

AN EVALUATION OF THE MISSOURI ADULT FARMING
COOPERATIVE PROGRAMS AND THEIR
INFLUENCE ON THOSE
ENROLLED

By

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CHAPTER I

INTRODUCTION

In this space age, a progressive farmer must be a scientist, a technician, a tax specialist, and have a superior managerial ability. In the past five years, the accelerated increase of agriculture expenditure has enforced the need for adult farmer education. The wide scope of modernization and technical knowledge has almost made it an impossibility for the farmers of today to stay within bounds of these changes. He needs to be aware of institutions and publications that can aid his production proficiency. The fast pace of which knowledge and information is being compiled and distributed by universities has brought about the need for farmers to seek professional help. Since the Smith-Hughes Act, the vocational agriculture instructor has been in charge of teaching and guiding these programs. The sponsors of the Smith-Hughes Act were probably the first to realize the need for adult education. Lloyd Phillips (1, p. 481) states that the Smith-Hughes Act says "such education shall be less than college grade and be designed to meet the needs of persons who have entered upon the work of the farm." At one time it was practical for a single vocational agriculture instructor to handle both in school day classes for those regularly enrolled in vocational agriculture and conduct and advise night classes and meetings for adults. The change in modernization of agriculture has also increased the burden upon vocational agriculture instructors. The single vocational agriculture

instructor can no longer handle both teaching situations effectively and stay within limits of an acceptable work load. The State Department of Education in Missouri has realized this and has set up five agriculture departments with two teachers, one designated as an adult instructor and the other as a regular all day instructor, to see if this combination can best fill the needs of a community.

This demand for adult education is becoming more and more evident in that adults of all ages are returning to schools for all types of learning. The more progressive farmer is constantly trying to increase competency and skills to have a more productive farm. Young and newly established farmers are especially becoming interested because the lack of experience makes it more difficult for them to compete with established farmers. It is also evident that many of the former vocational agriculture students are returning to evening adult agriculture classes. Schmidt (2, p. 82) stated, "The best time for any one to learn anything is when he needs it." This has been a basic argument for adult education for many years. If ever adult education in vocational agriculture is needed, it is now and will become more pronounced in the future.

Statement of the Problem

The State Department of Education in Missouri has set up Adult Farm Cooperative Training Programs in five vocational agriculture programs throughout the state. The participants spend three hours a day, four days a week for forty-four weeks a year in a class and on the farm training situations. The students pay a monthly tuition rate. The programs are also partially reimbursed by the State Department of Education. With this amount of time and money spent by the student, a

survey needs to be run to determine if there has been a progressive change in the farming procedures of these students. Also it needs to be determined if the students are receiving the type of education that they were expecting when they enrolled in the program.

Purpose and Objectives

The purpose of this study was designed to investigate and determine the extent to which the farm cooperative training programs are aiding the farmers in improving their operation. Also to see if the programs are effectively meeting expectations and needs of those enrolled.

The objectives of this study were:

1. To determine reactions of adult students toward the curriculum being taught.
2. To determine student assessment of what were the most beneficial factors derived from the program.
3. To determine what economic change in farming the adult student has realized due to this enrollment in the Farm Cooperative Program.
4. To determine the increase in the total farming operation of the adult student as influenced by the Farm Cooperative Program.

Scope and Limitations of Study

This study was limited to only the five schools in Missouri who have Adult Farm Cooperative Training Programs. The questionnaire was distributed to the one hundred and twenty-five adult students of these programs. The instructor who is employed as fulltime adult instructor was responsible for giving the student the questionnaire. The five schools included: Birch Tree, Houston, Mountain Grove, Popular Bluff, and West Plains. The majority of students enrolled were part-time farmers.

Definition of Terms

Farm Cooperative Training Program: Is an instructional course for adult farmers of any age covering all aspects of the agriculture industry.

Adult Instructor: A regular certified vocational agriculture instructor whose primary duty is the instruction and supervision of agriculture adults.

Individualized Instruction: Is that instruction which is given to members of the farm cooperative program on a one to one relationship of instructor to adult student.

Adult Student: Is a student out of high school and enrolled full-time in the five Missouri Farm Cooperative Programs.

Procedure of Investigation

The initial step in the investigation was to develop a questionnaire that would measure the economic and technological changes and benefits the Farm Cooperative Program had in the students farming situation. A list of changes and benefits was prepared and taken to the instructors of the five schools of Farm Cooperative Programs. The instructors made modifications to the existing questions and added new ones to the list. This questionnaire, which was used to measure the changes and benefits that the adult students derived from the Farm Cooperative Training Program, was sent to the district supervisor of the Southwest District of Missouri. Then as a final step in the preparation of the questionnaire it was presented to the Agriculture Education staff for refinement.

After finalization the questionnaires were sent to the five Adult Farm Cooperative Training Programs to be completed by their students.

The schools that received the questionnaires were: Birch Tree, Houston, Mountain Grove, Popular Bluff, and West Plains.

Twentyfive questionnaires were sent to each school along with a letter explaining the use of the questionnaires. To further explain the correct procedure in answering the questionnaire a visit was made to each Farm Cooperative Program on the night the questionnaire was to be answered.

One hundred and twenty questionnaires were received from the five schools in this study with an average of twenty four questionnaires per school. This was one hundred percent of the adult students in attendance on the night the questionnaire was distributed.

CHAPTER II

REVIEW OF LITERATURE

The concept of adult education is not new; however, many states have been reluctant or apprehensive about the addition of evening adult classes to the high school curriculum. Many states do offer short courses for adults and have shown moderate degrees of success. If these are successful then there is a strong indication that adults are willing and eager to return to school. In reviewing literature of similar studies there is evidence of a great need for adult farmer education in every rural community, but only few carry these services. Those schools who did provide these educational services showed remarkable improvement in the social and economic changes of those enrolled.

During the years of 1967 to 1968, seventy-six vocational agriculture departments in Minnesota employed more than one instructor. In almost all cases, at least one of the additional men in each department was responsible for conducting organized adult classes in farm business management education. Enrollment in these courses exceeded 3,000 farm families. Person, Teacher Educator, University of Minnesota, (3, p. 42) ran a survey on the programs and found that taking into account the marginal community benefits and accounting for all opportunities and direct cost for both individual participants and the school, the benefit-cost ratio for farm business management education is about 9 to 1. For every dollar expended in conducting a farm business management education

program, the community can expect to generate nine dollars in increased business activity.

Socio-economic conditions are also playing an important role in today's education for adults. Wilkening (4) stated that not only new ideas are accepted, more readily if associated with existing values, but also they spread most efficiently through local leaders who, in the area he studied, tended to represent from five to fifteen farmers and were important, indeed necessary, communication links in the dissemination of both ideas and scientific information about agriculture and rural life. It has long been an understood fact that our more prominent farmers are always seeking new information. The main source of their inquiries has been the local agriculture teacher. With these leaders of our communities attending nightly meetings it has created interest throughout the entire community. The acceptance of these new innovations is largely due to functions of status factors. Rawson (5) ran a survey of 378 young farmers in Kansas to find where they learned about efficient ways of doing things, over 70 percent replied that they used two sources: one was the advice of successful farmers; the other was commercial companies producing products and equipment used by farmers. Although this information to aid the young and adult farmer is readily available, it generally isn't enough to enable the farmer to keep in stride with modernization. Brunner, Wilder, Kirchnen, and Newberry (6) found that although 2/3 of a sample, nearly 1,700 farmers in three middle western states received farmers bulletins, only 2/3 of these put the information they contained into use. The proportions both receiving and utilizing bulletins increased rapidly with education.

In today's world of complexities there are fewer and fewer opportunities for farmers to exchange ideas with fellow farmers. The

country schools, churches, Saturday nights in town, and other places where farmers gathered in the past have been erased from many rural communities. These Adult and Young Farmer courses provide an opportunity for the exchange of ideas among farmers with common problems. It has been shown that although new techniques and ideas are discovered everyday and presented in the adult and young farmer classes, they proved no value to a teacher or student unless it is kept on a useful basis and practicability can be shown. The Federal Board of Vocational Education published a bulletin saying that (7, p. 1) "In communities where adult farmer educational programs have been most effective they have been based upon the needs of the local farmers." The effectiveness of the adult farmer education activities evaluate the effectiveness in terms of changes made in farming operations of those receiving instructions.

The responsibility that the new information be presented on a practical and workable level fall chiefly upon the vocational agriculture instructor. In a study by Frank (8, p. 60) he stated that:

Between a beginning and end of a twenty-one month period of the study there were significant changes made in the farming operations being carried out by each of the adult farmers enrolled in the adult farm classes. The greatest number and extent of these changes occurred in areas which were emphasized to the greatest in organized classes and individualized instructions.

According to this study one can conclude that the educational program carried out by the vocational agriculture instructor was a factor in bringing about changes. In Frank's thesis he has brought out another important aspect of adult education the individual farm instruction. Deyoe (9, p. 128) said that "if farmers are to benefit from adult farmer classes, which are appropriate for a particular course, they must also use methods which are effective in securing these kinds of

carry-over to the farmers of the enrollees." From 88 farmers interviewed, the following types of carryovers were identified:

1. Applied practices which improve the efficiency of a specific enterprise.
2. Make changes in the organization and operation of the farm business.
3. Apply practices in soil conservation.
4. Introduce an enterprise new to the farm.
5. Participate in group activities.
6. Make changes in mechanical phases.
7. Make changes in a farming status.

It is extremely evident that most of these changes and carry-overs can not be accomplished unless an instructor spend some time with individualized instruction on each of the class members' farm.

Robert Wanbrod (12, p. 27) said that:

... the sixties was period of renewal and reorientation for agriculture education. Adults were enrolling in all types of agriculture education programs. If adult education in the last ten years is a relatively accurate reflection of the priority we have placed on it. The prospects for the next ten years depend to a considerable extent on the degree to which policies are revised to place a higher priority on adult education in agriculture.

Further evidence of the beneficiality of adult education was reported by Knewston (11) Vocational Agriculture Instructor in Columbus, Kansas, who taught a farm business management course for three years and at the end he compared his class members to non-class members. Knewston found that the class members had a significantly higher net income when compared to the state average.

Even though there is a great need for adult farmer education and the usefulness has been proved in several studies there are few schools that carry this service. Starling (12, p. 27) said "The reason most often given by the teachers for not conducting programs that meet the needs of adults is the lack of time and competence required to conduct the meetings."

Summary

The purpose of this review was to investigate literature that covered the studies of adults furthering their education and establishing the fact that more adult farmer education is needed. The literature showed a tremendous need for a complete adult education program is a realistic program that can no longer be placed on a list of low priorities.

CHAPTER III

PRESENTATION AND ANALYSIS OF THE DATA

The major purpose of this study was to determine what benefits and influences the Farm Cooperative Training Program had on its adult students. In order to accomplish the purpose of the study the following objectives were formulated: (1) to determine reactions of adult students toward curriculum being taught; (2) to determine what the students felt were the most beneficial factors derived from the program; (3) to determine what economic change the adult students have realized due to their enrollment in the Farm Cooperative Program; (4) to determine the increase in the total farming operation of the adult student as influenced by the Farm Cooperative Programs.

The data presented in this chapter were obtained from one hundred twenty (96%) of the adult students enrolled in the five Farm Cooperative Training Programs in Southwest Missouri. The returned questionnaires were collected and the data were analyzed.

The personal data section of the questionnaire were designed to show the characteristics of the respondents. These data included the following: Length of time enrolled in the program, years engaged in farming, years lived in present area, if membership in the FFA, type of livestock owned, number of acres presently operated, investment in equipment and buildings, and their yearly net income from the farm. The areas used were felt to be of greatest significance to the investigator and would give a better introduction for the data presented.

In order to arrive at an average response for each opinion statement, numerical values were assigned to the response categories as follows: Strongly Agree - 5, Agree - 4, Neutral - 3, Disagree - 2, Does not apply - 1. Prior to analysis, the investigator decided the actual numerical range for each response category was assigned as follows: Strongly agree - 4.6 to 5.0; agree - 3.6 to 4.5; Neutral - 2.6 to 3.5; Disagree - 1.6 to 2.5; and Does not apply - 1.5 and below.

The first eight tables are a summary of the selected background characteristics of the respondents.

TABLE I
LENGTH RESPONDENTS HAVE ATTENDED PROGRAM

Months	Distribution	
	N	%
0 - 6	13	10.8
7 - 12	17	14.2
13 - 18	22	18.4
19 - 24	21	17.5
25 - 30	22	18.3
29 - 36	25	20.8
TOTAL	120	100.0

Table I contains the responses of adult students concerning years of membership in their local Farm Cooperative Training Program. The highest percentage of adult students have been members of their local program for 29 to 36 months. The average tenure of membership ranged from 4 to 30 months with the average tenure of membership being 21.6 months.

TABLE II
DISTRIBUTION OF RESPONDENTS ACCORDING TO YEARS
ENGAGED IN FARMING

Years in Farming	N	Distribution	%
0 - 5	60		50.0
6 - 10	20		16.7
11 - 15	18		15.0
16 - 20	14		11.6
21 and over	8		6.7
TOTAL	120		100.0

Table II summarizes the responses of adult students concerning years they have been engaged in farming. The highest percentage of adult students enrolled in the Farm Cooperative Training Program had been farming five years or less. Only eight, 6.7 percent, of the respondents had been farming 21 years or more.

TABLE III
DISTRIBUTION OF RESPONDENTS ACCORDING TO LENGTH
OF TIME THEY HAVE LIVED IN PRESENT AREA

Years	N	Distribution	%
0 - 5	30		25.0
6 - 10	28		23.3
11 - 15	22		18.3
16 - 20	20		16.7
21 and over	20		16.7
TOTAL	120		100.0

Inspection of data presented in Table III indicates that the largest group of respondents, 30 or 25.0 percent, had lived in the area less than five years. There was little difference in the number and percentage of those for the other response areas.

TABLE IV
DISTRIBUTION OF RESPONDENTS ACCORDING TO YEARS
SPENT IN FFA

Years in FFA	Distribution	
	N	%
0	65	54.2
1	5	4.2
2	4	3.3
3	6	5.0
4	40	33.3
Over 4	0	0
TOTAL	120	100.0

Table IV contains the responses of adult students regarding their background in FFA. The largest group, 65 students, had never been members of FFA thus representing 54.2 percent of the respondents. The second largest group had been in FFA four years. This represents 33.3 percent of the students.

In order to evaluate the types of livestock enterprises operated by the adult students, Table V was prepared. The enterprise having the highest response was beef with 70 students, 50 percent. Those owning swine totaled 27, 19.0 percent which was the second largest group. In Table V the number totaled 141 which reflects that many of

the students owned more than one livestock enterprise. Poultry and sheep were the least important enterprises.

TABLE V
DISTRIBUTION OF RESPONDENTS ACCORDING TO TYPES
OF LIVESTOCK RAISED

Type of Livestock	N	Distribution	%
Beef	70		50.0
Dairy	25		17.7
Sheep	5		3.5
Swine	27		19.0
Horses	10		7.0
Poultry	4		2.8
TOTAL	141		100.0

To assess the size of the farming operations of the adult students, Table VI was prepared. The average size of the farms operated by the program participants were 190 acres in size. However, 73, 60.8 percent of the respondents operated farms that were 100 acres or less. The range of the total participants farm size was from 80 to 2,000 acres. There was a total of 22,800 acres operated by the adult students. This was broken down into; crop land, 3,000 acres or 13.2 percent of the land was in crops, hay and pasture totaled 10,655 acres or 46.7 percent, woodland totaled 9,145 acres or 40.1 percent of the total acres operated.

TABLE VI
DISTRIBUTION OF RESPONDENTS ACCORDING TO
ACRES OPERATED

Acres Operated	N	Distribution	%
100 and less	73		60.8
101 - 300	31		25.8
301 - 500	10		8.3
501 - 800	5		4.2
801 and over	1		.9
TOTAL	120		100.0

Note: Average size of farm = 190 acres

TABLE VII
DISTRIBUTION OF RESPONDENTS ACCORDING TO
INVESTMENT IN BUILDINGS AND
EQUIPMENT

Investment in \$	N	Distribution	%
0 - 5,000	15		12.5
5,001 - 10,000	20		16.7
10,001 - 15,000	73		60.8
15,001 - 20,000	12		10.0
20,001 and over	0		0
TOTAL	120		100.0

According to Table VII the highest number of respondents' investment was 10,001 to 15,000 dollars with 60.8 percent falling in this range. None of the respondents had an investment over 20,000 dollars.

Table VIII contains the responses of the adult students according to their net income from the farm. The largest group of respondents

were between the income levels of 5,000 and 10,000 dollars with the average income of 8,432 dollars. The smallest group was in the 15,001 to 20,000 dollar range. These latter two respondents were both dairy farmers.

TABLE VIII
DISTRIBUTION OF RESPONDENTS ACCORDING TO
YEARLY NET EARNINGS FROM THE FARM

Yearly Income in \$	N	Distribution	%
5,000 and less	16		13.3
5,001 - 10,000	94		78.4
10,001 - 15,000	8		6.7
15,001 - 20,000	2		1.6
20,001 and up	0		0
TOTAL	120		100.0

Note: The average income was \$8,432.

The following four tables were developed from findings for adult students of the five Farm Cooperative Training Programs in Southwest Missouri, regarding the determining of the benefits and influences of the Farm Cooperative Training Program. The four divisions of benefits were: Overall benefits, economic status, curriculum, and individualized instruction. Cumulative scores and mean ratings were given for each of the statements in the following tables. This allowed converting of ratings to mean responses for discussion purposes.

An inspection of Table IX reveals the responses of adult students regarding benefits of their farming practices. The highest mean response

of 4.28, an agree, was indicated for the statement "the Farm Cooperative Program encourages adult students to try new practices." This statement was followed closely with a mean response of 4.27, an agree, to the statement "adult students do jobs more efficiently on their farm because of the Farm Cooperative Programs." The lowest mean response of 3.48, a neutral was indicated by the statement "your enrollment in the Farm Cooperative Program has encouraged you to remain in productive farming." Overall, it was found that most adult students were in agreement that the Farm Cooperative Program helped in improving practices on the farm.

Table X contains data regarding responses of adult students relating to economic benefits derived from the program. An agree rating was assigned to the statement "the adult students have increased their livestock gains because of new practices they have learned while in the Farm Cooperative Program." Also an agree rating was given to the statement concerning the increased total farming operation. However, most adult students had a neutral response toward the Farm Cooperative Program having influenced their income or standard of living.

In order to assess the response of adult students regarding the curriculum, Table XI was constructed. The statement "adult students benefit from participation in class through discussion and regular attendance" received the highest mean response of 4.67, a strongly agree. Three of the five statements concerning the curriculum received, on the average, an agree response. The other statement concerning the thoroughness of the curriculum received a neutral response.

Table XII was prepared to show the effectiveness of individualized farm instruction. Both of these statements rated high on the agree response receiving ratings of 4.1 and 4.3.

TABLE IX

SUMMARY OF RESPONSES REGARDING OVERALL BENEFITS FROM PROGRAM PARTICIPATION

Statement	SA		A		N		D		NA		Cumulative Response	X Response
	N	%	N	%	N	%	N	%	N	%		
The Farm Cooperative Program encourages adult students to try new practices	38	31.7	68	56.7	5	4.1	0	0	0	0	513	4.28
Adult students do jobs more efficiently on their farms because of the Farm Cooperative Program	42	35	68	56.7	10	8.3	0	0	0	0	512	4.27
I have implemented new practices as a result of other students suggestions during our regular class meetings	28	23.3	77	64.2	10	8.3	0	0	5	4.2	483	4.02
The Farm Cooperative Program has increased your self confidence as a manager and operator	43	35.9	54	45	13	10.8	0	0	10	8.3	480	4.00
The Farm Cooperative Program improved your ability to more successfully market livestock	22	18.3	66	55	17	14.2	3	2.5	12	10.0	443	3.68
Your enrollment in the Farm Cooperative Program has encouraged you to remain in productive farming	28	23.3	40	33.3	30	25.0	6	5.0	16	13.4	418	3.48

TABLE X

SUMMARY OF RESPONSES REGARDING IMPROVEMENT IN ECONOMIC STATUS OF PROGRAM PARTICIPANTS

Statement	SA		A		N		D		NA		Cumulative Response	X Response
	N	%	N	%	N	%	N	%	N	%		
The adult students have increased their livestock gains because of new practices they have learned while in the Farm Cooperative Program	38	31.7	43	35.8	32	26.7	0	0	7	5.8	464	3.87
Since you became a member of the Farm Cooperative Program your total farming operation has increased	26	21.7	69	57.5	15	12.5	0	0	10	8.3	446	3.72
The Farm Cooperative Program has helped the adult student decrease his cost of operation and maintenance of the farm	16	13.3	38	31.7	38	31.7	28	23.3	0	0	402	3.35
Class members have increased their crop yield since they became members of the Farm Cooperative Program	7	5.8	60	50.0	32	26.7	0	0	21	17.5	392	3.26
The Farm Cooperative Program has helped the adult student to increase his standard of living	0	0	49	40.9	28	23.3	43	35.8	0	0	366	3.05

TABLE X (Continued)

Statement	SA		A		N		D		NA		Cumulative Response	X Response
	N	%	N	%	N	%	N	%	N	%		
Your investment in buildings and equipment has increased due to your enrollment in the Farm Cooperative Program	0	0	32	26.7	37	36.8	28	23.3	23	19.2	318	2.65
Through your enrollment in the Farm Cooperative Program your net farm income has increased significantly	0	0	28	23.3	54	45.0	11	9.2	27	22.5	318	2.65

TABLE XI

SUMMARY OF RESPONSES REGARDING CURRICULUM PRACTICES UTILIZED IN PROGRAMS

Statement	SA		A		N		D		NA		Cumulative Response	X Response
	N	%	N	%	N	%	N	%	N	%		
Adult students benefit from participation in class instruction through discussion and regular attendance	81	67.5	39	32.5	0	0	0	0	0	0	561	4.67
Farm Cooperative members have increased their record keeping and managerial ability due to instruction they received in class	54	45.0	60	50.0	6	5.0	0	0	0	0	528	4.40
The Farm Cooperative Program is one of the best sources of current information about agriculture practices for the member	43	35.8	71	59.2	0	0	6	5.0	0	0	511	4.26
The adult student has gained new ideas and innovations from field trips to farms of more prominent farmers of the area	38	31.7	77	64.2	0	0	5	4.1	0	0	503	4.19
The Farm Cooperative Program thoroughly covers all areas of farming through the course curriculum	15	12.5	20	16.7	0	0	85	70.8	0	0	325	2.70

TABLE XII

SUMMARY OF RESPONSES REGARDING INDIVIDUALIZED FARM INSTRUCTION PROVIDED PROGRAM PARTICIPANTS

Statement	SA		A		N		D		NA		Cumulative Response	X Response
	N	%	N	%	N	%	N	%	N	%		
The adult student has received beneficial aid in his farming operation due to individualized instruction from the instructor	60	50.0	43	35.8	10	8.4	7	5.8	0	0	516	4.30
Farm visitation from the instructor have been helpful in updating and modernizing the adult student farming operation	28	23.3	82	68.3	6	5.0	4	3.4	0	0	494	4.10

TABLE XIII

RANKING OF IMPROVED FARM PRACTICES GAINED FROM THE PROGRAM BY PROGRAM PARTICIPANTS

Practice	1 N	2 N	3 N	4 N	5 N	6 N	7 N	8 N	9 N	10 N	11 N	12 N	13 N	14 N	15 N	16 N	17 N	18 N	19 N	20 N	Cumulative Response	Rank
Record Keeping	42	5	15	11	21	11	5	5				5									447	1
Prevention and Treatment of Disease	15	26	26	16	11	11	5		5	5											460	2
Livestock Selection	21	42	15	11	5			5	11		5								5		503	3
Improved Practices on Pasture (fertilizer, lime)	15	15	15	15	34	5			5		11	5									576	4
Increased production per animal	11	11	11	42	5		15	5	5		5		5						5		634	5
Farm Welding	18	17	16		13	7	16	14	8	4					7						648	6
Tax Planning					18	46		23	17		5	6	5								895	7
Preparation and Renovation of Land	3		5		11	26	11	11	7	8	2	11	7	15		3					1046	8
Improved Crop Production Per Acre			10	5	7	12	20	16	7	1	9	11	14	3						5	1053	9
Feeding Livestock		2	11			9	4	20	12		16	9		12	5						1148	10
Breeding Livestock				6	7			8	23	14	33			9		11	3	6			1294	11
Preconditioning Livestock						4		22		46		17	13					18			1357	12
Maintenance of Farm Equipment				3	5	6	5	5	5	16	11	3	20	16	7	11	2			5	1409	13
Selling and Buying Livestock				4					3	5	7	29	32	40							1494	14
Parasite Control		12					7		6	29					24	17	12	13			1499	15
Building and Mending Fences											3	16		23	19	26		24	28		1849	16
Farmstead Planning							6					3		2	19	38	23	27	2		1920	17
Home Improvement												9			12		35	14	29	21	2105	18
Forestry Production															3	-50	30	21	16		2157	19
Increased Fruit and Nut Production										2								7	49	5	2267	20

A group of selected farming practices were ranked by respondents in order of importance from one to twenty. A cumulative rank score was calculated for each practice according to the number of respondents ranking. The practices were ranked overall on the basis of those receiving the lowest cumulative score.

In analyzing data presented in Table XIII, which deals with the respondents' rankings of improved farm practices which they have implemented as a result of the Farm Cooperative Program, it is shown that the practice of record keeping received the lowest cumulative response. The response was 447, thus ranking it first on their list of importance. The record keeping response also received the highest percent, 35, of respondents placing it first on the list of twenty. The other practices that were in the top five were: prevention and treatment of disease, 460; livestock selection, 503; improved practices on pastures, 576; and increased production per animal.

The practices were ranked in the following order:

1. Record keeping
2. Prevention and treatment of disease
3. Livestock selection
4. Improved practices on pastures
5. Increased production per animal
6. Farm welding
7. Tax planning
8. Preparation and renovation of land
9. Improved age production per acre
10. Feeding livestock
11. Breeding livestock
12. Preconditioning livestock
13. Maintenance of farm equipment
14. Selling and buying livestock
15. Parasite control
16. Building and mending fence
17. Farmstead planning
18. Home Improvement
19. Forestry production
20. Increased fruit and nut production

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Purpose and Objectives

The purpose of this study was to determine benefits and economic changes produced by the Farm Cooperative Program as operated in five southwest Missouri school districts. To accomplish this purpose, the following objectives were achieved: (1) to determine reactions of adult students toward the curriculum being taught, (2) to determine what the students felt were the most beneficial factors derived from the program, (3) to determine what economic change in farming the adult student was realized due to his enrollment in the Farm Cooperative Program, (4) to determine the increase in the total farming operation of the adult student as influenced by the Farm Cooperative Program.

Procedure

Data were collected by the use of questionnaires distributed to the adult students of the five Farm Cooperative Training Programs now in existence in southwest Missouri. The instrument used consisted of a personal data section, an opinionnaire to determine the adult students' reactions toward the benefits and economic change the Farm Cooperative Training Program has developed in their farm situation and a section

in which the respondents ranked the improved farm practices in order of their importance. One hundred and twenty questionnaires were received from student participants in the five Farm Cooperative Training Programs. This was from a total potential of 125.

Findings

A summary of the personal data gathered concerning background characteristics is as follows:

1. The typical adult student has been enrolled for 29 to 36 months. He has been engaged in farming five years or less and has very little background training in agriculture. He owns and operates an average of 190 acres and he has beef cattle as his major enterprise. The largest portion of his land is in hay and pasture production. The adult student has a yearly income of \$8,000.
2. The length the student lived in the area ranged from five years to twenty five years.
3. The students background in FFA was broken into two distinct groups, 65 has never had FFA and 40 had been in FFA for four years.
4. Livestock enterprises varied from a single enterprise to a combined enterprise. Of the respondents 50 percent owned beef cattle.
5. The adult students operated from 80 to 2,000 acres of land. Of the total acres operated 10,655 acres were used for hay and pasture.
6. Seventy three adult students had an investment in buildings and equipment of \$10,001 to \$15,000.

7. Seventy eight percent of the respondents had an income from \$5,001 to \$10,000.

8. The most significant number of students were part-time farmers.

The following is a summary of the adult students reaction to the curriculum, economic changes, individualized instruction, and benefits of the Farm Cooperative Program:

1. The adult students indicated that they had received encouragement in implementing improved practices on their farm. They felt the greatest encouragement was to try new practices. This was indicated with an agree response of 4.28.

2. Program participants were neutral toward their economic status being changed by the Farm Cooperative Program. However, the adult students gave a mean response of 3.87, constituting an agreement, that they had increased their livestock gains as a result of the Farm Cooperative Program.

3. The curriculum being taught was adjudged beneficial to their farming operation. The highest rating of the total questionnaire was given to the statement that class discussion and regular attendance was beneficial to their farming program.

4. An average mean response of 4.2 was given to the area of individualized farm instruction, thus indicating agreement that a one to one instruction is effective.

5. The rating the respondents gave the statements are as follows:

Strongly Agree:

1. Adult students benefit from participation in class instruction through discussive and regular attendance.

Agree:

1. The Farm Cooperative Program encourages adult students to try new practices.
2. Adult students did jobs more efficiently on their farms because of the Farm Cooperative Program.
3. I have implemented new practices as a result of other students suggestions during our regular class meetings.
4. The Farm Cooperative Program has increased your self confidence as a manager and operator.
5. The Farm Cooperative Program has improved your ability to more successfully market livestock.
6. The adult students have increased their livestock gains because of new practices they have learned while in the Farm Cooperative Program.
7. Since you became a member of the Farm Cooperative Program your total operation has increased.
8. Farm Cooperative members have increased their record keeping and managerial ability due to instruction they received in class.
9. The Farm Cooperative Program is one of the best sources of current information about agriculture practices for the members.
10. The adult student has gained new ideas and innovations from field trips to farms of more prominent farmers in the area.
11. The adult student has received beneficial aid in his farming operation due to individualized instruction from the instructor.

12. Farm visitations from the instructor have been helpful in updating and modernizing the adult students farming operations.

Neutral:

1. Your enrollment in the Farm Cooperative Program has encouraged you to remain in productive farming.
2. The Farm Cooperative Program has helped the adult student decrease his cost of operation and maintainance of the farm.
3. Class members have increased their crop yield since they became members of the Farm Cooperative Program.
4. The Farm Cooperative Program has helped the adult student to increase his standard of living.
5. Your investment in buildings and equipment has increased due to your enrollment in the Farm Cooperative Program.
6. Through your enrollment in the Farm Cooperative Program your net farm income has increased significantly.

Conclusion

From the analysis of data collected, certain conclusions can be drawn indicating benefits and economic changes of a Farm Cooperative Training Program. The investigator feels he is justified in concluding the following about adult students in the five Farm Cooperative Training Programs in Southwest Missouri.

1. The adult students have received encouragement to implement new practices into his farming operation. Self confidence as a

manager and operator increased along with ability to more efficiently carryout their farming operation.

2. Adult students did not feel their economic status had changed as a result of the program. However, they felt their scope of livestock gains have increased due to the Farm Cooperative Training Program. They also have been able to expand their total farming operation.

3. They felt the curriculum being taught has been very beneficial in aiding them in his own farm situation. Students affirm that their ability to keep more accurate records has increased substantially. However, there needs to be a wider scope of subjects taught.

4. They felt that on the farm and/or individualized instruction was an effective means of teaching and aiding adult students.

5. According to respondents the single most influential thing being taught is record keeping. The students are ready and willing to keep an accurate and update set of records. The program has also helped in the treatment and prevention of disease.

Recommendations

After completing this study, the author has made the following recommendations:

1. An increased emphasis should be placed on establishing new Farm Cooperative Programs.

2. The Farm Cooperative Program should emphasize gain in livestock and hay and pasture yields, thus improving their economic status.

3. A continued effort should be made toward instruction and demonstration of record keeping.
4. The Farm Cooperative program should continue to encourage adult students to try new farming practices.
5. The curriculum being offered should be broadened to cover a wider variety of subjects.
6. The adult instructor should continue making farm visits and providing individualized farm instruction.
7. Strong emphasis should be placed on regular class attendance and class discussions.
8. An effort should be made for the continuation of the existing Farm Cooperative Training Programs.

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ADULT FARM TRAINING PROGRAM QUESTIONNAIRE

Personal Data:

1. Date you entered the program: Month _____ Year _____
2. Total years or months you have been in farming _____
3. Total years or months you lived in present area _____
4. Years you were in FFA _____
5. What type livestock do you own? Circle answer
 - a. beef b. dairy c. sheep d. swine e. horses
 - f. poultry
6. Number of acres you own _____ number rented _____
7. List the acres of each:
 - a. crop land _____ b. Hay and pasture _____ c. woodland _____
8. What is your investment in buildings and equipment?
\$ _____
9. What is your yearly net earnings from the farm?
\$ _____

Please indicate the extent to which you agree or disagree with each of the following statements as it applies to your Adult Farm Cooperative program by circling the appropriate response to the right of the statement. The response categories are as follows:

- | | |
|------------------------|------------------------------|
| a. SA = Strongly Agree | d. D = Disagree |
| b. A = Agree | e. NA = Does not apply to me |
| c. N = Neutral | |

1. Since you became a member of the Farm Cooperative Program, your total farming operation has increased SA A N D NA
2. Adult students benefit from participation in class instruction through discussion and regular attendance. SA A N D NA
3. Adult students do jobs more efficiently on their farms because of the Farm Cooperative Program. SA A N D NA
4. The adult students have increased their livestock gains because of the new practices they have learned while in the Farm Cooperative Program. SA A N D NA
5. Class members have increased their crop yields since they became members of the Farm Cooperative Program. SA A N D NA
6. Your total investment in buildings and equipment has increased due to your enrollment in the Farm Cooperative Program. SA A N D NA
7. The Farm Cooperative Program encourages adult students to try new practices. SA A N D NA
8. I have implemented new practices as a result of other adult students suggestions during our regular class meetings. SA A N D NA
9. Farm Cooperative members have increased their record keeping and managerial ability due to instruction they received in class. SA A N D NA
10. The adult student has received beneficial aid in his farming operation due to individualized instruction from the instructor. SA A N D NA
11. Farm visitations from the Instructor have been helpful in updating and modernizing the adult student farming operation. SA A N D NA
12. Through your enrollment in the Farm Cooperative Program your net farm income has increased significantly. SA A N D NA
13. Your enrollment in the Farm Cooperative Program has encouraged you to remain in productive farming. SA A N D NA
14. The Farm Cooperative Program thoroughly covers all area of farming through the course curriculum. SA A N D NA

15. The Farm Cooperative Program is one of the best sources of current information about agriculture practices for the members. SA A N D NA
16. The Farm Cooperative Program has helped the adult student to increase his standard of living. SA A N D NA
17. The Farm Cooperative Program has helped the adult student decrease his cost of operation and maintenance of the farm. SA A N D NA
18. The adult student has gained new ideas on innovations from field trips to farms of the more prominent farmers of the area. SA A N D NA
19. The Farm Cooperative Program has improved your ability to more successfully market livestock. SA A N D NA
20. The Farm Cooperative Program has increased your self confidence as manager and operator of your farm. SA A N D NA

Listed below is a group of improved farming practices. Rank in order of importance of skills developed through Farm Cooperative Program by placing a 1 by the most important; 2 by second important; 3 by the third most important; etc.

- _____ Livestock Selection
- _____ Prevention and Treatment of Disease
- _____ Increase Production per Animal
- _____ Record Keeping
- _____ Improved Practices on Pasture (ex. fertilizer, lime)
- _____ Preparation and Renovation of Land
- _____ Improving Crop Production per Acre
- _____ Feeding Livestock
- _____ Maintenance of Farm Equipment
- _____ Building and Mending Fences
- _____ Selling and Buying Livestock
- _____ Pre-conditioning Livestock (ex. castration, vaccination, dehorning)
- _____ Farmstead Planning (ex. building placement)
- _____ Parasite Control
- _____ Forestry Production
- _____ Farm Welding
- _____ Breeding Livestock
- _____ Tax Planning
- _____ Home Improvement
- _____ Increase in Fruit and Nut Production

VITA

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