

Prairie View A&M University

Digital Commons @PVAMU

All Theses

8-1961

A Study of Practices Followed on Small, Average and Large Size Farms in Madison County, Texas

Marcellus Boyd McCullough
Prairie View A&M College

Follow this and additional works at: <https://digitalcommons.pvamu.edu/pvamu-theses>

Recommended Citation

McCullough, M. B. (1961). A Study of Practices Followed on Small, Average and Large Size Farms in Madison County, Texas. Retrieved from <https://digitalcommons.pvamu.edu/pvamu-theses/1346>

This Thesis is brought to you for free and open access by Digital Commons @PVAMU. It has been accepted for inclusion in All Theses by an authorized administrator of Digital Commons @PVAMU. For more information, please contact hvkoshy@pvamu.edu.

A STUDY OF PRACTICES FOLLOWED ON SMALL,
AVERAGE AND LARGE SIZE FARMS IN
MADISON COUNTY, TEXAS



McCULLOUGH

1961

51.1
395

A STUDY OF PRACTICES FOLLOWED ON SMALL, AVERAGE AND
LARGE SIZE FARMS IN MADISON COUNTY, TEXAS

A Thesis

Presented to

The Graduate Division of
Prairie View Agricultural and Mechanical College
Prairie View, Texas

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

By

Marcellus Boyd McCullough

August, 1961

S
561
M33
1961

Texas
Binder
11-26-62

69984

APPROVED BY:

CHAIRMAN:

COMMITTEE:

DEDICATION

This Thesis is dedicated to my deceased father and mother, Mr. and Mrs. Dave McCullough, and to my wife, Mrs. Velma W. McCullough, whose encouraging words and smiles, and whose boundless love has been an inspiration to me during the many hours of study, thought and concentration.

M. B. C.

A C K N O W L E D G E M E N T S

It is the desire of the writer to express his genuine appreciation and indebtedness to all who cooperated in the completion of the questionnaires used in this study.

Special acknowledge is expressed to Dr. E. M. Norris, for without his suggestions, his patience, his unbiased criticisms and his corrections, this thesis could never have been a success.

M. B. C.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
A. Statement of the Problem.	1
B. Purpose of the Study	1
C. Scope of the Study	2
D. Method of Collecting Data	2
E. Related Studies	3
F. Definition of Terms	5
G. Report of the Study	6
II. PRESENTATION AND ANALYSIS OF DATA.	7
A. Land Status of Farmers.	7
B. Some Farm Mechanization Evidences	8
C. Crop Enterprises Carried.	9
D. Crop Practices Followed	10
E. Livestock Practices -- Grade of Cattle Kept ...	11
F. Mongrel Herds and Flocks Kept	11
G. Livestock Practices	12
H. Farm Mechanic Practices -- Tractors	13
I. Status for Performing Fram Mechanic Jobs. . . .	13
J. Farm Mechanic Practices--General	14
K. Farm Mechanics Knowledge and Practices. . . .	15
L. Income Results	16

M. Home Appliances and Conveniences--Group A . . . 17

N. Home Appliances and Conveniences--Group B . . . 19

III. SUMMARY, CONCLUSION, RECOMMENDATIONS 20

 A. Summary and Conclusions 20

 B. Recommendations 23

BIBLIOGRAPHY 25

APPENDIX 26

LIST OF TABLES

TABLE	PAGE
I. Land Status of Farmers	7
II. Some Farm Mechanization Evidences.	8
III. Crop Enterprises Carried	9
IV. Crop Practices Followed	10
V. Livestock Practices--Grade of Cattle Kept.	11
VI. Mongrel Herds and Flocks Kept	11
VII. Livestock Practices	12
VIII. Farm Mechanic Practices--Tractors.	13
IX. Status for Performing Farm Mechanic Jobs	13
X. Farm Mechanic Practices--General	14
XI. Farm Mechanics Knowledge and Practices	15
XII. Income Results	16
XIII. Home Appliances and Conveniences--Group A.	17
XIV. Home Appliances and Conveniences--Group B.	19

CHAPTER I

INTRODUCTION

This is an explanatory thesis, with detailed comments and recommendations, which gives descriptions to the shortcomings resulting from the existing farm practices on small, average and large farms within the Madison County area.

Through lack of modern technological improvements, limited demonstration in farm management and organization in addition to financial difficulties, many Madison County Farmers have remained at a marginal performance level.

THE PROBLEM

Statement of the Problem

American agriculture is a giant without equal in any other agriculture in all history. Our farmers contributed tremendously to the success of all the allied nations in the last world war. In the ideological struggle of today, the productive genius of our farmers remains one of the free world's greatest assets.

Purpose of the Study

The purpose of this study is twofold: (1) discover and suggest improved practices for small, average and large size farms in the A. V. Lee School District; (2) propose and implicate an agricultural program for the A. V. Lee Area.

Scope

A Study of Practices Followed on Small, Average and Large Size Farms in Madison County, Texas embraces 70 farms in the A. V. Lee School Area. These farms include areas ranging in size from four acres in the small-farm group to 400 acres in the large-farm group. In this study the writer undertakes to spotlight poor practices, limited technological improvements, loose management and inferior soils as these relate to farm size.

Method of Collecting Data

The questionnaire-survey method was used to gather the information needed for the compilation of this report.¹ The information was obtained by making personal visits to each of the 70 farmers studied. The forms were filled out by the writer as the questions were asked the farmers. Care was taken not to ask leading questions. In some cases, it was necessary to explain the questions that were not understood.

The writer reviewed certain United States Census Materials in the W. R. Banks Library at Prairie View Agricultural and Mechanical College of Texas, and in the Sam Houston State College Library, Huntsville, Texas and the Houston County Library, Crockett, Texas.

The Agricultural Information Office of the Texas A. and M. College System complied with the request of the writer by sending bulletins, leaflets, reports, and other publications on farm management and county program building. Valuable help came from reading

¹See Appendix

articles in professional agricultural magazines in line with the subject.

The writer also had interviews with the following professional agricultural workers: Soil Conservation Service Technicians, Vocational Agriculture Teachers, Extension Service Agent, Home Economic Teachers, Farm and Home Administration Supervisor, Production Credit Administration Supervisor, and Agricultural Stabilization Conservation Supervisor.

The survey form was composed of nine major information areas designed to secure data on:

- a. Farm Machinery Practices Followed
- b. Land status of the farmers
- c. Farm Crop Practices Followed
- d. Farm Livestocks Practices Followed
- e. Farm Mechanic Practices Followed
- f. Income results
- g. Expenses results
- h. Off-farm income
- i. Home appliances

A REVIEW OF RELATED STUDIES

The writer has reviewed one similar study made previously by B. J. Pryor, of Smith County, Texas. Pryor's study was entitled, "A Proposed Program in Agricultural Work for Negroes in Smith County." This study was completed in August, 1953.

This writer has a broader subject inasmuch as he made a study of "Practices Followed on Small, Average and Large Size Farms in Madison County, Texas," and proposed a program in agricultural work in the A. V. Lee School District.

Pryor's thesis is somewhat related to the writer's thesis, but varies inasmuch as he expands on the agricultural situation and economic background of Smith County. Many resources of the county are listed and described. The number of Negro farmers and their tenure of operation are dealt with. Climatic conditions, and types of soil in Smith County are described. All public facilities and oil resources are pictured as being the most outstanding in the state of Texas. There are seven rural high schools for Negroes and eight rural grade schools. There are only three rural grade schools for Negroes in Madison County and no rural high school.

Pryor's study further states that Smith County is a part of the world's greatest deposits of oil, the East Texas Oil Field. The patterns of farm organization in the county are also included. His distribution of questionnaires and interviews conducted were 110 questionnaires filled out and returned. Of this number, 100 were from farmers and 10 were from professional or paid leaders. A table was given showing some background information of the group studied and the percentage of those responding and how they checked the various items. Family background and educational status were taken into consideration.

DEFINITION OF TERMS

For the purpose of this study, the terms listed below are used in the sense as indicated.

Farm Management: The economic phase of farming and is concerned with practice as well as with scientific principles.

Profitable Practice: Those farm operations which promise a return greater than the wages and other expenses incurred.

Land: The area on which a farmer grows his crops or pastures his livestock.

Financial Accounts: A complete farm inventory supplemented by a record of all the farm's receipts and expenses.

Small Size Farms: Those farms where the number of acres range from four to 30.

Average Size Farms: Those where the number of acres range from 31 to 90.

Large Size Farms: Those where the number of acres range from 91 to 400.

A Local Chapter of N.F.A.: An organization of the students studying vocational agriculture in the local school in accordance with the National Vocational Education Acts.

State Association of N.F.A.: An organization of the local chapters in the respective states.

Supervised Farming: Farming consisting of all the farming activities of educational value conducted by pupils enrolled in vocational agriculture and for which systematic instruction, and

supervision is provided by their teachers and parents.

Approved Practices: Practices which have been shown to be desirable by experimental evidence or successful use by farmers, or both.

Report of the Study

The material in this study is designed to set forth the basic principle of production economics in a clear and realistic manner. These principles are applied to practical farm problems as the need for them would arise while organizing and managing a farm and developing a county agricultural program of work.

Chapter I presents the introduction, statement of the problem, purpose of the study, scope of the study, method of collecting data, related studies, definition of terms and report of the study.

Chapter II presents the presentation and analysis of data that resulted from questionnaires on land status, farm machinery, farm crop practices, farm livestock practices, farm mechanic practices, use of home conveniences and appliances, and income status on and off the farms.

Chapter III, the final chapter, has the summary, conclusion and recommendations.

CHAPTER II

PRESENTATION AND ANALYSIS OF DATA

Statistical facts pertaining to the 70 farmers who were surveyed by the writer in A. V. Lee District, Madison County are presented in this chapter.

Data in this chapter concern the land status of the small average and large size farmers and some of the practices followed by each group.

Data for this chapter are presented in tabular form, giving average percentages in each instance, so that a clear and accurate picture may be presented.

Table I shows that the 25 small farmers reported 258 acres of land in cultivation, owned 450 and rented 142 acres of land. The 27 farmers on average size farms reported 829 acres in cultivation owned 1,363 acres and rented 792 acres. The 17 farmers on large size farms reported 654 acres in cultivation, owned 3,046 acres and rented 995 acres of land.

TABLE I

LAND STATUS OF THE FARMER

Farm Size Classification	Number Reporting	Cultivated Land	Acres Owned	Acres Rented	TOTAL
Small Size	26	258	458	142	600
Average Size	27	829	1,363	792	2,155
Large Size	17	654	3,046	995	4,041

Over 73 percent of the total land operated by these 70 farmers is fully owned by 98 percent of the farmers. Over 75 percent of the total land operated is fully owned by 17 of the families.

According to information received from the questionnaires and compiled in Table II, four percent of the small size farmers had tractors; 69 percent used mules, 31 percent used horses, none had haybalers, 73 percent used one row cultivators and four percent used two row cultivators. The average size farmers surveyed showed that 27 percent used tractors, 73 percent used mules, 65 percent used horses, four percent owned haybalers, 81 percent used one row cultivators and 23 percent used two row cultivators. Thirty-one percent of the large size farmers used tractors, 35 percent used mules, 48 percent of the large size farmers owned haybalers, 31 percent used one row cultivators and 31 percent used two row cultivators.

TABLE II

SOME FARM MECHANIZATION EVIDENCES

Farm Size Classification	PERCENT OF FARMERS HAVING - -					
	Tractors	Mules	Horses	Haybalers	One Row Cultivators	Two Row Cultivators
	%	%	%	%	%	%
Small	4	69	31	0	73	4
Average	27	73	65	4	81	23
Large	31	35	48	4	31	31

Table III shows the percent of acres used in various crops. It further shows that the small size farmers used five percent more acres for cultivation than the average size farms. It also reveals that the small size farmer used 26.4 percent more acres for cultivation than the large size farmer.

The larger the farms, the less acreage is devoted to cotton, food stuff, and feed crops. The farms producing more yields by acreage are the small farms. The average farms produce second and the large farms produce third.

TABLE III
CROP ENTERPRISES CARRIED

Farm Size Classification	Percentage of Acres in Cultivation	PERCENT OF CULTIVATED ACRES DEVOTED TO VARIOUS CROP ENTERPRISES					
		Cotton	Corn	Peas	Hegari	Water Melons	Sweet Potatoes
		%	%	%	%	%	%
Small	43.1	19	16	4	2	1.5	.6
Average	38.1	25	11	1	.5	.4	.3
Large	16.7	6	8	2	.6	.1	.02

Table IV shows the large size farmers support acceptable farm practices 32 percent more than the average size farmers and the average size farmers support accepted practices 24 percent more than the small size farmers.

The large size farmers adhere more to acceptable crop practices. The average farmers show advancement over the outdated practices of the small farmers.

TABLE IV

CROP PRACTICES FOLLOWED

Farm Size Classifi- cation	PERCENT OF FARMERS BY PRACTICES FOLLOWED								
	Fertili- zer by pounds	Fall Plow- ing	Culti- vation	Cover Crops	Mow Pas- ture	Winter Legumes	Applied Phos- phate	Crop Rota- tion	Cumu- lative Percent- ages
	%	%	%	%	%	%	%	%	
Small	65	58	81	0	4	0	0	19	227
Average	55	70	89	8	0	0	0	29	251
Large	59	59	77	11	18	6	6	47	283

Table V shows that four percent of the small size farmers kept pure bred beef sires, 22 percent of the average size farmers kept pure bred beef sires and 53 percent of the large size farmers kept pure bred beef sire. Only four percent of the average size farmers kept pure bred sire dairy with no percentages shown for small and large size farmers. Four average and five large size farmers kept pure bred boars of the lard type, with none of the small size farmers represented under this category. Four percent of the small size farmers, none of the average size farmers and 12 percent of the large size farmers kept pure bred poultry meat. Pure bred poultry for eggs were kept by four percent of the small size farmers, seven percent of the average size farmers and 12 percent of the large size farmers.

According to Table V, a greater percentage of pure bred live-sock and poultry was kept by the large size farmers.

TABLE V
LIVESTOCK PRACTICES -- GRADE OF CATTLE KEPT

Farm Size Classifi- cation	PERCENT OF FARMERS KEEPING PURE BRED LIVESTOCK AND POULTRY					
	Pure bred beef sire	Pure bred dairy sire	Pure bred boar lard	Pure bred boar bacon	Pure bred poultry meat	Pure bred poultry eggs
	%	%	%	%	%	%
Small	4	0	8	0	4	4
Average	22	4	4	4	0	7
Large	53	0	29	5	12	12

Small size farmers were found to keep 73 percent Mongrel cattle, 61 percent swine and 81 percent mongrel poultry. The average size farmers kept 89 percent mongrel cattle, 70 percent mongrel swine and 89 percent mongrel poultry. Ninety-seven percent of the large size farmers kept mongrel cattle, with 58 percent keeping mongrel swine and 76 percent keeping mongrel poultry.

As shown in Table VI, the average size farmers kept a greater percentage of mongrel herd and flocks of livestock and poultry.

TABLE VI
MONGREL HERDS AND FLOCKS KEPT

Farm Size Classification	PERCENT OF FARMERS KEEPING MONGREL HERDS AND FLOCKS OF LIVESTOCK AND POULTRY		
	Cattle	Swine	Poultry
	%	%	%
Small	73	61	81
Average	89	70	89
Large	95	58	76

The data in Table VII reveal that 15 percent of the small size farmers vaccinate for hog cholera; 41 percent of the average and 71 percent of the large size farmers vaccinate for hog cholera. It further shows that 15 of the small size farmers, 41 percent of the average size farmers and 76 percent of the large size farmers castrate with knife. Only five percent of the large size farmers castrate with clamp with no percentage shown for small and average size farmers.

TABLE VII
LIVESTOCK PRACTICES

Farm Size Classifica- tion	PERCENT OF FARMERS PERFORMING CERTAIN PRACTICES		
	Vaccinate for hog cholera	Castrate with knife	Castrate with Clamp
	%	%	%
Small	15	15	0
Average	41	41	0
Large	71	76	5

According to data shown in Table VIII, four percent of the small size farmers grease tractors; four percent change oil and eight percent make simple repairs. The percentage increases with the size of the farm as evidenced by 19 percent of the average size farmers having greased tractors, 41 percent change oil and 11 percent make simple repairs. Large size farmers show that 47 percent grease

tractors, 47 percent change oil and 47 percent make simple repairs.

TABLE VIII
FARM MECHANIC PRACTICES--TRACTORS

Farm Size Classification	PERCENT OF FARMERS PERFORMING CERTAIN PRACTICES		
	Grease Tractor	Change Oil	Make Simple Repairs
	%	%	%
Small	4	4	8
Average	19	41	11
Large	47	47	47

Table IX shows the status for performing farm mechanics jobs. Four percent of the small size farms have adequate tools with eight percent having the ability to assemble the various farm equipment parts. Fifteen percent of the average size farmers have adequate tools and 15 percent have ability to assemble their equipment. Among the large size farmers, data show that 47 percent have adequate tools and 29 percent have ability to assemble equipment necessary to the operation of a farm.

TABLE IX
STATUS FOR PERFORMING FARM MECHANIC JOBS

Farm Size Classification	S T A T U S	
	Have Adequate Tools	Have Ability to Assemble Equipment
	%	%
Small	4	8
Average	15	15
Large	47	29

Table X shows that eight percent of the small farmers practice shop safety, eight percent practice checking for farm mechanic jobs periodically; eight percent take good care of equipment; four percent do painting when needed and none have portable hog houses. Among the average size farmers, it was found that 19 percent practice shop safety; 19 percent check for farm mechanic jobs periodically; 19 percent take good care of equipment; 26 percent do painting when needed and none have portable hog houses. The large size farmers practice shop safety on an average of 58 percent; 71 percent check for farm mechanic jobs periodically; 59 percent take good care of equipment; 47 percent do painting when needed and six percent have portable hog houses. The frequency of each practice increases with the size of the farm.

TABLE X
FARM MECHANIC PRACTICES--GENERAL

Farm Size Classification	Practice Shop Safety	Check for Farm Mechanic jobs Periodically	Take good care of equipment	Do painting when needed	Have portable hog houses
	%	%	%	%	%
Small	8	8	8	4	0
Average	19	19	19	26	0
Large	58	71	59	47	6

Table XI shows the percentage of the farmers surveyed possessing farm mechanics knowledge and practices. Eight percent of the

small size farmers possessed general knowledge of building construction; 11 percent had knowledge of rural electrification; four percent possessed knowledge of land drainage; four percent did ditching and eight percent had general knowledge of tool fitting. Fifteen percent of the average size farmers had general knowledge of building construction; forty-one percent possessed general knowledge of rural electrification; 11 percent did land drainage, seven percent did ditching and fifteen percent had general knowledge of tool fitting. Among the large size farmers, 35 percent had general knowledge of building construction; 71 percent possessed general knowledge of rural electrification; 47 percent knew the advantages of land drainage; 23 percent did ditching and 41 percent possessed general knowledge of tool fitting. Again the scale is upward on knowledge and practices as the size of farm increases.

TABLE XI
FARM MECHANICS KNOWLEDGE AND PRACTICES

Farm Size Classification	PERCENT OF FARMERS HAVING KNOWLEDGE AND/OR SKILLS IN:				
	General Knowledge of Building Construction	General Knowledge of Rural Electrification	Land Drainage	Ditching	General Knowledge of Tool Fitting
	%	%	%	%	%
Small	8	11	4	4	8
Average	15	41	11	7	15
Large	35	71	47	23	41

The farmers surveyed in this study show a substantial net profit in each instance. Table XII reveals that the average annual gross income of the small size farmers on the farm was \$540.12; the average annual gross income off farm was \$496.15; giving an average annual total income of \$1,036.27, with an average of only \$295.85 used for expenses, leaving an average net profit of \$740.42. This is quite remarkable and denotes that farming even on a small scale is profitable when combined with off-farm income. The average size farmers had an average annual gross income on farm of \$2,004.04; earning an average of \$562.96 off the farm. This gives an average total of \$2,567.00 with an average of \$1,444.74 being used for expenses, and showing an annual average net profit of \$1,222.26. The large size farmers showed an average annual gross income on the farm of \$1,863.83, an average annual gross income off farm of \$529.41 with an average total income of \$2,393.24. Average annual expenses of the large farmers were \$1,070.21, giving an average annual net profit of \$1,323.03.

TABLE XII
INCOME RESULTS

Farm Size Classification	AVERAGE EXPENSE AND INCOME FIGURES				
	Annual Gross Income on Farm	Annual Gross Income off Farm	Annual Total Income	Expenses	Net Profit
	%	%	%	%	%
Small	\$ 540.12	\$ 496.15	\$ 1,036.27	\$ 295.85	\$ 740.42
Average	2,004.04	562.96	2,567.00	1,444.74	1,122.26
Large	1,863.83	529.41	2,393.24	1,070.21	1,323.03

Data shown in Table XIII reveal that farmers, too, "live modern". Modern electric appliances and conveniences could be found in the homes of most of the farmers.

The small size farmers showed 96 percent owned radios; 15 percent had televisions; four percent had electric stoves; 15 percent used gas stoves; eight percent owned home freezers; 30 percent had some type of electric washing machine; none had air conditioners, but 92 percent owned electric fans. All of the average size farmers or 100 percent owned radios; 33 percent had televisions; four percent used electric stoves; 29 percent used gas stoves; 29 percent used home freezers; 59 percent had washing machines; seven percent had air conditioners and 96 percent used electric fans. The large size farmers surveyed showed that 100 percent owned radios; 41 percent owned televisions; none used electric stoves; 29 percent used gas stoves; 29 percent had home freezers; 76 percent used washing machines; 12 percent had air conditioners and 76 percent owned electric fans.

TABLE XIII
HOME APPLIANCES AND CONVENIENCES
GROUP A

Farm Size Classifi- cation	PERCENT OF FARMERS HAVING - -							
	Radios %	Tele- vision %	Electric stoves %	Gas stove %	Home freezer %	Washing machine %	Air con- ditioner %	Electric fans %
Small	96	15	4	15	8	30	0	92
Average	100	33	4	29	29	59	7	96
Large	100	41	0	29	29	76	12	76

Table XIV shows the percentage of farmers having the necessary conveniences in the home. It was found that the small farmers do not have a large percentage of modern conveniences as evidenced by 85 percent still using wood stoves; 15 percent using ice boxes; 92 percent owned mechanical refrigerators; none had running water inside the home; none had sanitary toilets, 100 percent had outdoor toilets, 92 percent had electric irons and 19 percent had telephones installed in the home.

The average size farmers showed a slight improvement over the small farmers in that a lower percentage was recorded in each of the sub-standard areas studied. Specifically, 67 percent still use wood stoves; 22 percent own ice boxes; 96 percent own mechanical refrigerators; seven percent had running water inside the home; seven percent had sanitary toilets; 89 percent still used outdoor toilets; 96 percent had electric irons and 37 percent had telephones.

Among the large size farmers, it was found that 76 percent still used wood stoves; 23 percent used ice boxes; 100 percent used mechanical refrigerators; 23 percent had running water inside the home; 23 percent had sanitary toilet bowls; 82 percent used outdoor toilets; 76 percent had electric irons, and 18 percent had telephones installed in the home.

TABLE XIV

HOME APPLIANCES AND CONVENIENCES
GROUP B

Farm Size Classifi- cation	PERCENT OF FARMERS HAVING - -							
	Wood Stove	Ice Box	Mech. Refri.	Running Water Inside Home	Sanitary Toilets	Outdoor toilets	Electric iron	Telephone
	%	%	%	%	%	%	%	%
Small	85	15	92	0	0	100	92	19
Average	67	22	96	7	7	89	96	37
Large	76	23	100	23	23	82	76	18

CHAPTER III

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. Summary and Conclusions

After 21 years of experience as an agricultural teacher and with several years of experience in a new approach to program building, the writer has come to appreciate the great value in carrying out the over-all objectives of the agricultural program. The writer is also aware of the importance of sound management information to guide farmers in setting up and carrying on more profitable farming programs on their home farms and ranches.

This study reveals that over 75 percent of the A. V. Lee school families are farm families. Over 50 percent of the parents' occupation is farming. Approximately 73 percent of the total land operated by these 70 farmers is fully owned by 98 percent of the farmers; 75 percent of the total land operated is fully owned by 17 of the families.

Of the 6,796 acres included within this study, 5,055 acres stand unimproved. The remaining 1,741 are divided into meadows, pastures and cultivated land.

Farm machinery practices are employed in relationship to the size of the farms; the sequence mounts from the almost primitive farming on the small farms to the more advanced and more accelerated

farms on the larger acreages.

The farms producing more yields and adhering more to acceptable crop practices are the average size farms. The larger the farms, the less acreage is devoted to cotton, food stuff and feed crops. The small farms utilize their acreage for food production more than the large farms.

From the findings in this study, it might be established that the large size farms excell in cattle production; the average size in swine and poultry production; whereas, the small farms have a variety of mongrel cattle, swine, and poultry that do not rival the cattle production of the large size farms nor the poultry and swine production of the average size farms.

The survey further showed that more acceptable crop practices were followed by the large farmers with the average size farmers second and the small size farmers third.

Livestock practices, such as vaccination and castration of hogs were followed to a greater extent by the large farmers, with the average and small size farmers following such practices as the need arises and in many instances not at all.

Similarly, in the care and maintenance of farm equipment, the small farmers showed a very low percentage following good established practices. Although a notable increase in percentage was shown in the average and large size farmers, it is to be noted that generally speaking, the farmers do not take proper care of their tractors and other equipment.

The small size farmers possessed very little general knowledge of building construction, rural electrification and tool fitting. An increase was shown among the average size farmers and an even greater increase in percentage of the large size farmers, however, there is evidence that more knowledge is needed and could be utilized to increase farm profits.

Although the average size farmers have more expenses than either the small or the large size farmers, they (the average size farmers) receive more gross income on and off the farm and more net profit than do either of the other divisions. In total income the large size farms rank second and the small farms rank third.

Many of the farmers in this study are in remote areas, nevertheless, they were found to possess many of the modern conveniences of urban living. For instance, all the farmers on average and large size farms owned radios and large percentages owned televisions, electric stoves, gas stoves, home freezers, washing machines, air conditioners and fans.

However, there is still a definite lag in the conveniences that the farmers enjoy. Many of them do not yet have running water in the home; sanitary toilets were found among a very low percentage and all the small size farmers used outdoor toilets with high percentages among the average size farmers and the large size farmers.

The information compiled in this survey readily reveals that the frequency of each practice improved and/or approved standard conditions about the farm increased with the size of the farm.

B. Recommendations

After carefully studying the data compiled in this study, the writer makes the following recommendations:

That the local N. F. A. advisor assume primary responsibility in selecting, training, and guiding local people in program planning.

The public should be kept well informed and credit should be given where it is due.

Program planning should be considered as a continuing activity and a twin to program execution.

The writer also recommends that farm people study more about farm management problems so that they can provide themselves with more cash income.

Conduct more evening schools to help farmers meet their needs and solve their problems.

Demonstrations and agricultural information should be made more readily available to farmers by professional agricultural workers.

Better farm records and accounts should be kept to determine business gains or losses and to secure detailed information that will be helpful in planning a more profitable business.

The writer recommends a long term program and annual teaching plan containing the following problems or lesson to be taught in connection with the all-day N. F. A. classes for both young and adult farmers.

1. Farm shop work
2. N. F. A. work or leadership, thrift and cooperation
3. Improving farming practices
4. Conserving the soil
5. Managing the farm business
6. Improving livestock and poultry
7. Beautifying the home surrounding
8. Improving plants
9. Marketing farm products
10. Feeding livestock and poultry
11. Controlling diseases and pests of livestock and poultry
12. Producing a living at home
13. Caring for farm equipment
14. Controlling diseases and insects of plants
15. Conserving wild life on the farm
16. Caring for livestock and poultry
17. Tractor maintenance
18. Rural electrification.

BIBLIOGRAPHY

- Boss, Andrew, and Pond, George A. A Modern Farm Management. St. Paul: Webb Publishing Company, 1947.
- Chapman, Paul W. Efficient Farm Management. Boston: Turner E. Smith and Company, 1930.
- Gustafson, A. F. Using and Managing Soils. New York Book Company, Inc., 1948.
- Heady, Earl O., and Jensen, Harold R. Farm Management Economics. New York: Prentice-Hall, Inc., 1938.
- Hibbard, Benjamin. Agriculture Economics (First Ed.). New York: McGraw-Hill Book Company, 1948.
- Hopkins, John A., and Murray, William G. Elements of Farm Management. New York: Prentice-Hall, Inc., 1953.
- Hunt, Robert L. Farm Management in the South. Danville: Interstate Publishing Company, 1952.
- Kelsey, David K., and Hearne, C. C. Cooperative Extension Work. Cornstock Publishing Company, 1949.
- Murray, William G. Agricultural Finance. Ames: The Iowa State College Press, 1941.
- Vaughan, Lawrence Moore, and Hardin Lowell S. Farm Work Simplification, New York: Prentice-Hall, Inc., 1951.
- Waite, Warren C., and Trelogan, Harry C. Agricultural Market Prices. New York: John Wiley and Sons, Inc., 1951.
- Williamson, W. N. County Extension Program Building in Texas. College Station, Texas (December, 1952), 39.

APPENDIX

QUESTIONNAIRE

Name _____ Address _____

Total number of acres in farm _____

Total number of acres owned _____

Total number of acres rented _____

A. Farm Machinery Practices Followed:

Indicate by number: 1. Tractor _____ 2. Combiners _____

3. Mules _____ 4. Horses _____ 5. Hay balers _____

6. One row cultivators _____ Two row cultivators _____.

B. Farm Crop Practices Followed:

Types of crops by acres: 1. Cotton _____ 2. Corn _____

3. Peas _____ 4. Hegari _____ 5. Watermelons _____

6. Sweetpotatoes _____ 7. Fertilizer by pounds per

acre _____ 8. Number of times cultivated different

crops _____

C. Farm Livestock Practices Followed:

Indicate by number: Pure bred sires--1. Beef _____

2. Dairy _____ 3. Mongrels _____; Pure bred boar

hog -- 4. Lard type _____ 5. Bacon type _____

6. Mongrels _____; Pure bred poultry -- 8. Meat type _____

9. Egg type _____ 10. Mongrels _____ 11. Others _____

12. Vaccinated hogs against cholera _____

13. Castration with knife _____ 14. Others (specify)

D. Farm Mechanic Practices Followed:

1. Tractor maintenance _____

2. Tool fitting _____ 3. Equipment assembled

_____ 4. Farm shop _____

5. Farm machinery _____ 6. Building construc-

tion _____ 7. Rural electrification _____

_____ 8. Land drainage _____

9. Tool adjustments _____

E. Income Results:

1. What was your gross or yearly farm income? _____

F. Expenses results:

1. What was your gross yearly farm expenses? _____

G. Off Farm Incomes:

1. Indicate your farm yearly income: (a) \$300.00; (b) \$400.00; (c) \$500.00; (d) \$600.00; (e) \$800.00; (f) \$1,000.00; (g) \$1,200.00; (h) \$1,300.00 or more.

H. Home Appliances:

Indicate by numbers: 1. Radios _____

2. Television _____ 3. Stoves -- a. electric

_____ b. Gas _____ c. Wood _____

4. Ice box _____ 5. Deep freeze _____
6. Refrigerator _____ 7. Running water inside
house _____ 8. Inside toilet _____
9. Outside toilet _____ 10. Washing machine _____
- _____ 11. Air conditioners _____
12. Electric fans _____ 13. Others _____
- _____