FARM BUSINESS NOTES

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

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Market Outlets for Farm Products

WARREN C. WAITE

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Following the close of the war farmers have become increasingly concerned over the prospective markets for their agricultural products. Agricultural production during the war was expanded in the United States so that total production at the close was approximately a third larger than the prewar average of the years 1935 to 1939. The war brought with it a greatly increased demand for agricultural products. Some of the increased demand resulted from government purchases for the armed forces and for lend-lease shipment. Postwar purchases for the armed services have declined but there have been important relief shipments which have in part offset the decreased military requirements. However, a major part of the war demand came from increased buying power in the domestic market. This increased buying power was a reflection of expanded employment and higher income among the farmer's customers. Postwar domestic demand has been sufficient to maintain high prices. The close of the war thus finds our productive capacities capable of producing much more than prewar. If this production is to continue to be disposed of at favorable prices, however, a continued high level of demand will be required. This means that a greater domestic demand or larger exports than prewar or both will be needed.

The principal outlet for our agricultural production is the domestic market. During the 10-year prewar period from 1931 to 1940 the value of agricultural exports from the United States approximated 10 per cent of the cash income from farm marketings. However, even though the foreign market is considerably smaller than the domestic market this does not mean that our export sales are unimportant. A number of our individual agricultural products depended upon the export market for a substantial portion of their sales in the prewar period. This was the case for example with cotton, tobacco, lard, wheat, and some fruits. If the export market were unavailable for the producers of these products, their returns would be greatly lessened and many would be forced to change to other lines of production. In this way the producers of products which are sold entirely in the domestic market would face increased competition and lower prices. Thus even though our foreign sales are small, relative to domestic sales, they are nevertheless of great importance. A good foreign market as well as a good domestic market is desirable for the postwar period.

The events of the war clearly demonstrated the influence of the high consumer incomes upon the domestic demand for agricultural products, if any additional evidence were needed. Examination of the two prewar decades from 1921 to 1940 shows that an increase or decrease of 10 billion dollars in the income of nonagricultural workers was associated with a corresponding change of about 1.6 billion dollars in the cash sales of agricultural products. These relationships held for the variations among years of prosperity as well as those of depression.

City families necessarily spend a considerable portion of their income on food. Just before the war the typical workingman's family with an income of $1,500 a year was spending about one third, or $500, of that income on food. Not all of this expenditure reached the farmer, since nearly half went to pay for the marketing and processing services involved in getting the food from the farm to the consumer. Families with larger incomes were spending more on food, but this expenditure constituted a smaller proportion of their total expenditures. For example, a family with an income of $3,000 would probably spend $750 on food, but this would be only one fourth of its income. Families with lower incomes spend a large portion of their income on food but a smaller amount in dollars. A given dollar increase in the incomes of those in the lower income brackets would be expected, in consequence, to increase the demand for food more than a similar increase in the incomes of those in the higher income brackets. It is significant that the incomes of those in the lower income brackets increased relatively more during the war than those in the higher income brackets. Many families were able to purchase foods during the war which their low incomes had previously prevented them from securing.

Table 1. Percentage Increase in the Expenditure on Specified Foods by Nonfarm Families in the United States, 1941, Accompanying a 100 Per Cent Increase in Income

Whole milk	50.2	All beef	68.8
Sweet cream	115.1	All pork	38.0
Ice cream	177.7	All poultry	52.2
Butter	32.9	All lamb	98.8
American cheese	29.6	Eggs	45.8
Potatoes	25.8	Lard	—71.8
Sugar	1.4	Margarine	—33.7

The larger expenditures of the families in the higher income levels are not made up of a uniform increase in the expenditure on each of the different kinds of food. The quantities of potatoes, sugar, and cereals have fairly uniform consumption at all income levels. Expenditures on potatoes, however, increase because consumers buy better qualities. Families with larger incomes generally spend much more on dairy products, meats, and fruits and vegetables than families in the lower income levels. The rates at which expenditures on some selected food items increased with changes in consumer incomes among nonfarm families in the prewar period are shown in table 1. The rates are averages for differences of income represented by the $500—$999 income group and the $2,000—$2,999 income group in 1941.

It is not certain that expenditures by consumers on these commodities would decline in a similar manner with a general decline in consumer incomes. There is, however, considerable probability that the rates in the table indicate the general pattern of what would be the relative declines in demand.

Minnesota agricultural production is concentrated in livestock and livestock products and the demand for these products would be greatly influenced by a decline in consumer purchasing power. During the two prewar decades the relationship between the cash sales by Minnesota farmers and the national income was very close. Each increase of a billion dollars in national income was accompanied by an increase of 5¾ million dollars in the sales of Minnesota agricultural products. Declines in sales accompanied declines in the national income.

The prospects for a continued strong demand for export products are not good. Currently we are engaged in extensive rehabilitation and feeding operations abroad which require considerable quantities of food. These cannot, however, be expected to continue indefinitely and at their close we will be able to sell only what our foreign countries are able to buy with their own funds. The only way they can get these funds is by having at least some of them sell things to us. This means that we must be willing to buy products from abroad if we wish to export.

A satisfactory price situation for the farmer depends not alone upon the income of industrial workers but also upon the volume of industrial output. If wage rates are increased with no corresponding increase in industrial output, costs of goods bought by farmers will rise in price and this price rise is likely to be larger than the increase in consumer expenditures on farm products resulting from the larger wages. In this case, farm costs would be likely to rise more than farm income. Much also depends upon whose wages are increased. An increase in the wages of workers in the higher income group of laborers, with no increase in their output, would be reflected in an increase in the prices of the goods produced by them. If wages were not increased for the workers in the lower income groups these higher prices might lessen their ability to buy agricultural products. The net result would be little or no change in the demand for agricultural products. In the prewar period, 1921-1939, the volume of industrial production relative to the volume of agricultural production had an important relationship to the ratio of the cost of things bought by farmers and farm prices. When industrial production rose relative to agricultural production, farm prices rose relative to the cost of things bought by farmers.

Consequently, on the basis of the prewar relationships and the present levels of industrial and agricultural production, the ratio of prices received by farmers relative to the prices paid by them, or the parity ratio, would be somewhat above 100. This would, however, be an average of many products and the actual prices of individual products would vary relative to their parity level. The fact that the present parity ratio is 20 points above 100 indicates that current prices receive considerable support from the strong demand for exports.

If industrial production should drop to the level prevailing in 1935-1939 and agricultural production continued at its present level, agricultural prices can be expected to drop below 90 per cent of parity unless supported. The farmer thus benefits from a high level of real income resulting from a large volume of sustained industrial production and employment rather than from a high dollar income created by high prices and wage rates.

The Flaxseed Situation

Rex W. Cox

The flaxseed and linseed oil situation at the present time is exceedingly tight. Stocks are relatively low, imports are limited, and the demand for oil by the drying industries is heavy. No decided improvement in the situation is likely to occur before the harvest of the 1947 domestic crop. The present market prices of flaxseed are an indication of the shortness of supplies relative to the very active demand for linseed oil.

Domestic stocks of flaxseed on January 1, 1947, totalled 10,481,000 bushels, and linseed oil stocks, 152,069,000 pounds. In terms of oil equivalent, the combined total was 196,518,000 pounds, or 34 per cent less than on the same date last year, and 21 per cent less than the average for January 1, 1936-45.

The status of imports is a very important factor in accounting for our reduced supplies. In the prewar period, imports of flaxseed on an average represented about half of our available supplies for crushing. In years when our domestic production was reduced, the imports were increased to the point where the total supply was sufficient to meet the requirements for linseed oil. Argentina was the main source of imports with Uraguay and Canada

supplying smaller amounts. Domestic production in 1946 was below normal and our imports during the current crop year have been insufficient to build our stocks to the desired level.

There are several reasons for the current import situation. The recently harvested flaxseed crop in Argentina is below average and many countries in addition to the United States are competing for the exportable surplus. Both the governments of Uraguay and Argentina exercise almost complete control of exports. The Argentine government, in particular, allocates the destination of exports. For some time the political situation in Argentina has hindered our success in negotiating for increased allocation of exports to the United States, and in consequence our imports have been severely restricted. An announcement was made recently that the Argentine government had agreed to release 40,000 tons of linseed oil to the United States, the shipment to be completed by the end of May and the allocation to domestic users to be made by the Commodity Credit Corporation. While this purchase will be short of meeting requirements, it will be of substantial help in tiding us over until the new crop of flaxseed is available.

In order to encourage the domestic producers to plant 5,000,000 acres of flaxseed in 1947, which is about 90 per cent above the planted acreage of 1946, a support price of $6.00 a bushel for No. 1 seed, Minneapolis basis, has been announced. The price support program will be implemented by means of loans to producers; contract with processors who agree to pay farmers not less than the applicable support price; and Commodity Credit Corporation purchases of flaxseed, if necessary, to assure farmers of receiving the support price. If the acreage goal is met and growing conditions are average, the 1947 crop of flaxseed would be more than 40 million bushels, compared with 23 million bushels in 1946.

In view of the relative high support price and the favorable current flaxseed price situation, it was thought that producers had a strong incentive in striving to meet the acreage goal. However, the attainment of the goal has become somewhat doubtful because of recent developments. Seed flax has not only advanced in price, but also is becoming more difficult to obtain. A recent survey by the United States Department of Agriculture indicates a deficit of seed flax, particularly in certain areas. In addition, prices of competing crops, especially wheat, have risen sharply. With the marked improvement in prices of other grains competing for the same acreage, there are indications that producers are a little more disposed to give up their hunt for seed flax and swing back to other crops. Flaxseed, however, is still the most desirable crop from the standpoint of guaranteed minimum prices.

Beef-Breeding Herd Costs and Returns

TRUMAN R. NODLAND

Many farmers in Minnesota maintain a beef-breeding herd and raise feeder calves. The records of the farm management services in southern Minnesota are a source of information in regard to production, costs, and returns.

Table 1. Number of Head and Quantity of Feed Consumed by Beef-Breeding Herd

	1940	1941	1944	1945	Avg. of 4 years
Number of cases	6	10	8	11	39
Average number of cows	20.2	23.7	18.5	16.8	19.8
Number calves born	19	23	20	18	20
Pounds beef produced	10,834	15,803	11,340	10,329	12,077
Pounds beef produced per cow	536	667	613	615	610
Number calves transferred to feed lot	18	22	18	10	17
Average weight of calves transferred to feed lot	560	527	508	545	535
Pounds feed consumed per cow:					
Concentrates	1,543	1,116	1,344	1,551	1,388
Hay	2,571	2,894	2,823	3,492	2,945
Fodder and stover	1,069	713	468	281	633
Silage	2,952	5,719	6,961	6,031	5,416

The number of head, production, and feed consumed are shown in table 1. The average herd included 20 cows and approximately the same number of young cattle. The average number of head is computed by adding the number on hand at the beginning of each month and dividing this sum by 12. Heifers are transferred into the cow herd during the month they freshen. An average of 20 calves were born during the year, five were purchased, and 17 were transferred to the feed lot. The remainder of the calves were accounted for in sales, replacements for the breeding herd, and deaths. Forty-two per cent of the calves were born during the months of April, May, and June.

The feeds consumed are on a "per cow" basis. The total quantity of feed consumed by the cows, heifers, herd bull, and calves have been divided by the average number of cows in the herd. Nearly all the feeds were farm raised. In addition to these feeds the entire beef herd had access to a considerable amount of pasture.

The cost of feed and the return above feed cost, on a per cow basis, are shown in table 2. The cost of feed is based on average farm prices in the area. Roughages and pasture together make up 65 per cent of the total cost of the feed required to maintain a beef herd. Nearly all the herd owners received some income from dairy products. The net increase in value includes a credit for the calves transferred to the feed lot. These calves were valued at current market prices at the time of the transfer. The return above feed cost is the amount available to the farmer to pay for his labor, management, buildings, equipment, interest, etc.

Table 2. Beef-Breeding Herd Costs and Returns

	1940	1941	1944	1945	Avg. of 4 years
Feed cost—per cow basis					
Concentrates	$12.51	$10.62	$28.25	$23.27	$18.66
Roughages	13.35	19.28	35.25	40.05	26.98
Pasture	7.51	9.92	8.01	9.33	8.69
Total feed cost	$33.37	$39.82	$71.51	$72.65	$54.33
Value of produce—per cow basis					
Dairy products	$ 8.66	$12.32	$25.97	$17.15	$16.02
Net increase in value	46.16	56.19	56.68	81.50	60.13
Total value produced	$54.82	$68.51	$82.65	$98.65	$76.15
Return above feed cost	21.45	28.69	11.14	26.00	21.82
Return for $100 feed	$165	$193	$119	$141	$155

Minnesota Farm Prices For February, 1947

Prepared by W. C. Waite and O. K. Hallberg

The index number of Minnesota farm prices for February, 1947, is 238.4. This index expresses the average of the increases and decreases in farm product prices in February, 1947, over the average of February, 1935-39, weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index, February 15, 1947, with Comparisons*

	Feb. 15, 1947	Jan. 15, 1947	Feb. 15, 1946		Feb. 15, 1947	Jan. 15, 1947	Feb. 15, 1946
Wheat	$2.05	$1.95	$1.56	Hogs	$23.90	$22.00	$14.00
Corn	1.05	1.04	.90	Cattle	17.00	17.00	11.00
Oats	.73	.73	.69	Calves	19.80	18.20	13.30
Barley	1.53	1.55	1.09	Lambs-sheep	18.68	18.70	12.28
Rye	2.80	2.55	1.87	Chickens	.200	.210	.200
Flax	6.96	6.96	2.91	Eggs	.337	.339	.395
Potatoes	1.10	1.10	1.15	Butterfat	.740	.740	.540
Hay	11.80	10.30	9.60	Milk	3.250	4.000	2.850
				Wool†	.420	.430	.440

* These are the average prices for Minnesota as reported by the United States Department of Agriculture.

† Not included in the price index number.

Prices received by farmers for livestock rose about 5.2 per cent and prices for crops about 2 per cent from January to February, but prices of all Minnesota farm products rose only 1.7 per cent, owing to a 4 per cent drop in livestock products prices. The purchasing power of Minnesota farm products decreased to 34.6 per cent over the 1935-39 average, owing to an all-time high being reached in prices paid by farmers for items used on the farm and in the household.

The corn-hog ratio is the highest yet recorded, although other feed ratios fell.

The largest increases in prices from January to February were hay, 14.6 per cent; rye, 9.8 per cent; veal calves, 8.8 per cent; hogs, 8.6 per cent; and wheat, 5.1 per cent. A decline in milk prices of 18.3 per cent was greater than the usual seasonal decline.

Indexes and Ratios for Minnesota Agriculture*

	Feb. 15, 1947	Feb. 15, 1946	Feb. 15, 1945	Average Feb., 1935-39
U. S. farm price index	239.9	188.6	182.2	100
Minnesota farm price index	238.4	167.0	168.0	100
Minn. crop price index	211.0	173.2	172.4	100
Minn. livestock price index	275.3	169.8	173.7	100
Minn. livestock product price index	207.3	161.1	159.5	100
U. S. purchasing power of farm products	135.5	127.4	127.0	100
Minu. purchasing power of farm products	134.6	112.8	117.2	100
Minn. farmers' share of consumers' food dollar	65.2†	61.7	64.0	48.0
U. S. hog-corn ratio	19.3	12.8	13.2	13.1
Minnesota hog-corn ratio	22.8	15.6	16.7	15.5
Minnesota beef-corn ratio	16.2	12.2	14.2	12.1
Minnesota egg-grain ratio	13.0	13.8	16.1	14.4
Minnesota butterfat-farm-grain ratio	30.8	26.4	27.2	34.2

* Explanation of the computation of these data may be had upon request.

† Figure for December, 1946.

Field Seed Prices

Owen K. Hallberg

Retail prices of legume, grass, and grain crop seeds in Minnesota are substantially higher at the beginning of the spring selling season than a year ago, reflecting the removal of O.P.A. price ceilings coupled with a strong demand and short supply of some kinds of seeds. For legume seeds, only white and ladino clover were priced lower than in February, 1946, while red and alsike clover were up about 30 per cent, making them both higher than alfalfa for the first time in nine years. Bluegrass increased in price by more than 62 cents a pound, making it twice as costly as a year ago.

For the United States the index of prices paid by farmers for seed was 355 in mid-February, a record high representing an increase of 23 per cent over a year ago and 27 per cent over the post-World War I peak reached in 1919.

Price of Field Seeds

	Minnesota Feb. 15, 1947	U. S. average Feb. 15, 1947	U. S. average year ago	U. S. average 1942-46
		Per bushel		
Red clover	34.80	34.20	26.28	18.95
Alsike clover	33.00	32.70	25.38	18.81
Sweet clover	11.40	11.46	10.98	8.60
Alfalfa—common	34.20	31.26	28.80	23.56
Alfalfa—Grimm	37.20	36.06	31.80	26.27
Timothy	4.90	4.86	4.37	5.41
Spring wheat	2.70	2.65	2.16	1.68
Oats	1.80	1.44	1.25	.97
Barley	2.50	2.00	1.72	1.17
		Per pound		
Red top	.285	.263	.205	.170
Kentucky bluegrass	1.300	1.190	.568	.293
Smooth brome	.290	.296	.194	.192
White clover	1.000	1.100	1.220	.854
Ladino clover	2.150	2.100	2.230	1.840

UNIVERSITY OF MINNESOTA
Department of Agriculture
Agricultural Extension
University Farm, St. Paul 1, Minn.

PAUL E. MILLER, Director

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