SOURCES OF AGRICULTURAL INFORMATION USED BY WHEAT AND COTTON FARMERS IN JACKSON COUNTY, OKLAHOMA

Ву

DONALD LARRY PROCTOR

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Thesis Adviser

Dean of the Graduate College

Thesis Approved:

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CHAPTER I

INTRODUCTION

The Smith-Lever Act of 1914 created the Cooperative Extension Service by which practical information could be taken from the land-grant colleges and the Department of Agriculture to the people in their local environment.

The Act, while giving Extension a very broad clientele--the people of the United States--specified that its programs should be concerned with "... agriculture and home economics and subjects relating thereto" (6, p. 18). Extension has been credited as a major influence on the rapid increase in efficiency of U.S. commercial agriculture.

In the future, the program content and approaches for Extension farm programs must be designed to fit the needs of different sizes of business, as well as different levels and types of specialization. It is also very evident that Extension personnel must take advantage of every opportunity to strengthen their skills and know-how if they are to be effective under such circumstances. One concern uppermost in the minds of many Extension workers involves methods that are most appropriate to reach present day clientele with needed information.

Mass communication media enable Extension workers to greatly increase their teaching effectiveness. Certainly, the use of mass media makes it possible to get information to a much larger and

diversified clientele. However, we need to know which mass media methods are most effective.

Statement of the Problem

Extension has contributed to increased efficiency and productiv
...y by encouraging the adoption of new or improved technology on
farms. It has improved technical, managerial, and other skills of
farmers and provided information to assist in solving their production
and management problems. This involves the interpretation and dissemination of information about the results of research and development
activities, primarily of the agricultural experiment station and the
United States Department of Agriculture (USDA).

Extension uses a wide range of educational methodology. Personto-person situations include home and office visits, telephone calls, and personal letters. Group activities include meetings held indoors or out in the field, at one location or on a tour of several points.

In the mass media area there are in-house publications such as newsletters and subject matter material from specialists and agents to each other and to clientele. Many commercial concerns, government agencies, commodity associations, and other farmer groups have internal house organs in the form of newsletters, newspapers, and magazines, and rely heavily on Extension prepared materials to fill up their columns.

Other commercial mass media consists of newspapers, magazines, radio, and television. Extension generally has made effective use of these media because the media, in general, have viewed Extension

messages as helpful to people, and thereby worthy of their time and space.

Stated in a report to Congress by the Secretary of Agriculture as requested in the Food and Agriculture Act of 1977 is the following:

Extension's clients and diversity of their needs have increased dramatically in recent years. Extension has handled this expansion, in part, by wholesaling more educational materials through mass media and by hiring paraprofessionals (13, p. xi).

The Secretary stated that the "Budget factor will become more critical" (13, p. xiii).

A study in North Dakota showed a cost per contact of between \$7.00 and \$16.00 for meetings, but only three cents for television (13, p. xii).

In view of this, several questions have to be posed to the Extension Agriculture Agent. First, how important is the mass media methodology in diffusing information to the agriculture clientele?

Second, which of the mass media techniques do the agriculture clientele value most? Third, what might the future role of the county agriculture agent hold as a result of the growing complexity of problems now addressed by Extension and the increasing specialization of Extension staffs?

Purpose of the Study

The purpose of the study was to determine the channels of communication that have the greatest impact on agriculture clientele.

Objectives of the Study

In order to accomplish the stated purpose, the investigation was

directed toward the following specific objectives:

- 1. To identify the principal communication channels for agricultural information used by Jackson County wheat and cotton farmers.
- 2. To determine the frequency of use of the communication channels by Jackson County wheat and cotton farmers.
 - 3. To determine the farmers' perceptions of Extension credibility.
- 4. To determine possible socioeconomic characteristics of the farmer that might have a bearing on their relationship with Extension.

Background and Value of the Study

One concern uppermost in the minds of many Extension workers concerns methods that are most appropriate to reach present day clientele. These workers are also aware that no one method is considered best. The effective Extension worker must not only have at his or her command a variety of tools and methods of teaching, but must know where and how to use them.

Cosner (3) states:

As human needs change and increase, there has been a strong trend toward the Extension Service being asked to serve an increasing number of clientele with a variety of Extension programs. This has caused Extension to face the need of expanding its audiences at a time of rapid social and economic change (p. 96).

Demonstrations and one-to-one teaching approaches still are major techniques of Extension education. But group meetings, mass media use, and audiovisual technology have expanded substantially. Recorded telephone messages, open circuit television, video tape, and computers now supplement people and printed material.

This research should provide findings on the mass communication media to enable the Extension worker to greatly increase their teaching effectiveness. The findings should also provide insight as to which mass media methods are better adopted to informing and increasing interest among the agriculture clientele.

Assumptions of the Study

Concerning this research study, the following basic assumptions were made:

- 1. Those individuals participating in the study were representative of the agriculture clientele of the county.
- 2. The responses made by the participants were accurate and sincere.
- 3. The information sources listed in the survey instrument were representative of the information sources available to agriculture clientele.

Definition of Terms

For better understanding of facts presented in the study, the following terms are defined:

<u>Extension Worker</u>: The professional staff member of the Cooperative Extension Service responsible for program planning and evaluation of agriculture programs.

Agriculture Clientele: That segment of the population involved in full or part time production of agriculture commodities.

<u>Mass Media</u>: The methods used to disseminate information to large numbers of people with a low cost per unit of coverage: publications, radio, television, newspapers, and magazines.

Scope of the Study

The population of this study consisted only of those farmers in Jackson County listed in the ASCS mailing list as producers of wheat and cotton. The sample population was obtained by selecting every fifth name of the list. In this study the farmers were asked to respond to certain socioeconomic questions, their utilization and/or involvement with Cooperative Extension Programs, and the source and convenience of various agriculture information sources, as well as questions about convenience. Data collection was conducted and completed in the spring of 1983.

CHAPTER II

REVIEW OF LITERATURE

The Smith-Lever Act created the Cooperative Extension partnership arrangement among the U.S. Department of Agriculture, land-grant colleges and universities, and county governing boards. It set forth the major function: to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same. It specified that the clientele would be persons not attending or residing in said colleges in the several communities. The methodology would consist of field demonstrations, publications, and otherwise.

While the agent is generally seen as the fundamental strength of the Extension system, the agent's role has been changing as a result of the growing complexity of problems now addressing Cooperative Extension and the increasing specialization of Extension staffs.

From the beginning, adoption-diffusion researchers found that the educational methodology used must be adjusted to the complexity of the practice being recommended.

Awa and Crowder (1) concluded that those concerned with disseminating scientific information to farmers must recognize the diversity of sources and communication channels through which farmers seek agriculture information. Understanding of the primary function and the strength and weaknesses of each method of communication is important. The methods selected should supplement and complement each other.

In general, the methods which deal with people as individuals are important in the selection of local leaders and cooperators, and contribute greatly to the effectiveness of group methods and mass media. They are relative expensive.

Group methods make possible face-to-face contacts with large numbers of people and facilitate the sharing of knowledge and experience. Group methods are less expensive than individual contact methods and are likely to be more effective than mass media.

Overall, mass contact methods are less effective than face-to-face methods in bringing about changes, but the large number reached more than offsets the lack of intensity and lower effectiveness. Mass media complements and reinforces individual and group contact and adds greatly to total Extension accomplishments at relatively little additional cost.

Starks (12) states that the information sources used by farmers can be divided into three major sources: mass media, persons, and agriculture agencies.

Mass media delivery, although useful, frequently increases the demand for one-to-one contact. A summary of the effective use of mass media is given by Bible (2):

We need to know when mass media methods are most effective in our teaching. Research in the diffusion process has shown that the mass media are most effective in the awareness and interest stages of the process. More people become aware of new ideas from mass communication media than other sources. Mass media have their greatest impact in the awareness stage of adoption. However,

they still play an important role in providing general information in the interest or second stage of adoption. As the individual progresses through evaluation, trial and adoption of an idea, personal contact with friends and neighbors become more important than media contact. For early adopters mass media are more effective than personal contact in all stages of the diffusion process (p. III).

Studies of farmers' sources of information and Extension delivery methods indicate that Extension staff and Extension educational activities are a primary direct source for technical production information. Farm magazines and agribusiness sources also rank high. For marketing information, particularly prices, mass media outlets, dealers, elevator operators, salespersons, and buyers are the primary sources (13).

Most studies of farmers' information sources indicate about 40-50% of the farmers use Extension bulletins (13). There is some evidence that Extension serves farmers as a source of "objective" verification of information from other sources.

Awa and Crowder (1) further state that Extension agents are not always the primary or the most frequently contacted source, but they do seem important as information validators.

Summary

This review of literature presented background information with emphasis on two areas: the major function of Cooperative Extension and a review of selected literature.

The Smith-Lever Act of 1914 set forth the major function of Cooperative Extension as to aid in diffusing among the people of the United States useful and practical information on subjects relating to

agriculture and home economics and to encourage the application of the same.

The extension agent is generally seen as the fundamental strength of the Extension system. The agent's role and the educational methodology has been changing as a result of the growing complexity of problems addressing Cooperative Extension.

Several studies have been conducted to determine the effectiveness of Cooperative Extension teaching methods and cost-influence ratios of methods. All do have a place. However, despite all studies that have been conducted at whatever level, the local extension agent needs to know and understand the local situation in order to help farmers and others involved in agriculture.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

The purpose of this chapter is to describe the methods and procedures used in conducting the study. In order to meet the objectives of the study, the following Jackson County's agricultural statistics must be understood.

Of the Jackson County total land area of 499,200 acres, 330,778 acres are cultivated. Seven hundred and thirty-five farmers planted 315,900 acres of wheat and cotton in 1982, with an estimated gross farm income of \$41,490,625, or 82% of the total gross farm sales. These figures are pointed out to show the economic importance of wheat and cotton production, and that these agricultural enterprises are engaged in by over 90% of the farmers. With this in mind, the overall attitudes of the study's population of only wheat and cotton farmers would be representative of attitudes of all Jackson County's farmers.

Population Population

The population for this study was derived from the Jackson County ASCS office's producer list of cotton and wheat.

Sampling Method

The sampling procedure was a random sampling technique with

individual selection of every fifth name on the Jackson County ASCS producer list.

Selection and Development of the Instrument

In analyzing various methods of data gathering instruments, the mail questionnaire was determined the most appropriate to meet the study's objectives. It is realized that the mail questionnaire offers the most practical and economical method to obtain data. Although the percentage of returns will be smaller than with other methods available, the mail questionnaire will give a more unbiased response than one requiring personal contact with the interviewer (14).

The first step in development of the questionnaire was to compile a list of questions from related studies that were relevant to determine the sources of agriculture information farmers sought.

The next step was to make necessary revisions and test the applicability and continuity of the questions to be used. The question-naire was administered to members of the credit course of Agricultural Education 5980 at the Western Oklahoma State College talk-back television location, and to Extension personnel.

The final step was to take into consideration the comments made and any suggestions for improving the instrument and for making revisions. The questionnaire used was to identify the farmers by age group, the extent they are involved in farming, their educational level, the information sources used, and the frequency of use of the sources.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The overall purpose of this study was to determine the information sources that have the greatest impact on agriculture clientele. In addition, the study provided socioeconomic data about selected Jackson County farmers and their relationship with Extension.

The data for this study were collected in the Spring of 1983. A sample of Jackson County farmers was drawn from the Agriculture Stabilization and Conservation Services' wheat and cotton producer mailing list by selecting every fifth name on the list.

Population 8

Each of the 147 selected individuals in the sample were mailed a questionnaire with a follow-up reminder two weeks after the initial mailing. The mail questionnaire was selected as the data gathering instrument because it offers the most practical and economical method to obtaining data, even though a lower percentage of return and relatively incomplete responses could be expected (14).

Two questionnaires were returned by the post office with insufficient addresses. Sixty-nine questionnaires were returned by respondents, representing a 47.5% return rate. Of these, 62, or 42.7%, were useable.

The first section of this chapter reports the general characteristics of the Jackson County farmers who responded. Numerical and percentage frequency distribution are reported for the demographic data obtained. In the second section, the response to specific utilization and/or involvement questions concerning the Cooperative Extension programs are presented. Frequency distributions consisting of numbers and percentages are used to report the data. This third section of the chapter presents the data assessing the sources of information used by respondents. Respondents were asked to rate the frequency of use of various selected mass media, business and government agencies, and types of persons.

To permit computer analysis of the data, numerical values were assigned to the categories according to the following pattern:

<u>Value</u>	<u>Frequency</u> <u>of</u> <u>Use</u>	Convenience
4	Very Often	Very Convenient
3	Often	Convenient
2	Seldom	Somewhat Convenient
1	Never	Not Convenient

The data is presented as numbers and percentages and mean score. As to the mean responses presented in the tables in this chapter, the computer selected the real limits for each response category, as follows:

Range	of Use	Convenience
3.25-4.0	Very Often	Very Convenient
2.5 -3.24	Often	Convenient
1.75-2.49	Seldom	Somewhat Convenient
1.0 -1.74	Never	Not Convenient

Attitude toward the attributes of the sources of information was collected from the respondents and reported in percentages. To further examine data collected, three variables were analyzed: age of the farm operator, educational level of the operator, and gross farm sales.

<u>Selected Characteristics of the Farmers</u> Participating in the Study

The number and percentage of Jackson County farmers surveyed in the seven gross farm sales categories are presented in Table I.

Twenty-four percent of the respondents surveyed had less than \$25,000 in gross sales. The largest category of gross sales was over \$50,000, with 51.61% of the respondents indicating this category.

Data in Table II present the distribution of respondents by age categories. The largest category, 35 to 49 years old, represented 45.16% of the responses. The age categories 34 and under provided 11.29% of the responses, while the 50 and over categories provided 43.55% of the total responses.

Table III presents data showing the distribution of respondents by the various educational levels. The data indicated that a total of three, or 4.84%, of the respondents had completed one to two years of high school. Another 33.87% of the respondents indicated they had completed three to four years of high school. The data also indicated that 33.87%, or 21 respondents, completed one to four years of college education, while 27.42% of the respondents had over four years of college.

TABLE I
DISTRIBUTION OF RESPONDENTS ACCORDING TO GROSS FARM SALES

Farm Sales	Frequency Distribution %	
Less than \$5,000 \$5,000 to \$10,000 \$10,000 to \$15,000 \$15,000 to \$20,000 \$20,000 to \$25,000 \$25,000 to \$50,000 Over \$50,000	3 4 2 3 3 15 32	4.84 6.45 3.23 4.84 4.84 24.19 51.61
Total	62	100.00

TABLE II

DISTRIBUTION OF RESPONDENTS ACCORDING TO AGE

Age Level	Frequency Distribution %	
Under 18 18 to 24 25 to 34 35 to 49 50 to 62 63 or older	0 3 4 28 20 7	0 4.84 6.45 45.16 32.26 11.29
Total	62	100

TABLE III

DISTRIBUTION OF RESPONDENTS BY HIGHEST LEVEL
OF EDUCATION COMPLETED

Educational Level Completed	Frequency Dist	ribution %
O to 8 years 1 to 2 years of high school 3 to 4 years of high school 1 to 2 years of college 3 to 4 years of college Over 4 years of college	0 3 21 13 8 17	0 4.84 33.87 20.97 12.90 27.42
Total	62	100

The data in Table IV show that 75.81%, or 47, of the respondents perceived themselves as being involved in agriculture full time.

TABLE IV

DISTRIBUTION OF RESPONDENTS AS TO INVOLVEMENT IN AGRICULTURE

How Involved in Agriculture	Frequency Distr	ibution %
Part-Time Full-Time	15 47	24.19 75.81
Total	62	100

Each respondent was asked if they had contacted the Extension Office for information. The responses are found in Table V. Eighty-seven percent, or 54 respondents, had contacted the Extension Office, while eight, or almost 13%, of the respondents said "no," they had not contacted Extension for any information.

TABLE V

DISTRIBUTION OF RESPONDENTS BY CONTACT WITH THE EXTENSION OFFICE FOR INFORMATION

Contacted Extension for Information	Frequency Dist	cribution %
Yes No	54 8	87.10 12.90
Total	62	100

For the purpose of determining the methods of contact(s) with Extension that are utilized by Jackson County farmers, each respondent who provided a "yes" response to having contact with the Extension Office was asked, "How was the contact made?" A respondent could indicate from the possible methods: "called," "written," or "personal contact."

Data in Table VI indicate the responses of 54 respondents who stated that they had contacted the Extension Office. Personal contact was the method used most by the respondents. The data show that 49, or 90.74%, used this method of contact. The next most used method was "called," which provided 42.59%. Only 7.4% of the respondents had used writing as a method of contacting the Extension Office for information. Because some respondents indicated multiple contacts, the percentages are not additive.

TABLE VI

DISTRIBUTION OF RESPONDENTS ACCORDING TO THE METHOD USED TO CONTACT EXTENSION FOR INFORMATION

Method of Contact	Frequency Distr	ribution %
Called	23	42.59
Written	4	7.40
Personal Contact	49	90.74

To assist in determining the level of participation of Jackson County farmers in Extension sponsored programs, the respondents were asked if they had participated in any Extension sponsored meetings.

The number and percentage of respondents who participated in Extension

sponsored meetings are shown in Table VII. The data indicate that over 75% of the respondents had participated in an Extension sponsored meeting.

TABLE VII

DISTRIBUTION OF RESPONDENTS BY THEIR PARTICIPATION IN AN EXTENSION SPONSORED MEETING

Participated in Extension Sponsored Meeting	Frequency Distr	ribution %
Yes No	47 15	75.81 24.19
Total	62	100

To assist in determining the value of news columns as a source of information for Jackson County farmers, the respondents were asked to indicate if they read news columns written by extension agents. Table VIII presents data that 95.16%, or 59 respondents, read news columns by extension agents.

Findings of the Study

Data in Table IX indicate that Extension is the dominant messenger of information for Jackson County farmers. The importance of magazines is clearly shown as being a source of the latest technical information available. Although respondents indicated their trust in Extension, secondary responses indicated a trust in friends and relatives for trustworthy information, and as having influence when making farm decisions.

TABLE VIII

DISTRIBUTION OF RESPONDENTS BY WHETHER THEY
READ EXTENSION NEWS COLUMNS

Read Extension News Columns	Frequency Dist	ribution %
Yes No	59 3	95.16 4.84
Total	62	100

Tables X through XXIX display the data of all respondents, grouped according to variables of age, gross farm sales, and level of education, as well as how the sources of agricultural information are regarded.

Magazines serve as the primary source of agriculture information to the respondents, Only with the over 50 years of age and the over four years of college groups did magazines not emerge as the major

TABLE IX
INFORMATION SOURCES USED

Attributes	Extension	Friends and Relatives	Dealers	Magazine	Others*
Most helpful	42.53%	20.69%	10.34%	21.84%	4.60%
Most trustworthy	60.30	20.59	5.88	8.82	4.41
Most often used for agri- culture science of tech- nical information	56.95	6.94	11.11	23.61	1.39
Most likely to have latest agriculture development	52.57	2.56	19.23	23.08	2.56
Most influential when making farm practice decisions	48.69	25.00	7.89	13.16	5.26

 $^{{\}rm \star Included}$ in this category were responses such as ASCS, stockbroker, etc.

TABLE X

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS

	Distribution by Frequency of Use								
		y Often	01	ften	Sel	dom	Never		
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media									
Magazine Newspaper Fact Sheets Radio Television	22 16 6 19 10	35.48 25.81 9.68 30.65 16.13	31 26 28 30 22	50.00 41.94 45.16 48.39 35.48	7 18 18 10 23	11.29 29.03 29.03 16.13 37.10	2 2 10 3 7	3.23 3.23 16.13 4.84 11.29	3.18 2.90 2.48 3.05 2.56
Business or Government Agency	10	10.10		30.40		37.10		11,25	2.30
SCS ASCS Extension Office Commercial Ag Dealer	1 19 13 6	1.61 30.65 20.97 9.68	19 31 23 14	30.65 50.00 37.10 22.58	24 11 20 23	38.71 17.74 32.26 37.10	18 1 6 19	29.03 1.61 9.68 30.65	2.05 3.10 2.69 2.11
Persons									
Extension Personnel Vocational Agriculture	12	19.35	24	38.71	19	30.65	7	11.29	2.66
Instructor Friends and Relatives	4 10	6.45 16.13	9 29	14.52 46.77	25 16	40.32 25.81	24 7	38.71 11.29	1.89 2.68

TABLE XI

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS IN THE AGE
CATEGORY 50 YEARS OLD AND OVER

	Distribution by Convenience of Use									
	Very Conve	enient		venient	Some		Not	enient		
Source of Information	N	%	N	%	N	%	N	%	Mean	
Mass Media										
Magazine	10	37.04	11	40.74	4	14.81	2	7.41	3.07	
Newspaper	10	37.04	11	40.74	5	18.52	1	3.70	3.11	
Fact Sheets	3	11.11	11	40.70	7	25.93	6	22.22	2.41	
Radio	7	25.93	15	55.56	4	14.81	1	3.70	3.04	
Television	5	18.52	12	44.44	5	18.52	5	18.52	2.63	
Business or Government Agency										
SCS	3	11.11	12	44.44	6	22.22	6	22.22	2.44	
ASCS	6	22.22	17	62.96	3	11.11	ĩ	3.70	3.04	
Extension Office	6	22.22	14	51.85	1	3.70	6	22.22	2.74	
Commercial Ag Dealer	2	7.41	4	14.81	9	33.33	12	44.44	1.85	
Persons										
Extension Personnel Vocational Agriculture	10	37.04	10	37.04	1	3.70	6	22.22	2.89	
Instructor	5	18.52	6	22.22	2	7.41	14	51.85	2.07	
Friends and Relatives	6	22.22	11	40.74	3	11.11	7	25.93	2.59	

TABLE XII

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
BY JACKSON COUNTY FARMERS IN THE AGE
CATEGORY 35 to 49 YEARS OLD

	Distribution by Frequency of Use								
	Very	Often		ften		dom		ever	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media								***************************************	
Magazine Newspaper Fact Sheets Radio Television	9 6 2 10 5	32.14 21.43 7.14 35.71 17.86	16 10 13 13 9	57.14 35.71 46.43 46.43 32.14	3 11 9 3 12	10.71 39.29 32.14 10.71 42.86	0 1 4 2 2	0 3.57 14.29 7.14 7.14	3.21 2.75 2.46 3.11 2.61
Business or Government Agency									
SCS ASCS Extension Office Commercial Ag Dealer	1 10 6 3	3.57 35.71 21.43 10.71	9 12 9 9	32.14 42.86 32.14 32.14	11 5 12 10	39.29 17.86 42.86 35.71	7 1 1 6	25.00 3.57 3.57 21.43	2.14 3.11 2.71 2.32
Persons									
Extension Personnel Vocational Agriculture	7.	25.00	8	28.57	12	42.86	1	3.57	2.75
Instructor Friends and Relatives	3 8	10.71 28.57	6 11	21.43 39.29	9 8	32.14 28.57	10 1	35.71 3.57	2.07 2.93

TABLE XIII

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS IN THE AGE
CATEGORY 34 YEARS OLD AND UNDER

	Distribution by Frequency of Use									
	Very	Often		ften		dom	Ne	ever		
Sources of Information	N	%	N	%	N	%	N	%	Mean	
Mass Media										
Magazine Newspaper Fact Sheets Radio Television	3 0 1 2 0	42.86 0 14.29 28.57 0	4 5 4 2 1	57.14 71.43 57.14 28.57 14.29	0 2 .2 3 6	0 28.57 28.57 42.86 85.71	0 0 0 0	0 0 0 0	3.43 2.71 2.86 2.86 2.14	
Business or Government Agency										
SCS ASCS Extension Office	0 1 1	0 14.29 14.29	2 4 4	28.57 57.14 57.14	4 2 2	57.14 28.57 28.57	1 0 0	14.29 0 0	2.14 2.86 2.86	
Commercial Ag Dealer	2	28.57	1	14.29	4	57.14	0	0	2.71	
Persons										
Extension Personnel Vocational Agriculture	1	14.29	3	42.86	3	42.86	0	0	2.71	
Instruction Friends and Relatives	. 0	0	0 5	0 71.43	5 1	71.43 14.29	2 1	28.57 14.29	1.71 2.57	

TABLE XIV

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS WITH GROSS
FARM SALES OF OVER \$50,000

	Distribution by Frequency of Use								
	Very	Often		ften		dom		ever	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media									
Magazine Newspaper Fact Sheets Radio Television	11 8 3 10 6	34.38 25.00 9.38 31.25 18.75	17 14 14 16 8	53.13 43.75 43.75 50.00 25.00	3 8 11 5 14	9.38 25.00 34.38 15.63 43.75	1 2 4 1 4	3.13 6.25 12.50 3.13 12.50	3.19 2.88 2.50 3.09 2.50
Business or Government Agency	· ·	10.70	J	20.00	• • •	10.75	•	12.00	2.00
SCS ASCS Extension Office Commercial Ag Dealer	1 9 7 5	3.13 28.13 21.88 15.63	11 20 14 9	34.38 62.50 43.75 28.13	13 3 9 11	40.63 9.38 28.13 34.38	7 0 2 7	21.88 0 6.25 21.88	2.19 3.19 2.81 2.38
Persons									
Extension Personnel Vocational Agriculture	6	18.75	15	46.88	9	28.13	2	6.25	2.78
Instructor Friends and Relatives	2 4	6.25 12.50	7 14	21.88 43.75	13 10	40.63 31.25	10 4	31.25 12.50	2.03 2.56

TABLE XV

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS WITH GROSS
FARM SALES \$25,000 TO \$50,000

	Distribution by Frequency of Use								
	Verv	Often		ften		dom	Ne	ever	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media									
Magazine	6	40.00	7	46.67	1	6.67	1	6.67	3.20
Newspaper	5	33.33	6	40.00	4	26.67	0	0	3.07
Fact Sheets	3	20.00	8	53.33	2	13.33	2	13.33	2.80
Radio	5	33.33	7	46.67	2	13.33	1	6.67	3.07
Television	ī	6.67	5	33.33	7	46.67	2	13.33	2.33
Business or Government Agency									
SCS	0	0	6	40.00	5	33.33	4	26.67	2.13
ASCS	9	60.00	4	26.67	2	13.33	0	0	3.47
Extension Office	5	33.33	4	26.67	4	26.67	2	13.33	2.80
Commercial Ag Dealer	ĭ	6.67	3	20.00	7	46.67	4	26.67	2.07
Persons									
Extension Personnel Vocational Agriculture	5	33.33	3	20.00	4	26.67	3	20.00	2.67
Instruction	2	13.33	0	0	5	33.33	8	53.33	1.73
Friends and Relatives	ī	26.67	8	53.33	2	13.33	ĩ	6.67	3.00

TABLE XVI

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS WITH UNDER
\$25,000 GROSS FARM SALES

				ution by F					
	Very	Often .	0	ften	Sel	dom	Ne	ever	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media									
Magazine	5	33.33	7	46.67	3	20.00	0	0	3.13
Newspaper	3	20.00	6	40.00	6	40.00	0	0	2.80
Fact Sheets	0	0	6	40.00	5	33.33	4	26.67	2.13
Radio	4	26.67	7	46.67	3	20.00	i	6.67	2.93
Television	3	20.00	8	53.33	2	13.33	2	13.33	2.80
Business or Government Agency									
SCS	0	0	2	13.33	6	40.00	7	46.67	1.67
ASCS	ĩ	6.67	7	46.67	6	40.00	ì	6.67	2.53
Extension Office	i	6.67	5	33.33	7	46.67	2	13.33	2.33
Commercial Ag Dealer	Ö	0	2	13.33	5	33.33	8	53.33	1.60
Persons									
Extension Personnel Vocational Agriculture	1	6.67	6	40.00	6	40.00	2	13.33	2.40
Instructor	0	0	2	13.33	7	46.67	6	40.00	1.73
Friends and Relatives	2	13.33	7	46.67	4	26.67	2	13.33	2.60

TABLE XVII

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS WITH OVER
FOUR YEARS OF COLLEGE

			Distrib	ution by F	requenc	y of Use			
	Very	Often		ften		dom	Ne	ever	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media	.,,								
Magazine	6	35.29	10	58.82	1	5.88	0	0	3.29
Newspaper	6	35.29	6	35.29	4	23.53	i	5.88	3.00
Fact Sheets	2	11.76	9	52.41	5	29.41	i	5.88	2.71
Radio	7	4.18	9	52.94	ì	5.88	Ö	0	3.35
Television	2	11.76	8	47.06	6	35.29	ĭ	5.88	2.65
Business or Government Agency								·	
SCS	0	0	5	29.41	9	52.94	3	17.65	2.12
ASCS	3	17.65	9	52.94	5	29.41	Ö	0	2.88
Extension Office	4	23.53	6	35.29	5	29.41	2	11.76	2.71
Commercial Ag Dealer	1	5.88	4	23.53	9	52.94	3	17.65	2.18
Persons									
Extension Personnel Vocational Agriculture	3	17.65	8	47.06	6	35.29	0	0	2.82
Instructor	1	5.88	4	23.53	7	41.18	5	29.41	2.06
	2				-				2.76
Friends and Relatives	2	11.76	9	53.94	6	35.29	0	0	2.

TABLE XVIII

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS WITH EDUCATIONAL LEVEL OF ONE TO FOUR
YEARS OF COLLEGE

			Distrib	ution by	Frequenc	y of Use	;		
		Often		ften		dom		ever	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media									
Magazine	7	35.00	10	50.00	3	15.00	0	0	3.20
Newspaper	6	30.00	8	40.00	6	30.00	0	. 0	3.00
Fact Sheets	2	10.00	9	45.00	8	40.00	1	5.00	2.60
Radio	5	25.00	10	50.00	5	25.00	0	0	3.00
Television	5	25.00	4	20.00	10	50.00	1	5.00	2.65
Business or Government Agency									
SCS	0	0	9	45.00	6	30.00	5	25.00	2.20
ASCS	6	30.00	10	50.00	4	20.00	0	0	3.10
Extension Office	4	20.00	8	40.00	8	40.00	0	0	2.80
Commercial Ag Dealer	4	20.00	7	35.00	7	35.00	2	10.00	2.65
Persons									
Extension Personnel Vocational Agriculture	5	25.00	7	35.00	8	40.00	0	0	2.85
Instructor	2	10.00	2	10.00	11	55.00	5	25.00	2.05
Friends and Relatives	5	25.00	9	45.00	5	25.00	ĭ	5.00	2.90

TABLE XIX

SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY
OF USE BY JACKSON COUNTY FARMERS WITH EDUCATIONAL LEVEL OF ONE TO FOUR
YEARS OF HIGH SCHOOL

		Distribution by Frequency of Use									
Source of Information	Very N	Often %		ften %		dom		ever	Mean		
Mass Media											
Magazine Newspaper Fact Sheets Radio Television	9 4 2 7 3	36.00 16.00 8.00 28.00 12.00	11 12 10 11 10	44.00 48.00 40.00 44.00 40.00	3 8 5 4 7	12.00 32.00 20.00 16.00 28.00	2 1 8 3 5	8.00 4.00 32.00 12.00 20.00	3.08 2.76 2.24 2.88 2.44		
Business or Government Agency					·			23.30			
SCS ASCS Extension Office Commercial Ag Dealer	1 10 5 1	4.00 40.00 20.00 4.00	5 12 9 3	20.00 48.00 36.00 12.00	9 2 7 7	36.00 8.00 28.00 28.00	10 1 4 14	40.00 4.00 16.00 56.00	1.88 3.24 2.60 1.64		
Persons											
Extension Personnel Vocational Agriculture Instructor	4 1	16.00 4.00	9	36.00 12.00	5 7	20.00	7 14	28.00 56.00	2.40 1.64		

TABLE XX

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS

			Distri	bution b	y Conver	nience of			
	Very				Some		Not		
		enient	-	nient		enient		enient_	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media				<u> </u>					
Magazines	20	32.36	30	48.39	9	14.52	3	4.84	3.08
Newspaper	19	30.65	29	46.77	11	17.74	3	4.84	3.03
Fact Sheets	16	25.81	27	43.55	9	14.52	10	16.13	2.79
Radio	24	38.71	29	46.77	6	9.68	3	4.84	3.19
Television	15	24.19	23	37.10	17	27.42	7	11.29	2.74
Business or Government Agency									
SCS	8	12.90	26	41.94	14	22.58	14	22.58	2.45
ASCS	15	24.19	35	56.45	8	12.90	4	6.45	2.98
Extension Office	15	24.19	32	51.61	7	11.29	8	12.90	2.87
Commercial Ag Dealer	6	9.68	26	41.94	16	25.81	14	22.58	2.39
Persons									
Extension Personnel Vocational Agriculture	20	32.26	28	45.16	7	11.29	7	11.29	2.98
Instructor	12	19.35	16	25.81	12	19.35	22	35.48	2.29
Friends and Relatives	16	25.81	28	45.16	11	17.74	7	11.29	2.85
Dealers and Salesmen	7	11.29	20	32.26	18	29.03	17	27.42	2.27

TABLE XXI

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS IN THE AGE CATEGORY
50 YEARS OLD AND OVER

	Von		Distr	ibution b					
	Very	enient	Conve	enient	Some	enient	Not	enient	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media									
Magazine	10	37.04	10	37.04	4	14.81	3	11.11	3.00
Newspaper	12	44.44	9	33.33	4	14.81	2	7.41	3.15
Fact Sheets	6	22.22	10	37.04	6	22.22	5	18.52	2.63
Radio	8	29.63	16	59.26	2	7.41	1	3.70	3.15
Television	7	25.93	10	37.04	6	22.22	4	14.81	2.74
Business or Government Agency									
SCS	3	11.11	12	44.44	6	22.22	6	22.22	2.44
ASCS	6	22.22	17	62.96	3	11.11	i	3.70	3.04
Extension Office	6	22.22	14	51.85	ĩ	3.70	6	22.22	2.74
Commercial Ag Dealer	2	7.41	4	14.81	9	33.33	12	44.44	1.85
Persons									
Extension Personnel Vocational Agriculture	10	37.04	10	37.04	1	3.70	6	22.22	2.89
Instructor	5	18.52	6	22.22	2	7.41	14	51.85	2.07
Friends and Relatives	6	22.22	11	40.74	3	11.11	7	25.93	2.59
Dealers and Salesmen	2	7.41	3	11.11	10	37.04	12	44.44	1.81

TABLE XXII

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS IN THE AGE CATEGORY
35 TO 49 YEARS OLD

			Distr	ibution b	y Conver	nience of	Use			
	Very	enient		enient	Some		Not	enient		
Source of Information	N	%	N	%	N	%	N	%	Mean	
Mass Media										
Magazine	8	28.57	14	50.00	6	21.43	0	0	3.07	
Newspaper	7	25.00	13	46.43	7	25.00	1	3.57	2.93	
Fact Sheets	9	32.14	13	46.43	2	7.14	4	14.29	2.96	
Radio	13	46.43	10	35.71	3	10.71	2	7.14	3.21	
Television	8	28.57	10	35.71	8	28.57	2	7.14	2.86	
Business or Government Agency										
SCS	5	17.85	11	39.29	6	21.43	6	21.43	2.54	
ASCS	9	32.14	13	46.43	4	14.29	2	7.14	3.04	
Extension Office	9	32.14	12	42.86	5	17.86	2	7.14	3.00	
Commercial Ag Dealer	3	10.71	18	64.29	5	17.86	2	7.14	2.79	
Persons										
Extension Personnel Vocational Agriculture	10	35.71	12	42.86	5	17.86	1	3.57	3.11	
Instructor	7	25.00	9	32.14	7	25.00	5	17.86	2.64	
Friends and Relatives	7	25.00	14	50.00	7	25.00	0	0	3.00	
Dealers and Salesmen	4	14.29	13	46.43	7	25.00	4	14.29	2.61	

TABLE XXIII

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS IN THE AGE CATEGORY
34 YEARS OLD AND UNDER

			Distr	ibution b	y Conver	nience of	Use		
	Very				Some		Not	•	
Source of Information	Conve	enient %	Conv	enient %	Conve	enient %	Conve	enient %	Mean
Mass Media									
Magazine	2	42.57	5	71.43	0	0	0	0	3.29
Newspaper	0	0	7	100.00	0	0	0	0	3.00
Fact Sheets	1	14.29	4	57.14	1	14.29	1	14.29	2.71
Radio	3	42.86	3	42.86	1	14.29	0	0	3.29
Television	0	0	4	57.14	2	28.57	1	14.29	2.43
Business or Government Agency									
SCS	0	0	3	42.86	2	28.86	2	28.86	2.14
ASCS	0	0	5	71.43	1	14.29	1	14.29	2.57
Extension Office	0	0	6	85.71	1	14.29	0	0	2.86
Commercial Ag Dealer	1	14.29	4	57.14	2	28.57	0	0	2.86
Persons									
Extension Personnel Vocational Agriculture	0	0	6	85.71	1	14.29	0	0	2.86
Instructor	0	0	1	14.29	3	42.86	3	42.86	1.71
Friends and Relatives	2	28.57	3	42.86	1	14.29	1	14.29	2.86
Dealers and Salesmen	1	14.29	4	57.14	1	14.29	1	14.29	2.71

TABLE XXIV

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION BY JACKSON COUNTY FARMERS WITH GROSS FARM SALES OVER \$50,000

Distribution by Convenience of Use										
Very						Not				
		Conve		Conve		<u>Convenient</u>				
N	%	N	%	N	%	N	%	Mean		

13	40.63	15	46.88	4	12.50	0	0	3.28		
12		. 11	34.38	6			9.38	3.00		
		17						2.88		
12	37.50	15		4		1		3.19		
8	25.00	10	31.25	11	34.38	3	9.38	2.72		
5	15.63	16	50.00	7	21.88	4	12.50	2.69		
				4				3.00		
		15						2.94		
3	9.38	17	53.13	8	25.00	4	12.50	2.59		
10	31.25	14	43.75	5	15.63	3	<i>9</i> .38	2.97		
7	21.88	8	25.00	8	25.00	9	28.13	2.41		
6	18.75	17	53.13	7	21.88	2	6.25	2.84		
3	9.38	14	43.75	8				2.41		
	Conve N 13 12 8 12 8 9 3	Convenient N % 13 40.63 12 37.50 8 25.00 12 37.50 8 25.00 5 15.63 8 25.00 9 28.13 3 9.38 10 31.25 7 21.88 6 18.75	Very Convenient Convenient N % N 13 40.63 15 12 37.50 11 8 25.00 17 12 37.50 15 8 25.00 10 5 15.63 16 8 25.00 18 9 28.13 15 3 9.38 17 10 31.25 14 7 21.88 8 6 18.75 17	Very Convenient Convenient N % 13 40.63 12 37.50 11 34.38 8 25.00 17 53.13 12 37.50 15 46.88 8 25.00 10 31.25 3 9.38 15 46.88 3 9.38 17 53.13 10 31.25 14 43.75 7 21.88 8 25.00 6 18.75 17 53.13	Very Convenient N Convenient N Someword Convenient N 13 40.63 15 46.88 4 12 37.50 11 34.38 6 8 25.00 17 53.13 2 12 37.50 15 46.88 4 8 25.00 10 31.25 11 5 15.63 16 50.00 7 8 25.00 18 56.25 4 9 28.13 15 46.88 5 3 9.38 17 53.13 8 10 31.25 14 43.75 5 7 21.88 8 25.00 8 6 18.75 17 53.13 7	Very Convenient Convenient Somewhat Convenient 13 40.63 15 46.88 4 12.50 12 37.50 11 34.38 6 18.75 8 25.00 17 53.13 2 6.25 12 37.50 15 46.88 4 12.50 8 25.00 10 31.25 11 34.38 5 15.63 16 50.00 7 21.88 8 25.00 18 56.25 4 12.50 9 28.13 15 46.88 5 15.63 3 9.38 17 53.13 8 25.00 10 31.25 14 43.75 5 15.63 7 21.88 8 25.00 8 25.00 6 18.75 17 53.13 7 21.88	Very Convenient N Convenient N Somewhat Convenient N Not Convenient N 13 40.63 15 46.88 4 12.50 0 12 37.50 11 34.38 6 18.75 3 8 25.00 17 53.13 2 6.25 5 12 37.50 15 46.88 4 12.50 1 8 25.00 10 31.25 11 34.38 3 5 15.63 16 50.00 7 21.88 4 8 25.00 18 56.25 4 12.50 2 9 28.13 15 46.88 5 15.63 3 3 9.38 17 53.13 8 25.00 4 10 31.25 14 43.75 5 15.63 3 7 21.88 8 25.00 8 25.00 9 6 18.75 17	Very Convenient Convenient Somewhat Convenient Not Convenient 13 40.63 15 46.88 4 12.50 0 0 12 37.50 11 34.38 6 18.75 3 9.38 8 25.00 17 53.13 2 6.25 5 15.63 12 37.50 15 46.88 4 12.50 1 3.13 8 25.00 10 31.25 11 34.38 3 9.38 5 15.63 16 50.00 7 21.88 4 12.50 8 25.00 18 56.25 4 12.50 2 6.50 9 28.13 15 46.88 5 15.63 3 9.38 3 9.38 17 53.13 8 25.00 4 12.50 10 31.25 14 43.75 5 15.63 3 9.38 7		

TABLE XXV

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION BY JACKSON COUNTY FARMERS WITH GROSS FARM SALES \$25,000 TO \$50,000

			Distr	ibution b	y Conven	ience of	f Use		
	Very		•		Somew		Not		
Source of Information	N	enient %	N	enient %	Conve N	nient %	Conve	enient %	Mean
Mass Media									
Magazine	4	26.67	8	53.33	1	6.67	2	13.33	2.93
Newspaper	5	33.33	9	60.00	1	6.67	0	0	3.27
Fact Sheets	5	33.33	6	40.00	3	20.00	1	6.67	3.00
Radio	5	33.33	8	53.33	1	6.67	1	6.68	3.13
Television	2	13.33	5	33.33	5	33.33	3	20.00	2.40
Business or Government Agency									
SCS	3	20.00	3	20.00	3	20.00	6	40.00	2.20
ASCS	6	40.00	6	40.00	i	6.67	2	13.33	3.07
Extension Office	5	33.33	8	53.33	Ö	0	2	13.33	3.07
Commercial Ag Dealer	2	13.33	7	46.67	2	13.33	4	26.67	2.47
Persons									
Extension Personnel Vocational Agricultural	6	40.00	4	40.00	1	6.67	2	13.33	3.07
Instructor	3	20.00	4	26.67	2	13.33	6	40.00	2.27
Friends and Relatives	5	33.33	6	40.00	1	6.67	3	20.00	2.87
Dealers and Salesmen	3	20.00	4 .	26.67	4	26.67	4	26.67	2.40

TABLE XXVI

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION BY JACKSON COUNTY FARMERS WITH GROSS FARM SALES UNDER \$25,000

			Distr	ibution b	y Conver	nience of	Use			
	Very				Some		Not			
		<u>enient</u>		<u>enient</u>		<u>enient</u>		<u>enient</u>		
Source of Information	N	%	N	%	N	%	N	%	Mean	
Mass Media										
Magazine	3	20.00	7	46.67	4	26.67	1	6.67	2.80	
Newspaper	2	13.33	9	60.00	4	26.67	0	0	2.87	
Fact Sheets	3	20.00	4	26.67	4	26.67	4	26.67	2.40	
Radio	7	46.67	6	40.00	1	6.67	1	6.67	3.27	
Television	5	33.33	8	53.33	1	6.67	1	6.67	3.13	
Business or Government Agency										
SCS	0	0	7	46.67	4	26.67	4	26.67	2.20	
ASCS	ī	6.67	11	73.33	3	20.00	0	0	2.87	
Extension Office	1	6.67	9	60.00	2	13.33	3	20.00	2.53	
Commercial Ag Dealer	1	6.67	2	13.33	6	40.00	6	40.00	1.87	
Persons										
Extension Personnel Vocational Agriculture	4	26.67	8	53.33	1	6.67	2	13.33	2 .9 3	
Instructor	2	13.33	4	26.67	2	13.33	7	46.67	2.07	
Friends and Relatives	4	26.67	6	40.00	2	13.33	3	20.00	2.73	
Dealers and Salesmen	1	6.67	2	13.33	6	40.00	6	40.00	1.87	

TABLE XXVII

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS WITH OVER
FOUR YEARS OF COLLEGE

			Distr	ibution b	y Conver	ience of	Use		
	Very				Some		Not		
		enient		enient		nient		enient	
Source of Information	N	%	N	%	N	%	N	%	Mean
Mass Media						2			
Magazine	5	29.41	10	58.82	1	5.88	1	5.88	3.12
Newspaper	6	35.29	7	41.18	3	17.65	1	5.88	3.06
Fact Sheets	5	29.41	9	52.94	2	11.76	1	5.88	3.06
Radio	10	58.82	5	29.41	2	11.76	0	0	3.47
Television	4	23.53	6	35.29	7	41.18	0	0	2.82
Business or Government Agency									
SCS	2	11.76	9	52.94	2	11.76	4	23.53	2.53
ASCS	4	23.53	9	52.94	ī	5.88	3	17.65	2.82
Extension Office	5	29.41	8	47.06	7	5.88	3	17.65	2.88
Commercial Ag Dealer	2	11.76	6	35.29	5	29.41	4	23.53	2.35
Persons									
Extension Personnel Vocational Agriculture	7	41.18	7	41.18	2	11.76	1	5.88	3.18
Instructor	7	41.18	2	11.76	3	17.65	5	29.41	2.65
Friends and Relatives	6	35.29	8	47.06	1	5.88	2	11.76	3.06
Dealers and Salesmen	2	11.76	7	41.18	3	17.65	5	29.41	2.35

TABLE XXVIII

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS WITH ONE TO
FOUR YEARS OF COLLEGE

			Distr	ibution b	y Conver	nience of	Use		
	Very Convenient N %		Convenient N %		Somewhat Convenient N %		Not		
Source of Information							Conve	enient_ %	Mean
Maca Madia									
<u>Mass</u> <u>Media</u>									
Magazine	6	30.00	8	40.00	6	30.00	0	0	3.00
Newspaper	6	30.00	10	50.00	4	20.00	0	0	3.10
Fact Sheets	5	25.00	9	45.00	4	20.00	2	10.00	2.85
Radio	7	35.00	11	55.00	2	10.00	0	0	3.25
Television	7	35.00	5	25.00	. 0	30.00	2	10.00	2.85
Business or Government Agency									
SCS	1	5.00	9	45.00	7	35.00	3	15.00	2.40
ASCS	2	10.00	15	75.00	3	15.00	0	0	2.95
Extension Office	3	15.00	13	65.00	4	20.00	0	0	2.95
Commercial Ag Dealer	1	5.00	14	70.00	4	20.00	1	5.00	2.75
Persons									
Extension Personnel Vocational Agriculture	5	25.00	11	55.00	4	20.00	0	0	3.05
Instructor	1	5.00	7	35.00	8	40.00	4	20.00	2.25
Friends and Relatives	5	25.00	9	45.00	5	25.00	1	5.00	2.90
Dealers and Salesmen	2	10.00	8	40.00	9	45.00	1	5.00	2.55

TABLE XXIX

CONVENIENCE OF SOURCES OF AGRICULTURAL INFORMATION
BY JACKSON COUNTY FARMERS WITH ONE TO
FOUR YEARS OF HIGH SCHOOL

			Distr	ibution b	y Conver	nience of	Use		
	Very				Some		Not		
Source of Information	Convenient_ N %		Convenient_N %		Convenient N %		Convenient N %		Mean
Mass Media					name de la companie				
Magazines	9	36.00	12	48.00	2	8.00	2	8.00	3.12
Newspaper	7	28.00	12	48.00	4	16.00	2	8.00	2.96
Fact Sheets	6	28.00	9	36.00	3	12.00	7	28.00	2.56
Radio	7	28.00	13	52.00	2	8.00	3	12.00	2.96
Television	4	16.00	12	48.00	4	16.00	5	20.00	2.60
Business or Government Agency									
SCS	5	20.00	8	32.00	5	20.00	7	28.00	2.44
ASCS	9	36.00	11	44.00	4	16.00	1	4.00	3.12
Extension Office	7	28.00	11	44.00	2	8.00	5	20.00	2.80
Commercial Ag Dealer	3	12.00	6	24.00	7	28.00	9	36.00	2.12
Persons									
Extension Personnel Vocational Agriculture	8	32.00	10	40.00	1	4.00	6	24.00	2.80
Instructor	4	16.00	7	28.00	1	4.00	13	52.00	2.08
Friends and Relatives	5	20.00	11	44.00	5	20.00	4	16.00	2.68
Dealers and Salesmen	3	12.00	5	20.00	6	24.00	11	44.00	2.00

source of agricultural information. Radio serves as the secondary source of agricultural information to respondents, with the other print media, newspapers, being the third source. Television and fact sheets were indicated by the respondents as being seldom used as sources of agricultural information.

Of the business and government agencies, the Agricultural Stabilization and Conservation Service (ASCS) was the unanimous choice among the respondents as being the primary agency contacted by the respondents. The Extension Office was the second unanimous choice of the respondents as the agency often contacted for agricultural information. Respondents indicated that the Soil Conservation Service (SCS) and commercial agriculture dealers were seldom contacted for agricultural information.

Friends and relatives were most often used by the respondents for agriculture information by the respondents. "Extension Personnel" was the source most often used for the groups over 50 years of age, over \$50,000 in gross sales, and with over four years of college. With all other respondent groupings, Extension Personnel served as the secondary contact for agricultural information. Vocational Agriculture (Vo-Ag) Instructors seldom were used as a source of agricultural information.

In general, as the amount of gross farm sales decreases and the level of education decreases, the mean score decreases. In other words, those with smaller gross farm sales and lower levels of education use all information sources less frequently.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to summarize the study's procedure and findings relative to the purpose and objectives. Also presented are conclusions and recommendations which are based upon the analysis of data collected and observations made in the conduct of this study.

Summary of the Study

Purpose

The purpose of this study was to determine and analyze the channels of communication that have the greatest impact on agriculture clientele.

Objectives of the Study

In order to accomplish the purpose of this study, the following objectives were established:

- 1. To identify the principal communication channels for agricultural information by Jackson County wheat and cotton farmers.
- 2. To determine the frequency of use of the communication channels by the wheat and cotton farmers.
 - 3. To determine the farmers' perceptions of Extension credibility.

To determine possible socioeconomic characteristics of the farmer that might have a bearing on their relationship with Extension.

Rationale

Because each community differs in its needs, interests, and communication channels, Extension workers can gain the most acceptance of new ideas and technology if they understand the local situation regarding these things and base educational messages and programs on them. The local extension agent needs to use all of the communication channels available locally to disseminate technology appropriate to farmers. It was hoped that information gained from this study would aid the extension agent to plan communication strategy to serve users.

Procedures

Following a review of literature and research pertaining to the study, the following tasks were involved in collecting and analysis of data to satisfy the purpose and objective of the study: (1) determine the study population, (2) develop the instrument for data collection, (3) collect the data, and (4) analyze the findings.

Selection of individual respondents was determined from a Jackson County ASCS list of cotton and wheat farmers, by selecting every fifth name. Mailed questionnaires were utilized to collect data for the study. Each of the 147 selected individuals were mailed a questionnaire in the Spring of 1983. Two questionnaires were returned due to insufficient addresses. Sixty-nine questionnaires were returned by respondents, for a 47.5% return rate.

<u>Selected Characteristics of the Farmers</u> Participating in the Study

Thirty-Two (51.61%) of the respondents had gross farm sales over \$50,000, while 15 (24.19%) had gross sales of \$25,000-\$50,000, and 15 (24.19%) had less than \$25,000 in gross sales.

Forty-three percent of the respondents were over 50 years of age, while 45% were between 35 to 49 years old and 11% were under 34 years old.

Seventeen (27.42%) of the respondents had over four years of college, while 21 (33.87%) had one to four years of college. Twenty-four (38.71%) had one to four years of high school education.

In regard to contacting the county Extension office for agricultural information, over 87% of the respondents had contacted the Extension office. When contacting the Extension office, over 90% had "personal contact," while just over 42% had "called" the office. Only 7.4% had "written" for information.

Participation in an Extension meeting was indicated by approximately 75% of the respondents, and more than 95% of the respondents indicated that they read Extension news columns.

Findings of the Study

The major focus of the research effort was to assess the principal information sources used and their frequency of use by Jackson County wheat and cotton farmers. The data of the study are summarized in Tables XXX and XXXI.

TABLE XXX

SUMMARY OF MEAN RESPONSES CONCERNING SOURCES OF AGRICULTURAL INFORMATION AND FREQUENCY OF USE

	Overall Mean	Age Category Gross Farm Sales				es	Educational Level				
		Over 50	35-49	34-Under	Over \$50,000	\$25,000- \$50,000	Under \$25,000	Over Four Yrs. College	One-Four Yrs. College	One-Four Yrs. High School	
Mass Media											
Magazine Newspaper Fact Sheets Radio Television	3.18 2.90 2.48 3.05 2.56	3.07 3.11 2.41 3.04 2.63	3.21 2.75 2.46 3.11 2.61	3.43 2.71 2.86 2.86 2.14	3.19 2.88 2.50 3.09 2.50	3.20 3.07 2.80 3.07 2.33	3.13 2.80 2.13 2.93 2.80	3.29 3.00 2.71 3.35 2.65	3.20 3.00 2.60 3.00 2.65	3.08 2.76 2.24 2.88 2.44	
Business or Government Agency											
SCS ASCS Extension Office Commercial Ag Dealer	2.05 3.10 2.69 2.11	2.44 3.04 2.74 1.85	2.14 3.11 2.71 2.32	2.14 2.86 2.86 2.71	2.19 3.19 2.81 2.38	2.13 3.47 2.80 2.07	1.67 2.53 2.33 1.60	2.12 2.88 2.71 2.18	2.20 3.10 2.80 2.65	1.88 3.24 2.60 1.64	
Persons											
Extension Personnel Vocational Agriculture Instructor Friends and Relatives	2.66 1.89 2.68	2.89 2.07 2.59	2.75 2.07 2.93	2.71 1.71 2.57	2.78 2.03 2.56	2.67 1.73 3.00	2.40 1.73 2.60	2.82 2.06 2.76	2.85 2.05 2.90	2.40 1.64 2.44	

TABLE XXXI

SUMMARY OF MEAN RESPONSES CONCERNING CONVENIENCE
OF THE SOURCES OF AGRICULTURAL INFORMATION

			Age Catego	ory	Gro	ss Farm Sal	es		Educational Level	
	Overall Mean	Over 59	35-49	34-Under	Over \$50,000	\$25,000- \$50,000	Under \$25,000	Over Four Yrs: College	One-Four Yrs. College	One-Four Yrs High School
Mass Media				· w • · · · · · · · · · · · · · · · · ·			A Prince and a Pri			
Magazine Newspaper Fact Sheets Radio Television	3.08 3.03 2.79 3.19 2.74	3.00 3.15 2.63 3.15 2.74	3.07 2.93 2.96 3.21 2.86	3.29 3.00 2.71 3.29 2.43	3.28 3.00 2.88 3.19 2.72	2.93 3.27 3.00 3.13 2.40	2.80 2.87 2.40 3.27 3.13	3.12 3.06 3.06 3.47 2.82	3.00 3.10 2.85 3.25 2.85	3.12 2.96 2.56 2.96 2.60
Business or Government Agency										
SCS ASCS Extension Office Commercial Ag Dealer	2.45 2.98 2.87 2.39	2.44 3.04 2.74 1.85	2.54 3.04 3.00 2.79	2.14 2.57 2.86 2.86	2.69 3.00 2.94 2.59	2.20 3.07 3.07 2.47	2.20 2.87 2.53 1.87	2.53 2.82 2.88 2.35	2.40 2.95 2.95 2.75	2.44 3.12 2.80 2.12
Persons										
Extension Personnel Vocational Agriculture	2.98	2.89	3.11	2.86	2.97	3.07	2.93	3.18	3.05	2.80
Instructor Friends and Relatives Dealers and Salesmen	2.29 2.85 2.27	2.07 2.59 1.81	2.64 3.00 2.61	1.71 2.86 2.71	2.41 2.84 2.41	2.27 2.87 2.40	2.07 2.73 1.87	2.65 3.06 2.35	2.25 2.90 2.55	2.08 2.68 2.00

The findings of the study are summarized in the following section as they relate to the study objectives.

The sources of information in rank order are as follows: Mass Media--magazine, radio, newspaper, television, and fact sheets; Business and Government Agency--ASCS, Extension Office, commercial agriculture dealer and SCS; Persons--friends and relatives, Extension personnel, and vocational agriculture instructors.

The source of information in rank order of frequency of use under headings are as follows: Mass Media--radio, magazine, newspaper, fact sheets, and television; Business and Government Agency--ASCS, Extension Office, SCS, and commercial agriculture dealer; Persons--Extension personnel, friends and relatives, vocational agriculture instructor, and dealers and salesmen.

The following additional findings emerged from the study as being of particular importance:

- 1. The over 50 year old, over \$50,000 gross sales, and over four years of college respondents indicated Extension personnel as the primary persons as sources of agricultural information.
- 2. Generally, as amount of gross farm sales decreases, those farmers use all information sources with less frequency.
- 3. Generally, as the level of education decreases, those farmers use all information sources less frequently.
- 4. Television and fact sheets are seldom used for sources of information.
- 5. Vocational agriculture instructors and dealers did not emerge as being a source often used by respondents.

- 6. Extension was indicated as being most helpful and trustworthy as an information source.
- 7. A large percentage of farmers are exposed to Extension information through meetings and news columns.

Conclusions

Interpretation of the findings of the study prompted the formulation of the following conclusions:

- 1. Those concerned with disseminating agriculture information must recognize the diversity of sources and communication channels through which farmers seek information.
 - 2. Farmers do not depend on any one source for information.
- 3. Extension agents should focus their efforts on transferring information to primary information sources that best reach and serve the clientele.
- 4. Extension agents must develop and use the communication skills necessary to prepare understandable messages for the mass media.
- 5. Agents must learn to know farmers to whom others look for information and advice.
- 6. Extension agents must recognize the advantages and disadvantages of mass media channels of communication.
 - 7. Farmers are a highly educated group of people in our society.

Recommendations

As a result of analysis of the data and major findings of the research, it is recommended that:

- 1. The Cooperative Extension Administration develop mechanisms which provide access to and support from all departments relevant to Extension's function in preparing mass media educational material for use by local extension agents.
- 2. The Oklahoma Cooperative Extension Service commit time and energy to staff training and development of proficiency in the use of mass media for informing and teaching people.
- 3. The Oklahoma Cooperative Extension Service make the best use of available staff by utilizing new electronic teaching devices and new communications sytems.
- 4. Vocational agriculture instructors establish and maintain a cooperative working relationship with the county extension agent.
- 5. Local extension agents use channels of communications available to them to reach people who have never participated in programs or used information available to them.

Recommendations for Additional Research

The following recommendations are made by the author in regard to additional research. The recommendations are judgments based on the findings and suggestions resulting from the study. It is recommended that:

- 1. Research be conducted to determine the kinds of agricultural information needed by farmers from mass media.
- 2. Research be conducted to determine the means by which fact sheets best serve the local extension agent.
- 3. Research be conducted with mass communication techniques and how to utilize them to reach the potential mass media audience.

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APPENDIXES

APPENDIX A

FARMER QUESTIONNAIRE

1.	You	r Sources of Agricultur	al In	format	ion:		1	
				Very	rrequ	ency of l	<u>Jse</u>	
	Α.	Mass Media		<u>Often</u>	<u>Often</u>	<u>Seldom</u>	<u>Never</u>	
		Magazine			-			
		Newspaper						
		Fact Sheets			·			
		Radio						
		Television						
		Others						
	В.	Business or Government Agency	<u>-</u>					
		SCS						
		ASCS						
		Extension Office						
		Commercial Ag Dealer						
		Others						
	С.	Persons						
		Extension Personnel						partie de la company de la
		Vocational Agriculture Instructor						
		Friends and Relatives						
2.		e the Convenience to Yo	u of	the So	urces o	f Agricu ⁻	ltural	Infor-
		Very Conv		it Conv		Somewhat Convenier	Not it Conv	venient
	Α.	Mass Media						
		Magazine						
		Newspaper	,					
		Fact Sheets						
		Radio		-			-	
		Television						
		Others						

			Very Conven	ient	Convenie		omewhat onvenient	Not Convenient
	В.	Business or Gov- ernment Agency						
		SCS						
		ASCS						
		Extension Office						
		Commercial Ag Dealer	*****					
		Others					•	
	С.	Persons						
		Extension Personne	el					
	•	Vocational Agri- culture Instruc- tor						
		Friends and Rela- tives						
		Dealers and Sales- men	-					
3.	Chec Attı	ck the Source of Aç ributes Described:	gricult			ion ⁻	That Most	Fits the
	Attı	ributes E	Extensi		riends & elatives	Deale	er Magazir	ne Others
	Most	t helpful						
	Most	t trustworthy		_				
	a (er	t often used for griculture sci- nce or technical		_				
	18	t likely to have atest agricul- ural development			·			
	wł	t influential nen making farm ractice decisions				***************************************		
4.	Have	you had contact w	vith th	e Ex	tension O)ffic	e for any	information?
		Yes		N			J	
5.	How	was the contact ma	ide?					
. •		Telephone		Wr	itten		_Personal	Contact

6.	Have you participated in any meetings sponsored by the Extension Service?
	YesNo
7.	•
	YesNo
8.	What year were you born?
	Under 1835 - 49 (1934-1948)
	18 - 24 (1959-1965)50 - 62 (1921-1933)
	25 - 34 (1949-1964)63 or over (before 1920)
9.	What is the highest grade you have completed in school?
	0 - 8 years1 - 2 years of college
	l - 2 years of high school3 - 4 years of college
	3 - 4 years of high schoolover 4 years of college
10.	Are you involved in agriculture:
	full-timepart-time
11.	Of the following ranges, which one most closely approximates the gross income you receive from agriculture?
	less than \$5,000\$20,000 - \$25,000
	\$5,000 - \$10,000\$25,000 - \$50,000
	\$10,000 - \$15,000over \$50,000
	\$15,000 - \$20,000

APPENDIX B

CORRESPONDENCE

April 8, 1983

To: Jackson County Farmers

At the Jackson County OSU Extension Center, we want to provide you with the agricultural information and educational programs you need.

We also want to provide the information and programs in ways that are most convenient and helpful to you.

To find out how we can do this best, you have been selected to receive a short questionnaire. It should take you only a few minutes to complete, and there is a stamped and addressed envelope to send it back.

Thanks for your help. I certainly do appreciate it.

Sincerely,

Don Proctor County Extension Director Jackson County

DP/km

April 21, 1983

Dear Producer:

You recently received a survey that would be of great benefit to the Jackson County Extension Office for planning future educational programs for the farmers of Jackson County.

If you have returned your survey, I thank you. If not, would you please take a minute to fill it out and return it? We need as many returned as possible, as it was only sent to a representative group.

Your help is greatly appreciated.

Sincerely,

Don Proctor County Extension Director Jackson County

DP/km

VITA

Donald Larry Proctor

Candidate for the Degree of

Master of Science

Thesis: SOURCES OF AGARICULTURAL INFORMATION USED BY WHEAT AND

COTTON FARMERS IN JACKSON COUNTY, OKLAHOMA

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Duncan, Oklahoma, July 22, 1944, the son of Eldon and Hazel Proctor.

Education: Graduated from Waurika High School, Waurika, Oklahoma, May, 1962; received Bachelor of Science degree from Oklahoma State University in July, 1966, with a major in Agriculture Education; received Master of Science degree from Oklahoma State University in December, 1983.

Professional Experience: Farm background, Vocational Agriculture Instructor, August, 1966 to January, 1970; Extension Agent, 4-H, Comanche County, Oklahoma, February, 1970 to April, 1973; Extension Agent, Urban 4-H, Comanche County, Oklahoma, April, 1973 to September, 1974; County Extension Director, Jackson County, Oklahoma, September, 1974 to present.

Professional Organizations: Oklahoma Association of County Extension Agents; National Association of County Agents; Army Reserve; Kiwanis; B.P.O. Elks.