

THE IMPORTANCE OF FARM MANAGEMENT EDUCATION FOR ADULT FARMERS IN MINNESOTA

by

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In approaching this problem in efforts to shed some light on it, the author draws heavily upon his own experiences in teaching and farm management as a background and source of materials for setting up the main body of this paper. Some of these teachings, education and work experiences are as followx; five years spent teaching adult farmer groups; two years member of board of educ ion rural high school; six months teacher-training staff for agriculture teachers University of Minnesota; four years employment in the farm management department University of Minnesota; seven years spent ax an operator of farms; and presently, chairman of the adult education committee of the Minnesota Vocational Agriculture Instructors Association.

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The stated objective of adult education for farmers is to increase their proficiency in farming and farm living. In accomplishing this objective, farm management plays a dual role. For example, proficient farming is just another way of saying good farm management while proficient farm living depends upon good farm management to provide the farm income needed to carry out a desirable level of living; therefore, farm management training should be a vital part of any comprehensive program of adult education for farmers.

The purposes of this paper will be to point out why farm management education is essential for the modern farmer, and to highlight what is being done in Minnesota to provide farm management training for adult farmers through the public schools.

The vital place of farm management in modern farming has greater significance to us when we realize that it is the only major factor affecting farm income that is largely controlled by the individual farmer. Other factors affecting farming income such as prices, climate, soil type, chance, and government actions, are largely beyond the control of the individual farmer. Apparently, there is only one way for the individual farmer to increase his farm earnings by his own actions. He must become increasingly skillful in the management of his farm business.

For our discussion we will use the following definition of farm management: "Farm management is the application of agricultural techniques and economic principles to the organization and operation of a farm so as to secure the maximum continuous profit." We wish to think and act in terms of the whole farm business when working with farm management problems. We are concerned with forming a picture of the whole farm business that will be most profitable for a given farmer to handle in keeping his resources, interests, ability and energy. Farmers are no different than other people in that they vary a great deal in their outlook on life. Some want much out of life while others are indifferent and apparently have little ambition to succeed. Farm management training has the best opportunity for accomplishing results where the farmers recognize their management problems and have a desire to take action on learning how to solve their problems.

The author found from his own teachings that the most satisfactory way of bringing individual farm management problems to farmers' attention was to use the system followed by the University of Minnesota in its farm management studies carried out among successful farmers in southern Minnesota. In these studies, groups of farmers have their farm management performance graphically pictured for them in a thermometer chart arrangement of the seven factors the University uses to test the soundness of a farm business. On this chart any farmer in the study can see how he rates in all seven management factors as compared to the high, low or average of the entire group. On a year-to-year basis, the individual farmer can find out from the thermometer chart if he is improving his level of management, just holding even or declining in performance as compared to the group. This thermometer chart apparently motivates some farmers to strive for improvements in their management of their farm business since many have remarked that they really did not know what was meant by farm management until they saw their own farm business pictured in the thermometer chart. No doubt what the thermometer chart actually accomplished was nothing more than making the farmers realize

that they did have some farm management problems. Once the problems were understood by the farmers, the more alert individuals were ready and willing to progress towards ways and means of working out proper solutions.

Each year during the five years that the author has been teaching agriculture to adult farmers, this thermometer chart arrangement of the management factors has been drawn up for class members. It has been a very useful teaching tool and has served for several purposes. It was used to determine the position in farming of class members at the start of their training program. It was the base used to make farm plans and to set goals for improvement; and finally, it was very effective in evaluating annual farming progress of class members. The chart on page three illustrates how a class thermometer chart pictures the various elements of the farm business for each class member in relation to the class as a whole. This particular chart brings out the reasons for the spread in the farm earnings between the high and low man in this one year.* Net worth change and percent debt load is also shown.

On page four we have illustrated another use of the seven farm management factors. Here we use the factors to make two comparisons. In the chart on the top of the page, the individual farmer can see how the elements of his farm business compare with the class averages of well established farmers in the University of Minnesota farm management studies in S. E. Minnesota. The chart on the bottom of the page gives each farmer in the class a picture of how the relative strength of a farm business pays off in higher farm earnings. The more well acquainted a farmer is with his own business and its relative strong and weak points as compared to other farms operating under the same conditions, the greater are his chances of making sound decisions for improving his farm business. The basic use of these charts shown here is to aid the farmer in forming sound judgment in organizing and operating his farm in harmony with the ever changing world in which we live.

The chart on page five indicates the farm management progress made by one member of an adult farmer class during a two year period. The class as a whole was making good progress during this time; however, this individual farmer moved ahead at a faster pace. He was well rewarded for his extra efforts as indicated on the chart. In the first year this man was only above class average in two of the seven management factors and his earnings were well below class average. However, two years later this man was above class average in all seven management factors and his farm earnings stood well above the class average.

On page six we have data to bear out the fact that farmers can raise their farm incomes with improved farm management even during periods of declining prices for farm products. The 22 farms shown on this chart were the same farms for both of the years 1948 & 1949. This gave the writer an excellent opportunity to measure the results of relative changes of improvement in the farm management factors. The entire class was improving during this time; however the half of the class that improved fastest in the factors of management was apparently rewarded for their efforts. In the face of falling prices for crops and livestock products for the year of 1949, those farmers who improved relatively the fastest in their farm management had slightly higher incomes in 1949 than in 1948; on the other hand, the half of the class which did not improve so fast had farm incomes

*All illustrations of seven farm management factors in this paper use butter fat per cow factor in place of feeding efficiency factor.

A VETERAN'S AGRICULTURE TRAINING CLASS THERMOMETER CHART
FARM ORGANIZATION AND MANAGEMENT EFFICIENCY ANALYSIS

Student _____ Year _____

Each factor listed below is ranked from high to low for the class. The earnings and seven management factors are calculated on a whole farm basis.

MANAGEMENT FACTORS

		1	2	3	4	5	6	7		
Oper. labor earnings		Index crop yields	Index crop selection	B.F. per cow	L.S. units per 100A	Work units	Work units per worker	Equip. exp. per work unit	Vet's net worth inc.	Vet's liab. are of assets
*1. 3778		160	92	362	13.9	561	481	\$.01	5485	0
2. 3566		133	91	332	13.6	525	421	.23	1782	0
3. 2428		128	87	310	13.2	497	373	1.34	1655	0
4. 1943		124	87	301	12.3	467	358	1.40	1403	0
5. 1695		119	86	300	11.5	454	348	1.79	1384	3
6. 1579		116	79	293	11.2	435	337	2.03	1248	10
7. 1510		115	77	289	10.3	421	332	2.09	1188	12
8. 1466		114	76	285	10.3	373	314	2.14	1056	13
9. 1415		111	75	281	10.3	358	310	2.29	1017	13
10. 1367		106	75	275	9.4	349	308	2.43	999	18
11. 1312		105	73	271	9.0	348	306	2.47	947	19
12. 1173		102	71	286	8.4	332	290	2.50	846	19
13. 1037		100	70	251	8.1	309	279	2.95	804	22
14. 1013		99	70	247	7.1	308	256	3.11	762	29
15. 845		86	68	247	6.8	306	252	3.41	687	34
16. 819		86	67	237	6.5	90	249	.43	635	34
17. 611		83	65	233	6.4	279	248	3.78	575	35
18. 601		82	65	231	4.4	256	248	3.99	557	37
19. 599		81	64	230	4.3	252	234	4.75	432	41
20. 559		75	61	199	4.2	248	227	4.89	219	42
21. 467		56	59	192	4.0	248	220	5.74	33	52
*22. 79		47	54	138	3.9	220	206	5.77	-80	58

*Farmer with high earnings for year has individual figures enclosed in blocks.

**Farmer with low earnings for year has individual figures circled.

MEASURES OF FARM ORGANIZATION
and
MANAGEMENT EFFICIENCY, 1949

	Your Farm	Class Average	S. E. Minn. Average
Operator's Labor Earnings	_____	\$1,641	\$2,642
(1) Crop Yields*	_____	100	100
(2) % Tillable Land in High Return Crops**	_____	73	56
(3) Pounds Butterfat per Cow	_____	264	305
(4) Productive Livestock Units per 100 Acres	_____	8.6	22.7
(5) Size of Business - Work Units ***	_____	356	577
(6) Work Units per Worker	_____	300	288
(7) Power, Machinery, Equipment and Building Expense per Work Unit	_____	\$2.84	\$5.97

*Given as a percentage of the average of each group.

**Class used area 6 data.

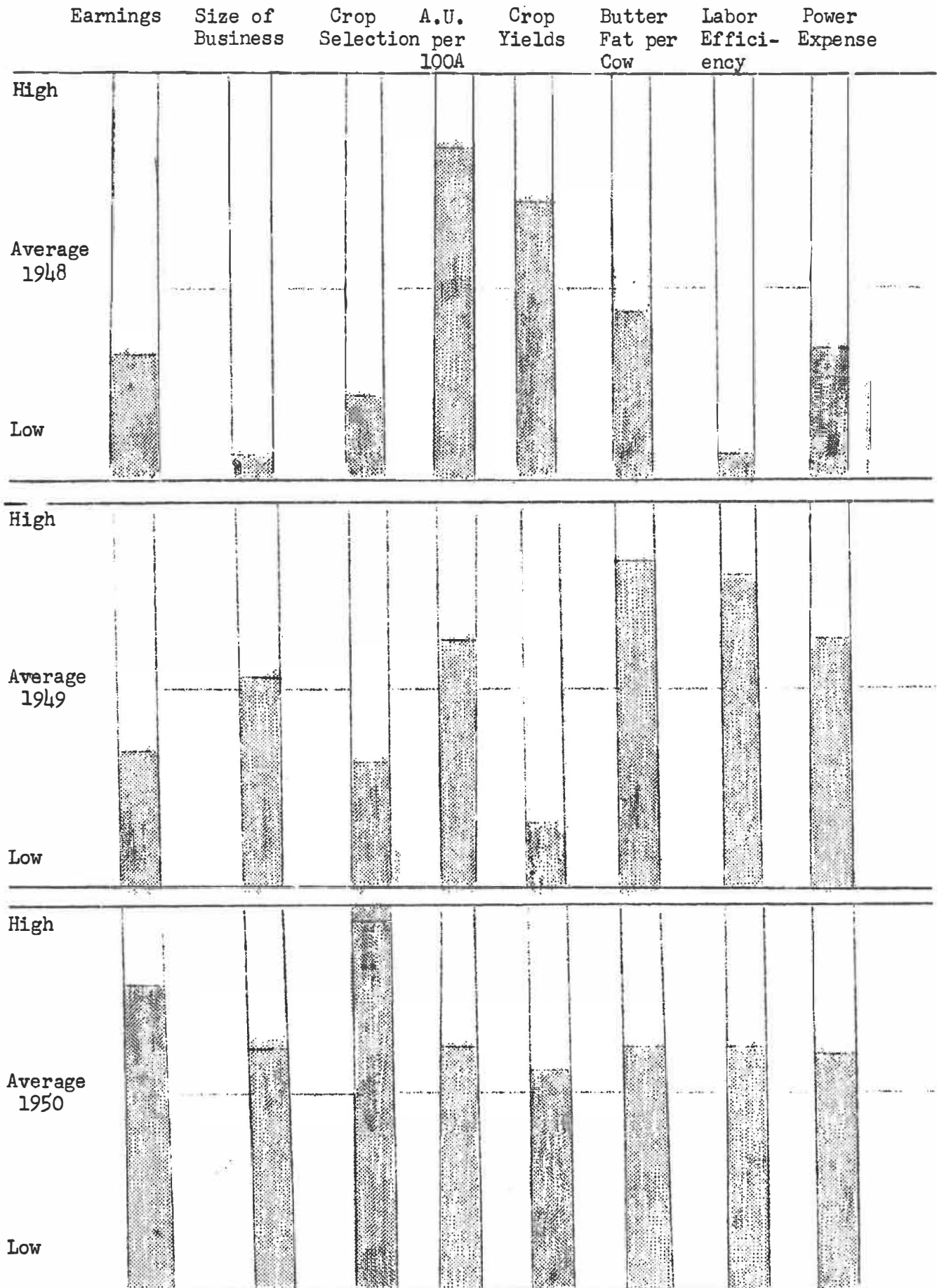
***Class work units calculated by N. E. Minn. Standards.

RELATION OF O.P.L. TO NO. OF FACTORS IN WHICH VETERAN EXCELS

No. of Factors in which veteran excels	Number of Farms	Your Farm	Average Opera- tor's Labor Earnings
None	1	_____	\$ 79
One, two or three	8	_____	1,226
Four or more*	13	_____	2,017

* Only one veteran rated above in six factors. No veteran was above average in all seven factors.

FARM ORGANIZATION AND MANAGEMENT EFFICIENCY IMPROVEMENT -- Shown in Three Years
by one Farmer in a Vo-Ag Class -- Thermometer Chart Farm Business Analysis



RELATIVE CHANGES IN FARM ORGANIZATION AND
MANAGEMENT EFFICIENCY

1949

STUDENT	Class Position Change in Factors from - 1948							Total Positive Changes	Total Negative Changes	Complete Change
	1	2	3	4	5	6	7			
1.	+5	+9	-5	+2	+5	+6	+9	36	5	+31
2.	-9	+2	+9	-4	+11	+17	+4	43	13	+30
3.	-3	+5	-6	-5	+3	+5	+19	32	14	+18
4.	0	+9	+5	-4	+1	0	+3	18	4	+14
5.	-2	+12	+1	-1	-2	0	+5	18	5	+13
6.	-12	+10	+3	-1	+4	+8	0	25	13	+12
7.	+1	-3	+1	+1	-2	0	+9	12	5	+7
8.	+7	+2	-2	0	-1	-1	+1	10	4	+6
9.	+4	-2	0	+1	+1	0	0	6	2	+4
10.	+9	-9	+1	+9	-1	+5	10	24	20	+4
11.	-3	+11	+1	0	0	-1	-5	12	9	+3
12.	-2	0	-2	+3	0	-3	0	3	7	-4
13.	+1	-1	0	+4	-2	-2	-9	5	14	-9
14.	+6	-14	-7	+5	0	0	+1	12	21	-9
15.	+2	-2	+1	12	+1	-2	0	4	16	-12
16.	+6	+3	0	+1	-9	-11	-6	10	26	-16
17.	0	-13	+10	-2	-7	-2	-2	10	26	-16
18.	+1	-5	-6	-4	0	-4	0	1	19	-18
19.	+1	-12	0	0	0	-7	0	1	19	-18
20.	-8	0	-4	-1	-1	-1	-5	0	20	-20
21.	-4	-17	-1	+1	+1	-4	0	2	26	-24
22.	-2	-5	+1	-1	-2	-3	-12	1	25	-24

	1948	1949	Difference
Average Operator Labor Earnings on 11 Improving Farms	\$1505	\$1541	36
Average Operator Labor Earnings on 11 Declining Farms	\$1778	\$1216	-562
On Average per Worker Basis, Top Farms Earned \$2.00 More per Day			

in 1949 that were \$562 per farm less than they had in 1948.

All of the author's experiences in education and farming bear out the fact that good farm management pays off in higher farm earnings and better living standards for farm people. In view of this fact, it is well to raise the question of what is being done along the line of teaching farm management to adult farmers in the public schools of Minnesota. We can report that more and more schools in Minnesota are providing adult courses in agriculture for the farmers in their service area. The Veterans program of agriculture training has given much emphasis to this increased interest in adult farmer classes. Many of these Veterans teachers have stated that the best approach to use in training adults is the farm management approach.

The University of Minnesota has aided the Veterans teachers in their farm management teachings by setting up studies on the farm accounting records that the farm trainees kept. These studies were carried out by University during a five year period starting in 1947 and they are quite similar to the farm management studies that have been operating among established farmers in southern Minnesota for a number of years. These studies gave many teachers and farmers a much closer tie with good farm business analysis than would have been accomplished without the help of the University. In the future, there is the possibility that the University will continue these studies with any interested schools and farmer classes. If this situation develops into a regular farm management study as a cooperating program between the public schools and the University of Minnesota, we could well be moving into a period where Minnesota would have one of the better programs of adult farmer education in this country. Under this kind of a cooperative program, the University research people in farm management would have a much closer view of farm management problems from all sections of the state, and they would be able to make many more timely recommendations for use by the agricultural teachers in their teaching than is possible at the present. In the future, the farmers in this cooperative program would very likely be more civic minded about supporting their local schools and the University for the simple reason that they had made direct, personal contact with both of these institutions and found that both had valuable information and services to offer them.

The final worth of farm management training for adult farmers in Minnesota public schools will be demonstrated by the long time effect it has on the rural people who take the training. If it aids farmers in becoming more happy and useful members of their rural communities, then it should be included in the curriculum of schools serving rural areas.