FARM BUSINESS NOTES

Prepared by the Divisions of Agricultural Economics and Agricultural Extension
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Opportunities for Starting Farming after the War

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Every major war in which the United States has been engaged has been followed by a "back-to-the-land" movement. Indications are that a somewhat similar situation is likely to develop after this war.

Several factors are responsible for widespread interest in farming after a prolonged war. *First,* farm profits rise sharply during war and interest in farming tends to rise with rising farm profits and to fall with falling profits. It was at an extremely high level during World War I but dipped sharply during the great depression of the 1930's. *Second,* a major war emphasizes the importance of food not only to support the armed forces but to maintain the civilian population as well. Food supplies are taken more or less for granted during peace, but they are of general concern during war, and those who have their roots in the soil have first claim on the food they produce. *Third,* a modern war emphasizes the greater relative security in wartime of homes and jobs in rural than in urban areas. In countries ravaged by war, homes and factories in many urban centers were all but destroyed, while in the surrounding country farm homes and farm land escaped with relatively little damage. *Fourth,* a grateful country naturally wishes to express its appreciation to the veterans and one way of expressing this appreciation in the past was to make land available to those who desired to take up farming. The Homestead Act of 1862 was passed during the Civil War, and various land settlement schemes were adopted after the last war. And *fifth,* in the past, some individuals and organizations favored an increase in the number of farms for financial, political, or social reasons. Local commercial clubs, state immigration departments, railroads, and private owners of raw land were anxious to bring in settlers for financial reasons. Some encouraged land settlement because they believed that farmers generally held conservative views on political and economic issues, and hence that a large farm population would have a stabilizing effect upon society as a whole. Others supported the back to the land movement to relieve current or prospective urban unemployment.

Many of these forces are at work at the present time. Farm profits during this war have been the highest on record. Food shortages have affected more people than ever before because of the global nature of this war. The Federal Congress has already passed the Servicemen's Readjustment Act of 1944, whereby the "Veterans' Administration may guarantee any part of an approved loan up to 50 per cent of the amount borrowed, but the total guaranty may not be for more than $2,000." This guarantee is available to veterans who wish to buy farms or farm equipment to be operated by them. The Congress has also made available to the Farm Security Administration for the year 1945-46 an additional $25,000,000 which may be loaned to veterans for the purchase of farms under the same terms as the Tenant Purchase program, that is, loans up to the full purchase price of a farm with interest at 3 per cent payable over a 40-year period.

Those who contemplate starting farming after the war are interested in several fundamental questions. These include the probable postwar demand for farm products, the amount of farm land required to meet this demand, the number of farm units needed to operate the required acreage efficiently, and the supply of farms available to those who wish to engage in farming.

The effective demand for most farm products in this country has exceeded the supply since about the time we entered the war, and this situation has become increasingly acute even in the face of a 30 per cent increase in output. This has been due to the considerable quantities shipped abroad to feed our allies and the people in countries ravaged by war, to the amounts required to feed our armed forces at home and abroad, and particularly to the fact that wartime incomes have enabled large numbers of consumers to enter the market regularly for foods which they formerly could afford seldom, if at all.

Even under conditions of reasonably full employment at wages considerably above prewar, and with foreign demand much above the 1935-39 level, some shrinkage from the peak of wartime demand appears inevitable. This suggests that less, not more, farm land will be required.

The supply of farms after the war will depend upon the number of vacancies on existing farms and the number of new farms that may be established. Farm vacancies oc-

cur through death or retirement of farm operators, while new farms could conceivably be established in undeveloped areas, on military lands, or by dividing existing farms into smaller units. It has been estimated that in Minnesota, before the war, about 3,000 farm vacancies occurred each year because of death of the operator and about 1,800 because of retirement, which together make a total of about 4,800 farm openings per year.[1] It is probable that the number of vacancies due to death and retirement will be greater than normal after the war. Many farmers were forced to postpone retirement during the 1930's because of low farm income and declining land values. Thirty-one per cent of the farm operators in Minnesota were 55 years old or over in 1940 compared with 23 per cent in 1920. Although comparable figures are lacking for the war period, indications are that while some farmers retired earlier than usual because of favorable farm income and an active land market, and some may have turned their farms over to their sons to give them a preferable position in the draft, many elderly farmers remained on the land because their sons were called to the service or because of a scarcity of good tenants. If farm income is reasonably high after the war, farm operators will retire earlier than if farm income falls to a relatively low level.

According to some estimates, about 6,000,000 of the more than 18,000,000 acres in the 14 cutover counties of northeastern Minnesota have been or may ultimately be designated as farm land. Of this amount about 3,600,000 acres are in farms and about 2,400,000 acres are wild land.[2] This undeveloped land would be sufficient for 15,000 new farms of 160 acres each. However, when the cost of clearing these lands and of erecting suitable farm buildings is weighed in the light of the probable postwar demand for farm products, it appears desirable to postpone settlement until normal demand clearly justifies the labor and expense that would be involved.

There is relatively little military land suitable for farming in Minnesota. That which is suitable will provide only from 60 to 80 farm units of sufficient size to permit efficient operation and to provide satisfactory income.

There appears to be little prospect of increasing the total supply of farms in Minnesota by breaking up large farms into smaller units. Some farms are sufficiently large to make this possible, but the number in proportion to the total is not large. Rather, the trend is in the opposite direction. Modern machinery has increased the amount of land that can be operated by an individual farmer. Furthermore, machinery costs per unit of land tend to decrease with increased acreage. The relatively larger investment per acre in small compared with larger farms, which is typical in the better farming areas, also favors the larger units. And when farms are operated under identical systems of farming and at the same level of intensity, earnings tend to increase with increased size of farm. The combination of a decrease in the per acre investment in farm capital and increase in earnings which are associated with increasing size of farm suggests a trend toward fewer rather than more farms in the developed areas in Minnesota.

Thus it appears that most of those who start farming after the war will find it more satisfactory to operate farms already developed than to establish new farms in unimproved areas or on parts of existing farms. These farms should be of sufficient size to permit efficient operation and the maintenance of satisfactory living standards.

The demand for farms after the war will come largely from farmers' sons, veterans, and war workers. About 9,000 Minnesota farm boys reach the age of 18 each year, and a considerable number of these look forward to life on the farm. A few scattered surveys have been made to determine the postwar plans of servicemen, and though these are not conclusive they do suggest that many hope to start farming. Some war workers also have been saving money with the expectation of farming after the war.

The demand for farms will be influenced greatly by employment conditions in urban centers. Active urban employment will tend to draw surplus farm population from the farms into business, professional, and other urban activities, and hence reduce the demand for farms.

Although the postwar supply of and demand for farms cannot be predicted with certainty at this time, there are some indications that the demand is likely to exceed the supply. If that should be the case, the upward pressure on land prices would be increased with prospects of another unfortunate land boom. It would be very shabby treatment indeed to encourage veterans to invest in farms at prices that cannot be supported by long-time earnings. It would be just as unfortunate to encourage them to invest in farms that are too small or so lacking in productivity that they will not enable the operators to maintain satisfactory living standards for themselves and their families. Many prospective farm owners may find it desirable to take a longer route to ownership and start as renters or perhaps as farm laborers until they have accumulated additional capital and the necessary local farm experience before taking the next step up the agricultural ladder.

[1] Lowry Nelson, "Minnesota's Farm Population Prospects," Minnesota Agricultural Experiment Station, 1944, pp. 19-21.

[2] A. D. Wilson, "Progress in Development of a Land and Timber Management Program in Northeastern Minnesota," Minnesota Agricultural Experiment Station, 1944, p. 42.

Lost Time in Field Work

S. A. Engene

Records for a few Nicollet County farmers show how their time in the fields is spent. There are many jobs in the field that do not contribute directly to accomplishing the work to be done. Careful planning may make it possible to eliminate or shorten some of these jobs, thereby increasing the efficiency of field work.

The jobs performed in connection with four field operations, and the time required for each, are shown in the following table. These are data for individual farms, not averages of groups of farms. Although there are wide differences among farmers in the time spent at these various jobs, these cases are quite typical.

As an average of these four observations, only two thirds of the time was spent in directly effective work. Comparable results were obtained for other operations and other farmers.

Turning required considerable time for plowing and cultivating corn. In both of these operations the imple-

Table 1. Operations and Time Required in Field Work

	Minutes	Per cent
Plow with Tractor		
2.4 acres in a 12.3 acre field		
Plow	131	65
Turn (end of furrow)	11	6
Clean moldboard	14	7
Delays due to wet spots	18	9
Pull out stone	6	3
Talk to boss	7	3
To and from field	7	3
Service tractor and plow	8	4
	202	100
Cultivate Corn with Tractor		
All of 9.9 acre field		
Cultivate	226	82
Turn	20	7
Uncover corn	4	1
To and from field	7	3
Service tractor and cultivator	4	1
Miscellaneous	15	6
	276	100
Cut Barley with Tractor		
All of 9.5 acre field		
Cut	151	52
Turn	7	2
Travel empty	10	4
Throw bundles from back swath	46	16
To and from field	18	6
Service binder and tractor	42	15
Miscellaneous	14	5
	288	100
Mow Hay with Horses		
All of 11.4 acre field		
Mow	448	68
Turn	10	2
Travel empty	8	1
Rest horses	63	9
To and from field	20	3
Service mower and make repairs in field	73	11
Harness and unharness horses, hitch and unhitch	34	5
Miscellaneous	8	1
	664	100

ments were run empty at the ends of the furrows or rows. Less time was spent in turning for cutting grain and mowing hay, because cutting was done on all four sides of the field.

The time required for travel to and from the field varied with the distance traveled and the speed of travel. Tractors generally run at higher speeds than horses.

In some cases considerable time was lost in repairing old machines and machines kept in poor repair. Considerably more servicing time was spent on the more complicated machines such as the grain binder, than on simple machines such as the plow or corn cultivator.

Farmers Continue to Increase Their Net Worth

TRUMAN R. NODLAND

A study of the net worth statements for the cooperators in the various farm management services in Minnesota shows that farmers made substantial increases in their net worth in 1944. The data for 108 owner-operators, 68 part-owners, and 59 renters in southern and west central Minnesota are presented in table 1. Owners and part-owners increased their net worth approximately 7 per cent and renters 11 per cent.

The increase in net worth was the result of both an increase in the value of outside investments and a decrease in long-term indebtedness. A substantial proportion of the increase in net worth is represented by war savings bonds. Owner-operators reduced their real estate mortgages 13 per cent and part-owners 17 per cent. In general there was not much change in chattel mortgages, notes, and accounts payable.

At the end of 1944 owner-operators had enough liquid assets—stocks, bonds, and cash on hand—to pay off 44 per cent of their indebtedness, part-owners could pay off 45 per cent, and renters could pay all their indebtedness and still have some reserve to operate their business.

It should be noted in interpreting these data that the members of the farm management services have larger and more productive farms than the average of their communities. It is quite likely that their debt reductions and bond purchases are also well above average.

Table 1. Net Worth Statement

	Owners	Part-owners	Renters
Number of cases	108	68	59
Acres per farm	209	296	233
Owned	209	193	.....
Rented	.....	103	233
January 1, 1944			
Assets:			
Total farm capital	$27,371	$28,409	$ 9,883
Accounts receivable	306	91	151
Outside investments:			
Stocks and bonds	1,090	1,087	1,172
Life insurance	720	538	447
Miscellaneous	262	847	450
Total	2,072	2,472	2,069
Household and personal assets:			
Cash on hand and in bank	762	725	374
Other household and personal assets	1,016	1,193	1,042
Total	1,778	1,918	1,416
Total assets	31,527	32,890	13,519
Liabilities:			
Real estate mortgages	6,042	5,227	.....
Chattel mortgages	380	923	911
Notes payable	1,004	811	818
Accounts payable	102	156	175
Total liabilities	7,528	7,117	1,904
Net worth	23,999	25,773	11,615
December 31, 1944			
Assets:			
Total farm capital	$26,904	$28,508	$ 9,969
Accounts receivable	277	75	190
Outside investments:			
Stocks and bonds	2,076	2,222	2,032
Life insurance	766	576	482
Miscellaneous	454	858	459
Total	3,296	3,656	2,973
Household and personal assets:			
Cash on hand and in bank	709	635	544
Other household and personal assets	991	1,186	1,012
Total	1,700	1,821	1,556
Total assets	32,177	34,060	14,688
Liabilities:			
Real estate mortgages	5,247	4,307	.....
Chattel mortgages	460	1,022	928
Notes payable	832	881	726
Accounts payable	82	167	158
Total liabilities	6,621	6,377	1,812
Net worth	25,556	27,683	12,876
Gain in net worth	+1,557	+1,910	+1,261

Minnesota Farm Prices for June, 1945

Prepared by W. C. WAITE and R. W. Cox

The index number of Minnesota farm prices for June, 1945 is 185. This index expresses the average of the increases and decreases in farm product prices in June, 1945 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, 1945, with Comparisons*

	June 15, 1945	May 15, 1945	June 15, 1944		June 15, 1945	May 15, 1945	June 15, 1944
Wheat	$1.54	$1.52	$1.45	Hogs	$14.10	$14.00	$12.60
Corn	.98	.89	1.01	Cattle	13.00	12.50	12.40
Oats	.62	.61	.73	Calves	13.80	13.30	13.40
Barley	.99	.97	1.13	Lambs-Sheep	12.90	12.90	12.45
Rye	1.30	1.15	1.00	Chickens	.24	.22	.21
Flax	2.91	2.91	2.86	Eggs	.33	.32	.28
Potatoes	1.80	1.70	1.05	Butterfat	.53	.53	.53
Hay	9.70	9.30	9.40	Milk	2.60	2.60	2.65
				Wool†	.43	.41	.43

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

† Not included in the price index number.

Prices of the principal products sold by Minnesota farmers either increased from May to June or remained at their May levels. The most marked increases occurred in the prices of corn, rye, cattle, and calves. The over-all increase averaged 2.2 per cent. While the index of crop prices is lower than one year ago, the indexes of livestock and livestock product prices are much higher, resulting in an increase of 8.5 points in the Minnesota farm price index over that of June, 1944. The purchasing power of Minnesota farm products is only slightly higher than one year ago but almost 29 per cent above the average for 1935-39.

All of the feed ratios show an increase over June, 1944, as a result of lower prices of feed grains and higher prices received for livestock and eggs. The producers of butterfat received a feed payment of 10 cents per pound in June. If this amount is added to the reported price of this product, the butterfat-farm-grain ratio would be raised to 32.8.

Indexes and Ratios for Minnesota Agriculture*

	June 15, 1945	June 15, 1944	June 15, 1943	Average June 1935-39
U. S. farm price index	195.4	183.1	185.0	100
Minnesota farm price index	185.2	176.7	177.9	100
Minn. crop price index	187.7	191.3	165.0	100
Minn. livestock price index	176.6	163.3	170.9	100
Minn. livestock product price index	191.8	184.2	187.2	100
U. S. purchasing power of farm products	135.9	131.0	137.8	100
Minn. purchasing power of farm products	128.8	126.4	133.4	100
Minn. farmers' share of consumers' food dollar	64.6†	61.5	61.2	45.5
U. S. hog-corn ratio	12.7	10.9	12.8	12.0
Minnesota hog-corn ratio	14.4	12.5	14.4	15.2
Minnesota beef-corn ratio	13.3	12.3	13.5	12.8
Minnesota egg-grain ratio	15.8	12.8	18.1	14.6
Minnesota butterfat-farm-grain ratio	27.6	24.3	28.4	30.9

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

† Figure for March, 1945.

World Food Production

The United States Department of Agriculture has recently made estimates of the changes in agricultural production during the war in various parts of the world. No estimates were possible for the war-torn portions of Soviet Russia, occupied China, or the Dutch Indies. The table below shows food production in terms of calories compared with the prewar years.

The largest increase in food production has been in the western hemisphere and especially in North America. The most marked advances have been in the production of edible oils, meats, and dairy products. Food production appears to have been sustained surprisingly well in western Europe. This has been accomplished largely by a shift from animals to crops as a source of calories. Cereals and potatoes have increased in importance and forage crops have declined. In the export countries there has been a tendency towards increased livestock production. Among the individual countries the increase in the United Kingdom has been the largest. By using more of the home-produced grains for food, expanding production of potatoes, sugar beets, fresh vegetables, and milk and sharply reducing the production of meats, eggs, and butter, the gross output from farms of the United Kingdom, in terms of calories, has increased by about 45 per cent. If allowance is made for the smaller imports of feed and cattle, the net output in the years 1943 and 1944 was about 70 per cent more than in the prewar years. The total world increase in food during the war has not exceeded the growth of world population.

Table 1. World Food Production Measured in Calories in 1943 and 1944 (Prewar = 100)

	Crops	Livestock products	Total
North America	127	142	132
South America	115	122	116
Western Europe and North Africa	97	74	91
Middle East	100	86	99
Oceania and South Africa	78	109	86
Southern and Eastern Asia	104	91	103
World	106	105	105

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