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Prepared by the Divisions of Agricultural Economics and Agricultural Extension
Paul E. Miller, Director Agricultural Extension

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### The World Food Situation

O. B. Jesness

Major wars create food problems. Food production and supply are reduced in some areas by the shift of man power from agriculture to military service and by the use of steel, chemicals, and other materials for war rather than for farm machinery, fertilizers, and other supplies used in food production. War interferes with the flow of goods and their processing. The volume of

supply available in some parts of the world is sharply reduced in consequence. Demand, on the other hand, is increased by military requirements and by the increased spending power which war employment gives many consumers.

Europe's food supply situation was fairly favorable when the war began. Western Europe, however, became increasingly dependent on outside supplies, particularly from the United States and Canada, as the war continued. The lend-lease program was an effective sharing of food supplies, as well as of other war costs, with our allies and nations friendly to us. Food aids to Europe have continued under a variety of programs since the end of active warfare. The European Recovery Program, authorized by Congress earlier this year, includes food among the supplies being sent to participating nations.

It will require time to restore agricultural output to prewar levels in war-affected parts of Europe. Weather conditions have delayed the re-establishment of more normal food supplies. The winter of 1946-47 was unusually severe in Europe and this was followed by extreme drouth in western Europe in the summer of 1947. Fortunately, crop prospects are decidedly better this year. Agricultural recovery and marketing of farm products have been slowed down by inadequate supply of other goods and by monetary instability. The division of Europe into east and west has reduced food supplies available in western Europe and has increased the dependence of that area on other sources.

Improved crop prospects and progress in economic recovery are improving diets and lessening dependence on outside supplies. However, it will require some time to

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bring diets back to prewar levels in Great Britain and some parts of Europe. Livestock numbers, especially hogs and poultry, were reduced in some areas. Farm equipment and fertilizers are still in short supply. Time also is needed for adjustments in the cases of displaced and transplanted people.

Wheat has been the major food contribution of the United States

to Europe during the past year or so. This commodity is a well-nigh universal food. It can be transported and handled easily, and it is a relatively economical source of human maintenance and energy. The record wheat crop in the United States in 1947 came at the most opportune time, enabling this country to be of greater aid than otherwise would have been possible. Shipments of food have been important not only in easing shortages but also in helping to restore order and revive economic activity.

The wheat crop this year will be smaller, but the demand from overseas likewise will be less pressing. Wheat is expected to remain important in the European Recovery Program but smaller amounts will be needed. As European diets improve, livestock and livestock products will again assume greater importance, although cereals and potatoes will remain the mainstay in the diets of many. An increasing supply of feed grains will be needed. Home production will provide part of this grain and the rest will have to be imported. Eastern Europe can be an important source of imports. It is impossible to predict, however, the extent to which trade between eastern and western Europe will be revived. It may be noted in this connection that the desire for such exchange is by no means one-sided. Agricultural areas in eastern Europe need markets in and supplies from the more industrialized areas of western Europe.

While the European food situation is improved, it will be some time before it returns to prewar levels. Several years elapsed before Europeans generally were back to prewar food supplies after World War I. The destruction and disruptions of World War II were much greater. The time required for return to prewar levels will depend upon

weather, the rate of economic recovery, government and monetary stability, restoration of trade, and prospects for enduring peace. The volume of future agricultural exports from this country will depend not only on overseas needs but also on foreign exchange available to other countries. The latter will be decided by the volume of trade and especially by the trade policies of the United States.

Food shortages have revived interest in the Englishman, Malthus, who a century and a half ago predicted that population would outgrow food supplies. He viewed famine, pestilence, and war as the forces which would keep numbers in line with supplies. The experiences of the western world have not borne out the predictions of Malthus. He could not have been expected to foresee in full the expansion in agricultural areas, particularly in the new world, which was destined to take place. Nor could he anticipate advancements in agricultural technology. Another very important factor which he could not foresee was the decrease in the birth rate in recent decades.

The Orient presents a different situation. The grim picture suggested by Malthus comes uncomfortably close to being an accurate prediction in that area. Here the population presses on the food supply. Hunger is not an unusual state for millions. Any extensive crop failure in this part of the world soon transforms hunger into famine and death. Some die for lack of food; many others become easy prey to disease because of their weakened condition.

The United States is not the unlimited source of world food supply which some persons believe it to be. This country does not have the capacity to feed the entire world. Its supplies are not equal to the task of raising materially the dietary levels of the large population in the Far East. Nor does that region at present have the means of buying very much in our markets. In times of dire distress, emergency food aid may be extremely important. However, basic improvement in nutrition levels in that part of the world will have to come mainly from changes within the area itself. These changes include better use of available resources and development of nonagricultural lines to improve incomes and to take some of the population off the land. Farm units can thus be enlarged and made more efficient. Long-run improvement of the food situation appears unlikely without some moderation of the high birth rates characteristic of that part of the world.

What about our own food situation? Are we in danger of falling short of meeting our needs? Population is still increasing, which means that there will be more mouths to feed. The war period brought an increase in the birth rate. While indications still are that the population will level out at some time in the future, that time is somewhat farther away and the number somewhat larger than was estimated before the war. Agriculture can still count on further growth in the population, but should be prepared for a slowing down in the rate of increase.

The high cost of living so disturbing to Americans at present may appear to indicate that food production has failed to keep up with population growth. Actually, the output of food on American farms increased more than the population during the war period. Demand, however, increased more. Part of this demand came from the over-

seas needs, but a considerable share was the consequence of more employment and increased money incomes of consumers. Costs are high in terms of prewar food prices but Americans now consume more than during the 1930's.

The line between scarcity and surplus in food supply is relatively narrow. Unfavorable weather over any considerable area during the growing season soon makes its effect felt. Any decline in employment and incomes likewise influences the demand for some food products.

An appraisal of prospects suggests little likelihood of any general or serious food shortage in the United States in the foreseeable future. In fact, the concern felt by many farmers today over the possibility of future price-depressing surpluses in some lines appears to be more realistic than worry over serious shortages. Once expanded, agriculture does not shrink production easily. The enlarged war output is likely to continue. The end of improvements in agricultural technology is not in sight. New developments need not be as spectacular as hybrid corn to have important effects. Most of the land area well suited to agriculture is now in farms but there is room for some expansion through reclamation if and when needed. The shift from animal to mechanical power during the past thirty years has released about 55 million acres for production for food or other purposes. An additional 15 to 20 million acres may be released in the same way during the next two decades. Available land can be farmed more intensively if necessary. The use of fertilizer is increasing. Some of these developments may merely maintain output but some may lead to increased yields. The United States could support a considerably larger population if diets shifted to crops and away from livestock and livestock products. However, a need for such a shift is not apparent at present.

## Seasonality in Egg Production and Marketing

W. H. DANKERS

As in many other farm enterprises seasonality in production constitutes a problem in the egg enterprise. Eggs are consumed at a fairly uniform level throughout the year. There is a high peak of production in March, April, and May, however, and considerably below-average production in the fall months of September, October, and November. This requires storing a considerable volume of eggs for part of the year. Thus greater price fluctuation occurs, and markets cannot be as well developed as when production is more uniform.

Seasonality in production is responsible for "jumpy" egg prices in certain areas of the state. More eggs are consumed than produced in the Northeastern area of Minnesota. This provides a local market for the producers in the area, and they usually receive a price that is higher than the average for the state. Hennepin and Ramsey counties have a similar situation.

In other areas of Minnesota more eggs are produced than consumed. Because of the seasonality in production, the deficit areas (where more eggs are consumed than produced) expand during short supply months and contract

in the months of peak production. On the border line, where such expansion and contraction is taking place, prices change from abnormally high while a deficit situation prevails to abnormally low when a surplus situation prevails. Because such areas depend on a local market for part of the year, the egg volume is low, and the marketing machinery is not well developed for out-shipment from the area during the periods of surplus. This also tends to depress prices.

The monthly egg production, and each month's percentage of the United States' total is given in table 1.

It can be observed from table 1 that egg production has been much less seasonal in the United States in the last several years than in earlier years. During 1925-34, average production was 14.1 per cent of the year's total in the peak month of April and dropped as low as 3.6 per cent in November. During 1945-47 monthly production was uniformly high in March, April, and May. Production wasn't nearly as high in any one month, when compared with total production for the year, as it was in the earlier period. Likewise, production did not drop as low in the fall months as in the earlier period and was uniformly low in September, October, and November. In the earlier period November was definitely the low production month.

The trend in Minnesota is similar to that in the United States as a whole. Statistics on egg production for the five-year period of 1940-44 and the three-year period of 1945-47 are given in table 2.

The peak in egg production in Minnesota used to be in May. This was later than the peak in the whole United States. Flocks in Minnesota are now brought into production earlier in the fall, and consequently the spring peak of production comes earlier than in past years. During 1945-47 Minnesota egg production was uniformly high for the months of March, April, and May. The low point of production was in October, which is earlier than for the United States.

Table 3. Prices Per Dozen for Eggs Received by Farmers in Minnesota

Years	Jæ.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average
Average					(C	ents	per	do	zen)				
1930-34	20	15	14	13	13	11	12	14	16	20	24	23	16.3
1935-39	19	18	16	16	17	16	17	18	20	24	25	23	19.1
1940-44	24	23	23	24	24	24	26	27	29	31	33	32	26.7
1945-47	34	32	33	34	34	34	36	37	39	42	40	42	36.4
Ind	ex of Month	ıly F	rice	sA	nnu	al A	ver	ıge	Pric	e =	100		
1930-34	123	92	86	80	80	68	74	86	98	123	148	142	100
1935-39	100	94	84	84	89	84	89	94	105	126	131	121	100
1940-44	90	86	86	90	90	90	98	101	109	116	124	120	100
1945-47	93	88	91	93	93	93	99	102	107	115	110	115	100

There is a limit to how much egg production can be leveled. A single farm enterprise is fitted into the farm business along with a number of other enterprises, and the distribution of work and the available labor must be considered. Costs of production may be lower at certain seasons of the year. Weather is also an important factor of production. An individual producer will be able to obtain larger returns for his efforts, however, if he can avoid the seasonal production peaks and market his products when the supply is low. Market prices are usually considerably below the annual average during the season of peak production and considerably above the annual average during the season of low production. The mid-month average prices received by farmers for eggs in Minnesota during various five-year periods are given in table 3.

It can be observed from table 3 that prices have leveled with a leveling in egg production. In the 1930-34 period average mid-month prices ranged from 20 per cent below the annual average to 48 per cent above average, in 1935-39 from 16 per cent below to 31 per cent above, in 1940-44 from 14 per cent below to 24 per cent above, and in 1945-47 from 12 per cent below to only 15 per cent above.

Table 1. Monthly Egg Production and Percentage of Yearly Total—United States

Years	Jan.	Feb.	Mar.	April	Мау	June	July	Aug.	Sept.	O et.	Nov.	Dec.	Total	Monthly Average
Average		L					(Million	dozens)						
1925-34	170	243	392	437	416	333	281	239	195	153	113	123	3095	258
1935-44	237	286	418	455	409	354	303	280	222	197	173	203	3537	295
1945-47	363	408	545	552	523	435	374	319	281	272	261	305	4638	386
			Per c	ent Month	ly Product	ion was o	f Total Pr	oduction fo	or the yea	r				
1925-34	5.5	7.8	12.7	14.1	13.4	10.8	9.1	7.7	6.3	5.0	3.6	4.0	100.0	
1935-44	6.7	8.1	11.8	12.8	11.6	10.0	8.6	7.9	6.3	5.6	4.9	5.7	100.0	
1945-47	7.8	8.8	11.7	11.9	11.3	9.4	8.1	6.9	6.0	5.9	5.6	6.6	100.0	

Table 2. Monthly Egg Production and Percentage of Yearly Total—Minnesota

Years	Jan.	Feb.	Mar.	April	Мау	eunſ	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Monthly Average
							(Million	dozens)						-
1940-44	18.4	19.8	21.8	28.2	29.1	24.3	20.6	17.7	14.6	12.3	12.4	16.1	235.5	19.6
1945-47	29.9	29.9	36.1	36.3	36.2	31.5	27.2	22.6	18.4	17.0	18.3	25.4	328.8	27.4
			Per c	ent Month	ly Product	ion was c	f Total Pr	oduction f	or the yea	r				
1940-44	7.1	8.3	9.1	11.8	12.2	10.2	8.6	7.4	6.1	5.1	5.2	6.7	100.0	
1945-47	9.1	9.1	11.0	11.0	11.0	9.6	8.3	6.9	5.6	5.2	5.5	7.7	100.0	

#### Minnesota Farm Prices For June, 1948

Prepared by W. C. WAITE and K. E. OGREN

The index number of Minnesota farm prices for June, 1948 is 303.5. This index expresses the average of the increases and decreases in farm product prices in June, 1948, over the average of June, 1935-39, weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index, June 1948, with Comparisons\*

	June 15, 1948	May 15, 1948	June 15,	lune 15, 1948 May 15,	June 15, 1947
	<u> </u>	27		THE ME	
Wheat	\$2.26	\$2.33	\$2.38	Hogs\$22.00 \$19.0	\$21.50
Corn	2.05	2.06	1.72	Cattle	19.70‡
Oats	1.05	1.05	.89	Calves 26.50 24.7	22.60‡
Barley	2.05	2.06	1.80	Lambs-Sheep 22.09 21.2	4 19.62‡
Rye	1.94	2.19	2.87	Chickens	00 .207
Flax	5.84	5.85	5.93	Eggs	75 .380
Potatoes	1.60	1.60	1.30	Butterfat	2 .68
Нау	14.00	13.50	13.00	Milk 3.95 3.9	5 2.95‡
				Wool†	4 .43‡

 $<sup>^{\</sup>star}$  These are the average prices for Minnesota as reported by the United States Department of Agriculture.

† Not included in the price index number.

# Revised.

Prices received for Minnesota farm products rose 4 per cent from May to June. Price increases that have occurred in the months following February's sharp price decline have brought the Minnesota farm price index to a level only slightly below the January record high. The purchasing power of Minnesota farm products in June equaled the January value.

Crop and livestock product prices declined 1 per cent from May to June, while livestock prices increased 11 per cent. The largest individual gain, 16 per cent, was recorded in hog prices. Prices of cattle, calves, and lambs-sheep advanced above the record highs reached in May.

Indexes and Ratios for Minnesota Agriculture\*

	June 15, 1948	June 15, 1947	June 15, 1946	Average June 1935-39
U. S. farm price index	279.9	257.1	206.8	100
Minnesota farm price index	303.5	262.1	197.3	100
Minn. crop price index	339.3	317.9	223.9	100
Minn, livestock price index	304.0	280.0	181.1	100
Minn. Livestock product price index	293.6	232.2	204.1	100
U. S. purchasing power of farm products	139.6	140.0	132.8	100
Minn. purchasing power of farm products Minn. farmers' share of consumers' food	151.4	142.7	126.7	100
dollar	58.9†	60.5	65.3	45.5
U. S. hog-corn ratio	10.6	12.6	10.1	12.0
Minnesota hog-corn ratio	10.7	13.7	11.1	15.2
Minnesota beef-corn ratio	12.0	11.3	10.9	12.8
Minnesota egg-grain ratio	10.6	11.3	12.1	14.6
Minnesota butterfat-farm-grain ratio	25.4	22.0	30.5	30.9

 $<sup>^{\</sup>star}$  Explanation of the computation of these data may be had upon request.

† Figure for April, 1948.

### The 1948 Pig Crop

K. E. OGREN

The U.S. Department of Agriculture in its June pig crop report estimated the 1948 spring pig crop at 51.4 million head, which is about 3 per cent below both the 1947 and the 1937-46 average. Because of a 3 per cent increase in the expected number of farrowings and a near-record number of pigs saved per litter (6.44), however, the estimate is considerably larger than the farmers' reports last December indicated.

Farmers' reports on breeding intentions indicate that 4.9 million sows are being kept for fall farrowing, which is about the same number that farrowed last fall but 8 per cent below the 10-year average. The indicated intentions are short of the Department goal set for 1948 fall farrowings, which called for a 10 per cent increase over last year.

The largest reductions in the 1948 pig crop are in some of the Corn Belt states. In Minnesota the spring pig crop was 8 per cent smaller than 1947 and 12 per cent below the 10-year average. A decrease in fall farrowings of 4 per cent from 1947 is planned by Minnesota farmers. If these breeding intentions are carried out, the total 1948 pig crop in Minnesota will be the smallest since 1938.

Hog slaughter during the latter half of 1948 will probably be considerably less than a year ago. The 1947 fall pig crop was marketed at a faster than usual rate and at lighter weights, especially in the Corn Belt states. On June 1 the estimated number of hogs over 6 months old on farms was less than a year ago despite the larger 1947 fall pig crop. A below-average proportion of the reduced spring pig crop will reach marketable weights during 1948. A larger number of farrowings occurred in April and May, and a considerable part of the pig crop will be held back for the new feed crop because of the present shortage of feed supplies.

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