	7,325
Sept. 6	2,858	3,386	154	125	3,582	3,974
13	3,485	2,451	217	303	4,505	3,875

Compiled from weekly report of the Department of Commerce.

Table 24. - Wheat including flour: Shipments from principal exporting regions, specified dates, 1929 and 1930

Date	Argentina		Australia		Danube		North America	
	1929	1930	1929	1930	1929	1930	1929	1930
	bushels	bushels	bushels	bushels	bushels	bushels	bushels	bushels
June 7	7,120	2,344	2,264	1,336	0	104	10,452	8,348
14	5,968	3,080	1,632	468	0	80	10,742	7,441
21	4,800	2,672	1,334	1,840	32	160	8,519	5,448
28	6,088	2,192	708	656	0	120	7,933	6,757
July 5	5,328	1,624	1,384	1,508	120	80	4,842	5,254
12	4,312	780	1,176	1,000	0	168	11,140	8,084
19	2,996	1,336	1,160	1,064	120	136	6,446	6,759
26	2,388	416	1,272	1,304	8	24	5,675	9,167
Aug. 2	2,620	732	592	1,444	208	0	7,998	8,283
Aug. 9	5,988	1,336	1,568	1,716	16	336	5,586	8,388
16	5,688	928	1,516	852	144	136	6,728	9,564
23	6,924	516	1,352	1,428	160	472	5,045	10,012
30	5,144	1,032	800	816	184	424	5,092	10,340
Sept. 6	5,930	461	1,704	512	120	592	4,000	8,212
13	3,631	892	1,400	560	928	1,280	7,280	10,064

Compiled from official and trade sources.

1 - World prospects	1- 3
2 - World production	4- 5
3 - World trade	6
4 - Prices	7- 9
5 - United States	10-19
6 - Canada	20-21
7 - Australia	21-22
8 - The Orient	22-23
9 - India	23
10- Europe	23-36
11- Probable effects of the new import certificate values in Germany on trade and prices of the commodities concerned	36-37
12- The effects of the German import certificate system	37
13- The problem of Russian wheat exports	38-42

TABLES

1 - Wheat: Production, average 1909-1913, 1923-1927, annual 1928-1930	4
2 - Wheat, including flour: Shipments from principal exporting countries	6
3 - Wheat: Closing prices of December futures at specified markets	8
4 - Wheat: Weighted average cash prices at stated markets	8
5 - Wheat: Price per bushel at important world markets, January-August, 1929 and 1930	9
6 - Wheat: Liverpool parcels price per bushel by classes	9
7 - Wheat flour: Supply, distribution and per capita consumption in the United States, in terms of wheat, 1925-1930	12
8 - Wheat: July and August receipts at specified markets 1926 - 1929 - 1930	13
9 - Wheat: Visible supply in the United States by weeks, 1929 and 1930	14
11 - Licensed inspections of hard red winter wheat in Kansas, Texas and Oklahoma for the month of July 1925-1930, average 1925-1929	15
12 - Wheat: Protein content by States, 1925-1930	16
13 - Wheat: Number of cars and protein content inspected at Kansas City, Missouri, specified periods, 1930	17
14 - Protein content of wheat in all line cars received at Minneapolis, as determined by protein laboratory of grain investigation, Minn- esota grain inspection department, specified periods, 1930	17
15 - Wheat No. 2 hard winter: Average premiums paid per bushel for pro- tein over the price paid for 11.25-11.45 per cent, by months, at Kansas City, 1925-1930	18
16 - Wheat No. 1 dk. no. spring: Average premiums paid per bushel for protein over the price paid for No. 1 northern spring (cash close) by months, Minneapolis, 1926-1930	18
17 - Stocks of all grain, unfilled storage space available for storing new crop and per cent of total space filled at 14 principal mar- kets on stated dates	19
18 - Wheat: Estimated deficit of the United Kingdom and continental Europe, 1930-31	25
19 - Wheat: Production in Europe, average 1925-1929, annual 1929 and preliminary estimates for 1930	26
20 - Germany: Price per bushel of domestic wheat and rye, July 9 - September 10, 1930	29
21 - Wheat including flour: Exports from principal exporting countries, June, July and August 1929 and 1930	43
22 - United States: Imports and exports of wheat including flour	43
23 - United States: Exports of wheat and wheat including flour, by weeks 1929 and 1930	44
24 - Wheat including flour: Shipments from principal exporting regions, specified dates, 1929 and 1930	44