EXTENSION BULLETIN 267 (SECOND PRINTING) AUGUST 1945

DO I WANT TO FARM ?

A Guide for Service Men, Industrial Workers and Others Considering Farming as a Vocation

MICHIGAN STATE COLLEGE

EXTENSION SERVICE

EAST LANSING

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AFTER WORLD WAR I—Many started farming without planning in advance.

AFTER WORLD WAR II—Why not plan first and farm longer?

Issued, February 1945
Second Printing, August 1945

FOREWORD

Persons who are now interested in locating on land in the country may be divided into two groups:

(1) Those who wish to become established on an adequate, efficient farm unit for the purpose of making their living from farming.

(2) Those who wish to locate on small acreages, primarily as a site for a home and as a place where some products may be produced to help meet the family food needs. Persons in second group have or should have an assured income either through savings or from outside employment.

This bulletin has been prepared particularly to help the individual in the first group who wants help in getting started in farming on a sound basis and who plans to make farming his life work. After World War I, many persons started farming without having considered all the factors of success and failure, with disastrous results. Following World War II, why not plan first and farm longer?

THINGS TO CONSIDER

1. *How Can I Get Started in Farming?*
2. *Should I Buy a Farm?*
3. *Is Now the Time to Buy a Farm?*
4. *Where Shall I Buy a Farm?*
5. *Have I Overlooked Anything About the Farm?*
6. *How Much Can I Afford to Pay for the Farm?*
7. *Will the Farm Provide Enough Productive Work?*
8. *What Income and Expense Can I Expect?*
9. *How Should the Farm be Financed?*
10. *General Principles of Successful Farming*

Do I Want to Farm?

By CLYDE O. MAY*

YOUR ANSWER to the question "Do I Want to Farm?" will depend on your desire to farm, and on your appraisal of the opportunities in farming as compared with other ways of making a living. It is the purpose of this bulletin to raise questions and to provide information for individuals who may wish to farm. In addition, you will want to seek counsel from those best qualified to help you, such as county agricultural agents, high school agricultural teachers, and established farmers. Getting a good start in a job is a big help toward making a good finish.

The following questions could well be considered by every person interested in getting started in farming: "(1) *Do I have sufficient training and knowledge of the farm business to make a go of it?* (2) *Shall I start as a hired man or tenant?* (3) *Should I buy a farm?* (4) *Do I have enough money?*"

HOW CAN I GET STARTED IN FARMING?

There are many ways of getting started in farming. The road that may be best suited for one person may not be best for someone else. The road best suited for an individual is largely determined by the amount of money available along with the experience and managerial ability of the individual.

1. Some different methods of getting started are:
   - (a) Work as a hired man
   - (b) Father-and-son or similar types of partnerships
   - (c) Rent a farm on a tenant one-third and landlord two-thirds basis
   - (d) Rent a farm on a 50-50 crop and livestock share basis
   - (e) Rent a farm on a crop share basis
   - (f) Rent a farm on a tenant two-thirds and landlord one-third basis
   - (g) Rent a farm on a cash basis
   - (h) Buy some land and rent additional land
   - (i) Buy an economical size farm unit

*In cooperation with other members of the Department of Farm Management.

The statements in this list are arranged in the order of the amount of capital, experience and managerial ability that would be required to start farming.

Your county agricultural agent will be able to inform you as to the possibilities of obtaining employment as a hired man and what to expect in the way of earnings. Your county agricultural agent will also have copies of the various lease forms mentioned above. From these lease forms and by comparisons with successful farms you can determine something as to the amount of capital required under the different rental agreements.

Working as a hired man for a good farmer is an excellent way of getting farm experience and becoming familiar with farm values. The idea of working as a hired man, however, or of renting a farm may not appeal to some persons, even though they may be lacking capital as well as experience and managerial ability.

In some cases the terms on which money can be borrowed to finance the purchase of a farm would make one feel that nothing but kindness is back of the loans. However, a loan—even though on apparently easy terms—to buy land and personal property at highly inflated prices

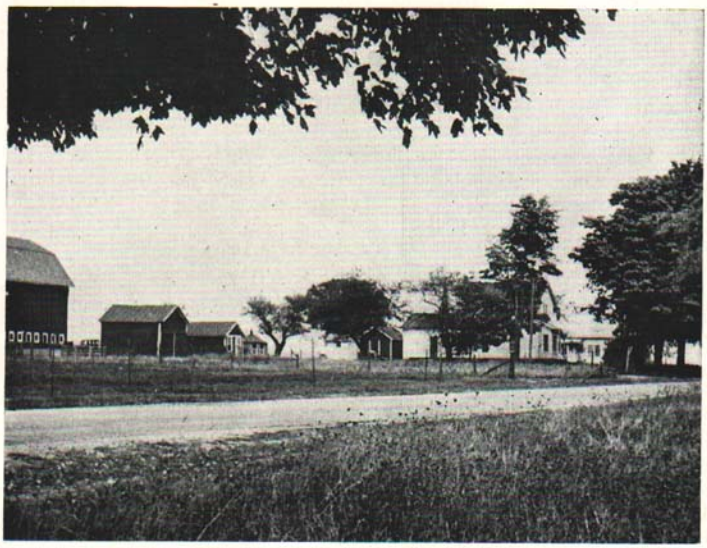


Fig. 1. A good farmstead in one of the good farming communities of south-central Michigan.

may cease to be kindness if the money has to be paid back when farm products are selling on a lower price level.

It has seldom been sound business for a person with limited capital and limited experience to buy a farm with the idea of paying for it from farm earnings. It is certainly not sound business to buy a farm on that basis today. Thus, the other ways of getting started in farming should be given considerable thought.

SHOULD I BUY A FARM?

Many persons have bought farms during recent months. Many more people are interested in buying now. For those who are thinking of buying a farm, perhaps they would find it of value to ask themselves some questions, such as: "(1) Is now the time to buy a farm? (2) Where shall I buy? (3) Have I overlooked some items about the farm? (4) How much can I afford to pay for the farm? (5) How much income can I expect from my prospective farm? (6) Will the farm provide enough work? (7) What is the best way to finance the purchase of a farm?" These various questions are discussed in the following pages.

First, Some Personal Questions—You are one of a large group who would like to buy a farm, but perhaps before buying there are a number of questions you should ask yourself. *For example:*

1. Have I had enough farm experience to operate a farm of my own? .....
2. Would it be better for me to work for a good, experienced farmer? .....
3. Should I rent a farm until I gain more experience and capital? .....
4. Am I sure I like farm work more than any other type of work? .....
5. Would I enjoy living on a farm more than any other place? .....
6. Has my wife ever lived on a farm? .....
7. Does my wife enjoy farm work and farm life? .....
8. Do I enjoy working in the fields alone? .....
9. Is my health and physical make-up such that I can do all kinds of farm work? .....

Fig. 2. An abandoned farm, the result of an ill-advised start in farming.

10. Do I have any likes or dislikes for any particular crops or for any classes of livestock which would handicap my chances for success in the community where I want to farm? ....

11. Would my wife and I be satisfied with the rural school, church and community for our family? ....

12. Do I have enough money to buy and properly equip a farm with machinery and livestock? (See item 5 on page 11.) ....

IS NOW THE TIME TO BUY A FARM?

You are sure you would enjoy farm work and living on a farm, but perhaps you had better consider the business side of farming too. Eight questions are presented in the following discussion of this topic. Answers or at least partial answers to these questions will help much in your making an intelligent decision as to whether now is the time to buy a farm.

1. How much higher are land prices now than before the war?
   a. Michigan land prices for March 1, 1944 were 47 percent higher than for 1940.
   b. Land prices are now at the same level as in 1918.
   c. Land prices reached their peak in 1920 at a price 15 percent above the 1918 level (see Fig. 3, below).
   d. The low point in land prices was in 1933 when prices were 52 percent of the 1920 peak price.
   e. A farm bought in 1920 for $150 per acre could have been bought for $78 per acre in 1933.
2. Has the price of farm products gone up as much as land prices?
   a. The price of farm products for 1944 will average 100 percent higher, while land prices on March 1, 1944, were 46 percent above 1939 prices.
   b. Land prices do not fluctuate so much or as rapidly as farm product prices.
   c. Considering 1910-14 land prices as 100, land prices reached a peak of 154 in 1920 and a low of 80 in 1933 while farm product prices reached a peak of 218 in 1920 and a low of 64 in 1932.
3. How much higher are net farm earnings now than before the war?
   a. Net farm earnings have more than doubled on Michigan farms since 1940.
   b. For details relative to income and expenses on Michigan farms for years with different price levels see Table 1, page 10.

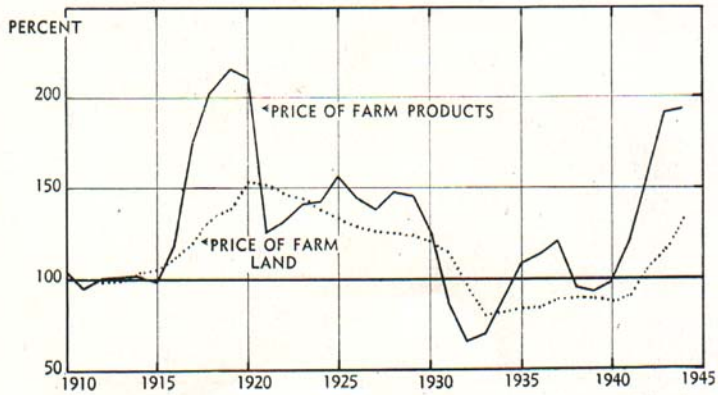


Fig. 3. Prices of farm products and prices of farm land in Michigan are following a pattern in World War II similar to that in World War I. (1910-14 = 100)

4. How much longer can I reasonably expect farm earnings to stay at the present level?

   a. Farm product prices increased 8 percent and land prices went up 15 percent during the 18 months following the close of World War I.

   b. While prices were higher following World War I, net farm earnings were lower because expenses increased more than income.

   c. It seems reasonable to expect relatively high prices for farm products for a period following this war, but expenses also will be high. The result will be lower net farm earnings even though prices are higher.

TABLE 1—*Farm earnings vary greatly from year to year depending largely upon the prices received for farm products. The figures in this table, taken from records of farm accounting farms located throughout Michigan, show the earnings for a poor year 1932, a more or less average year 1940, and a very good year 1942.*

Item	1932	1940	1942
Number of farms	831	1,263	1,160
Total acres	156	170	176
Tillable acres	103	112	117
Income from—			
Crops	$ 279	$ 891	$1,737
Dairy products	595	1,039	1,605
Cattle	0	418	703
Hogs	90	207	648
Poultry and eggs	170	269	492
Sheep	49	117	148
Other	80	169	193
GROSS INCOME	$1,263	$3,110	$5,526
Expense for—			
Feed bought	155	278	590
Machinery	274	344	497
Hired labor	130	270	384
Crop expense	128	212	343
Family labor	139	220	306
Improvements	162	141	168
Taxes	160	78	82
Other	61	98	111
TOTAL EXPENSES	$1,209	$1,641	$2,481
Net Farm Income	54	1,469	3,045
Interest at 5%	649	682	742
LABOR INCOME	$−595	$ 787	$2,303

5. Should I pay much above the long-time earning value of a farm? See also pages 16 and 18.

   a. The amount one might pay above the long-time earning value of a farm depends on how many years above-normal earnings will continue.

   b. We are now four years nearer the end of higher earnings than we were four years ago, even though the price of land is nearly 50 percent higher.

   c. If one is able to pay cash and buys at an inflated price he will not likely encounter difficulties except to discover at a future date he may not be worth so much as when he bought the farm.

   d. Even after the drop in land prices, however, he may discover he is worth more than his neighbor who made other types of investments.

   e. Fig. 4 shows that when farm incomes drop, farm foreclosures increase. This situation was especially true on heavily mortgaged farms.

6. If I do not buy a farm now, how much longer will it be before land prices are lower than at present?

   a. Following the close of World War I it was 1925 before land prices were down to the same level as in 1918.

   b. If prices of farm products go up following this war, land prices will likely follow. It is questionable as to how long it will be before land prices are down but they drop slower than product prices.

7. Would I also have to pay inflated prices for livestock and machinery needed to stock and equip the farm?

   a. Livestock prices have doubled and in some cases more than doubled since 1940.

   b. New machinery prices have only increased 10-15 percent since 1940 but they were already on a high price level.

   c. Used machinery has been selling at inflated prices.

8. What are the prospects for a drop in the prices of livestock and machinery?

   a. A very drastic drop can be expected in the price of used machinery as soon as new machinery becomes available, but new machinery prices will likely be quite stable.

   b. Livestock bought at present inflated prices will drop in price very rapidly when the decline comes.

   c. When money is more plentiful and prices high there is often a tendency to overlook the productive value of the animal and pay a premium for looks and for the reputation of the breeder.

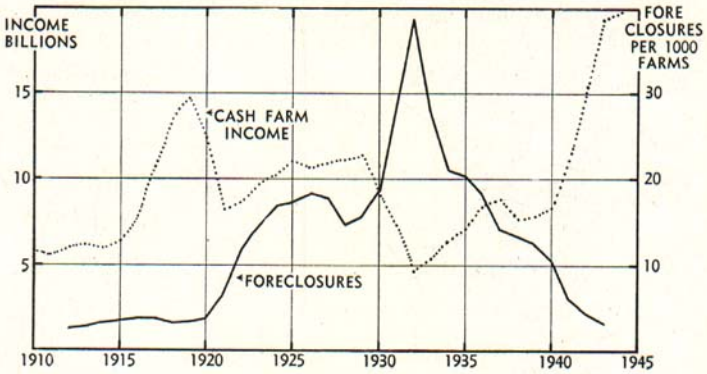


Fig. 4. When farm incomes drop, farm foreclosures rise especially on heavily mortgaged farms. The figures shown are for the United States.

WHERE SHALL I BUY A FARM?

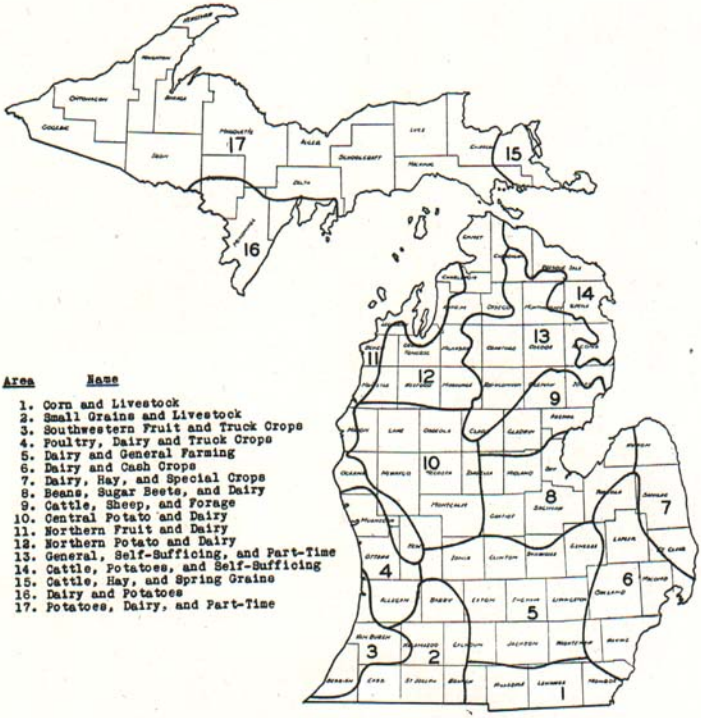
You would like to locate near home or near some of your friends, but if your chances for success are better elsewhere you would consider other areas. Before selecting an area there are some things you would like to know, namely—

1. What in general is the nature and productivity of the land in the different areas of Michigan?
2. What are the kinds of crops grown and the crop yields in the different areas (see Table 2)?
3. What are the principal classes of livestock found in different areas and how do the returns compare (see Table 3)?
4. How do the net farm earnings for the different areas compare for the five-year period 1935-39 (see Table 4)?
5. How much difference is there in the investment in a farm business in these different areas?

   a. The average investment as shown by farm records (the results of which are shown in Table 4) was $12,140 for the years 1935-39. This was for farms averaging 159 acres with 100 acres of tillable land. In type-of-farming Area 1, the average investment per farm was $16,172 for farms averaging 185 acres in size with 136 acres tillable. In Area 14 the investment per farm was $7,460 for farms of 160 acres with 69 acres tillable.

b. To buy the real estate, livestock and machinery on the average farm, represented in this report, one would need approximately $18,000 to $20,000 under present day prices. In Area 1, $25,000 would be required whereas in Area 14, the average amount would be about $12,000.

Those who have not definitely decided on where they would like to start farming, may find the map on this page and the information in Tables 2, 3, and 4 of interest. If a person has some preferences in regard to the type of farming he wants to carry on, it will be to his advantage to locate in the area where such a type of farming is best adapted. It usually takes more than personal preference to change profitably the type of farming in a community.



Area	Name
1.	Corn and Livestock
2.	Small Grains and Livestock
3.	Southwestern Fruit and Truck Crops
4.	Poultry, Dairy and Truck Crops
5.	Dairy and General Farming
6.	Dairy and Cash Crops
7.	Dairy, Hay, and Special Crops
8.	Beans, Sugar Beets, and Dairy
9.	Cattle, Sheep, and Forage
10.	Central Potato and Dairy
11.	Northern Fruit and Dairy
12.	Northern Potato and Dairy
13.	General, Self-Sufficing, and Part-Time
14.	Cattle, Potatoes, and Self-Sufficing
15.	Cattle, Hay, and Spring Grains
16.	Dairy and Potatoes
17.	Potatoes, Dairy, and Part-Time

Fig. 5. The seventeen type-of-farming areas in Michigan.

TABLE 2—*Crops: Percentage of tillable acres utilized by different crops and crop yields on farm accounting farms in Michigan by type-of-farming areas, 10-year averages 1934-43.*

Item	Type-of-farming areas													
	1	2	4	5	6	7	8	9	10	12	14	15	16	17
Number of farms	86	97	52	184	50	29	112	49	100	127	44	20	30	73
Total acres	183	189	122	182	167	188	146	179	175	178	164	205	160	154
Tillable acres	136	143	94	133	121	148	110	91	105	97	73	128	76	59
Percent tillable acres in hay and pasture	38	42	41	41	46	46	32	53	49	55	59	60	58	66
Percent of tillable acres in:														
Alfalfa hay	15	14	14	15	18	13	15	22	18	20	28	4	15	8
Other hay	8	8	13	8	8	12	5	13	11	13	11	40	26	47
Tillable pasture	15	20	14	18	20	21	12	18	20	22	20	16	17	11
Corn	23	18	21	18	16	9	15	14	14	12	7	.....	10	1
Oats	12	9	15	13	14	13	12	13	11	10	9	8	12	12
Barley	2	.....	3	2	3	5	7	.....	1	.....	3	5	8	6
Wheat	11	12	11	10	7	7	8	4	5	3	4	3	.....	.....
Potatoes	1	1	1	.....	3	.....	.....	1	4	6	4	.....	5	6
Beans	.....	.....	.....	5	2	10	14	4	3	.....	1	.....	.....	.....
Sugar beets	1	.....	.....	1	.....	4	7	.....	.....	.....	.....	.....	.....	.....
Fruit and truck	.....	.....	.....	.....	1	.....	.....	.....	3	.....	1	3	.....	.....
Other crops	12	18	8	10	8	6	5	11	10	14	12	21	7	9
Crop Yields per Acre:														
Alfalfa hay.....tons	2.0	1.7	2.0	1.7	1.7	1.8	1.9	1.5	1.8	1.4	1.5	1.5	2.0	2.0
Other hay.....tons	1.5	1.3	1.6	1.3	1.5	1.4	1.5	1.3	1.3	1.1	1.2	1.2	1.6	1.5
Corn (shelled basis).....bu.	42	38	37	38	36	35	40	30	34	26	24	.....	.....	.....
Oats.....bu.	38	30	36	30	39	40	47	31	31	26	26	27	42	30
Barley.....bu.	23	.....	26	.....	26	30	34	.....	21	.....	19	17	31	22
Wheat.....bu.	22	20	21	20	24	24	27	22	20	15	11	17	.....	.....
Potatoes.....bu.	92	127	109	127	117	.....	.....	96	158	166	139	.....	157	183
Beans.....bu.	.....	.....	.....	14	9	15	18	13	12	.....	.....	.....	.....	.....
Sugar beets.....tons	9.3	.....	.....	.....	.....	7.5	9.7	.....	.....	.....	.....	.....	.....	.....

TABLE 3—*Livestock: Numbers and returns from different classes of livestock on farm accounting farms by type-of-farming areas, 5-year averages 1935-39.*

Item	Type-of-farming areas*														
	1	2	3	4	5	6	7	8	9	10	11	12	14	16	17
Total acres	185	186	86	114	179	167	172	139	172	163	135	173	169	157	157
Tillable acres	136	139	71	88	129	120	138	105	85	99	80	94	69	57	57
Productive animal units	32.0	24.7	7.5	20.9	27.1	21.8	25.1	20.5	20.1	19.1	12.2	15.8	17.4	16.0	15.1
Tillable acres per P.A.U.**	4.2	5.6	6.1	4.2	4.8	5.5	5.5	5.1	4.2	5.1	5.1	5.9	4.9	3.8	3.8
Livestock income, total	$2,888	$2,160	$ 735	$2,418	$2,354	$2,379	$2,370	$1,853	$1,284	$1,647	$ 895	$1,169	$ 994	$1,531	$ 1,334
Cattle:															
Number of dairy cows	9.9	9.4	4.0	11.2	9.8	12.9	13.5	8.7	8.0	9.7	6.5	8.6	8.5	10.7	9.8
Dairy product sales per cow	$ 101	$ 104	$ 99	$ 114	$ 103	$ 124	$ 101	$ 92	$ 63	$ 89	$ 71	$ 80	$ 59	$ 105	$ 97
Dairy product sales, total	1,004	986	397	1,274	1,011	1,594	1,363	796	512	866	468	690	504	1,131	955
Cattle income	518	332	137	321	427	421	658	383	334	319	188	226	266	229	196
Hogs:															
Number of sows	2.8	2.5	.4	.6	1.5	.6	.2	1.5	.8	.8	.6	.8	.8	.3	.4
Number of litters farrowed	4.8	4.3	.7	1.0	2.6	.9	.3	2.6	1.3	1.3	.9	1.3	1.1	.4	.5
Pigs weaned per litter	6.4	6.4	6.9	6.6	6.6	6.9	7.0	6.8	6.7	6.7	6.7	6.7	7.2	6.5	6.4
Hog income, total	$ 665	$ 487	$ 66	$ 113	$ 312	$ 99	$ 49	$ 291	$ 108	$ 138	$ 81	$ 102	$ 66	$ 23	$ 22
Sheep:															
Number of ewes	17	15	.....	2	26	7	3	8	21	6	.....	5	10	.....	.....
Lambs raised per 100 ewes	95	95	.....	103	92	101	102	105	101	106	.....	96	105	.....	.....
Sheep income, total	$ 303	$ 142	.....	$ 17	$ 269	$ 67	$ 34	$ 79	$ 135	$ 52	.....	$ 38	$ 78	.....	.....
Poultry:															
Number of hens	134	85	53	221	108	69	101	112	56	98	53	47	43	52	55
Egg sales per hen	$ 2.23	$ 1.90	$ 1.99	$ 2.06	$ 2.25	$ 2.10	$ 2.20	$ 2.19	$ 1.68	$ 2.25	$ 1.79	$ 1.60	$ 1.46	$ 2.47	$ 2.53
Egg sales, total	299	162	105	589	243	147	223	247	94	222	97	75	63	131	141
Poultry income, total	397	213	135	693	334	195	266	304	140	271	130	112	80	142	154

*Information is not presented for areas 13 and 15 because of the lack of a sufficient number of farm records.
**Productive animal unit.

TABLE 4—*Income and expenses: Comparison of gross incomes, expenses, and labor incomes on farm accounting farms by type-of-farming areas, 5-year averages 1935-39.*

Item	Type-of-farming areas*												
	1	2	3	4	5	6	8	9	10	11	12	14	17
Total acres	183	186	86	114	179	167	139	172	203	135	178	168	157
Tillable acres	136	139	71	88	129	120	105	85	111	80	96	85	57
Investment: Personal	$ 5,230	$ 4,207	$ 2,709	$ 3,638	$ 4,699	$ 4,329	$ 4,399	$ 2,923	$ 3,339	$ 2,665	$ 2,734	$ 2,792	$ 2,794
Real estate	10,942	10,847	12,391	7,733	10,845	11,250	10,938	5,838	7,614	8,817	5,142	4,681	5,816
INCOME													
Dairy products	$ 1,004	$ 986	$ 397	$ 1,274	$ 1,012	$ 1,594	$ 796	$ 512	$ 863	$ 468	$ 678	$ 504	$ 955
Crops	831	793	2,946	330	743	696	1,284	332	695	1,744	674	527	349
Hogs	665	487	66	113	312	100	291	126	140	81	96	66	22
Cattle	518	332	137	321	427	421	383	334	344	188	220	266	196
Poultry and eggs	397	213	135	693	334	195	304	140	232	131	105	80	155
Sheep	303	142	2	16	269	67	79	166	100	26	35	78	6
Other	169	172	238	131	155	129	159	182	133	186	147	188	255
Gross income	$ 3,887	$ 3,125	$ 3,921	$ 2,878	$ 3,252	$ 3,202	$ 3,296	$ 1,792	$ 2,507	$ 2,824	$ 1,955	$ 1,709	$ 1,938
EXPENSES													
Feed bought	$ 494	$ 357	$ 221	$ 509	$ 317	$ 215	$ 171	$ 99	$ 193	$ 154	$ 150	$ 85	$ 266
Machinery	347	298	276	247	294	325	323	194	245	326	235	237	273
Hired labor	346	237	592	200	214	262	207	82	169	505	152	110	85
Crop expense	229	195	599	148	206	205	211	81	129	262	118	80	109
Family labor	178	183	220	155	188	228	185	177	217	170	175	183	295
Improvements	180	173	120	136	181	159	159	93	132	93	90	82	95
Taxes	104	104	84	66	83	94	79	52	69	57	48	38	38
Other	80	70	62	69	66	91	57	31	56	46	35	29	47
Total expense	$ 1,958	$ 1,617	$ 2,274	$ 1,530	$ 1,549	$ 1,579	$ 1,392	$ 809	$ 1,210	$ 1,613	$ 1,003	$ 844	$ 1,208
Net Farm Income	1,929	1,508	1,647	1,347	1,703	1,623	1,904	983	1,297	1,211	952	865	730
Interest on investment at 5%	809	753	755	569	777	779	767	438	548	574	393	373	431
LABOR INCOME	$ 1,120	$ 755	$ 892	$ 778	$ 926	$ 844	$ 1,137	$ 545	$ 749	$ 637	$ 559	$ 492	$ 299
Net Farm Income	$ 1,929	$ 1,508	$ 1,647	$ 1,347	$ 1,703	$ 1,623	$ 1,904	$ 983	$ 1,297	$ 1,211	$ 952	$ 865	$ 730
Wage allowance, farmer	720	720	720	720	720	720	720	600	600	600	600	600	480
Returns for investment	1,209	788	927	627	983	903	1,184	383	697	611	352	265	250
Personal property at 5%	262	210	135	182	235	216	220	146	167	133	137	140	140
Interest return, real estate	947	578	792	445	748	687	964	237	530	478	215	125	110
Capitalized at 5%	18,940	11,560	15,840	8,900	14,960	13,740	19,280	4,740	10,600	9,560	4,300	2,500	2,200
Productive value per acre	103	62	184	78	84	82	139	28	52	71	24	15	14

*Information for areas 7, 13, 15, and 16 is not presented because of the lack of a sufficient number of farm records.

HAVE I OVERLOOKED ANYTHING ABOUT THE FARM?

You may wonder if you have overlooked any important items about the farm you propose to purchase. Perhaps you had better check the following list of questions:

1. Does the community surrounding the farm appear generally prosperous? .....
2. Is the farm large enough so that I can do the usual type-of-farming in the area and still make a living? .....
3. How long is the growing season and is the farm "frosty"? .....
4. Have I taken into account the productivity of the soil? .....
5. Is the soil naturally fertile or is it difficult to maintain in a productive state? .....
6. Is the drainage good and if not how much will it cost to properly drain the land? .....
7. How much, if any, lime is needed for growing alfalfa and other legumes? .....
8. Is water or wind erosion any problem? .....
9. Are there enough noxious weeds to cause trouble? .....
10. Are there enough stones to cause difficulties? .....
11. Are the buildings adequate or is the farm overbuilt? .....
12. Are the roofs and foundations in good repair? .....
13. Are buildings wired for electricity? .....
14. Is there a basement, furnace and other modern conveniences in the house? .....
15. Is there one or more good wells that will provide sufficient water for all needs? .....
16. Are fences in good condition? .....
17. How much will it cost to put farm in first class condition? .....
18. Are the market outlets good for the regular farm products? .....
19. If I wanted to buy or rent additional land in this community, what are the possibilities? .....
20. How is the farm located as far as roads, schools and churches are concerned? .....

HOW MUCH CAN I AFFORD TO PAY FOR THE FARM?

You have often heard it said that farming is a mode of life. That is a "high-sounding" statement, but the fact remains that it takes money to pay the interest and principal of a loan. Farming, however, is considered as a desirable mode of living by enough persons that they are willing in many instances to bid up land prices above the long-time productive earning value of the land. While you enjoy farming you still want to think of it as a business. With that in mind, why not ask yourself:

1. How much additional money will it take to buy machinery and livestock to properly operate the farm?

   a. Usually the investment in a complete farm business is two-thirds in real estate and one-third in personal property. In other words suppose a 160-acre farm is bought for $16,000 another $8,000 will be in machinery, livestock and feed when the farm is well organized.

   b. It should be remembered, however, that a person seldom starts his first day of farming with a large farm all fully equipped and stocked. Most farmers build up gradually, starting as a farm boy to acquire experience, finances, stock and equipment with which to farm.

2. How much is the farm worth which I have been considering?

   a. Small farm businesses, say an $8,000 investment, must take in enough gross income to equal the investment in three or, preferably, fewer years, if a satisfactory income is to be obtained.

   b. Medium-sized farm businesses where the investment in the real estate, the machinery, livestock and feed represents from $15,000 to $20,000, should take in a gross income sufficient to equal the investment in 3½ to 4½ years if a reasonable net income is to be obtained.

   c. Larger businesses—$40,000 or so—need not have quite so rapid a turnover of capital—perhaps once every 5 years.

   d. If the farm in question when fully equipped and stocked, can produce under average management and 1935-39 prices (see Table 5) enough gross income to meet the above-mentioned requirements it is likely priced within reason. If it cannot meet those requirements it is likely priced above its actual value.

e. A method of computing the long-time productive value of farms based on actual farm income and expense records is shown at the bottom of Table 4 and also in Fig. 6. The income and expense items are averages on farm accounting farms for the 5-year period 1935-39. The reader should also keep in mind that the productive values per acre of real estate shown in Table 4 are for farm-accounting farms and are undoubtedly higher than for the average farm in the region.

For example, in Area 5, a family labor charge of $188 has been deducted as a farm expense. The average net farm income for 1935-39 was $1,703. Deducting an operator's yearly wage allowance of $720, the balance of $983 represents the returns for the investment. The investment in personal farm property was $4,699 and the interest charge at 5 percent would be $235. When the $235 is deducted from $983 the remainder $748 represents the returns for the real estate. If this amount were capitalized at a certain rate, say 5 percent, the result would be $14,960 or the productive value of the farm.

If the $14,960 productive value of the farm is divided by 179, the average number of acres per farm, a productive earning value of $84 per acre is obtained for the real estate. If, however, the income accruing to the real estate were capitalized at 6 percent instead of 5, the productive value per acre of the real estate would be $70 an acre.

This discussion would indicate that under price relationships which prevailed during 1935-39, if the farmer purchaser paid more than $84 an acre for an average farm-accounting farm in Area 5 (based on the 5-percent capitalization) either (1) he should be buying a farm that is better than the average or (2) he would be paying more than the farm is worth. In either case if he bought the farm without much of a down payment, in order to pay for the farm in a reasonable time he would have to do a better than average job of farming or else skimp on his family expenditures.

The discussion in the preceding paragraphs does not mean that all farm-accounting farms in Area 5 during 1935-39 had an average productive value of $84 an acre, when capitalized at 5 percent. Some farms would be worth more than $84 per acre whereas some would be worth less because of differences in land and improvements. Furthermore, if the farm-cost price relationships in the future become more favorable than they were during 1935-39 the productive value of the real estate would be higher than that indicated in this discussion. If the relationships were less favorable the value of the real estate would be lower.

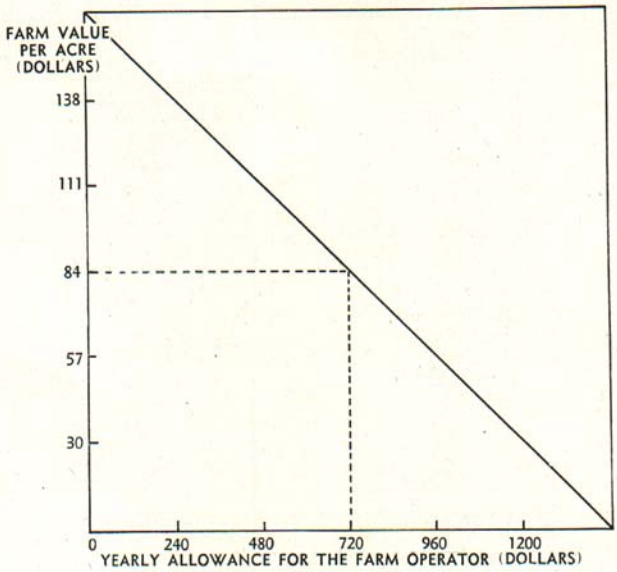


Fig. 6. After all expenses have been paid for operating a farm, the sum that remains is all that is left to pay for the operator's labor and for the investment in the farm business. This figure illustrates how the net returns may be divided between the operator's labor and the real estate. It also shows how this division affects the value of real estate per acre. For example, if in type-of-farming Area 5 during the 5-year period 1935-39, the farm paid the operator $720 a year for his labor and management there would have been left an $84 per acre value of farm land if capitalized at 5 percent. If the farm operator were to receive $960 a year for his work, the farm value would be $57 per acre.

TABLE 5—*Michigan farm prices for crops, livestock and livestock products, 1935-39.*

Item	1935-39 Average Price	Item	1935-39 Average Price
Corn.....bu.	$0.66	Butterfat.....lb.	$0.30
Wheat.....bu.	.83	Milk.....cwt.	1.73
Oats.....bu.	.34	Eggs.....doz.	.21
Barley.....bu.	.59	Hogs.....cwt.	8.56
Potatoes.....bu.	.64	Lambs.....cwt.	8.50
Field beans.....cwt.	3.09	Wool.....lb.	.26
Alfalfa hay.....ton	8.86	Beef cattle.....cwt.	6.52
Apples.....bu.	.72	Veal calves.....cwt.	9.42

3. How can I determine the earnings from a farm?
   a. Long-time earnings are determined by applying long-time average prices to average production and then deducting average expenses. Information in Tables 2, 3 and 4 should be helpful when determining income and expenses on the farm you contemplate purchasing.
   b. Table 5 shows the 1935-39 average Michigan farm prices for crops, livestock and livestock products.
   c. On this page one can use Table 6 to make some calculations as to possible income and expenses on the prospective farm using 1935-39 average prices.

TABLE 6—*Income and expenses which I can expect from my prospective farm.*

INCOME

CROPS SOLD	Units	Price	Total Value
		$	$
LIVESTOCK			
Dairy products			
Cattle sales			
Lambs			
Wool			
Hogs			
Eggs			
Poultry			
Other income			
TOTAL FARM INCOME			$

EXPENSES

Feed	$	Building repairs	$
Hired labor		Fence repairs	
Machinery repairs		Insurance	
Car expense		Taxes	
Truck expense		Veterinary	
Tractor expense		Vaccination	
Seeds		Electricity	
Fertilizer		Telephone	
Threshing		Others	
Combining		Building depreciation	
Baling		Machinery depreciation	
Corn picking		Family living	
Silo filling			
Sprays		TOTAL EXPENSES	$
		*INCOME LESS EXPENSES	$

*This is amount available for interest and principal payments in average year. How much of a debt load will this income keep current and pay for the farm in 20 to 35 years?

IS MY JOB BIG ENOUGH?

You have heard it said that some farms provide enough productive work to make possible an income while other farms do not. How much productive work should a farm provide in order to have possibilities for success? How can the amount of work be measured?

A certain amount of productive work is necessary before a satisfactory living can be obtained from a farm business although work in itself does not necessarily insure a good income. Farms of 80 tillable acres should be organized to provide 4 to 5 productive man work units per tillable acre before reasonable income should be expected. Larger farms of, say, 160 tillable acres or more, can do a satisfactory business with 3 to 4 work units per acre. A farm that provides a total of only 250 or so work units seldom has a chance for producing an income with much debt-paying ability.

The amount of work provided by crops and livestock can be measured by productive man work units. A productive man work unit is the amount of productive work the average man, with average labor efficiency, will accomplish in a ten-hour day. Table 7 provides a convenient form for determining productive man work units.

TABLE 7—*How much productive work will my prospective farm provide?*

CROP	Acres	Productive man work units	
		Per acre	Total
GRAIN:			
Corn for silage		2.5	
Corn for grain		3.0	
Oats		1.0	
Barley		1.0	
Wheat		1.0	
Soybeans		1.5	
HAY:			
Alfalfa (per cutting)		.7	
Clover		.7	
Mixed		.7	
OTHER:			
Beans		2.5	
Potatoes (table stock)		6.0	
Potatoes (certified)		9.0	
Sugar beets (all labor)		10.5	
Sugar beets (contract labor excluded)		3.0	
Alfalfa or clover seed		1.0	
Summer fallow		.7	
Cabbage		12	
Snap or string beans		15	
Tomatoes		12	
TOTAL			

LIVESTOCK	No. of head	Productive man work units	
		Per head	Total
Dairy cows		15.0	
Beef cows		3.0	
Mature bulls		10.0	
Heifers, calves or bulls under 2 years		3.0	
Steers, or other cattle to fatten		2.0	
Colts		4.0	
Ewes (mature and yearlings)		0.5	
Lambs raised		0.1	
Feeder lambs		0.1	
Brood sow or boar		3.0	
Hogs raised to 200 pounds		0.5	
Hens		.18	
Pullets raised		.05	
Broilers		.03	
Turkeys and geese		.20	
Turkeys raised		.09	
TOTAL			

METHODS OF FINANCING AND CAPITAL NEEDED TO BUY AND EQUIP A FARM

You realize that there are many ways to finance the purchase of a farm when one doesn't have sufficient cash, but you have some questions about credit for buying a farm:

1. How much can I safely go in debt for a farm at present prices?
   a. An experienced man might safely consider going in debt for 50 percent of the purchase price of a farm at present prices, but an inexperienced man should have more cash and not go in debt 50 percent.
   b. Going in debt 50 percent on present prices of land means going in debt for 75 percent of the 1940 price.
   c. One should also have sufficient cash to pay for 50 to 75 percent of all personal property such as machinery and livestock.
2. I can get an individual to take the mortgage for a 4-percent interest rate. Is this a good deal?
   a. If the loan is relatively large one might question borrowing from an individual especially if there is no amortization or long-time plan involved. Sometimes the unforeseen happens, the individual may die, and his heirs demand a settlement which may cause difficulty.
   b. Individual loans could be made to take care of amortization and other features, but usually aren't.
3. I can get a loan from various sources but they are only for a 3- to 5-year period, but the interest rate is reasonable. Would this be satisfactory?
   a. Records show that very few farms are paid for during a 3- to 5-year period. It is risky business to take a short-time loan on a farm. When the loan comes due and isn't paid the mortgage holder may foreclose if you are unable to get a new loan elsewhere.
4. I could get a loan for a 20- to 30-year period with an amortization payment plan and reasonable interest. Would such a loan be advisable?
   a. This type of loan is best adapted to a farmer's needs.
   b. This type loan can be paid off much faster if it is possible to do so.
5. The buildings and fences need considerable repair. Should money to finance repairs be included in a long or a short term loan?
   a. It would be highly advisable to include repairs and needed drainage in the long-time loan. It will take extra money to get started, and incomes are usually not too high the first years when getting established. One should not handicap operating capital by trying to pay repairs out of current earnings.

Fig. 7. Many persons have lost their life savings and the results of many years of hard work in trying to get established in farming on a farm where conditions are not suitable for financial success.

GENERAL PRINCIPLES OF SUCCESSFUL FARMING

1. Small farm businesses of about $8,000 investment must take in enough gross income to equal the investment in 3 or fewer years, if a satisfactory income is to be obtained.
2. Medium-sized farm businesses with investments of about $15,000 should take in enough gross income to equal the investment each 3½ to 4½ years if a reasonable income is to be obtained.
3. Large farm businesses of $40,000 or so may have a desirable income with a slower rate of turnover of the investment—say 5 years. This would require an annual gross income of $8,000 and over.
4. Most farms of 80 tillable acres should provide 4 to 5 productive man work units per tillable acre in order to produce a sufficient volume of business to be profitable.
5. Farms that will produce high yields of high-valued crops, or farms with high livestock production and good markets may be able to operate with a few less productive man work units than indicated above.

6. Larger farms may be profitable with less productive man work units per tillable acre than the 80-acre farms. Usually 3 or 4 work units per tillable acre would be sufficient to make possible a satisfactory income on the larger farms.
7. Relatively small farms intensively operated will provide as large an income as farms twice as large handled on an extensive basis—such as 5 productive man work units per acre on the 80-acre farm compared with 2½ on the 160-acre farms.
8. The true test of a soil is the crop yields it will produce in the most adverse years.
9. The debt-paying ability of a farm declines rapidly as one leaves the good grades of soil.
10. Good management is important, but its reward is diminished by a poor soil.
11. Farmers who are poor managers have about the same income, regardless of the quality of soil they farm.
12. From an economic viewpoint, the nature and productivity of a soil are not enough to consider when thinking of soils. The value of the crops that can be grown on a soil, and location with respect to markets for the crops as cash crops or for livestock and livestock products must also be considered.
13. There is a close relationship between crop yields and labor incomes.
14. Crop yields 25 percent below average will tend to produce labor incomes 50 percent below average.
15. Crop yields 25 percent above average will tend to return labor incomes 50 percent above average.
16. Most farms with crop yields 25 percent below average have practically no debt-paying ability.
17. Kinds of crops grown are important, but in general they are not so important for farms in the same area as differences in crop yields.
18. Farm businesses that are diversified tend to have higher labor incomes than those depending on only one or two sources of income.
19. Specialization has a place where one enterprise has a great advantage over any other possible competing enterprise.
20. When selecting the classes of livestock to handle, select the classes that will utilize most efficiently the most scarce of the following: labor, feed, and capital.

21. On small farms where feed and capital are relatively scarce, the more intensive classes of livestock such as dairy cows and poultry will provide better incomes than will the extensive classes of livestock.

22. Large farms may be farmed more extensively; thus the more extensive classes of livestock, such as beef breeding herds, sheep breeding flocks, feeder cattle, feeder sheep and hogs may find a place.

23. In most areas of Michigan, the farms that are more heavily stocked tend to have the higher labor incomes.

24. Differences in production per cow, sow, ewe, and hen are responsible for more variations in labor incomes than are the differences in the amounts of livestock on many farms.

25. Man labor at hired wage rates accounts for 40 to 50 percent of the total farm expenses; thus labor efficiency is closely associated with labor incomes.

26. Increased use of machinery may increase labor efficiency, but it frequently does not since the amount of work provided is not changed and the number of men to handle the work remains unchanged on many farms.

27. Increased efficiency in the use of buildings is possible on many farms. In general, there is no relationship between the investment in buildings and labor incomes on farms in most areas of Michigan.

28. Higher-than-average crop expenses, resulting from good crop production practices, will not cause a farmer to "go broke".

29. A business so balanced as to utilize all of the available resources most efficiently and a business adapted to the abilities and skills of the farmer is the one that will succeed.

30. The successful farmers are those who do the ordinary things extraordinarily well.