By<br>DELMAR EDWARD HATESOHL<br>Bachelor of Science<br>Kansas State University<br>Manhattan, Kansas 1951<br>Master of Science<br>University of Missouri<br>Columbia, Missouri 1959

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THE MEASUREMENT AND ROLE OF FARMERS ${ }^{\circ}$
ATTITUDES IN PUBLIC POLICY


## PREFACE

The research reported in this dissertation was conducted under Oklahona Agricultural Experiment Station Project，＂An Appraisal of Pamer Proference for Alternative Goverment Wheat and Feod Grain Programs＂This is a contributing project to the Interegional Comnittee on Price and Income Policy．The dissertation is an analysis of famers＂perception of the current agricultural situation，attitudes tovard faym programs，and the information sources farmers use to keep abreast of new farm prograns and policies．

I wish to thank my major adviser，Dro Luther Tweeten，for his guidance and prompt assistance during my graduate study．Thanks are also due to the other members of my committee ：Dr。I。V．Blakley， Dro JoH．Bradsher，Dr．V．RoEidnan，and Dr．C．E．Marshall．

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## CHAPTER I

## INTRODUCTION

Development of successful government farm price support and adjustment programs requires that such programs be acceptable to farmers. This is especially true for programs which are subnitted to the vote of farmers in referendums. Even for programs which are not submitted to such a vote, it is doubtful. if desirable income and adjustment results can be achieved if such programs are not generally acceptable to farmers.

The difficulty of predicting what type of programs will be acceptable to farmers was brought into focus by results of the 1963 wheat referendum. The vote was different from what many farm leaders expected. Before the referendum, some farm leaders said that "farmers couldn"t possibly afford to vote "no"." Yet 52 percent of the voters cast a negative vote and, months later, attempts were still being made to interpret the outcome。 ${ }^{1}$

Heady has suggested that goals and values play a major role in farmers ${ }^{\text {a }}$ reactions to farm prograns:
$1_{\text {Iynn }} M_{0}$ Daft, "The 1963 Wheat Reîerendum: An Interpretation," Journal of Farm Economics, XLVI (1964), ppo 588-592; Don F. Hadwiger, "Wheat Referendumw-Its Meaning for Future Farm Policy," a paper read at the Fourth Economic Conference and Seminar for Agricultural Editors, Ames, Iowa, February 12, 1964.

Solutions to the major economic problems must have their roots in goal-value phenomena. The basic economic and physical cause of the agricultural problem is now well understood. Agriculturalists and economists can suggest a half dozen ways to solve it. But solutions immediately confront problems in goals and values, the deeply imbedded beliefs of particular indisiduals, groups, and organizations in respect to "what is right or "what ought to be." In some cases, disagreement rests on goals themselves. In other cases, conflict arises in respect to the appropriate means of attaining particular goals. Until goal and value positions for agriculture are more clearly articulated, and until it is recognized that progress to the solution of the income problem rests on resolutions of apparent conflicts in goals and values; progress in solving major structural problems of agriculture may be small. ${ }^{2}$

A starting point for determining what types of prograns farmers will accept is to examine farmers' orientation toward public policy and farm programs in general. what do they believe is the cause of the economic problems they currently face? What should be the main objectives of farm programs? What approaches to raising farm income would be most acceptable to farmers? How keenly do farmers perceive the total agricultural situation? What are some of the basic attitudes that farmers have toward the role of government in economic and social areas of activity?

This type of information is needed by those who are responsible for developing farm programs. It is also needed by educators and other agricultural leaders who attempt to increase farmers" understanding of the current economic problems in agriculture. Only by understanding how farmers react to certain ideas and phrases can agricultural leaders effectively communicate with farmers about such problems. An inportant related question concerns the types of information sources farmers use

[^0]to learn about farm polictes and programs. By knowing more about these information sources, agricultural leaders can more effectively reach farmers with program information.
Objectives

Specifjcally, this study has the following major objectives:

1. To determine specific values, attitudes, and beliets of wheat producers about farm programs.
2. To relate such values, attitudes, and beliefs to preferences for specific types of wheat prograns and to certain sociow economic variables.
3. To measure farners ${ }^{\text {a }}$ perception of the current agricultural situation。
4. To determine what information sources wheat producers use most to keep inforned on prograns.
5. To examine the role of the College of Agriculture and Extension Service in providing educational material about farw programs and policies.

A fundamental purpose of this study is to learn nore about the factors that affect the acceptability of faxm prograns and policies to wheat growers. Results of the study are intended to provide a detailed analysis of how famers in four different types of production areas within the hard red winter wheat belt think and act in regard to farm programs. particularly those related to wheat. Such knowledge should help those who design farm programs to foresee provisions wich are ompletely unacceptable to farmers in these areas. It should also help agmoulturel
economists to design educational prograns which will help famers to improve theix understanding of the basic economic relationships in the farm protlem.

A study of attitudes can also be helpful in the design and interm pretation of future studies of farmers preferences for different types of programs. Davidson and Mighell state that a better understanding of basic attitudes toward the key concepts is needed in the early stages of a comprehensive inquiry into farner opinions. 3 This understanding can help in phrasirg questions in later studies and in subsequent analysis of survey results. Such a study is also valuable as a benchnark in attempts to analyze the extent of changes in farmers" attitudes over a period of time.

Finally, increased knowledge of how farmers get their information about policies and programs should help agricultural leaders choose the most efficient techniques and channels for disseminating such information.

Previous Studies

Hathaway lists three conditions as being necessary for a policy gool: ${ }^{4}$ (1) it must offer simultaneous attaiment of a nuaber of individual ends or values: (2) it must be consistent with the other important noms or values of the group adopting it; (3) it must be able to meet the two preceding criteria for a significant portion of the group having political influence in the particular policy area.

[^1]These conditions illustrate the conflict that can arise when the methods available for achieving the ends (e.gos improved farm income) are not consistent with important noms (e.g., maximum freedom to operate or complete selfwreliance).

Heady said there is agreement that the massive productive capacity of agriculture must be brought under control, and size and costs of surplus storage must be reduced. Disagreement rests not so much on these internediate goals but more on the means to attain them. 5

Stroup 1 ound that many Oklahome farmers did not like the acreage allotment programi on wheat, but about threewfourths believed there should be some method of controlling wheat production. ${ }^{6}$

App and Sundquist, Minnesota, concluded that a situation exists where typical price policy goals of respondents are unattainable with the preferred system of reducing feed grain production. They also said it was apparent that both economic and noneconomic considerations were important in farmers' decisions to participate in the 1961 Feed Grain Program. 7

5Earl O. Heady, "Goals and Values in Agricultural Policy," Price and Income Policies, CAEA Report 7, Iowa State University (Anes, 1960) p. 5.
${ }^{6}$ Geonge Stroup, "OkZahoma Wheat Producers" Attitudes, Opinions and Knowledge of Government Wheat Programs and Related Public Affairs Issues," (unpub. Ed. Do thesis, Comell University, 1961).

7 James L. App and W. Bo Sundquist, The Feed Grain Program in Minnesota, Minnesota Agricultural Experiment Station Eulletin 464 (St. Paul, 1963)。

Tompkin and Sharples, Ohio, found strong evidence that many farmers make their business decisions within a framework which includes influences comonly referred to as "noneconomic" or economic intangibles. 18

Hasbargen found that 43 percent of 133 Minnesote farmers interviewed ranked attitude as the first consideration in importance in making their decision on the 1963 Feed Grain Progran. He concluded that:

For policy makers, an important finding is that other considerations may be as important as the profit motive to farmers examining alternatives in government programs. Rather than by making it more financially attractive, a voluntary program might be more effectively "sold" by (1) improving farmer attitudes toward it and (2) stressing its security aspects.

In a recent study of participation in government land retirement, prograns, Squibb and West found that Missouri farmers" attitudes ranged between two extremes - - from wanting complete absence of goverment programs to fovoring strict supply control. However, they did not find. a relationship between attitudes toward the land retirement programs and rate of compliance. Rate of compliance depended primarily on how woll the program fit the individual farmers's operation. 10

In an earlier study in 1950. Hatheway found that farmers desired price supports at high levels but did not want production controls … a situation he called an inconsistency and conflict in farmers ${ }^{\circ}$ attitudes.

[^2]But his mork also suggested that in choosing a support nethod for a parm ticular commodity, consideration can be given to economic feasibility without fear of arousing strong farmer valuations. He did find that, in general, farmers had valuations against prograns which made food prices higher to the consumer, strong valuations against, large numbers of federal workers to administer a program, and a great dislike of red tape, 11

In a later article, Hathaway proposed that farmers' values should be discussed in marginal terms:

If wo re dealing with absolute values, political com promise would be unlikely. By using the marginal concept, it can be perfectly rational for an individual to hold freedom as his highest value, even above life itself, and still be willing to sacrifice some small portion of his freedon in order to achieve more security. This involves marginal rates of substitution between the values and easily serves to explain why persons make different choices at different times. 12

Another early study in New York (1951) found that nany farmers were confused and undecided about price support programs. The farmers who favored price supports, generally those on the lower educational levels who had smaller farms and less efficient farm businesses, did so because they interpreted support as a way to hang on in a competitive agricultural situation. Production controls were opposed by six out of 10 farmers interviewed. 13 It should be pointed out that farmers at that time had much less experience with price support programs than farmers today.

IIDale E. Hathaway and Lawrence Witt, "Agricultural Policy: Whose Valuations?" Journal of Farm Economics, XXXIV (1952), pp. 299w309.
${ }^{12}$ Dale E. Hathaway, "Agricultural Policy and Farmers" Freedom: A Suggested Framework," Journal of Farm Economics, XXXV (1953), pp. 496m510.
${ }^{13}{ }_{\text {Edward }} 0$. Moe, New York Farmers 0 Oinions on Arricultural Progeans: Cornell Extension Bulletin 864 (Ithaca, 1952).

Farners consistently have stated that basing allotments on historical acreages is unfair. They believe that the farner who had been doing a good job of using soil conserving crops was penalized when base acreages for allotments were set. 14

While many farmers were dissatisfied with the way allotments were set up, not many famers in an Ohio study had any ideas on how to improve on the method. 15

In this same study, the main reasons given for voting against quotas in the 1954 wheat referendum were: (1) loss of independence and freedom of choice, (2) program does not help small famers, and (3) disrupts farm organization.

In a 1957 survey in eight states, farmers said the following were the most important causes of the farm problem: (l) current high cost of production items, (2) high profit margins taken by processors and distributors of fam products, (3) labor union practices which contimally raise wages, and (4) poor management ability of some farmers. 16

14John Schnittker, J. O. Bray, and B.J. Bowlen, Kansas Farmers ${ }^{\circ}$ Views on the Wheat Price Support and Acreage Control Progran, Kansas Agricultural Experiment Station Economics Report 77 (Manhattan, 1957). Also see $G$. A. Pond and D. S. Moore, Farmers Reaction to Corn Allotment and Other Farm Programs, University of Minnesota Institute of Agricultuxe Report No. 218 (St. Paul, 1954); Farmers ${ }^{\text {P }}$ Reactions to Acreage Allotments; a report by the North Central Farm Management Research Cormittee, published by Kentucky Agricultural Experiment Station (Lexington, 1955): Stroup. p. 206.
${ }^{15}$ Mervin G. Smith, ot al., An Analysis of Ohio Farmers ${ }^{\text {® }}$ Views and Responses to Wheat Price Support and Control Program: Ohio Agricultural Experiment Station, Mineo Bulletin AE258 (Colurnbus, 1955).
${ }^{16} G_{G e n e} M c M u r t y$, et $2 l .$, Farmers ${ }^{8}$ Attitudes Toward the Income Problam and Its Solutions, Purdue University Agricultural Experiment Station Mirneo EC-157 (Lafayotte, 1958).

Possible solutions to the farm problem which were ranked as most important were expansion of foreign trade and increasing the domestic markets for agricultural products. Farmers were unilling to accept "too many farmers" as a cause of their problem and were just as unvilling to accept programs which would move people out of agriculture.

Also in the study, farmers were asked to agree or disagree with a series of statements involving various degrees of governmental activity in agricultural and nonagricultural fields. There was substantial agree. ment anong farmers that governnent has some responsibilities to help fare mers and businessmen, but there was considerable disagreement as to how far these responsibilities reached. There was very little difference between large and small farm operators in their attitudes toward governm mental responsibilities.

A 1964 survey in Iowa gave results similar to those in the eight... state study. 17 Ranked as most important causes of the farm problem were "high costs of production inputs" and "high profits taken by processors and distributors." "Too many farmers" and "surplus production due to new technology" ranked towards the bottom of the list.

## Sources of Information

The field of communications has been receiving considerable attertion in recent years. More and more administrators and educators are recogn nizing the importance of having an understanding of commuication processes and habits. ${ }^{18}$

17 Wallace E. Ogg, "The Education of Leaders for a Viable Democracy," a paper read at the Fifth Anrual Policy Review Conference, Washington, $D_{0}$ Co, January 26,1965, p. 7.

18 Williar. V. Haney, Communication Patterns and Incidents, (Homewood, 1960), p. 1.

Thmons stated the problem in the following way:
It remains doubtful that ressarchers have been comm pletely successful in translating their findings into form which can be readily understood and utilized by other groups in our society nore deeply involved in making and administering policies and programs than we are. In other words, we as scientists in particular fields probably know considerably more than we as a society utilize in our approaches to agriculture"s problems. Thus, we face the two-fold challenge of putting together our knowledge from relevant disciplines in a form understandable by the public and in the process discover the areas of inquiry needed for onhancing our knowledge of values and means to attain them. 19

The process of diffusion of fam information is a complex one. In sone cases, dissemination of information is a planned and intended function involving a complex organizational structure and wellwormulated procedures. In other cases, exchange may occur without planing and with no more structure than a chance meeting of two people with cormon interests. 20

One of the first questions to be considered deals with information sources. To what media do farmers look for different types of information? A number of studies have provided partial answers to this question. In general, these studies show that mass media have their greatest impact by making farmers aware of new practices and ideas. 21 Then personal contacts become more important as farmers evaluate new practices and ideas for their ow operations.

19 J . F. Timmons, "Society Values and Goals in Respect to Agriculture: Discussion," Goals and Values in Agricultural Policy (Arres, 1961), p. 364.
${ }^{20}$ Rex Campbell and John Bernett, Your Audience. . What's It Like? University of Missouri Agricultural Experiment Station Bulletin 77I (Columbia, 1961), p.l.
${ }^{21} \mathrm{G}_{\mathrm{G}}$ M. Beal and J. M. Bohlen, The Diffusion Process, Iowa Agriculw tural Experiment Station Special Report 18 (Anes, 1957)。

Several studies have indicated that the higher incone，more highly educated farmers make more use of mass media than do their opposites． Lower income farners who tend to think in traditional terms are more likely to be convinced through personal persuasion of noighbors or friends． 22

Lionberger and Coughenour found that even the organization of the noighborhood can have offects on sources of infomation used．${ }^{23}$ Farmers who were more highly integrated into their neighborhood social organizam tion rated other farmers as their top source of information．Farmers who had less contact with their neighbors rated mass media as their most important source of information．

It may be dangerous to generalize about information sources．Evidence indicates that the most＂mportant source＂will vary with the subject under consideration．${ }^{24}$ Several studies have looked specifically at sources farmers use．for government policy and progran information．Stroup found that onewfourth of the Oklahoma wheat growers he interviewed believed farm magazines were their major source of such information．Following in importance were letters from agricultural agencies，daily newspapers， and visits with personnel of agmantural agencies． 25

[^3]App and Sundquist queried farmers about their sources of information on the 1961 . Feed Grain Program. About 80 percent said they received inform mation from the county Agricultural Stabilization and Conservation Service office (ASCS). Newspapers, farm papers, and radio ranked second, third, and fourth in frequency of contact. 26

Hadwiger interviewed a sample of famers at the time of the 1963 wheat. referondun. Supporters of the program relied primarily on the ASCS as a source of information vhile magazines vied with the ASCS as the most important source of information for "no" voters. Newspapers and neighbors also ranked high, but television was not considered as influential as other sources. 27

Outline of Following Chapters

The order of presentation for the remainder of this dissartation is as follows:

Chapter II an describes the procedure and methods of analysis used, and also, the areas sampled.

Chapter III - presents famers opinions on causes of the farm problem, what farm prograns should accomplishs and acceptable means of raising farm income from wheat.

Chapter IV - analyzes famers" pereeption and attitude scores for differences between certain groups of famers as classified by various socioeconomic variables.
${ }^{26}$ App and Sundquist, po 19。
${ }^{27}$ Hadwiger, pp. 9-10.

Chapter V - relates perception and attitude scores to specific prow gram preferences by regression techniques to determine if such scores can increase the predictability of farmers" preferences.

Chapter VI - discusses the sources of information farmers use in learning about fam policies and prograns, and famers" conception of the role of the College of Agriculture and Extension Service in presenting such information.

Chapter VII a sumarizes the results of the study and presents the conclusions and their inplications.

## CHAPTER II

PROCEDURE AND AREAS SAMPLED

The first step in designing the questionnaire was to formulate a series of questions to determine famers opinions toward the following: (1) what causes the current farm problem, (2) what a wheat program shonld accomplish, and (3) what are satisfactory means of rajsing farm income。 One question, made up of several parts, was designed to get a measure of farmers ${ }^{\text {p }}$ perception of the current agricultural situation.

The second step was to formulate a wide range of questions relating to the goals, values, and attitudes which might affect farmers" prew ferences for specific types of prograns. To do this it was necessary to determine that kinds of goals, values, and attitudes might apply to goverment farm prograns.

Mach has been written about goals and values of American farmers. ${ }^{1}$ Most of these writings heve been in somewhat general terms with no effort being made to relate values and goals held to specific behavior. However, researchers at Cornell University who attempted to relate value orientam tions to prectice adoption by New York farmers concluded that choice situations must be specific if high correlations are to be obtained between values held and behaviorsil action. ${ }^{2}$
$1_{\text {See Goals }}$ and Values in Agricultural policy (Anes, 1961).
${ }^{2}$ Olaf F. Larson, "Basic Goals and Values of Farm People," Goals and Values in Acricultural Policy (Ames, 1961), p, 143-157.

Bremster says the heart of any serious social problem is a conflict of deeposeated value judgments concerning the kinds of people and forms of social organization that are most prized. ${ }^{3}$ In such conflicts, choice of geals in inhibited by uncertainty as to what alternatives are possible and which ones are most desirable. There are problems of meshing deepe soated values which were developed in the premachine age, with current Genomio ant technological conditions.

Four creeds that have guided development of various Anerican policies through the years, according to Brewster, are the work ethic, democratic creed, enterprise creed, and the creed of self-integrity, There is no need to describe these in detail here but their mention does provide a starting point for devaloping an approach to determining the values and attitades which can profitably be examined in light of the current agricultraral situation.

The work ethic undoubtedly has had a strong influence on agricultural policy. This sthic says that man should work hard and strive for excellm arce in his employment if he wents to merit the respect of his fellownen. Thas value might be reflected in a farmer"s attitude torard efficiency in agricultural production. This attitude might also reveal a farmer. ${ }^{0}$ feeling about his responsibility to the economic welfare of society in genema.

Brewster ${ }^{\circ}$ woxlc ethic includes the judgment that the self-made man is the most respected of all. This value might be rerlected in a farmer ${ }^{\circ}$ s attitude tovard governnent expenditures for agricultural programs. This

3 John Ho Brevster, "Society Values and Goals with Respect to Agrin. cultrue," Goals and Values in Acricultural Policy (Ames, 1961), ppo 114 137.
attitude might also be influenced by the work ethio judgment that society owes to each man the equivalent of his contribution.

A famers attitude toward govemment help may also be an indication of how strongly he holds to the enterprise creed as described by Brevster. Included in this creed are the judgments that (1) the individual is and ought to be responsible for his ow economic security throughout life, and (2) owers have the right to say how their production mits will operate.

In this general field of attitudes, questions for this study were designed to detemine farmers attitudes in the following subject areas:

1. General liberalmeonservative orientation as determined by attitudes toward govemnental participation in econonic affairs.
2. Efficiency in farm production.
3. Farmers" concern about goverment and consumer costs.
4. Responsibility of goverment to support farm income.
5. Administration of past goverment programs.
6. Importance of progran infomation.

In the area of infomations questions were ained at finding out What infomation sources famers use most, and whether they believe they get enough infomation about parm programs to make intelligent choices. Another question was designed to obtath famers" concepts of the role of the College of Agriculture and Extension Service in disseninating finform mation on farm policies and prograns.

Measurement of attitudes and opinions is a complex process.
It is particularly complex in situations whexe enotions may becone very much involved, as is the case when discussing farm policies and programs.

Thair said that many economists hesitate to attempt studies of human moti－ vations and behavior because of the complexity of the problen and the lack of proper training．${ }^{4}$ He noted that humans are victins of rationalization and，because many motivations are below the threshold of recognition，direct questions cannot be depended upon to give reliable answers．He stressed the need for research to determine what kinds of indirect questions will give reliable answers．

Questions conceming attitudes or opinions，especially where hypothet－ ical situations are involved，create difficult problems of commnication between interviewter and respondent． 5 one sociologist has said there is a desperate need for better projective techniques and better ways of getting respondents to reveal attitudes that are too emotionally charged to be accessible to direct questioning．${ }^{6}$ The problem of emotionally－toned words is a threat to the reliability of answers in any interview？

One of the chief problens in comnection with attitude scales is their validity．The validity of any score is dependent upon the cooperation of the person answering the questions．A person can easily fake his response to many questions if he so desires．

Another problem is that a person${ }^{\circ}$ s stated attitudes may not predict how he will act in a specific situation．Some studies report substantial

[^4]corpatations between scoies on an attitude scale and observed behavior; otherg report negligible correlations. Moch of the research suggests a positive correlation in the neighborhood of .50 to . 60 between scores on attitude seales and actual perfomence or behavior. ${ }^{8}$

Iimitations of attitude acales were aptly described by Thurstone:
All that we can do with an attitude soale is to measure the attitude actually expressed with the fuli realization that the subject may be consciously hiding his tme attitude or that the social pressure of the situation had made him really believe what he expresses. All that we can do is to minimize as far as possible the conditions that prevent our subjects from telling the truth, or else to adjust our intarpretations acoodingly, 9

These problems and limitations might lead one to question the value of attempting research in such on area as attitudes towards farm policies and programs. However, two points can be mades (1) older, commony used methods of attitudinal research, such as direot questions, may be of same use if their Limitations are kept in mind, (2) sone of the newer teche niques being developed by psychologists and sociologists may help reduce the limitations involved in such studies. In a discussion of image research. which is quite similar to attitudinal research, Boulding has put the prow blen in this perspective:

Another important area of research in the social sciences whoh is primarily concemed with research into the inage is public opinion polling. Ons can admit all the deficiencies in the method, and at the sane tine one has to confess that there is an important residue of results. The problem of eliciting infomation about images by the simple device of recording answers to questions is by no means insoluble. We do not necessarily have to take these answers at face value. There are difficult and subtle problens of interpretation, and I
$8_{\text {Victor }}$ F. Noll, Introduction to Educationai Measurement (Cambridge, 1957), pp. 293-294.
${ }^{9}$ L. L. Thurstone, The Measurement of Values (Chicago, 1959), p.210.
think one would have to admit there is a certain absence of theoretical structure. Nevextheless, even with the crude apparatus which we have today the results are impressive. They are particularly impressive because wherever the polling is done regularly and with sone systematio notion in mind we can perceive not only sonething about the nature of the image but also how it changes. 10

Attitudinal research is getting more attention from agricultural economists. A number of attitudinal studies were mentioned in the mevien of literature. Staff members of the USDA Econome Research Service have published a bulletin which describes three different analytical methods for measuring famers" attitudes toward use of shortotermi credit。 il Attitudinal research is also an important part of many studies on managerjal ability.

## Techrique Selected

The technique selected for use in the attitudinal section of the study is an adaptation of the Likert scale. The respordent is given a single statement or a number of statements considered descriptive of attitudes toward specific Lueas or programs. He then indicates the extent of his agreenent or disagrement on a fivempoint scale: Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree.

The basic methodology of the tochnique was used by Twyman and Biddle of the Oklahoma State University College of Education in a study of the perception of the role of public school teachers. 12 Hobbs, Beal,
${ }^{10}$ Kerneth E. Boulding, The Image (Arn Arbor; 1956), pp. 156 - 158 . ${ }^{11}$ Don Bostwick, James Esmay, and Gordon Rodewald, Attitudinal Research Relating to Farmers Use of ShortaTerm Credit, U. S. Dapartment of Agriculture ERS-25 (Washington, 1961).

12
J. Po Twyman and Bo J. Biddle, "Role Conflict of Priblic School Teachers," The Journal of Psychology, IV (1963), pp. 183-198.
and Bohlen used it in a study relating certain values held by farmers to their economic return ${ }^{13}$ This type of agreemisagree analysis has been used extensively for public opinion polls by the University of Michigen Survey Research Center: ${ }^{14}$

This method has an advantage in that statements do not have to be scaled on a continuum or assigned any particular weight, but statements should be decidedly favorable or unfavorable. The use of a fivempoint scale for each item provides more information than the simple dichotomy of "agree" or "disagree." 15

In sone cases, more than one statement was used to measure a particular attitude. There is evidence that an index based on several statements bears a nore meaningful and stable relationship to behavior than do answers to single attitudinal questionso ${ }^{16}$ Answers to individual questions are subject to some margin of error. The impact of marginal. errors is greatly reduced when answers to several questions are combined.

Scale scores where multiple statements were used were computed as follows: If the respondent marked "Strongly Agree" on a statement that indicated a positive or favowble response consistent with an attitude, a score of 1 vas given: "Agreep was given a score of 2 , and so on to a score of 5 for a "Strongly Disagree." The scoring system was reversed
${ }^{13}$ Daryl Hobbs, George Beal, and Joe Eohlen, WThe Prediction of Farm Economic Productivity," a paper presented at the Rural Sociological Society Meeting, Northridge, California, August 23-27, 1963.
${ }^{14} \mathrm{~V}$ 。 O. Key, Jro, Public Quinion and American Democracy (Now York, 1961), p. 24.
${ }^{15} \mathrm{~J} . \mathrm{C}$. Nunnally, Jro, Tests and Measurements (New York, 1959), p. 306.
${ }^{16}$ Eva Mueller, "Effects of Consumer Attitudes on Purchases," American Economic Revievi, XLVII (1957), p. 948.
for statenents that reflected a negative or unfavorable attitude. A "Strongly Agree" mark was given a score of 5 and so on to 1 for a "Strongly Disagree" response. An individual's scale scores were obtained by sumw ming the item scores within each scale。

Statements used in the attitudinal questions were gleaned from earlier research projects, newspaper and magazine stories, speeches, and personal contacts. Attempts to validate the scale statements as being representative of different personal positions on the attitudinal area in question consisted of three steps:

1. A large number of statenents was gathered relative to each attitudinal area.
2. These statements were reviewed and those that tended to be duplicating or hazy in neaning were eliminated.
3. The remaining items were administered to a prelininary sample of farmers. Total scores were then computed on each attitudinal subject. Statenents which indicated they would differentiate betrieen the respondents were retained.

Attitudinal responses were analyzed to determine if there were significant differences between farmers when the following socioeconomic variables were considered: production area, age, education, organizational index, farm progran preferences, 1963 referendum vote, fair price for wheats expected fivemear free market price, full or partmine operator, political. party, farm organization membership, debt/asset ratio, total income, offe farm/total income ratio, fam size, tenure, attendance at fam meetings, and net worth.

A Manmowhiney U test was used to analyze differences in the attitudinal scores which were based on ordinal rank distributions. This is a statistic that tests the differences between two rank distributions, and is comparable to the parametric t test of the differences between two means. Siegel describes the test as follows:

When at least an ordinel measurement has been achieved, the Mann-Whitney U test may be used to test whether two indem pendent groups have been drawn from the same population. This is one of the most powerful of the non-parametric tests, and it is a most useful alternative to the parametric $t$ test when the researcher wishes to avoid the $t$ test's assumptions, or when the moasurement in the research is weaker than interval scaling. ${ }^{17}$

The first computational step is to assign the rank of 1 to the lowest score in the combined $\left(n_{1}+n_{2}\right)$ group of scores, assign rank 2 to the next lowest score, and continue until all scores have been ranked. Then

$$
U=n_{1} n_{2}+\frac{n_{1}\left(n_{1}+1\right)}{2}-R_{1}
$$

where $n_{1}=$ number of scores in group $1 ; n_{2}=$ number of scores in group $2 ;$ and $R_{I}=$ sum of the ranks assigned to the group whose sample size is $n_{1}$ 。

It has been shown that as $n_{1}$ and $n_{2}$ increase in size, the sampling distribution of $U$ rapidly approaches the normal distribution. That is, when $n_{2}$ is greater than 20 , the significance of an observed value of $U$ may be determined by

${ }^{17}$ Sidney Siegel, Nonparametric Statistics for the Behaviorial Sciences (New York, 1956), p. 116.

The probability associated with the occurrence of values as large as an observed $Z$ nay be determined by reference to a table of standard normal distribution.

In another part of the analysis, a regression technique is used to determine whether information about farmers ${ }^{0}$ attitudes in addition to socioeconomic characteristics will increase the predictability of prow gram preferences.

It would have been possible to develop specific hypotheses about the relationships of attitudes to all the variables considered. However, the large number of hypotheses necessary to cover all the potentialities would have been impractical and needlessly burdensone. The significant differences discovered by the analysis are considered to be a preliminary validation of some of the existing relationships between attitudes and preferences. 18

## Data Gathering

As the schedule was developed, two potential problems in adminism toring it became apparent. These were the difficulty and length of the schedule. This dissertation deals with only part of the questions asked in the survey. Some questions were unusually difficult because of the numerous implications and qualifications involved. This meant that it would be difficult to keep fron losing the respondent in a mass of detail. To help overcome this problem, a series of cards was used with the responw dent during the interview. The cards carried information in outline form which the respondent could follow as the interviewer road the question.

18 This was the approach used by Everett D. Erb in "A QuSort Study of Attitudes and Achievement," (unpublished Ed. D. thesis, Oklahoma State University, 1960)。

The problem of length of questionnaire developed because of the many variables which were thought to be relevant to farmers' overall preferences for wheat programs. To overcome this problem of length, Part I of the questionnaire, consisting of 13 pages, was mailed to the respondents. The respondent was asked to fill out Part I on his own (see letter in Appendix D). Then an interviewer called the respondent to make an appointment to pick up Part I and fill out Part II of the questionnaire. Most of the questions analyzed in this dissertation were contained in Part I of the questionnaire. The questionnaire is reproduced in Appendices $E$ and $F$.

## Areas Sampled

This study was concerned with the preferences and attitudes of wheat growers -- those who were operating wheat farms. The sample population was made up of individuals designated as actually growing Wheat by the county ASCS offices. Included were full owners, part owners, and tenants. The sample population did not include landlords.

Areas selected for sampling were considered to be representative of four different types of wheat production areas within the hard red winter wheat belt of Oklahoma, Kansas, Nebraska, Colorado, and Texas (see Figure 1). Primary factors considered in selection were land resources, climate, and type of farm operation.

Grant County, Oklahoma, is like much of the wheat production area found in North Central Oklahoma and South Central Kansas where wheat is the most important crop and yields are relatively high and consistent. Texas County, Oklahoma, is representative of the specialized wheat area


Figure 1. The heavy line encloses the area of concentrated hard red winter wheat production. 19 The sample was drawn from the four small enclosed areas.

[^5]in Oklahoma, Northern Texas, Southwestern Kansas, and Southeastern Colorado (often called the Panhandle). Fields tend to be low andi variable.

In Kansas, Washington County was selected as typical of a diversified farming area in North Central Kansas and South Central Nebraska. This is an area in which wheat is an important crop but where other crops are of near equal importance. Yields are relatively high and stable.

Thomas County, Kansas, is typical of the high plains wheat area found in Northwest Kansas, Western Nebraska, and Northeast Colorado.

Another factor considered in the selection of the areas was the general attitude toward wheat programs as reflected by the county vote in the wheat referendum held in May, 1963. The four counties were selected to avoid a sizeable departure from the state average percentage of farmers voting "yes" in the referendum. The Oklahoma state average was 41 percent; Grant County was 43 percent; Texas County was 36 percent. The state average in Kansas was 43 percent; Washington County was 36 percent; Thomas County was 37 percent.

In addition, personnel of the state ASCS office and Extension Service in each state were contacted to determine if there were any current political or personnel problens in the counties selected that would tend to distort the general opinion climate.

After checking with these agencies, lists of all wheat operators (growers) in each county were obtained from the state ASCS offices. Several areas in three of the counties were eliminated after looking at density of operators and consideration of additional information from extension agents and soil maps. It was believed that even though these areas are within the county boundaries, they are not generally represent-
ative of the wheat production areas under study（see Figure 2）because of soil type and the resulting predominant forms of farm enterprises． The areas eliminated tend to be grassy or sandy，and wheat production is not as intensive as in the remaining parts of these countifes．

Budget limitations preventad taking a random sample of farmers over the total areas under study，so a random sample of communities within each county was drawn Then a random sample vas taken of weat operators within these communities．A total goal of 500 interviews was established as a．compromise between budget limitations and an adequate $\mathbb{N}$ for the types of analysis anticipated．The number drawn within each community was proportional to the total number of operators in each community and the county．Interviews were taken during July，August，and Septerber， 1.964 。

Table I presents social and economic data which describe the fasms and farmers found in each county．

## TABLE I

SOCIAL AND ECONOMIC DATA DESCRIPTIVE OF FARMS AND FARMERS IN SURVEY ${ }^{\text {a }}$

|  | Grant | Texas | Thomas | Washington |
| :---: | :---: | :---: | :---: | :---: |
| Number interviewed | 150 | 101 | 90 | 160 |
| Ave．age | 50.8 | 46.8 | 48.6 | 46.3 |
| Ave．years of school | 11.1 | 11 | 10.4 | 10 |
| Ave。total acres farmed | 572 | 1224 | 1324 | 467 |
| Ave acres wheat allotment | 232 | 457 | 337 | 63 |
| Ave．net farmincome，59－63 | \＄3994 | \＄5413 | \＄7012 | \＄2926 |
| Ave．nonmfarm income， 63 | \＄1858 | \＄3068 | \＄1565 | \＄981 |
| Ave．net worth | \＄58，824 | \＄81．275 | \＄108， 697 | \＄41，265 |
| \％Farm Bureau nembers | 41 | 34 | 56 | 33 |
| \％Farmers Union members | 21 | 9 | 39 | 23 |
| \％Democrats | 54 | 57 | 43 | 23 |
| \％Republicans | 37 | 39 | 33 | 69 |
| \％＂Yes＂wheat vote | 41 | 36 | 34 | 34 |

aThese data were summarized from information obtained from farmers interviewed。


Ex Communities eliminated from sample area.
ITI Commities drawn for interviewing.

Figure 2. These county maps show communities which were eliminated before sample was draw and communities in which interviews were taken.

## Refusals and Possible Bias

Schedules were completed on 80 percent of the names draw in the sample. Percentages of completion for counties were: Grant, 81; Texas, 75: Thomas, 83; Washington, 83. The lower percentage of completion in Texas County was primarily a result of greater difficulty in physically contacting the responcents. About 50 percent of the non completions in each county were outright refusals on the part of the farmer to coopexate. The other 50 percent were due to sickness, death, quit faming, or other such reasons.

It is difficult to assess the preferences of farmers who refused to be interviewed. From comments they made, it is believed they tended to be somewhat antimgoverment although this was not true of all of these individuals. The results of the study may be biased slightly toward farmers who prefer government programs but the number of refusals was so small that such bias is not likely to have significantly affected the conclusions of this study.

## Evaluation of Survey Procedure

The procedure of mailing a part of the questionaire to respondents worked quite successfully. Approzimately 75 percent of the farmers who participated had Part I nearly completed when the interviewer arrived to complete Part II. However, the mailout method did have some limitations. There was the possibility of a respondent not understanding the questions in Part I and not having an interviewer present to clarify the question. In such cases, the respondent may have proceeded filling in answers, even though he didn ${ }^{8} t$ really understand the question. On the other hand,
not having the interviewer present may have encouraged more frank responses and reduced interviewer bias.

When an interviewer picked up Part I from a respondent, he would scan through it to see if all questions were answered. In this process, it was quite easy to overlook a question that wasn ${ }^{6} t$ answered. As a result, this part of the questionnaire may have had more omissions than if the interviewer had personally asked all the questions. However, the number of omissions on Part I was not large.

There is always the question of respondent fatigue when dealing with a questionnaire of this length. However, interviewers did not believe such fatigue was a serious problem in this study if the respondent filled out Part I before the interviewer arrived.

Experience in this study indicates that when a team of interviewers is used for taking detailed schedules, one person should edit all schedules within one or two days after they are taken. This procedure would help in getting all schedules corpleted in a consistent manner. Interviewers need a thorough trainjng session before going to the field and a shorter session after each interviewer has taken several schedules.

Several respondents noted the difficulty of some of the questions and said it "would take a week" to really make up their minds.

## CHAPTER III

## OPINIONS ON FARM PROBLETG AND PROGRAM OBJECIVES

## The purpose of this chapter is to describe famors* optrions as to

 What causes the farm problens what a meat progran chould acomplish. and wat are the most acceptable means of rasisting fam incone frow weat.Farmers were asked to agree or disagree on a Eivemplace scale whth ifons related to the above three questions. The soale was: Strongly Agree, Agree, Undecided, Disagree, and Strongly Dissgree.

This chapter will deal with the simple distribution of opinions along this/agreemisagree scale. Opinions may cluster closely together whioh indifates widespread aspeement on the question. In another situam tion the opinion distribution may show a clear-cut bi-polarization. These diferent types of distribution create radically different opinion cone texts for governmental action ${ }^{I}$

## Causes of the Farm Problem

Figures 3 and 4 show the percentages of farmers choosing each of the soale ratings for eight possible causes of the farm problem. The number of observations on this question was 500. Iten A in Figure 3 shows that famers were quite evenly split as to whether improved techology has been
$I_{\text {Key, }}$. $17 \%$



## Iten C. Past Government Farm Programs.



Iten D. Famers Can Got Credit Too Easily。

$$
\begin{aligned}
S A & =\text { Strongly Agree, } A=\text { Agree } \\
U & =\text { Undecided } \\
D & =\text { Disagree, } S D=\text { Strongly Disagree }
\end{aligned}
$$

Figure 3. Distribution of Farmers" Opinions on Agree-Disagree Soale for Itens $A, B, C$, and $D$ as Being Possible Cawses of the Farm Problem.
a. cause of the farm problem. This may indicate that some farmers do not associate improved technology with the current surpluses of some faym comoditíes.

Farmers tended to agree that, high costs of processing and marketing were causes of the farm problem (Item B, Figure 3). This attitude is reflected in the concern of ten expressed by farmers about their declining share of the consuner's dollar. ${ }^{2}$ Another probable result of this attitude is the current Congressional investigation of the structure and margins in the food marketing industry. ${ }^{3}$

Farmers were mixed in their reaction to the effects of past goverment programs, 2s shown in Item C, Figure 3. More farmers were undecided on this statement than on any of the other statements in the question. The f"act that onewhalf the farmers agreed that past governent programs were a cause of the current farm problem indicates that farmers are not fully satisfied with such prograns.

Farmers did not, in general, agree with the statement that farmers can get credit too easily (Iten D, Figure 3). However, a number of famers cited specific examples where they judged that easy curdit contributed to the problem. One such case was in Texas County where a framer complained that low cost loans were available through the government for develoment of irrigation wells. He said that irrigation increases erop output, thus aggravating the farm problem。
> ${ }^{2}$ Geoffrey S. Shepherd, Marketing Farm Products (Ames, 1955), pp. 258-259.
> $3_{\text {Food Field Reporter, }}$ December 7, 1964, po I.

Farmers tended to agree that one cause of the farm problem is thein own attempt to increase incone by increasing production (Iten E, Figure 4). This statement recoived more agreement than did the one on improved teohnology (Item A, Figure 3), although the two are similax in nature. Farmers adopt new technology as they try to increase their income.

The greatest agreement to any statement was elicited by the one which proposed that high wages in industry are a cause of the faxm prom blem (Item F, Figure 4). Farmers may be especially sensitive to this idea for two reasons: (1) farmers have seen the prices of many of the items they buy rise in recent years while prices of the products they sell have falleng and (2) the hourly wages of workers employed in manufacturing appear very high to many farmers.

Item $G$, Figure 4 , shows that farmers also largely agreed that their lack of bargaining power was a cause of the farm problem. This statement has been the rallying crry of the National Farmers Organization.

Finally, a majority of the farmers did not agree that poor managew ment is the rain reason why famers have income problems (Item $\mathrm{H}_{\text {, }}$ Figure 4). However, about onewifth did agree that this was a cause. The specific wording of this statement should be noted as it specifies that poor management is the "main" reason why famers have income problems. The reaction might have been quite different if it had indicated that poor management is "one of the reasons" why farmers have incone problems.

Farmers varied considerably in whet factor they considered to be the most important cause of the farm problems as show by table II. The statenent about high wages in industry was picked most often but it


Item E. Farmers Try to Increase Their Income By Increasing Prow duction.

Item Go Fawners Lack Bergaining Power.



Item F. High Wages in Indusbry Cause High Prices for what the Farmer Buys.


Iten H. Poor Management is the Main Reason Why Fomers Heve Incone Froblens.

$$
\begin{aligned}
S A & =\text { Strongly Agree, } A=\text { Agree } \\
U & =\text { Undecided } \\
D & =\text { Disagree, } S D=\text { Strongly Di sagree }
\end{aligned}
$$

Figure 4. Distribution of Farmers Opinions on Agree-Disagree Scale for Items F, F, G, and H as Being Possible Causes of the Farm Problem.

TABLE II
FARMERS OPINIONS ON MOST IMPORTANI CAUSE OF THE FARM PROBLEM


Ogg calls these the Mfamiliar scapegoats of long standing among farmers. ${ }^{4}$ These choices indicate a lack of understanding and acceptance of the world as it is, according to Ogg, and provide a discouraging prospect for famer acceptance of a policy consistent with longmun adjustments.

The pereentages of "Strongly Agree" ratings were a good predictor of the causes farmers would consider most important. The causes that had the highest percentage of "Strongly Agree" ratings were the ones selected most often as being the most important in Table II.

The complete data for each county are shown in Appendix $A_{s}$ Table $I_{0}$ There appeared to be general agreement among all areas on this question.

## Objectives of a Wheat Progran

In this question, famers were asked whether they considered seven possible objectives of a wheat program to be important. They were also asked to select the objective they considered most important. This question was answered by 499 fammers.

Figures 5 and 6 show the agreenent-disagreement with the seven objectives. Item A in Figure 5 shows that a majority of farmers agreed that keeping down famers" costs to grow wheat was important. A substantial number, 18 percent, were undecided on this statement. It would seen that the 20 percent who disagreed with this statement did not associate costs, or efficiency, directly with their profits.

Strong agreement was given to the objective of keeping wheat prices on a par with other prices in the economy (Item B, Figure 5). This strong

$$
4_{0 g g} \text { p. p. } 7 .
$$




Item B. Keep Wheat Pricos on a Par with Other Prices in the Economy.


Item D. Increase Farm mers: Income from Wheat.

$$
\begin{aligned}
S A & =\text { Strongly Agree, } A=\text { Agree } \\
U & =\text { Undecided } \\
D & =\text { Disagree, } S D=\text { Strongly Disagree }
\end{aligned}
$$

Figure 5. Distribution of Farmers ${ }^{\circ}$ Opinions on Agree-Disagree Scale for Items $A, B, C$, and $D$ as to What a Wheat Program Should Accomplish.
feeling may be due to the great emphasis that has been placed on the con-cept of parity prices in past years. Also, this is a very tangible concept for farmers to grasp. A number of farmers pointed out to interviewers that during the late $2940^{\circ} \mathrm{s}$, they could buy a new tractor for a specific number of bushels of wheat, and now it takes many more bushels to buy a tractor. They appeared to think in terms of the purchasing power of a bushel of wheat rather than total purchasing power made possible by greater yields and larger farms in recent years.

Itern $C$ in Figure 5 shows the wide variation in opinion about the objective of keeping bread prices low. More than one-fourth of the farm mers were undecided on this question. In this case, farmers find themselves in the position of being both a producer and a consumer, and this results in conflict.

Another objective that had general support from farmers was that of increasing farmers ${ }^{\text {a }}$ income from wheat (Item D, Figure 5). However, the percentage of "Strongly Agree" rankings on this objective was just onehalf of that on the objective of keeping wheat prices on a par with other prices in the econony. This again may indicate that farmers think more readily in terms of prices for what they sell rather than in terms of income. It could also mean they believe they are better off with 100 percent parity prices than 100 percent parity income because of increased volume and efficiency.

Item E in Figure 6 shows that a slight majority agreed with the objective of giving farmers freedom to produce and market as they wish. However, this objective had the highest percentage of "Strongly Disagree" rankings of any objective listed. Also, 14 percent were undecided. This indicates that even though farmers would like to see government regulation



Item $G_{0}$ Keep Government Regulation to a Minimum.
$S A=$ Strongly Agree, $A=$ Agree U $=$ Undecided
$D=$ Disagree, $S D=$ Strongly Disagree

Figure 6. Distribution of Farmers ${ }^{\text {b }}$ Opinions on AgreemDisagree Scale for Items $E$, F, and G as to What a Wheat Frogram Should Accomplish.
kept to a minimum, as will be shown by Iten $G$, a substantial number of farmers do not advocate complete freedom to produce and market farm goods.

Farmers generally agreed to the objective of keeping dow government expense (Item $F$, Figure 6). Farmers offen commented that farm programs cost the government too mach for what farmers get out of it. They were especially critical of the number of ASCS employees recuired to administer the prograns.

Agreement was very strong for keeping governnent regulation to a minimun (Item $G$, Figure 6). Farmers repeatedly mentioned their dislike for the red tape and complexity of past prograns.

Table III shows what farm progran objectives farmers considered to be the most importart. The percentage of "Strongly Agree" ratings was again a good predictor of the statements farmers would consider most important. A majority chose the objective of keeping wheat prices on a par with other prices in the economy. Again there is the question of Why this objective should rank so much higher than the objective of increasing famers ${ }^{0}$ incone from wheat. This feeling anong famers may have significance for policy makers when considering the relative acceptability of a price support progrem as compared to an incone support prom gram.

The objective of giving farmers freedom to produce and market as they wish makes a surprisingly strong showing in this table when the disw tribution of its agreemdisagree rankings is considered in Figure 6. When this objective is combined wjeth the related objective of minimizing govemm ment regulation, the total percentage of farmers selecting them as the most important objectives about equaled the percentage of farmers who in another part of the study said they would prefer a free market over a govermment

## FARMERS' OPINIONS ON MOST IMPORTANT OBJECIVE OF FARM PROGRAMS

| Objective | Percent Nating |
| :--- | :---: | :---: |
| Keep wheat prices on a par with other prices |  |
| in the economy. |  |

${ }^{a^{\text {Percent }}}$ of famers answering question.
$b_{\text {Mean rating where }} S A=1, A=2, U=3, D=4, S D=5$ 。
program. Personal goals of price, income, and freedom ranked much higher than society's goals of officiency, low food costs, and low governnent costs. Within the desired goals are the two elements which cause much of the controversy about farm programs today: the desire for higher prices and income vse the desire for maximum freedom to produce and narket. Under current conditions, the only feasible way to satisfy both of these goals is for goverrment to support farm prices and incomes with sizeable Treasury outlays, but the public resists such programs. A product of the conflict is a dichotomy anong farmers as represented by the contrasting ideologies of the Farm Bureau and the Farmers Union.

Complete data for each county are show in Appendix A, Table II. There was general agreement anong areas on these items.

## Means of Raising Income

Efforts to raise farm income from wheat could focus on a number of different methods. Farmers interviewed were given eight different methods and asked to approve or disapprove of each as the principal means of raisw ing farm income. The number of observations was 498.

Item A in Figure 7 shows that nearly threewfourths approved of reduce ing farmers costs to grow wheat. This would seem logical because many farmers complained of the high cost of production inputs they had to buy, especially machinery.

Farmers also approved of reducing the marketing and processing margins of middlenen, as show by Item $B$, Figure 7. Farmers had expressed earlier that the high cost of processing and narketing was one of the causes of the current form problem. However, a number of farmers raised the question as to how these margins would be reduced.

Three-fourths of the Lamers $^{\text {disapproved of increasing the price of }}$ bread (Item C, Figure 7). Again, farmers are in the conflioting position of being a producer and a consumer. Also, sone farmers commented that raising the price of bread would not do much to raise the price of wheato Famers have seen the price of bread increase while wheat prices have decreased.

Farmers split nearly equally on their approvalwdisapproval of con* tinuing present government prograns with increased levels of support


Item A. Reduce Farmers ${ }^{\text {a }}$
Costs to Grow Wheat.


Item B. Recuce the Marketing and Processing Margins of Middlemen.


Item C. Increase the Price of Bread.


Item D. Continue Present Government Programs but Raise the Level of Support Prices and Government Payments.
$S A=$ Strongly Approve, $A=$ Approve
$\mathrm{U}=$ Undecided
$D=$ Disapprove, $S D=$ Strongly Disapprove
Figure 7. Distribution of Farmers ${ }^{\text {P }}$ Opinions on Approve-Disapprove Scale for Items A, B, C, and D as Being Principal Means of Raising Farm Income.
prices (Item $D_{9}$ Figure 7). Nearly onewfourth were undecided. This indicates the unsettled nature of farmers' feelings toward present programs.

Item E in Figure 8 shows that farmers generally did not approve of using governmental control of the supply of fam products going to market. This provides an interesting contrast with the preceding statement and another part of this study which showed that about three-fourths of the famers preferred some type of goverment program to a free market. Evidently many farmers do not associate all types of programs which limit production with govermental control of supply. The result again points to the confilict fiaced by farmers between desire both for high income and freedor in production and marketing.

Even stronger disapproval was given to the jdea of making it easier for farmers to move off the farm so that there is more income for those remaining (Item F, Figure 8)。 It received a much higher percentage of "Strongly Disagree" ratings than did any other statement in the question. This is not surprising mes a group usually will resist the idea that sone of its members would be nore useful in some other occupation. There is still a strong feeling of agricultural fundanentalism among many farmers and some farm organizations. This longmeld doctrine is freguently used in political speeches to farmers.

The reaction against this idea of making it easier for faxmers to move of the farm has important policy implications. Economists generally agree that one of the adjustments needed is to nove a substantial amount of labor resources now underemployed in agriculture into other sectors of the econony. A program designed to accomplish this objective would have


Item E. Use Govemment Control of Supply of Farm Products Going to Merket.


Item $G_{0}$ Increase Exports with Govermment Subsidies or Donations if Necessary.


Iten F. Make it Easier for Famers to Move Off the Farm so That There is More "Income" for Those Remaining.


Item Ho Find More Uses for Farm Products.

$$
\begin{aligned}
S A & =\text { Strongly Approve, } A=\text { Approve } \\
U & =\text { Undecided } \\
D & =\text { Disapprove, } S D=\text { StrongIy Disapprove }
\end{aligned}
$$

Figure 8. Distribution of Farmers Opinions on Approve*Disapprove Scale for Items $E, F, G$ and $H$ as Being Principal Means of Raising Farm Incone。
to be named and handled carefully to aroid a strong negative reaction among many farmers, sone farm leaders, and some nonfarm people such as small tom merchants.

Item $G$ in Figure 8 shows farmers were about equally divided on the issue of increasing exports with goverment subsides or donations. Itrenty-six percent of the famers were undecided on this statement .... the highest percentage in this category for any statenamt in the quas. tion.

An attempt to ind more uses for form products was given more midew spread approval than any other statement in the question (Item Ha Figure 8). This idea has great appeal because it does not require the famer to nake any changes but instead, leaves him free to continue to produce and market as he wishes.

A relatively large number of famers interviewed were undecided on many of the statements in this question dealing with means of raising fam income. The implication is that while farmers in general agree farm income should be raised, many of them do not have a clearmout idea of how best to reach that goal.

Table IV shows that 44 percent of the farmers chose "finding more uses for farm products" as the one best way of raising farm income. This was more then tmice the percentage received by any of the other statements. Famers are probably unealistic when they put so moh stress on this idea. Extensive research efforts have focused on this goal for a number of years. Results have offered little promise for any major breakthrough in extend ing the uses of farm products.

## TABLE IV

FARMERS OPINIONS ON THE BEST MEANS OF RAISING FARM INCONE
Best Means of Raising Farm Incone
Find more uses for farm productso
Reduce the marketing and processing margins of
midalemen.
Continue present governent programs, but reise the
level of support prices and goverment paynents.

The use of govemment programs received little approvel as being the best means of raising farm income. This indicates that when given a genw eral type of choice, farmers want to move away from goverment prograns. However, it was show elsewhere in this survey that when confronted with a more specific choice between a government program and a free macket, a ma jowity of farmers proferred some type of prograno

This raisos sexious questions about the relevance of the survoy results reported in farm maganes where farmers are asked rather general questions about the optimal degree of govermment involvenent in agriculw ture. These survey responses might vary considerably with the degroe of specificity of the questions involved.

Complete county data on this question dealing with means of raising farm income are show in Appendix A. Table III. Again there was general. agreerant among areas on these items.

## Summary of Opinions

In sumary, the analysis in this chapter illustrates the difficulty of developing ferm policies and programs which will bring about desiroble adjustments and yet have widespread approval among farmers. first, it was found that farmers tended to blame the farm problem on causes which lay beyond their control. Forty percent said the most important cause wat either high wages in industry, or high marketing maxgins. Only nine percent rated improved technology as the nost important cause。

Secondly, the analysis showed that farmers disagreed as to the most important objectives of farm programs. Sixtymone percent said higher wheat prices and incomes were most impontant while 25 percent
wanted more freedon from government regulation. These conflicting goals result in farm organizations asking the policy planners and the legislam tive bodies for opposing types of prograns. In addition, the planners and legislative bodies must consider society's goals of lot bread prices, low government costs, and production efficiencys, all three of which were rated at the bottom of the list by farmers.

Finallys it wes found that 64 percent of the farmers said the best means of raising farm income was to find new uses for farra products, or reduce maketing margins. These cannot be considered realistic approches. An additional 10 percent of the farmers said the best way to increase farm income was to reduce farmers" costs to grow wheat. Such an effort on the part of all farmers would likely increase output and further depress prices and incomes. The idea of making it easier for farmers to move out of agrim culture was strongly rejected.

The difficulty of developing acceptable farm policies and prograras will be discussed further in the next chaptex in the analysis of farmers ${ }^{*}$ perception of the curcent agrioultural situation.

## CHAPTER IV

ANALYSIS OF FARMERS ${ }^{\text {P }}$ PERCEPTION AND ATTITUDE SCORES

Other researchers have noted that a famex: preteronces tor fam programs are probably influenced by a munber of attitudes as well as the programs tangible effects upon the individual's farm operation. It can also be postulated that a farmer ${ }^{9}$ s perception of the current farm sito uation will have an effect upon progran preferences. This chapter will present the results of this study's attempt to relate famers ${ }^{8}$ perception of the current agricultural situation and various attitudes to farm progran preferences and a number of socioeconomic variables.

The perception and attitude scores discussed in this chapter are based upon as few as one statement or itern, and in one instance as maxy as 11 statements. The scores, in the order in which they are discussed. are:

1. Perception of current farm situation.
2. LiberalmConservative oxientation.
3. Attitude toward farm production officiency.
4. Attitude toward government cost of farm programs.
5. Attitude toward consumer cost for food.
6. Attitude toward goverment ${ }^{\hat{}}$ s responsibility to support farm prices and incomes.
7. Attitude toward administration of past government programs.
8. Attitude toward importance of fom progran informetion.

After each of the items within each soale has been treatod separately, total attitude scores will be analyzed for assoctation with a number of socioecononic variables. Finally, a profile of scores will be presented, comparing groups of farmers with different preferences. All simplo pexe centage figures used in this chapter are based on 499 observetions.

Perception of Current Situation

Previous research in the area of farmers ${ }^{0}$ understanding of fam prograns has been ained primarily at determining faxmers knowledge of causes of the farm problen and of specific types of programs. ${ }^{\text {l }}$ It was felt, however, that it would be desirable to get a more basio measure of famers ${ }^{8}$ perception of the current agricultural situation and the underlying economic relationships.

That this concept of economic pereeption is an important problens is illustrated by comments made by Professor W. W. Cochrene in a sumary of his experiences as economic advisor to Secretary of Agriculture

Orville Lo Freeman:
The economic literacy of farmers generally is distressm ingly lowe In the wheat referendum of 1963 , there were farmers who actually believed that wheat prices would wise with the elimination of price support or the reduction of price support to 50 percent of paxity for that commodity. Most livestock producers, and many of their leaders, have no conception whatsoever of the indirect price and income support provided producers of animal products through the support of feed grain prices. Most producers do not understand the differential effect on their income fron an output increase on their paxticulare fam resulting from a technological advance, and from an aggregate output increase resulting from the industrymade sdoption
$I_{\text {Stroup, pp. }} 134 \omega 166$.
of a new and improved technology And the implications of farm technological advance for the average size of farm and the number of farms and famers ame just not considered. ${ }^{2}$

The practical effects of this lack of understanding have been outlined by Tweeten:

In my judgement the great void in fiam policy is not lack of program alternatives on even knowledge of their implications. Rather the hiatus is between what is known by economists and what is known and applied by farm mers. The policymaker himself may be informed, but a Congressman who realizes that a program $X$ which farmers now want will be completely unsatisfactory in the longm mun may be inclined to vote for $X$ if a negative vote spells no return to Congress next fall. 3

Carried even further, the effects of farmers ${ }^{2}$ perception of the current agricultural situation are felt in many facets of local commanty life. The quality and types of education offered in local schools may be affected by how well farmers understand longmterm trends in agriculture. The outlook of the commantyrs young people, their choice of ocoupation, and the number that decide to go to college may be influenced by how famers view the agricultural situationo Individual farm operations fram organizations, and farmmelated busi= nesses are likely to be affected. Evidence of these effects en be seen by contrasting a commnity in which farmers have been moking noeded adjustments in farm oporations and one in which such adjustments have not been made.

2Willard Wo Cochrane, Wone Obeervations of an Ex Eonomic Advisor: or What I Learned in Washingtong Journel of Earg Eoonomics. XIVII (196s). po 456 .
$3_{\text {Iuther }}$ Tweeten, "The Fam Firm in Agricultural Poluoy Researoh," a paper read at the Workshop on Prioe and Income Policies. Agrocultural Policy Institute, North Carolina State University, Raleigh, Apmil 2l. 1965.

This study had three objectives in attempting to measure farmers ${ }^{\circ}$ perception of economic relationships. The first objective was to get an indication of the types of relationships farmers fail to understand. This infornation should be a useful guide for plaming future educational programs. Another objective was to see if a farmer's perception of the current agricultural situation was related to his preferences for farm programs. The third objective was to provide a benomarik for possible use in comparisons at some later date to deternine whether the perception level had changed.

Farmers were asked to respond to the eleven items shown in Table V. An agree-disagree scale rather than a truesfalse scale was used for two reasons. First, most of these statements are not clearmout facts as such but are open to some argument. However, it was believed that farm mers with a keener perception of economic relationships would respond differently than those with less understanding. Second, it was believed that more valid responses would be given if the farmers did not realize that they were taking a form of a "test," so the same type of response scale was used as for the other attitudinal questions. One limitation of this type of scale for measuring perception is the difficulty of inputing a logical numerical weight to an opinion strongly held (Strongly Agree or Strongly Disagree) compared with a response of "Agree" or "Disagree"

Table $V$ shows the total sample response of farmers to the individual statements. A majority of farmers recognized that food supplies are not likely to be short just because people are leaving the fam (Item A)。 On Item $B$, most farmers still agreed with the long-time favorite expression of farmers that "depressions are farm bred and ffarm fed." They have not

## TABLE $V$

DISTRIBUTION OF FARMERS ${ }^{\circ}$ ANSWERS AND DISCRIMINATIVE VALUES ON ITEMS RELATING TO PERCEPTION OF FARM SITUATION
Item $\quad \frac{\text { Percent of Fariners Answering }}{\text { SA } A}$
A. There is apt to be a shortage of food because so many people $\begin{array}{llllllll}\text { are moving off the farm } & 4 & 15 & 8 & 57 & 16 & 1.18\end{array}$
B. A depression in agriculture will usually lead the whole $\begin{array}{lllllllll}\text { country into depression. }{ }^{2} & 38 & 50 & 5 & 5 & 2 & .71\end{array}$
C. A growing population will
eliminate the farm surplus problem within about five $\begin{array}{lllllll}\text { yearsod } & 4 & 18 & 29 & 44 & 5 & 1.11\end{array}$
D. If we went to a frree market for farm products, farm income would roturn to recent levels after a short period of adjustment. ${ }^{\text {d }}$ ? 730 27

28
8
1.34
E. Finding new uses for farm products doesn't offer much hope for solving the farm $\begin{array}{llllllll}\text { problena。 } & 4 & 23 & 10 & 51 & 12 & 08\end{array}$
F. The goverrment should support farm prices, but it shouldn ${ }^{6} t$ try to tell a farmer what and how much to produce, d
$\begin{array}{llllll}7 & 23 & 16 & 45 & 9 & 1.08\end{array}$
Go The family farm is rapidly $\begin{array}{llllllll}\text { going out of existence. } & 24 & 51 & 6 & 15 & 4 & .79\end{array}$
H. There's no reason for the U. So to have so much sur.m plus food while there are


Io The wheat price would be higher than it is now if farmers didn ${ }^{\circ} t$ use new $\begin{array}{llllllll}\text { varieties and fertilizers。 }{ }^{\circ} & 4 & 30 & 15 & 39 & 12 & .78\end{array}$

TABLE $V$ (Continued)

|  | Percent of Farmers Answering |  |  |  |  | DV' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | SA ${ }^{\text {a }}$ | A | U | D | SD |  |
| J. Farmers could easily organize to control production and raise prices. ${ }^{\text {d }}$ | 4 | 14 | 15 | 49 | 18 | 1.05 |
| K. When developing a wheat export policy, the United States must consider its exfects on other wheat exporting countries. ${ }^{c}$ | 5 | 53 | 19 | 18 | 5 | . 64 |

${ }^{a_{S A}}=$ Strongly Agree; $A=$ Agree; $U=$ Undecided; $D=$ Disagree; $S D=$ Strongly Disagree。
bThis discriminative value of an item is explained in the text.
$c_{\text {A }}$ "Strongly Agree" or "Agree" response was considered to be the more perceptive response to these items.
$\mathrm{d}_{\mathrm{A}}$ "Disagree" or "Strongly Disagree" response was considered to be the more perceptive response to these itens.
recognized that fluctuations within agriculture have less impact on the total economy as the non-farm sector grows. In fact, some farm organizaw tion leaders say that farmers have been facing depression conditions for the past few years. Yet the nonwarm sector has continued to prosper.

Nearly onemalf the famers rejected the idea that a growing population would soon elininate the farm problem (Item C). A relatively large number were undecided on this statement.

The response to Item $D$ shows about one-third of the farmers were optimistic about prices and income under a free market although this is contrary to what economists have generally predicted for such a situation. Again a considerable number were undecided.
receive food packages Irom the U. Sorl However, he points out that the United States is already moving all the food under Public Law 480 that the reciplent countries will take, either as a matter of national policy or as a matter of handing, storage, and transportation facilities.

Onemalf the farmers apparently did not underetand the relationship between wheat prices and the use of new varieties and fertijirers, acorom ing to Item I. This is consistent with the findings reported earier that famers did not generally recognize improved technology as being one of the causes of the farm problem.

Twomthirds of those interviewed recognized that farmers would not find it easy to organize and control production thenselves (Item J). Perhaps the holding actions by one of the farm organizations in recent Jears have denonstrated the difficulty involved.

Iten $K$ shows that a majority of famers agreed that the United States must consider other exporting countries when developing wheat export policy. The level of understanding of this situation appeared to be considerably greater than that on Item $H$, although the two are similar in nature.

The percentage of mudecided ratings on an item may be some indicam tion of how difficult it was for famers to answer that itom. Assuming this relationship, then Iten $C$ and $D$ were the most difficult to answer while $B$ and $G$ were the easiest to answer".

In sumarizing the overall distribution of answers on these perception items, the most disturbing factors would be the lack of famers"

[^6]understanding of the situations indicated by Items $C, D, E, F, H_{s}$ and I. A high degree of farmer understanding of the situations indicated by these items is rather basic to intelligent decision making on farm prom grams o The items: which diseriminated best between famers with the lowest and highest perecetion scores will be discussed after an oxplanation of total seores.

A total score for each individual was obtained in the following way: A "Strongly Agree" or "Agree" response to items $\mathbb{E}_{g} I_{9}$ and $K$ was considered to show a keener perception of the curpent agricultural situation than other responses. These items were scored as follows: Strongly Agree $=$ I; Agree $=2 ;$ Undecided $=3 ;$ Disagree $=4 ;$ StrongIy Disagree $=5$ 。

A "Disagree" or "Strongly Disagree" response to iterns $A, B, C, D$, $F, G, H$, and $J$ was considered to be in agreenent with economists ${ }^{*}$ per-m ception of the agricultural situation. These items were scored as follows: Strongly Agree $=5 ;$ Agree $=4$ : Undecided $=3 ;$ Disagree $=2$; Strongly Disagree $=1$ 。

A total score for each individual was obtained by sumning his scores on the 11 individual items, with the possible rarge being fron 11 to 55. Individuals with the lowest scowes were considered to have the keenest perception. This fact must be kept in mind to undexstand the anslysis in the following pages.

Figure 9 shows the distribution of total scores. It would be reason able to expect most of the scores to 1 all between 22 and 44 because to get outside these linits, an individual would have to be very consistent in his ratings and make some use of either the "Strongly Agree" or "Strongly Disagree" ratings. Most of the statenents in the perception
scale would not be expected to evoke strong reactions from farmers. Also, with this type of scale, those individuals who were undecided about many of the items would tend to score in the $30^{\circ} \mathrm{s}$.

No. of Famers


Figure 9. Distribution of Total Scores on Perception Scale.

When using a group of items such as the ones just discussed, it is useful to identify those which were most discriminating. The method of discriminative analysis used here was described by Rundquist and Sletto in $1936,{ }^{5}$ and is still recommended. ${ }^{6}$ The total scores were divided into quartiles and then a comparison was made of responses in the highest and lowest quartiles. The procedure is sumarized in the following formula:

5E. A. Rundquist and R. L. Sletto, Rersonality in the Depression (Minneapolis, 1936), p. 12。
${ }^{6}$ Allen Edwards, Techniques of Attitude Scale Construetion (Nev York, 1957), pp. 154-155.

$D V=$ item scale value difference; $W=$ unit weight; $F=$ frequency; $Q_{H}=$ highest quartile; $Q_{L}=$ lowest quartile。

The discriminative value is, in essence, the difference between the mean rank given an item by the high and low quartile groups. The discriminative values for the items on perception are given in Table Vo It can be seen that Items $A, C, D, F$, and $H$ were the most discriminatingo The item with the greatest discriminating power, Item $D$, dealt with expectations for income under a free market. Overall, the size of the discriminating values on these statements was comparable with that obtained by other researchers using similar methods.?

The next step in the analysis was to determine whether significant relationships existed between the perception score and various socioeconomic variables. The method of analysis was to divide each variable into two groups or classes and then compare the mean scores of the two groups. Also, comparisons were made between areas. The Mann-Whitney test was used to detect statistically significant differences. One disadvantage of this type of analysis is that all other variables are not held constant as the relationship between one variable and a particular attitude is analyzed.

The socioeconomic variables considered and the groups within each of these variables were:

7 Rundquist and Sletto, po $11-15$.

1. Age. Group A: up through 44 years of age: Group B: 45 years and older.
2. Education. Group A: up through 10 years of school finished; Group Bo 11 or more years of school finished.
3. Organizational Index. Group A: organizational index 0 to 8; Group B: an index of 9 or greater. The organisational index thas a total score for each respondent based on a sumation of the following: 3 points for being a nember of a farm organizam tion, commodity group, or commnity cominitee; 4 additional points for being an officer of a group: 1 additional for attendew ing meetings occasionally; 2 additional for attending meetings often. The mean index for all respondents was 7.82 .
4. Most Preferred Program. Group A: respondents who preferred a free market; Group B: those whe preferred some type of governnent farm program.
5. Least Preferred Program. Group A: respondents who least prew ferred a free market; Group B: those who least preferred a mandatory type of farm program.
6. Referendum Vote. Group A: respondents who voted "yes" in the 1963 wheat referendum: Group B: those who voted "ne."
7. Fair Price for Wheat. Group A: respondents who gave up to $\$ 1.99$ per bushel as being a fair price for wheat: Group B: those who gave $\$ 2$ or over. $A$ "fairel price was derined to fare mers as being a price that would pay their costs of production and give them a "fair" or "just" proftt.
8. Five-Year Free Market Price. Group A: respondents who estimated a free market price for wheat at the end of five years to fall within the range of $\$ 1$ and $\$ 1.50$ (nost economists" predictions fall within this range); Group B: those who gave any other price.
9. Full or Part-time Operator. Group As respondents who said they were full-time farmers; Group B: those who said they were parttine farmers.
10. Political Party. Group A: Democrats: Group B: Republicans.
11. Farm Bureau Membership. Group A: members; Group B: nonmermers.
12. Debt to Assets Ratio. Group $A$ : debt was from 0 to 25 percent of total assets; Group B: debt was more than 25 percent of total assets.
13. Total Income. Group A: \$5,000 and under combined total income from all sources for Texas, Grant, and Thomas Counties, and $\$ 3,000$ and under for Washington County; Group B: over $\$ 5,000$ total income for Texas, Grant, and Thomas Counties and over $\$ 3,000$ for Washington County. Average total income in Washington County was considerably less than in the other three counties.
14. Ratio of Off-Farm Income to Total Income. Group A: offifarm income was 25 percent or less of total income: Group B: of $\mathrm{f}=$ farm income was greater than 25 percent of total income。
15. Farm Size. Group A: small farms of less than 259 acres in Grant and Washington Counties, and less than 500 acres in Texas and Thomas Counties; Group B: large farms of 500 or more acres in Washington and Grant Counties, and 1.000 or more acres in Texas and Thomas Counties.
16. Tenure. Group A: full owners; Group B: those who rented all the land they operated.
17. Attendance at Policy Meetings. Group A: respondents who had attended a meeting on policy or programs within the past two or three years; Group B: those who had not attended such a meeting.
18. Attendance at Educational Meetings. Group A: respondents who often or occasionally attended educational meetings held by Extension or Vocational Agriculture; Group B: those who seldom or never attended such meetings.
19. Net Worth. Group A: respondents with net worth of $\$ 50,000$ and under in Grant and Washington Counties, $\$ 100,000$ and under in Texas and Thomas Counties; Group B: those with more than $\$ 50,000$ net worth in Grant and Washington Counties and more than $\$ 100,000$ in Texas and Thomas Counties.

The analysis showed no significant differences between geographic areas on the perception scale. Table VI shows the differences in mean scores on the perception scale between the groups within each variable where some association was found. Statistically significant differences are shown by asterisks. The nean score of each group and the nomalized $Z$ values for these differences, and for scales discussed later, are found in Appendix $C$.

The amount of association between the perception score and the sociom economic groups can be summarized under the following headings: Strong Association -- differences were statistically significant within two or more counties, within the two states, and for the total sample, with all

## DIFFERENCES IN MEANS ON PERCEPTION SCORES FOR VARIOUS SOCIOECONOMIC GROUPS ${ }^{a}$



Each variable was divided into two groups. The difference shown is mean of group on top or left minus mean of group on bottom or right. A positive difference indicates that group on bottomneight had the lower mean, hence a keener perception of the current agricultural situationo

Note: For all tables in this thesis, one asterisk means significance at . .05, two asterisks at . 01 probability level.
differences being in the same direction; Some Association - differences were significant within two counties, with a county and a state, or within the total sample; Iittle or № Association -* no significant differences or within one county only.

| Strong Association | Some Association | Little or No Association |
| :---: | :---: | :---: |
| Most Preferred Program | Education | Age |
|  |  |  |
|  | Organizational | Full or Partmine |
| Referendum Vote | Index |  |
|  |  | Farm Bureau Membership |
|  | Least Preferred |  |
|  | Program | Debt/Assets Ratio |
|  | Fair Price for Wheat | Total Income |
|  |  | Off-Farm/Total Income |
|  | Five $m$ Year Free Market Price | Ratio |
|  |  | Tenure |
|  | Farm Size | Net Worth |
|  | Attendance at |  |
|  | Policy Meetings |  |
|  | Attendance at |  |
|  | Other Educational |  |
|  | Meetings |  |

The strongest association between perception score and a specific group was found in the referendun vote variable. The differences between those who voted "yes" and those who voted "no" were significant within each county, each state, and for the total sample. Those who voted "yes" had the lower mean score, indicating a keener perception of the current agricultural situation, as measured by the items in the scale。 When the two variables that showed a strong relationship to the perception score are considered, respondents who preferred some type of government program tended to have a keener perception then did those who preferred a free
market. There was also an indication that the following groups tended to have somewhat keener perception: farmers with nore education, farmers active in commuity organizations, famers who gave a fair price for wheat of $\$ 2$ or more per bushel, farmers who estinated the free market price of Wheat to be between $\$ 1$ and $\$ 1.050$ at the end of 5 years, large farmers, and those who had attended policy meetings. The association between the perw ception score and attendance at other educational meetings was unusual in that farmers in Washington County who did attend such meotings showed significantly keener perception, while in Grant County those who did not a.ttend such meetings showed the keener perception.

Extreme caution must be used in interpreting these pereeption scores in relation to specific groups. First, the differences in scores are small. Second, the limitations of the scoring method used were pointed out previously. Third, the items included in this scale cover only a small portion of the total agricultural situation. The indicated results with regard to level of perception may have been entirely different if another set of items had been used.

## Liberal Conservative Orientation

The terms "liberal" and "conservative" have been used so indiscrim inately in recent years that their memings have become quite blurred. Durring the summer of 1964 , when this survey was made, the term "conserm vative" was frequently used to describe an individual who believed that the individual is basically responsible for his own security and that government intervention in economio affair"s should be kept to a minimum.

In contrast, a liberal was considered to be an individual who believed society has a responsibility to see that all citizens enjoy a rising level of living and that the Federal govermment should be playing a greater role in seeing that society moves towards this goal. This is the general con text in which the terms "liberal" and "conservative" are used in this study. Most of the items used in this question were ained primarily at getting famers ${ }^{\circ}$ reactions to governmental participation in various economic and social areas.

The items and the distribution of rankings on then are shown in Table VII. Farmers seemed to be strongly conservative on items $B, \mathrm{E}_{\text {, }} \mathrm{H}$, and $I_{0}$ They indicated that the national debt should be reduced and that government relief programs have become too large. A majority felt that the goverment should see that people are free to mun their businesses as they please and that present goverment farm programs are contrary to the free enterprise systen. They also tended to be conservative on the quese tion of whether the govemment should provide nedical care for the aged, but there was considerable division of opinion.

The only idea to which famers responded in a strongly liberal fashion was that bige businesses make entirely too much profito This is probably a reflection of the farmers ${ }^{*}$ long wheld resentment against big businesses in general. Farmers tended to be liberal on the question of whether the government should get involved in such projects as electrical power and housing. Their experience with rural electrification and FHA housing loans nay have influenced their thinking on this subject. Farme mers also tended to take a liberal position on tha govemment ${ }^{\text {B }}$ s respon sibility to provide jobs for men who want to work. The percentage of

| Item | Percent of Farmers Answering |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SA | A | U | D | SD | $D V^{2}$ |
| A．The Federal goverment should not get involved in such prow jects as electric power and housing。 | 10 | 23 | 20 | 38 | 9 | 1.07 |
| B．Instead of reducing taxes recently，Congress should have tried to reduce the national debt．$b$ | 21 | 36 | 22 | 19 | 2 | 1.34 |
| C．The Federal government ought to see to it that anyone who wants to work can find a job。 ${ }^{\circ}$ | 8 | 36 | 18 | 32 | 6 | 1.36 |
| D．Most big businesses make entirely too much profit．${ }^{\text {e }}$ | 21 | 40 | 22 | 15 | 2 | ． 85 |
| E．Government relief programs have gotten to be too large。 ${ }^{\circ}$ | 24 | 41 | 23 | 11 | 1 | 1.26 |
| F．It＇s time for Congress to pass a bill that will prow vide medical care for the aged．${ }^{\text {c }}$ | 5 | 26 | 25 | 28 | 16 | 1.77 |

G．The Federal goverment should be doing more to help small towns and cities build $\begin{array}{llllllll} & 9 & 9 & 35 & 18 & 27 & 11 & 1.55\end{array}$

H．One job of government is to see that people are free to run their businesses as they $\begin{array}{lllllllll}\text { please。 } 6 & 28 & 44 & 14 & 12 & 2 & 1.09\end{array}$

I．Present government farm prom grams are contrary to the free

${ }^{\text {a }}$ Discriminative value。
$\mathrm{b}_{\mathrm{A}}$＂Strongly Agree＂or＂Agree＂on these items is considered a conser＂ vative response．

A＂Strongly Agree＂or＂Agree＂on these items is considered a liberal response．
"Undecided" rankings was quite high on most of the itens in this liberalconservative group. There were relatively few ratings of "Strongly Agree" or "Strongly Disagree。" This was somewhat surprising wo it was expected that some of these statements would evoke strong reactions.

A total liberal-conservative score was calculated for each individual by summing his responses on the nine items. The lowest scores indicate the most conservative individuals. Figure 10 shows the distribution of these scores. The possible range was from 9 to 45 . If a farmer had been undecided on each of the items, his score would have been 27. The mean score of 24,90 is some indication that farmers as a whole were conservative in their viewpoint on these items. ivo. of Farmers



Figure 10. Distribution of LiberalaConservative Scores.

The items in this question which were most discriminating between high and low scoring individuals are shown by the discriminative values in Table VII. Item $F$, on medical care for the aged, had the greatest power to discriminate. The statement on the amount of profits of big business had the least power to discriminate. Overall, the items in the liberal-conservative scale had more power to discriminate than did the items in the perception scale。

A comparison between areas showed that washington County was slightly more liberal than Texas County. The difference in mean scores was 1.93 . which was significant at the 001 level. This was the only significant difference between areas on this score. Table VIII shows the differences in mean scores on the liberalwconservative scale for the groups showing association with the scale。

The association between the liberal-conservative score and the socioeconomic variables can be summarized as follows:

| Strong Association | Some Association | Little or Mo Association |
| :---: | :---: | :---: |
| Referendum Vote | Age | Organization Index |
| Political Party | Level of Education | FivemYear Free Market Price |
| Most Preferred Program | Off-Farm/Total Income Ratio | Full or Part-Time |
| Least Preferred Program |  | Farm Bureau Membership |
| Fair Price for Wheat |  | Debts/Assets Ratio <br> Farm Size |
|  |  | Tenure |
|  |  | Attendance at Policy Meetings |
|  |  | Attendance at Other Educational Meetings |
|  |  | Total Income |
|  |  | Net Worth |

The strongest association was found between the liberal-conservative score and the wheat referendum vote. Those who voted "yes" had a more liberal score on the scale. These results agree with a priori expectations, as did the results showing that Denocrats and those respondents who preferred a government program over a free market were significantly

## TABLE VIII

DIFFERENCES IN MEANS ON LIbERAL CONSERVATIVE SCORES FOR VARIOUS SOCIOECONOHIC GROUPS ${ }^{\text {a }}$

a Each variable was divided into two groups. The difference shom is mean of group on top or left minus mean of group on botton or righto A positive difference indicates that group on bottom or right had the lower mean, or a more conservative orientation.
more liberal than other farmers. Pamers who gave a faix price of whet of $\$ 2$ or $\quad$ nore were also more liberal. Older farmers and femers with fewer years of schooling showed sore tendency to be more lioeral. Results were mixed on the variable of offam to total income ratio. In Grant County, farmers with a highex proportion of offorarn income were more liberal while the opposite was twe in Thomas County.

Attitude Toward Efficiency in Farming

One of the long-run goals of society is for each sector of the economy to be producing at maximum efficiency $m$ that is, producing an optimum anount of product with a minimum anont of resources.

A wheat grower concerned about efficiency of production in the farming sector may look at fam programs differently from a grower not concemed about this concept. Seven items were used to measure the respondents ${ }^{\circ}$ concern about farming effictenog. The results are shom in Table IX.

The response to Item $A$ shows that farmers were divided on the question of whether crop history is a good way to detemnine allotments for the future. A majority of famers agreed that one goal of farm prom grams should be to keep increasing efficiency in agricultural production (Item B)。A substantial majority disagreed with restricting the amount of land a farmer can operate and with restricting the use of fertilizers (Item $C$ and $D$ ).

Iten $E$ shoved that a majority did not think govemment has the pespon sibility of seeing that every famer nakes a decent living. However, a majority did indicate that it is important that all farm boys who wat to farm should be given the oportuaity to do so (ItemF). This latter response may reflect the attitude that a farm boy should at least be given the opportunity to try any vocation he so chooses. More Iikely, this response was due to a longweld fundamentalist value anong farmers that the best vocation for most fam boys is faming. Iten $G$ indicates that a majority of farmers believed that. low cost production should be one of the prerequisites of a farm program.

| It |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

In general, a majority of rosponses indicated a concern among wheat producers about efficiency in the farming sector. The one excepo tion was the response to the item on the importance of providing oppor-m tunities for boys to farm.

The greatest discriminating power between the high and low quartile groups was found in Item $E$, which said that the goverment should see that every farmer makes a decent living. The least power to discriminate was found in Item $G$ dealing with the voting dow of any form progran that would raise the cost of producing a bushel of wheat.

Scores on the seven items were sumed to get a total attitude score for each respondent. The distribution of total scores is shown in figure 11. The possible range was from 7 to 35, while the actual range wes from 8 to 31. Those with the lowest scores were considered to be the nost con cerned about efficiency in the farming sector.

No. of Famers


Score
Figure 11. Distribution of Scores on Conocm About Efficiency in "the"Farming Sector.

DIPEERENGE TH MBASS ON SCORES RELATING TO ATTTHUDE TOWARD FARI PRODUCTION RFITCIENCY FOR VARIOUS SOCIOECONOMIC GROUPS ${ }^{2}$

| Area | $\begin{aligned} & \frac{48 e}{(0-44)} \\ & (45 m 020) \end{aligned}$ | $\begin{array}{r} \text { Qucetion } \\ (0-10) \\ \hline(11-10) \\ \hline \end{array}$ | $\begin{gathered} \begin{array}{c} \text { Organizam } \\ \text { thonal } \\ \text { Inder } \end{array} \\ \hline \text { Ioremat } \end{gathered}$ | $\begin{aligned} & \text { Least Prem } \\ & \text { Preod Progan } \\ & \text { Free hende } \\ & \text { maret tray } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grant | --7. 1.08 | 2.20** | 1.83** | 2.23* |
| Texas | -1.13 | 1. 31 | 1.42\% | . 57 |
| Thomas | -. 78 | . 92 | . 34 | 1.32 |
| washington | --1.06** | 1.36* | . 31 | 1.19 |
| Oklahoma | …1. 13 * | 1.84** | 1.65\% | 1. 52 \% |
| Kansas | -1.46** | 1.24** | . 39 | 1.24* |
| Total | -1.21** | 1.66\%* | 1.07** | I.20** |


| Area | $\begin{array}{r} \text { Wheat } \\ \text { Vote } \\ \hline \end{array}$ | $\begin{aligned} & \text { Fair Wheat } \\ & \frac{\text { Price }}{(0.1 .99)} \end{aligned}$ | Debt/Asset $\qquad$ Ratio | Tlotal Incoae | Off-farm/ <br> Total <br> Income <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes-No | (2.00-1112) | Lownitim | Lotwetigh | Low-High |
| Grant | 1.40* | -2.11** | .75 | 2.11** | $\cdots .54$ |
| Texas | . 79 | . 63 | . 97 | . 63 | …-2.36 |
| Thomas | 2.08* | - . - . 5 52* | 2.20* | 3.69\%* | 3.15** |
| Washington | 1. 2.4 | . 16 | .92 | .35 | . 96 |
| Oclahona | 1.1.7\% | -1.20* | . 81 | 1. $50 \%$ \% | - 1.84 |
| Kansas | 1.54.3* | $=.21$ | 1. 3.30 * | 3. $3.55 \%$ \% | 1.70** |
| Total | 1.32** | -. 44 | .99* | 1. $56 \%$ \% | .36 |

Attended
Educational
Heotings Farin Size Political Party Net Worth
Aree Tes-No SmaI Large Den. ReD. Ior-Mirn

| Grant | -. 51 | 2.09 | . 22 | . 22 |
| :---: | :---: | :---: | :---: | :---: |
| Texas | -1.60* | 2.31* | 1. 26 | 1.94** |
| Thomas | -. 59 | 2.66 | 1.81 | 1.76 |
| Washington | -. 79 | . 91 | 1.91\%* | 1.03 |
| Oklahoma. | -. 95 | 2.18** | . 61 | . 62 |
| Kansas | -. 69 | 1.54* | 1.54\% \% | 1.45* |
| Totel | -.92* | 2.01** | . 66 | 1. $12 * *$ | mean of group on top or left, minus mean of group on bottom or right. A positive difference indicates that the group on bottom or right had the lower score, indicating greater concem about efficiency in the farming sector.


| Strong Association | Some Association | Little or No Association |
| :---: | :---: | :---: |
| Education | Age | Most Preferred Program |
| Referendurn Vote | Organizational Index | Five-Year Free Market Price |
| Total Income | Least Preferred Program | Full or Part Time <br> Farm Bureau Membership |
|  | Fair Price for Wheat | Tenure |
|  | Debt/Asset Ratio | Attendance at Policy Meetings |
|  | Political Party |  |
|  | Off-Farm/Total Income Ratio |  |
|  | Farm Size |  |
|  | Attendance at Educational Meetings |  |
|  | Net Worth |  |

The strongest association between this attitude score and specific groups was found in the education and total incone variables. Those with more years of schooling and higher total income were more concerned with efficiency. Also showing a strong association with this attitude was the referendum vote. Those who voted "mo" showed the greater concern.

Other groups that tended to show more concem were younger farmers, those with a high organizational index, those who least preferred a mandaw tory program, farmers who gave less then $\$ 2$ as a fair price for wheat, those with a high debt to asset ratio, those with a high gatio of offfarm to total incone, large farmers, those who had a higher net worth, those who attended educational meetings, and Republicans.

Attitude Toward Goverment Cost

A wheat grower ${ }^{8}$ s preferences for different types of wheat prograns are likely affected by how concerned he is with the government costs of such programs. A measure of each respondent's attitude toward government costs of farn programs was obtained by suming the ratings on the two items shown in Table XII. Item A was analyzed previously as a part of the question on what a wheat program should accomplish. Item $B$ was just one in a series of statements to which respondents were asked to agree or disagree.

TABLE XII
IISTRIBUMION OF FARMERS ANSWERS AND DISCRIMINATIVE VALUES ON ITENS RELATING TO ATTITUDE TOWARD COSTS OF GOVERIMENT PROGRAMS

| Item | Percent of Farmers Answering |  |  |  |  | DV ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Koep down government expense。 | 34 | 46 | 11 | 7 | 2 | 1.70 |
| B. Farm price support programs really don ${ }^{\text {t }} \mathrm{t}$ cost the government much. ${ }^{b}$ |  | 21 | 15 | 43 | 17 | 2.34 |

${ }^{2}$ Discriminative value
$\mathrm{b}_{\mathrm{A}}$ "Disagree" or "Strongly Disagree" response to this item was considered to show concern about government costs.

The response to Iten $A$ shows that most of the farmers interviewed thought goverment costs should be kept low. A majority also disagreed with the idea that farm price support programs really don ${ }^{6}$ t cost the government much. Item $B$ had the greatest discriminative value. Taken as a whole, farmers showed considerable concem about government costs.

The distribution of total scores on this attitude is shom in Figure 12. The scores range from 2 to 10 , the ertire possible range. The lower scores indicated more concem about government costs. No. of Farmers


Figure 12. Distribution of Total Scores on Concern About Government Costs.

No significant differences were found between areas. Association between total scores on this attitude and the socioeconomic variables are shown in Table XIII and can be sumarized as follows:

## TABLE XIII

DIFFERENCES IN MEANS ON SCORES RELATING TO ATTITUDE TOWARD GOVERNMENT COSTS FOR VARIOUS SOCIOECONOMIC GROUPS ${ }^{\text {a }}$

|  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |


| Area | $\begin{aligned} & \text { Fair wheat } \\ & \text { Price } \\ & \hline(0-1.99) \\ & (2.00-u p) \end{aligned}$ | $\begin{aligned} & \text { Farm Size } \\ & \text { Small Large } \end{aligned}$ | Attended Educational <br> $\frac{\text { Meetings }}{\text { Yes-No }}$ | $\begin{aligned} & \begin{array}{l} \text { Political } \\ \text { Party } \end{array} \\ & \text { Dem. Rep. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grant | -1.03** | -. 41 | -. 22 | .82** |
| Texas | . 22 | . 19 | . 16 | . 50 |
| Thomas | -. 32 | -. 17 | . 04 | 1.19** |
| Washington | --91** | -.83* | . 67 * | 1.13** |
| Oklahoma | -.59* | -. 16 | -. 07 | .69** |
| Kansas | -. 68 ** | -.54* | .46* | . 96 ** |
| Total | -. 63 ** | -. 34 | . 19 | .76** |

${ }^{\text {a Each variable was divided into two groups. The difference shown }}$ is mean of group on top or left minus mean of group on bottom or right. A positive difference indicates that the group on bottom or right had the lower score indicating greater concern about government costs.

| Strong Association | Some Association | Little or No Association |
| :---: | :---: | :---: |
| Most Preferred | Education | Age |
| Progran |  |  |
|  | Organizational | FivemYear Free Market |
| Least Preferred | Index | Price |
| Program |  |  |
|  | Attendance at | Full or Part Time |
| Referendum Vota | Educational |  |
|  | Meetings | Farm Bureau Membership |
| Fajr Fxice for wheat | Fam Size | Debt/Assets Ratio |
| Political Party |  | Total Income |
|  |  | Attendance at Policy Meetings |
|  |  | Off-Farm/Total Income Ratio |
|  |  | Tenure |
|  |  | Net Worth |
| The strongest association between this attitude score and a specific |  |  |
| group was found in the referendum vote variable. Farmers who voted "no" |  |  |
| were significantly more concerned about government costs of farm programs |  |  |
| Farmers who most preferred a free market and least preferred a mandatory |  |  |
| program also showed greater concern about governnent costs. Other groups |  |  |
| showing the greatest concern within their variables were Republicans and |  |  |
| those who gave a fair price of wheat of under \$2. |  |  |
| The association was less strong in the following variables but |  |  |
| there was some indication that the following groups also showed greater |  |  |
| concern about government costs: farmers with fewer years of education, |  |  |
| small farmers, and those tho did not attend educational meetings. The |  |  |
| results were mixed on the organizational index variable. In Oklahoma, |  |  |
| those with the high reverse was true in | dex of activity sh | the greatest concern. The arent explanation. |

Attitude Toward Consumers ${ }^{\text {B }}$ Costs for Food

One of the issues in farm programs that often causes intense reaction from the press and non-farm public is the effect of such programs on consumer costs. This may become an increasingly sensitive factor in public and political reaction to farm programs as the farm population continues to decrease in size, both in actual numbers and in proportion of total population. It would seem useful then, to determine whether farmers are concerned about consumer costs.

A measure of respondents ${ }^{\text {P }}$ concern about consuner costs was obtained. by suming their ratings on the two items shown in Table XIV. Both of these itens were examined previously, Item $A$ in the discussion of what a wheat program should accomplish, and Item B in the discussion of acceptable ways to raise farm income from wheat.

There is much greater agreement among farmers on Item $B$ than on $A$. Item $B$ is probably the more relevant measure of farmers' concern about consumer costs because of the context in which it was asked. The results indicate that farmers generally were concerned about consumer costs. Iteri A had the greatest discriminating value between farmers with scores in the high and low quartiles.

Figure 13 shows the distribution of scores on attitude toward consumer cost. Scores covered the maximun possible range of 2 to 10.

No. of Femers


Figure 13. Distribution of Scores Relating to Attitude Toward ConsumenuCosts.

TABLE XIV

DISTRIBUTION OF FARHERS' ANSWERS AND DISCRININATIVE VALUES on Itels relating to conceri about consumer costis

| Item | Percent of Fermers Answering |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SA | A | T | D | SD | DV ${ }^{\text {a }}$ |
| A. Keep bread prices lowo | 6 | 23 | 28 | 37 | 6 | 2.04 |
| B. Increase the price of bread. | 1 | 7 | 19 | 53 | 20 | 1.42 |

apiscriminative value.

No differences were found between areas on thjs score: The associam tion between concern about consumer costs and the socioeconomic variables are show in Table $X V$ and can be summarized as follows:

TABLE XV
DIFFERENCES IN MEANS ON SCORES RELATIIUG TO CONCERN ABOUT CONSUMER COSTS FOR VARIOUS SOCIOECONOMIC GROUPS ${ }^{\text {a }}$

| Area | $\begin{gathered} \text { Age } \\ (0-44) \\ (45-\mathrm{up}) \end{gathered}$ | $\begin{gathered} \text { Education } \\ (0-10) \\ (11-u p) \\ \hline \end{gathered}$ | Least Preferred Program | $\begin{aligned} & \text { Debts/Assets } \\ & \text { Retio } \\ & \text { Low Hish } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Free Mandan Market tory |  |
| Grant | .50 | -. 26 | .07 | $\pm .34$ |
| Texas | . 48 | -. 26 | .83* | . 01 |
| Thomes | . 27 | -. 39 | -. 12 | -. 68 |
| Washington | . 26 | -. $87 * *$ | . 64 | -. $66 \%$ |
| Orclahoma | . 50 * | -. 27 | . 33 | - 20 |
| Kansas | . 25 | -.70\%* | . 41 | -. $66 \% *$ |
| Total | -36* | -.51** | -40* | -. $42 \%$ \% |
|  | Of: <br> Tot |  | Full or Part Tine | Farm Bureau Hembershio |
| Area | Low | High | Ful1 Part Viver | Nember Nonmember |
| Grant |  |  | -. 35 | . 54 * |
| Texas |  |  | . 05 | -. 06 |
| Thomas |  |  | -. 71 | . 19 |
| Washington |  |  | -. 57 | . $46 *$ |
| Oklahoma |  |  | -. 18 | . 36 |
| Kansas |  |  | -. $6.64 *$ | . $38 *$ |
| Total |  |  | -. $40 \%$ | . $33 *$ |

${ }^{\text {anch }}$ Eachable was divided into two groups. The mean difference shown is mean of group on top or left minus mean of group on bottom or right. A positive difference indicates that the group on bottom or right had the lower score, indicating greater concern about consuner costs.


Farmers ${ }^{\text { }}$ attitudes toward governnent ${ }^{\text {s }}$ s participation in various social and economic areas was discussed earlier in the section on liberal-conservative orientation. A direct measure of hov farmers
felt about government's responsibility to support farm prices and incone was obtained by Item A shown in Table XVI. The two attitudes overlap to some extent, yet a person's general liberal-conservative orientation may differ considerably from his attitude toward a specific action which directly relates to his personal financial status.

## TABLE XVI

DISTRIBUTION OF FARMERS ${ }^{*}$ ANSWERS ON ITEM RELATHNG TO ATTITUDE TOWARD GOVERNMENT'S RESPONSIBILITY TO SUPPORT FARM PRICES AND INCOVES

| Item | Percent of Farmers Answering |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SA | A | U | D | SD |
| A. It is the groverment's responsibility to support farm pxices and incomes. | 5 | 26 | 23 | 33 | 13 |

More farmers said that it was not government?s responsibility to support farm prices and incomes than said it was, but there was no majority either way. This again provides an interesting contrast with another part of the survey in which three out of four farmers said they preferred some type of program to a Eree market. The contrast here may be illustrative of a conflict in farmers' goals and values. It may indicate that farmers still hold quite strongly to the value of selfsufficiency, yet see the need for goverment help in the current agricultural situation if income goals are to be reached. The fact that 23 percent of the famers were undecided on this item lends support to the proposition that many farmers face an inner conflict on the question of government support for prices and incomes.

Some significant differences were found between areas on this score as shown in Table XVII. Washington County farmers felt govemment had a greater responsibility to support farm prices than did farmers in either Texas or Thomas Counties. Grant County farmers indicated government had a greater responsibility then did Thomas County farmers. This generally matched the pattern found earlier that Texas and Thomas County farmers were slightly nore conservative than Weshington and Grant County farmers.

TABLE XVII
DIFFERENCES BY COUNTY AND STATE AREAS IN MEANS ON
SCORES RELATING TO ATTITUDE TOWARD GOVERNMENT'S RESPONSIBILITY TO SUPPORT FARM PRICES AND INCOIES

| $\begin{aligned} & \text { Areas } \\ & \hline \end{aligned}$ | Hean Difference <br> $A-B$ |
| :---: | :---: |
| Texas*Thomas | . 11 |
| Texas-Grant | --. 26 |
| Texas-Washington | - 3 36* |
| Thomas-Grant | -.37* |
| Thomas-Washington | $\cdots .47 \% *$ |
| Grant-Washington | -. 10 |
| Oklahomam Kansas | $\underline{-04}$ |

Table XVIII shows the differences in mean scores for various sociow economic groups or attitude toward government's responsibility to supporto farm prices and incomes. The results can be sumarized as tollows:

TABLE XVIII
DIFFerences In means on scores ralating to atitude TOWARD GOVERNMENT'S RESPONSIBILITY TO SUPPORT FARM PRICES AND INCOWES ${ }^{\text {a }}$

| Area | Most Preferled $\frac{\text { Proeram }}{\text { Free }}$ Market Other | Least Prefexred Proging Free Meret Other | $\begin{gathered} \text { Wheat } \\ \text { Vote } \\ \text { Yes }=10 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Grant | -1.41** | -86* | 1.03\%* |
| Texas | -. $87 \% *$ | . 42 | .81** |
| Thomes | -. $59 * *$ | . 79 | 44** |
| Washington | -.80** | 1.60** | -90** |
| Oklahoma | - 1.20\%* | .61** | . $95 \%$ \% |
| Kansas | -.79** | 1.43** | - $74 . \times$ * |
| Total | -1.00** | 1.07** | . $85 \% *$ |
|  | Fair Wheat $\frac{\text { Price }}{(0.1 .99)}$ | Sotal Income | Politicel Party |
| Area | (2.00-410) | Low m High | Deny Reo |
| Grant | - $0.53 *$ | .18 | .10 |
| Texas | 0.34 | . 30 | .67 |
| Thomes | 0.43 | . 65 \% | .81 |
| Washington | - 0.59 \% | - $0.67 \% *$ | 1. 3 5** |
| Oklehoma | =-.43\% | . 26 | .32 |
| Kansas | -4.4.4 ${ }^{\text {\% }}$ | - . 15 | - $72 \times 4$ |
| Total | - - 4 , $3^{*}$ \% | . 08 | . $4.5 *$ |

Each variable was divided into two groups. The diference shom is mean of group on top or leit minus mean of group on bottom ar righto A positive difference indicates that the group on botton or migh had the lower score, indicating an attitude that government has less responsibility to support farm prices and incomes.
Strong Association Some Association Little or No Association
Most Preferred
Total Income ..... Age
Program
Least Preferred Program
Political Party
Education
Organizational Index
Referendua Vote
Fair Price for Wheat
Fivemear Free MarketPrice
Oficmarm/Total Income Ratio
Debt/Asset Ratio
Attendance at PolicyMeetings
Attendance at EducationalMeetings
Farm Size
Tonure
Net Worth
Full or Part Time
Farm Bureau Nembership
The strongest association between this score and the variables wasfound with the most preferred progran and the referendum vote. Those wopreferred some type of goverment progran and those who voted "yes" feltmore strongly that the govermment has a responsibility to support femprices and incomes. Showing a similar attitude were those who leastpreferred a free market and those who gave a fair price of wheat of\$2 or more。
Democrats showed some tendency to have a stronger leeling that the government has a responsibility to support farm prices and incones. The association with total income was mixed.

Attitude Toward Handing of Past Govemment Programs

It wes noted in the review of literature that several studies have found that many famers believe that allotments were initially established on an unfain besis. It was also noted thet many famers dislike the mod tape involved in fam prograns. These two factore may strongly influence farmers" preferences for different types of faxm programs.

A score to quantify each respondent ${ }^{\text {s }} \mathrm{s}$ attitude toward the handing of past government prograns was obtajned by summing the rankings on the two items shom in Table XIX.

TABLE XIX
DISTEIBUTION OF FARMERS ANSWERS AND DISCRTMINATTVE VALUES ON ITEMS RELATING TO ATTITUDE TOWARD HANDLING OF PAST GOVERNMENT PROGRAMS

| Ltem | Percent of Fanmers Answering |  |  |  |  | $D V^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SA | A | U | D | SD |  |
| A. It, ${ }^{\text {'s }}$ not possible to set up an allotment system that is fair to all famers. | 14 | 38 | 10 | 27 | 21 | 2.63 |
| B. Wheat programs have been poorly run (administered) in the past. | 20 | 36 | 19 | 21 | 4 | 2.02 |

A majority agreed that it's not possible to set up an allotraent system that is foir to all formers, and thet wheat programs have been poorly administered in the past. However, there was no overwhelming disapproval of the way programs have been handled.

The distribution of total scores on this attitnde is show in Figure It. The scores ranged from 2 to 10 , the entire possible range. The lower scores indjeated a stronger feeling that fam programs have been handled poonly.

No. of Fammers


Figure 14. Distribution of Scores Relating to Attitude Toward Adrainistration of Programs.

Some statistically significant difierences on this attitude rere found between areas, as show in Table XX , Thomas County farmers felt that the program had been handled more poorly than did either Texas or Washington County farmers.

The association between the scoxes on attitude toward program administration and socioeconomic vaniables are shom in Table XXI The results can be summerized as follows:

TABLE XX
difatrences by Counry and state areas In heans ON SCORES RELATING TO PROGRAM ADMINISTRATION

| Areas | Mean Difference $A-B$ |
| :---: | :---: |
| Texas-Thomas | .68* |
| TexasmGrant | . 19 |
| Texaswivashington | -. 12 |
| Thomas-Grant | -. 49 |
| Thomaswivashington | -.80** |
| Grantmbashington | -. 31 |
| Oklahoma-Kansas | . 06 |


| Strong Association | Some Association | Littie or ino Association |
| :---: | :---: | :---: |
| Wost Preferred Program | Education | Age |
| Least Preferred Program | Organization Index | FivewYear Free Market Price |
| Reîerendum Vote | Fair Price for wheat <br> Political Party | Debt/Asset Ratio |
|  |  | Off.Farm/Total Incone Ratio |
|  |  | Ferm Size |
|  |  | Temure |
|  |  | Total Income |
|  |  | Attendance at Policy Meetings |
|  |  | Attendance at Educetional Meetings |
|  |  | Net Worth |
|  |  | Fuil or Paxt mime |
|  |  | Farm Bureau Membership |

TABLE XXI
DIFFERENCES IN MEANS ON SCORES RELATING TO ATTITUDE TOWARD program adirinistration for various socioeconomic groupsa


Each variable was divided into two groups. The difference shown is mean of group on top or left minus mean of group on bottom or right. A positive difference indicates that the group on bottom or right had the lower score, indicating a stronger feeling that farm prograns had been administered poorly.

Those who preferred a free market, least preferred a mandatory prow gram, and voted "no" felt programs had been handled more poorly in the past. Other groups tending to show this same attitude were famers with less education, those with a low organization index, those who gave a fair price of wheat of less than $\$ 2$, and Republicanso

Attitude Toward Inportance of Farm Program Information

If a wheat grower is to vote intelligently in a referendum, he must show sone initiative in obtaining information on which to base his vote. Perhaps there are some farmers who feel it is "really all too complicated or that "it doesn"t matter what just one farmer like me thinks."

An attempt to measure each respondent"s attitude towards the imporm tance of fam program infomation was nade by summing the rankings on the items show in Table XXII.

## TABLE XXII

DISTRIBUTION OF FARMERS' ANSWERS AND DISCRIMINATIVE
VALUES ON ITEMS RELATING TO ATTITUDE TOWARD IMPORTANCE OF FARM PROGRAM INFORMATION
Item $\quad \frac{\text { Percent of Fanmers Answering }}{\text { SA } A}$
A. Farmers find it too hard to keep up on all the governe $\begin{array}{lllllllll}\text { ment programs that come out. } & 28 & 50 & 4 & 16 & 2 & 1.37\end{array}$
B. An individual farmer can ${ }^{\circ}$ t do much about the farm problem $\begin{array}{lllllllll}\text { so why worry about it. } & 9 & 27 & 11 & 40 & 13 & 2.16\end{array}$
C. Keeping up on farm programs
is just as important as knowing about the latest feeding and fertilizing practices. $\begin{array}{lllllll}28 & 62 & 5 & 3 & 2 & .76\end{array}$
D. Determining what prograns would be best is really the iob of the policy experts. $\quad 2 \quad 14 \quad 14 \quad 39 \quad 31 \quad 1.75$
${ }^{\text {a Discriminative Value }}$

Three out of four farmers agreed that farmers find it hard to keep up with government programs (Iten A). These results and comments made during the interviews indicate that the acceptability of programs could be improved by keeping them as simple as possible and by elininating so many yearetomyear changes.

Iten $B$ shows a majority of famers disagreed with the idea that the individual farmer might as well ignore the farm problem, However, a disturbingly large number (about onemthixd) agreed there was littie reason for the individual famer to worry about it.

Nost farmers agreed that keeping up on farm prograns is just as imporo tant as knowing about the latest production practices (Item C)。 Few farm mers would leave the job of determining "what programs would be best ${ }^{\text {p }}$ to the policy experts (Item D).

A total score on this attitude was obtained by sumaing each responde ent's ranks on the four items. The distribution of these scores is shown in Figure 15. The possible range wes from 4 to 20 , the actual range was from 4 to 17 .
No of Farmers 200

Figure 15. Distribution of Scores on Infomation Orientation Scale.

Some differences were found among areas in attitude toward program information. Table XXIII shows that Thomas County farmers were significantly less concerned about program information than were Texas and Grant County farmers. Washington County farmers were less concerned than Texas County farmers. Overall, Kansas farmers were less concerned than Oklahoma farmers.

TABLE XXIII
DIFFERENCES BY COUNTY AND STATE AREAS IN MEANS ON SCORES RELATING TO INEORMATION ORIENTATION

| Areas | Mean Difference <br> $A$ |
| :--- | :---: |
| Bexas-Thomas | $-1.10 * *$ |
| Texas-Grant | -.45 |
| Texas-Washington | $-.73^{*}$ |
| Thomas-Grant | $.65^{*}$ |
| Thomas-Washington | .37 |
| Grant-Washington | -.28 |
| Oklahoma-Kansas | $-.59 * *$ |

The association between scores and groups within variables is shown in Table XXIV and can be summarizedcassfollows:

## TABLE XXIV

DTFHERENCES IN MEANS ON SCORES RELATING TO INFORMATION ORIENTATION FOR VARIOUS SOCIOECONOMIC GROUPS ${ }^{\text {a }}$

| Area | $\begin{aligned} & \frac{\text { Education }}{(0-10)} \\ & (11-u p) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Organizam } \\ & \text { tional } \\ & \text { Index } \\ & \text { Iow-High } \end{aligned}$ | Most Preferred $\frac{\text { Program }}{}$ Free other Market other | Least Preferred Progan Free Manda Market tory |
| :---: | :---: | :---: | :---: | :---: |
| Grant | . 57 | .81* | . 32 | -. 61 |
| Texas | 1.14 | 1.54** | 1.48** | -. 87 |
| Thomas | 1.47** | . 33 | -. 37 | -. 43 |
| Washington | 1.23** | . 35 | 1.37** | -. 86 |
| Oklahoina | .81* | 1.09** | .81* | -. .70 |
| Kansas | 1.29** | . 30 | . 60 | -. 78 |
| Total | 1.14** | .72** | .70* | $\cdots .82^{* *}$ |


| Area | $\begin{aligned} & \text { Wheat } \\ & \frac{\text { Vote }}{\text { Yes. Mo }} \end{aligned}$ | Attended <br> Policy $\frac{\text { Meetings }}{\text { Yes-No }}$ | Attended <br> Educational <br> Meetings <br> Tes-No |
| :---: | :---: | :---: | :---: |
| Grant | -. 75 | -. 73 | -. 08 |
| Tezas | -. 86 | -1.77** | -1.16* |
| Thomas | -. 14 | . 05 | -. 30 |
| Washington | -2.03** | -1.26** | -. 73 |
| Oklahoma | -.79* | -1.14.** | -. 52 |
| Kansas | -1.33** | -.81* | -. .60 |
| Total | -1.06** | -1.01** | -.61** |

atach variable was divided into two groups. The difference shom is mean of group on top or left minus mean of group on bottom or right. A positive difference indicates that the group on bottom or right had the lover score, indicating greater concem about fam program infomation.

| Strong Association | Some Association | Little or No Association |
| :---: | :---: | :---: |
| Education | Organizational Index | Age |
| Attendance at Policy Meatings |  | Political Party |
|  | Most Preferred |  |
|  | Program | Five-Year Free Market Price |
|  | Least Preferred Program | Fair Price |
|  | Referendum Vote | Full or Part Time |
|  | Attendance at Educational | Farm Bureau Membership |
|  | Meetings | Debts/Assets Ratio |
|  |  | Total Incone |
|  |  | Offararm/Total Income Ratio |
|  |  | Farm Size |
|  |  | Tenure |
|  |  | Net Worth |
| The strongest association between attitude toward program inform |  |  |
| mation and specific groups was found in the variables of education and |  |  |
| attendance at policy neetings, Farmers with more education and who |  |  |
| attended policy meetings showed a statistically significant greater con- |  |  |
| cem towards farm progran information. However; the actual differences |  |  |
| in means were quite small. |  |  |
| Other groups which showed a tendency towards greater concern about |  |  |
| farm progran infomation were those with a high organizational index, |  |  |
| most preferred a goverment program, least preferred a free market, |  |  |
| voted "yes" in wheat referendum, and attended other educational meetings |  |  |

Profile of Attitudes

Association between the various attitudes discussed and program preference can be sumarized in a profile of attitudes as show in Figure 16 . The results are consistent with a priori expectations that farmers who prefer a free market as compared to those who prefer a governe ment progran would: (a) be nore conservative, (b) be nore concerned about government costs, (c) feel that governnent has less responsibility to support farm prices and incomes, and (d) have a less favorable attitude toward program administration. Farmers who preferred a. free market appeared to deviate more from economists" perception of the current agricultural situation and were less concerned with progran information.

A profile based on referendurn vote in Figure 17 shows very similar results.

## Correlation Between Scale Scores

The profiles discussed previously indicate that there is some association between several of the attitiude scores. The strength of this association is shom by the correlation coefficients in Table XXV. The largest coefficients were found between the liberel-conservative scores, farm efficiency scores, govemment cost scores, program adminise tration scores, and government responsibility scores.

Table XXV also shows the association between scale scores, nost preferred program, and referendum vote. Scele scores showing the strongest association with the most preferred program and the referendun vote were liberal-conservative scores, goverment cost scoxes, and govemment responsibility scores. The size of the coefficients between
Keener Perception
of Farra Situation
Kenca Perception
Of Farn Situation
attitudes and program preferences, and their usefulness for prediction will be discussed in the following chapter.

TABLE XXV
MATRIX OF SIMPLE CORRELATION COEFFICIENTS BETWEEN PERCEPTION AND ATTITUDE SCORES, AND PROGRAM PREFERENCES

## (1) (2) (3) (4) (5) (6) (7) (8) (9)

| (1) Perception | $1-.17$ |  | . 21 |  | -. 22 | . 17 | . 22 | . 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (2) Iiberal-conservative | 1 | . 42 |  |  | . 25 |  |  | -. 41 |
| (3) Farm efficiency |  | 1 | . 20 | -. 10 | . 10 |  |  | -. 23 |
| (4) Government cost |  |  | 1 | . 01 | .15 | . 38 | -. 29 | -. 35 |
| (5) Consumer cost |  |  |  | 1 | -. 01 |  | -. 05 | . 03 |
| (6) Program administration |  |  |  |  | 1 | .15 | -. 22 | -. 23 |
| (7) Government responsibility |  |  |  |  |  | 1 | -. 38 | -. 35 |
| (8) Prefer free market |  |  |  |  |  |  | 1 | . 29 |
| (9) "No" vote |  |  |  |  |  |  |  |  |

## Summary of Attitudinal and Perception Scores

Weny of the actual differences in scores were quite small. This could be due to several factors. First, there are likely many individuals who are "middle of the road" in their attitudes. This is indicated by the tendency for many of the scores to cluster around the means. Larger differences would have been obtained if only the high and low quartiles of scores had been analyzed. Second, these scales had not been extensively refined to select items which would be the most discriminative.

With the data now available, it likely would be possible to construct a scale of items which would show larger differences between groups. The fact that in most cases, the differences in means, though small, were in the same direction for all areas supports the proposition that real differences were being measured. A larger sample number,
especially within counties, might heve resulted in a greater number of statistically significant differences. However, the size of total sample appeared to be sufficient to detect significant differences where the absolute value of the difference was large enough to be meaningrul.

It is noteworthy that, in general, larger dieferences were found within socioeconomic groups than between counties and states. It is also noteworthy that the variables, (a) most preferred progran and (b) referendum vote, of ten showed the strongest association with the attitude scores. Little or no association was found with age, farm size, income, net worth, or Farm Bureau membership.

In summarizing the responses to the items on perception and attitudes, it would seem that many farmers have conflicting values and lack an understanding of basic economic relationships. There are likely several reasons for this. Farmers have seen tremendous changes come about in farming during their lifetime. They face the possibility of even more spectacular changes in the future. Farm organizations have mrangled continuously over the best way to make adjustments. Colleges of Agriculture have not devoted much effort to helping farmers understand the social, economic, and political context in which public policy decisions are made.

Many of today's farmers have operated during periods when there was relatively little government control. Many would prefer to operate in such a way but they fear the effect on their incomes. Thus, on the one hand, many farmers still have the old Protestant ethic that they will be amply rewarded if only they work hard enough -w the idea that a man shouldn ${ }^{\circ} t$ need help from anyone, especially not a goverment handout (as
prose support payments are sometimes called). In addition, many farm mers have an aversion to the red tape involved in government programs -- standing in line at the ASCS office or plowing up crops to meet acreage restrictions. Also, many famers chafe when they see other farmers getting a better deal or "getting by" with something undex govermment prograns.

On the other hand, many of these same farmers have seen their incomes hold steady or decrease while city workers have enjoyed rising incomes. They have seen the prices of products they sell go down while products they buy have gone up. Some farmers said that non-agricultural sectors of the economy are receiving considerable government aid, and they believe that agriculture will need help as long as other sectors recejve it. As a result of all these factors, many farmers have these conflicting forces within them.

Whan can agricultural educators do to help farmers reach logical decisions under such a situation? First, it's important that agricultural leaders recognize the conticts within the farmers. Agricultural educators need to correct some of the oliches which are often prevalent in discuss. ions of farm policy and programs. And finally, educational programs should include a discussion of goals and values as well as dollar and cent relam tionships.

## CHAPTER V

## PREDICTIVE POWER OF COMBINED VARIABLES

Basic attitudes, perception, and other variables were found to be related to farmers" preferences for prograns in the analysis of the previous chapter. Because the available data appeared to conform to the assumptions of non-paranetric methods, a Mann-Whitney test of significant differences was used for the analysis. A disadvantage of this test prow cedure was that only two-variable comparisons were made simultaneously while other variables were not held constant. Also, the resulting association between two variables provided little basis for prediction since information provided by other variables influencing program choices was not incorporated in the model.

To circumvent these latter difficulties, multiple regression is used in this chapter to predict program choices of farmers from perception, attitudinal, geographic, and other variables. The program chojee is specified by a zero-one dependent variable; thus the emor structure cannot be expected to approach a normal distribution, even in large samples. The parametric test of significance therefore must be interpreted cautiously.

If a multiple regression of a dependent variable $Y$ which takes on O-l values is run on several explanatory variables $X$, then the calculated
value of $Y$ may be interpreted as an estimate of the conditional probw ability of $Y$, given $X_{0}{ }^{1}$

This analysis can provide a better measure of the relative strength of association of the combined set of variables with progran preference then was possible in the last chapter. The partial regression coeffi" cients indicate the effect of one independent, variable when other variables are held constant. Regression analysis can also indicate whether a knowlodge of farmers attitudes can increase the predictability of farmers ${ }^{8}$ preferences over that provided by socioeconomic characteristics alone. It is not the purpose of this chapter to present a detailed analysis of the factors affecting choices among several programs as this will be the subject of another dissertation.

Three dependent variables related to program preferences were selected: (1) preference for a free market, (2) preference for a mandam tory program, and (3) a "yes" vote in the wheat referendum. Three regression equations were run on each of the above dependent variables in the following sequence:
(1) Dependent varieble $=f$ (perception and attitudinal scores)
(2) Dependent variable $=f$ (sociosconomic variables)
(3) Dependent variable $=f(a$ combination of the attitudinal and socioeconomic variables showing the greatest association with the dependent variable in equations $I$ and 2.)
${ }^{1}$ J. Johnson, Econometric Methods (New York, 1963), pp. 221-228. Johnson points out that extensive application of this zeromone approach has been made by the Social Systems Research Institute of the University of Wilsconsin. The work of the Institute is concermed with the integration of sociological and other variables with the more orthodoz economic variables in the study of the dynamics of socioeconomic systems.

The score related to farmers ${ }^{3}$ attitude toward program information was not included in the regression analysis. This score was included in the analysis of the previous chapter primarily to get a better characterization of specific groups of farmers.

The number of observations used in the regression equations was 346. Approximately 150 of the schedules had to be eliminated from this analysis because certain questions were not answered. Most of the questions not answered dealt with income, net worth, breakeven price, and estimated five-year froe market price. ${ }^{2}$

The regression results are presented in tabular form.

## Preference for Free Market

Table XXVI shows the influence of attitudes and perception upon preference for a free market. The independent variable showing the strongest association with the dependent variable was the attitude toward government's responsibility to support farm prices and incornes. An attitude that goverment has little responsibility was associated with a preference for a free market. The coefficient can be interpreted to mean that for every unit increase in this attitudinal score, the probability of preferring a free market decreased by .0904. For example, Republicans had a mean score of 2.61 on this attitude while Democrats had 2.97 .
$2_{\text {An }}$ alternative procedure would have been to use mean values of variables to fill missing observations. An inspection of the data suggested that missing observations were distributed somevhat randomly among schedules, e.g., persons who did not give net income data tended to give net worth and other data. If the missing observations were truly random throughout the schedules, omitting schedules with missing observations would not lead to bias.

## TABLE XXVI

REGRESSION COEFFICIENTS SHOWING ASSOCIATION OF ATHITUDES AND PERCEPTION WITH PREFERENCE FOR A FREE MARKET

| Variable | Coefficient | $t$ Value | Standardized <br> Coefficient |
| :--- | :--- | :--- | :--- |
| Attitudes |  |  |  |
| Goverment responsibility to |  |  |  |
| support prices | -.0904 | -4.7623 | -.2630 |
| Liberal-Conservative | -.0130 | -2.9270 | -1682 |
| Concern about government cost | -.0268 | -2.1148 | -.1134 |
| Perception | .0097 | 2.0618 | .1047 |
| Past program administration | -.0198 | -1.8525 | -.0944 |
| Concern about farm efficiency | .0069 | 1.2324 | .0667 |
| Concern about consumer cost | -.0041 | -1.1347 | -.0552 |
| Area |  |  |  |
| Washington | -.0874 | -1.7705 | -.0973 |
| Texas | -.0885 | -1.7179 | -.0928 |
| Thomas | -.0718 | -1.2547 | -.0663 |
| Constant term $=.6204$ |  |  |  |
| $R^{2}=.23$ |  |  |  |

${ }^{a_{\text {Trhe }}}$ tabulated $t$ value at $P(.01)$ is 2.58 ; at $P(.05), 1.96$; and at $P(.10)$, 1.64。

Standardized coefficients have been corrected for differences in estimated variance. This permits comparison of the coefficients as to their relative impact upon the dependent variable.

Multiplying these mean scores times the coefficient of -.0904 shows that based on this attitudinal score, the probability of an average Denocrat preferring a free market was only .0325 less than for the average Republican. Nean attitudinal scores for different groups are given in Appendix C.

Other variables whose coefficients were statistically significant at $P(.05)$ or less were liberal-conservative attitude, concern about government cost, and perception of the farm problem. A conservative orientation, concern about government cost, and a less keen nerception were associated
with a preference for a free market. The relationshipswere consistent with those found in the analysis of the previous chapter. The use of perception, attitudinal, and area, vaiables gave an $R^{2}$ of .23 .

Area coefficients indicate county differences in magnitude (probability) of the dependent variable when all other independent variables are at the same level. They allow for differences in regression intercept among counties, but do not allow for differences in marginal response of the dependent variable to the independent variables. In this analysis Grant County was used as a standard of comparison. For example, the probability of a farmer in Washington County preferring a free market was .0874 less than if he lived in Grant County, other things equal.

Table XXVII shows the influence of socioeconomic variables upon preference for a free market. Size of wheat allotment had the largest standard coefficient and indicated that the smaller the wheat allotment, the greater the tendency to prefer a free market. Other factors tending to show a positive association with a free market preference were expectations of a higher five-year free market price for wheat, a relatively good competitive position in a free market situation as compared with neighboring farmers, greater age, a smaller percentage of acres owned, and more education. All of these coefficients were statistically significant at $P(.05)$ or less. The other variables listed, all showing relatively less asociation with the dependent variable, are selfexplanatory except for breakeven wheat price. This was the wheat price per bushel which the farmer said he would need to break even with his cash costs of production. The use of socioeconomic and area variables gave an $R^{2}$ of .22 .

REGRESSION COEFFICIENTS SHOWING ASSOCIATION OF SOCIOECONOMIC VARIABLES WITH PREFERENCE FOR A FREE MARKET


Independent variables selected for inclusion in the third equation were those which showed the strongest association with the dependent variable in equations 1 and 2 。 Both $t$ values and standardized coefficients were considered in making the selection. In most cases the $t$ value was 1.00 or greater for the coefficients of variables selected for equation 3. Some variables were eliminated because the available conputer program put a limit on the number of variables that could be used. Another reason for eliminating variables was to reduce intercorrelation and attendant instability of paranetric estimates. Later results show this effort was not completely successiful.

The results of combining the attitudinal and socioeconomic variables are shown in Table XXVIII. The four variables having the strongest associa.tion with preference for a free market as shown by the standard coefficients included one attitudinal variable and three socioeconomic factors. Three of these coefficients were significant at $\mathrm{P}(.05)$ or less.

The $R^{2}$ was .31 on the combined variables. It is noteworthy that the addition of the attitudinal variables to the socioeconomic variables increased the $R^{2}$ by about 40 percent.

## Preference for Mandatory Progran

Table XXIX shows the association of attitudes and perception with preference for a mandatory program. The perception variable had the highest standard coefficient and indicated that the keener the perception, the greater the tendency to prefer a mandatory program. Two other variables showing relatively large coefficients were attitude toward governm ment's responsibility to support farm prices and liberal-conservative

## TABLE XXVIII

REGRESSION COEFFICIENTS SHOWING COMBINED ASSOCIATION OF ATTITUDES AND SOCIOECONOMIC VARIABLES WITH PREFERENCE FOR A FREE MARKET

|  | Coefficient | t Value | Standardized |
| :--- | :---: | :---: | :---: |
| Coefficient |  |  |  |

TABLE XXIX.
REGRESSION COEFFICIENTS SHOWING ASSOCIATION OF ATTITUDES AND FERCEPTION WITY PREFERENCE FOR A MANDATORY PROGRAM

| Variable | Cosfficient | $t$ Value | Standardized Coefficient |
| :---: | :---: | :---: | :---: |
| Attitudes |  |  |  |
| Perception | -. 0096 | $-2.2038$ | -. 1204 |
| Government responsibility to support prices | . 0347 | 1.9666 | . 1168 |
| Liberalw Conservative | . 0073 | 1.7624 | . 1089 |
| Concern about government cost | . 0108 | . 9212 | . 0531 |
| Past program administration | . 0074 | .7447 | . 0408 |
| Concern about farm efficiency | . 0002 | . 0311 | . 0018 |
| Concern about consumer cost | . 0001 | .0328 | . 0017 |
| Area |  |  |  |
| Washington | -. 1595 | -3.4769 | $\cdots .2054$ |
| Thomas | -. 1152 | -2.1656 | -. 1231 |
| Texas | .. 0606 | -1.2662 | - 0.0736 |
| Constant term $=.1600$ |  |  |  |
| $\mathrm{R}^{2}=.11$ |  |  |  |

orientation. The direction of influence was consistent with a priori expectations: the stronger the feeling that government has a responsibility to support prices and the more liberal the individual, the greater the tendency to prefer a mandatory program. Although both these attitudes stem from somewhat similam ideology, the attitude toward government's responsibility to support fam prices and incones is much more specific in nature than the general liveral-conservative orientam tion. Thus measures of both attitudes are used.

The $R^{2}$ of this group of variables was oll, indicating that the explanatory attitudinal variables predicted very imperfectly the choice oif a mandatory program.

The association of socioeconomic variables with preference for a mandatory program is show in Table XXX. The strongest relationship was one indicating that the less opportunity a farmer saw for nonwfarm enployment, the more likely he was to prefer a mandatory prograx. It is noteworthy that such variables as size of farm, average income, age, education, and Farm Bureau membership had little influence upon preferences for a mandatory prograin. The $\mathrm{R}^{2}$ was. 11 , the same as shown by the attitudinal variables.

The results of using both types of variables are shown in Table XXXI. Few of the coefficients were statistically significant. The combining of the variables raised the $\mathrm{R}^{2}$ from . 11 to .15 , an increase of about one- third.

A "Yes" Vote in Wheat Referendum

Attitudes showed a relatively strong association with famers ${ }^{\circ}$ tenm dency to vote "yes" in the 1963 wheat referendum, as shown by Table XXXII, Famers who were more liberal, less concerned about goverment costs, and had a more favorable attitude toward administration of past programs were more likely to vote "yes". The relationship with perception indicated that the keener the perception, the greater the tendency to vote "yes"。 All of these coefficients were statistically significant at $P(.05)$. The $R^{2}$ was .32. The resulting coefficient of multiple correlation of $R=$ .57 compared favorably with the point made earlier in the study that many researchers have reported a correlation of .50 to .60 between attitudinal scores and actual performance of behaviox. 3
${ }^{3}$ The correlation found here was actually much higher than that rem ported in some attitudinal studies. For example, Mheller, p. 959, reported an $R$ of 25 , regressing consumer purchases on a linear combination of income, age, index of buying intentions, and attitudes.

TABLE XXX
REGRESSION COEFFICIENTS SHONING ASSOCIATION OF SOCIOECONOMIC VARIABLES WITH PREFERENCE FOR A MANDATORY PROGRAM

| Variable | Coefficient | t Value | Standardized |
| :--- | :--- | :--- | :--- |
| Coefficient |  |  |  |

TABLE XXXI
REGRESSION COEFFICIENTS SHOWING COMBINED ASSOCIATION OF ATTITUDES AND SOCIOECONOMIC VARIABLES WITH PREFERENCE FOR A MANDATORY PROGRAM

| Variable | Coefficient | $t$ Value | Standardized Coeificient |
| :---: | :---: | :---: | :---: |
| Socioeconomic |  |  |  |
| Opportunity for nonfarm employment | -. 0544 | -2.1725 | -. 1203 |
| Ratio of off-farm to total income | . 0015 | 2.1114 | . 1159 |
| Breakevenprices | . 0378 | 1.4659 | .0798 |
| Organizational index | . 0026 | 1.1605 | . 0647 |
| Attendance at educational meetings | -. 0507 | -. 8655 | -. 0467 |
| Compliance with allotments | . 0506 | . 7601 | . 0413 |
| Attendance at policy meetings | . 0297 | .6432 | . 0358 |
| Competitive position with neighbors | -. 0195 | -. 5494 | -. 0302 |
| Democrat | . 0186 | . 4856 | . 0274 |
| Five-year free market price | -. 0074 | -. 1832 | -. 0112 |
| Attitudes |  |  |  |
| Perception | -. 0082 | $-1.8183$ | -. 1027 |
| Government responsibility to support prices | . 0290 | 1.6445 | . 0976 |
| LiberalmConservative | . 0049 | 1.1813 | . 0743 |
| Concern about government cost | . 0109 | . 9178 | . 0532 |
| Past program administration | .0076 | .7581 | . 0418 |
| Area |  |  |  |
| Washington | -. 1068 | -2.1209 | -. 1376 |
| Thomas | -. 0942 | $-1.7232$ | -. 1007 |
| Texas | -. 0575 | $-1.1747$ | -. 0697 |
| Constant term $=.0546$ |  |  |  |
| $R^{2}=.15$ |  |  |  |

## TABLE XXXII

REGRESSION COEFFICIENTS SHOWING ASSOCIATION OF PERCEPTION AND ATTITUDES WITH A "YES" REFERENDUM VOTE

| Variable | Coefficient | $t$ Value | Standardized Coefficient |
| :---: | :---: | :---: | :---: |
| Attitudes |  |  |  |
| Liberal-Conservative | . 0293 | 5.6175 | . 3037 |
| Concern about government cost | . 0627 | 4.2077 | . 2122 |
| Perception | -. 0204 | -3.6961 | -. 1766 |
| Past program administration | .0307 | 2.4372 | . 1169 |
| Government responsibility to support prices | . 0317 | 1.4174 | . 0736 |
| Concern about consumer cost | . 0023 | -. 5267 | -. 0241 |
| Concern about farm efficiency | -. 0030 | -. 4620 | -. 0235 |
| Area |  |  |  |
| Washington | -. 1275 | -2.1919 | -. 1133 |
| Thomas | . 0642 | . 9517 | . 0473 |
| Texas | . 0517 | . 8529 | . 0433 |
| Constant term $=-.0857$ |  |  |  |
| $\mathrm{R}^{2}=.32$ |  |  |  |

Table XXXIII shows the association of socioeconomic variables with referendum vote. Seven of these variables showed a relatively strong association with the "yes" vote. There was a negative association between size of wheat allotment and a "yes" vote but a positive association between size of total farm and a "yes" vote. The lower the estimated five-year free market price for wheat, the greater the tendency to vote yes. Farmers who had higher estimated breakeven prices were more likely to vote "yes ", as were farmers who complied with wheat allotments. Farmers who felt their competitive position was relatively poor as compared with their neighbors were more likely to vote "yes". All of these coefficients were statistically significant at $P\left(.05\right.$ ) or less. The $R^{2}$ was equal to . 34.

## TABIE XXXXIII

## REGRESSION COEFFICIENTS SHOWING ASSOCIATION OF SOCIOECONOMIC VARIABLES WITH A "YES" REFERENDUM VOTE

$\left.\begin{array}{lrrr}\hline \hline & \text { Coefficient } & \text { t Value } & \text { Standardized } \\ \text { Variable } \\ \text { Cofficient }\end{array}\right]$

Table XXXIV shows the coefficients resulting when both attitudinal and socioeconomic variables were regressed upon a "yes" vote. Five socioeconomic and four attitudinal variables were significant at $P(.05)$ or less. Combining the two types of variables increased the $R^{2}$ to . 44 , or about one-third over using each type individually.

TABLE XXXIV
REGRESSION COEFFICIENTS SHOWING COMBINED ASSOCIATION OF ATIITUDES AND SOCIOECONOMIC VARIABLES WITH A "YES" REFERENDUM VOTE

| Variable Co | Coefficient | $t$ Value | Standardized Coefficient |
| :---: | :---: | :---: | :---: |
| Socioeconomic |  |  |  |
| Size of wheat allotment | -. 0007 | -3.1053 | -. 3921 |
| Size of total farm | . 0002 | 2.8805 | . 3308 |
| Five-year free market price | -. 2315 | -4.8289 | -. 2430 |
| Breakeven price | . 0826 | 2.7078 | . 1205 |
| Democrat | . 1172 | 2.5658 | . 1191 |
| Average income | . 0000 | 1.6432 | . 0941 |
| Compliance with wheat allotments | ts . 1531 | 1.9195 | . 0862 |
| Opportunity for nonfarm employment | -. 0480 | -1.6090 | -. 0732 |
| Competitive position with neighbors: | -. 0589 | -1.3762 | -. 0629 |
| Attendance at policy meetings | . 0723 | 1.3095 | . 0603 |
| Farm Bureau membership | -. 0135 | -1.1737 | . 0585 |
| Organizational index | . 0031 | . 9915 | . 0538 |
| Ratio of offefarm to total income | me . 0010 | 1.1021 | . 0523 |
| Percent farm acres owned | . 0002 | . 3801 | . 0172 |
| Attitudes |  |  |  |
| Concern about government cost | . 0558 | 3.9427 | . 1887 |
| Liberal-Conservative | . 0159 | 3.1675 | . 1647 |
| Past program administration | . 0280 | 2.3593 | . 1067 |
| Perception | .. 0116 | -2.1513 | -. 1003 |
| Government responsibility to support prices | .0032 | . 1507 | . 0074 |
| Area |  |  |  |
| Washington | -. 0982 | -I. 4694 | -. 0873 |
| Texas | . 0852 | 1.3453 | . 0714 |
| Thomas | . 0401 | . 5511 | . 0296 |
| Constant term $=-.0642$ |  |  |  |
| $R^{2}=.44$ |  |  |  |

In each of the three preferences analyzed, there tended to be a decrease in size of coefficients and in $t$ values when the variables were combined in equation 3. This probably results from intercorrelation among the variables. However, the relative associative strength of the variables remajned similar。

## Summary of Regression Analysis

The purpose of this chapter was to determine the relative strength of association of certain variables with famers ${ }^{\circ}$ preferences for different types of farm programs and also, the predictive power of attitudinal and other variables. The analysis was based on the proposition that farmers' program preferences are a function of perception and attitudes as well as socioeconomic factors. This proposition was supported by the analysis which showed that the predictability of farmers' preferences could be improved by using a combination of attitudinal and socioeconomic variables, rather than either type alone. However, the predictability was not high, an indication of the complicated nature of individual farmer preferences.

A number of variables tended to show a substantial amount of association with the program preferences. From the attitudinal group these included attitude toward government responsibility to support farm prices, liberal-conservative orientation, concern about government cost, and pero ception of the current agricultural situation. Socioeconomic variables that were included in this group were size of wheat allotment, size of total farm, five-year free market price, and political party.

Other variables tended to show little association with preferences. Included among these were the attitudinal variables of concernabout consumer cost and efficiency in farming, and the socioeconomic variables of average income, age, education, and Farm Bureau membership. ${ }^{4}$

There may be non-linear relationships involved between the variables used in this analysis. This non-linearity may be due to a relationship between the dependent and an independent variable which could best be approximated by a squared or cubed term. Or there could be non* linearity resulting from interaction between independent variables, such as between perception and education. These possibilities were not explored in this study.

The findings on relationships of attitudes and program preferences obtained in the previous chapter by comparisons between groups generally substantiated the results obtained by regression in this chapter。

[^7]
## CHAPTER VI

## SOURCES OF INFORMATION AND ROLE OF EDUCATION

One of the conclusions drawn from the analysis of previous chapters was that there is a need for additional educational work with farmers on the subject of farm policies and programs. It would be useful in planning an effective educational program to know what sources of inform mation farmers now use to keep abreast of new developnents in this field。 It would also be useful to know farmers opinions on the role of the College of Agriculture and Extension Service in this area of educational work。

A better understanding of farmers sources of information on farm programs would help farm educational leaders make more efficient use of the time they spend on such informational efforts. Improved informational efforts would help famers to better evaluate current programs in terms of their individual farm operetions and the total agricultural economy.

## Information Sources

There are two distinct types of information situations related to farm programs. One type deals with the details of programs currently in effect, such as size of allotments, support prices, signwup dates, and rules about crossmcompliance. The other type deals with information of a more basic nature, such as used by a farmer deciding how he will vote
in a specific referendum or election, or whether or not to support a particular organization or political candidate. This is the type of information in which the College of Agriculture and the Extension Service are primarily interested. Their purpose is not to influence directly a specific decision but to provide information about the total agricultural situation, adjustments needed, and possible methods of making these adjustments so that farmers have objective information on which to base decisions. Farm organizations and political officials also are usually very active in this type of information situation, attempting to influence directly the vote or decision. Newspaper and magazine editors often write impassioned editorials in these situations.

Farmers were questioned about information sources they used most frequently in each type of situation. Table XXXV shows the information sources they used most frequently for learning the details of current prom grams. Letters from and visits to the ASCS office were rated considerably above any other source as being most useful. Substantial use was made of ASCS special meetings, farm magazines, and newspapers, although they did not rate high as being the most useful source. Neighbors, radio, television, and elevator manager were used some, while the use of landlord and county agent was negligible.

These results have several implications. They point out the reliance farmers place upon letters from and vishts to the ASCS office. This would indicate that ASCS personnel have an obligation to constantly review their techniques and methods of presenting information so that these letters and visits will be of the greatest possible benefit to farmers.

TABLE XXXV

## SOURCES OF INFORMATION FOR DETAILS ON FARM PROGRAMS

| Source ${ }^{\text {a }}$ | Use Much | Use Some | IJse <br> Little | Use None | Most Useful |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (Percent of Famers Answering) |  |  | $(\text { Pct. })^{0}$ |
| Letters from ASCS office | 70 | 22 | 7 | 1 | 38 |
| Visits to ASCS office | 52 | 33 | 13 | 2 | 30 |
| ASCS special meetings | 28 | 31 | 31 | 10 | 10 |
| Farm magazines | 28 | 45 | 21 | 6 | 9 |
| Newspapers | 21 | 46 | 25 | 8 | 3 |
| Neighbors | 14 | 39 | 34 | 13 | 3 |
| Radio | 11 | 34 | 43 | 12 | 2 |
| Television | 11 | 31. | 43 | 15 | 2 |
| Elevator manager | 11 | 32 | 43 | 14 | 1 |
| Landlord | 5 | 17 | 49 | 29 | 1 |
| County agent, | 4 | 17 | 59 | 20 | 1 |
|  |  |  | $=499)$ |  | $(\mathrm{N}=552)$ |

${ }^{\text {a Listed in order of rank in column "Use Mach". }}$
${ }^{\text {b }}$ Percent of summed frequencies of all sources listed as "Most Useful". Some farmers gave more than one source, giving an $N$ of 552.

A number of farmers commented on the attitude of ASCS office workers. It would appear that for certain farmers to get the most out of their visits to the ASCS office, the office workers need to use considerable patience and tact in explaining details of farm programs (often quite complicated) to these individuals.

The results indicate that mass media efforts would likely be most efficient if directed towards magazines and newspapers rather than radio or televisión。.

For the Extension Service, these results indicate that county agents should evaluate carefully any efforts they put into simply publicizing the details of farm programs. It appears that informational efforts by
county agents optimally should be aimed at background information or other information not being supplied to farmers by ASCS efforts.

A considerable amount of discussion about farm program details takes place among neighbors. Fiftyothree percent said they used their neigho bors as a source either "much" or "some". The fact that 43 percent used their elevator managex to some extent indicates that the ASCS office should make an effort to keep elevator managers informed of developments.

Similar findings were reported when farmers were asked what sources of information they used when trying to decide how to vote in referendums. The results are shown in Table XXXVI。

The county ASCS office was again rated as the most useful source of information, with 44 percent of the ohoices falling in this category. Farm magazines and newspapers were again the highest ranked mass media. Neighbors were used "much" or "some" by nearly onewhalf the farmers.

Farm organizations and the College of Agriculture ranked about the same。 The relatively low ranking given to farm organizations is somewhat surprising as such organizations have put considerable effort into infore mational programs dealing with referendums. By compazison, the College of Agriculture has been less involved in referendums, attompting only to provide background information and sone methods by which farmers could analyze their individual situations.

It should be noted that it is difficult for an individual to recall all the sources of information that come into play in a specific situa.m tion. However, the answers to the preceding question indicate that fere mers in this survey put most emphasis on ASCS infomntion to determine how their farm operation would be affected by a particular progrem.

TABLE XXXVI
SOURCES OF INFORMATION WHEN DECIDING HOW TO VOTE
IN A REPERENDUM

| Source ${ }^{\text {a }}$ | Use | Use | Use | Use | Most |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mach | Some | Little | None | Usef |
|  | (Percent of Farmers Answering) |  |  |  |  |
| County ASCS office | 39 | 35 | 18 | 8 | 44 |
| Farm magazines | 27 | 47 | 18 | 8 | 17 |
| Newspapers | 17 | 48 | 25 | 10 | 10 |
| Neighbors | 10 | 35 | 44 | 11 | 9 |
| Farm organizations College of Agriculture and county agent | 8 | 28 | 49 | 15 | 5 |
|  | 8 | 29 | 45 | 18 | 5 |
| Dept. of Agriculture in Washington | 8 | 29 | 4.5 | 18 | 2 |
| Television | 8 | 31 | 44 | 17 | 2 |
| Radio | 7 | 34 | 44 | 15 | 2 |
| Elevator manager ${ }^{\text {c }}$ | 6 | 25 | 48 | 21 | 2 |
| Landlord | 6 | 18 | 48 | 28 | 2 |
| Political party officials |  | 8 | 66 | 25 | - |
|  | $N=492)$ |  |  | $(\mathbb{N}=441$ |  |
| bPercent of surmed frequencies of all sources listed as "Mostalul" |  |  |  |  |  |
| Conversely, they seemed to put relativaly little importance on what the |  |  |  |  |  |
| farm organizations and political party officials were saying. It may be |  |  |  |  |  |
| that ASCS information is primarily operational in its influence but, |  |  |  |  |  |
| because of its close identification with farm programs, it was the source |  |  |  |  |  |
| listed by many farmers as being most useful in making decisions involving |  |  |  |  |  |
| basic values. Conversely, the influence of other groups such as farm |  |  |  |  |  |
| organizations may be less evident but stm an important factor in farm |  |  |  |  |  |

An additional evaluation of information sources was obtained by asking farmers iff they thought any of these sources present a biased analysis of progran situations. Of 501 famers, 47 percent said yes, 19 percent said no, and 34 percent said they did not know or didn ${ }^{9} t$ answer. A high percentage of "don"to know" or "no" responses indicates that many farmers probably had not thought much about this idea. Table XXXVII shows that slightly over onewhalf the farmers answering "yes" to the question said farm organizations are sources that present only one side of the question. Also listed a substantial number of times were political party officials, county ASCS office, and Department of Agriculture in Washington. The College of Agriculture and county agent were listed by eight percent of the farmers answering "yes" to this quesm tion. A few farmers said that 211 souxces present only one side of the picture。

It was noted earlier that faxmers frequently said that they used their neighbors as a source of farm program information Sociologists have found that farmers like to discuss ideas with someone else when they are making decisions about a new idea or program. Farmers inter viewed in this survey were asked the following question: If you could get the opinion of only one acher person in your commuity about a farm program, who would it be? Only 267 of the 501 famers interviewed answered this question, which indicates many farmers did not understand, the question or could not decide how they wanted to answer it (Table XXXVIII). Of those answering, a large majority satd they would seek the opinion of another farmer Nine percent listed a local ASCS official. while oight percent named their banker. The county agent and elevator managex were

TABIE XXXVII
SOURCES LISTED AS GIVING A BIASED PRESENTATION
OF FARM PROGRAM INFORMATION

| Source | Percenta |
| :--- | :---: |
| Farm organizations | 54 |
| Political party | 41 |
| County Ascs office | 30 |
| Department of Agriculture in Washington | 27 |
| Newspapers | 12 |
| Neighbors | 9 |
| Farmmagazines | 9 |
| College of Agriculture or county agent | 8 |
| Television | 7 |
| Radio | 7 |
| Elevator manager | 7 |
| Landlord | 6 |
|  | (N |
|  |  |

TABLE XXXVIII
PERSON WITH WHOM PARMERS WOULD MOST PREFER TO DISCUSS FARM PROGRAMS

|  | Number of Farmers | Percent of Farmersa |
| :--- | :---: | :---: |
| Person | 172 |  |
| Another farmer | 25 | 64 |
| ASCS employee | 21 | 9 |
| Banker | 14 | 8 |
| County agent | 13 | 5 |
| Elevator manager | 4 | 5 |
| Make up own mind | 3 | 2 |
| Wife | 3 | 1 |
| Iandlord | 12 | 1 |
| Other | 267 | 5 |
| No answer | 234 | 100 |

[^8]each named by fisve percent of those answering the question. These results indicate that a majomity of the farners answering this question would prom fer to get the opinion of another famer rather than some farm agency employee or businessman. It is believed that most farmers interpreted the "opinion" in this question to be of an approvemisapprove nature rather than a clarification of some program detail.

Role of College of Agriculture and Extension Service

Considerable discussion in recent years has focused on the role of the College of Agriculture and Extension Service in disseminating information about farm programs. Some people have proposed that they need to become much more active in public affairs education. ${ }^{1}$ However, increased work in this alea has noved slowly, partly because there are controversial issues involved in public policies. Cochrone has stated this need for increased effort very forcefully:

The time has come, and long since past, to do something about this economic literacy problem. Unless farmers underm stand the basic economie relationships of their industry, there is no way to confront ther with reality with respect to the problems of their industry. Thus, it seoms to me that each extension director, each head of a department of agricultural economies and each agriculturel economist who thinks of himself as a leader, must give this problem very high priority in his thoughts and actions.

And more is involved here than presenting and extending "the facts"。 Farmers are barraged with facts. The problena is one of assisting farmers to gain a working knowledge of the important and relevant economic relationships involved in their industry. Somehow, some way, farmers generally must gain this understanding. ${ }^{2}$

[^9]The question might be asked whether education such as provided by the College of Agriculture can help famers gain this understanding. An informal survey of students and staff in the Department of Agricultural Economics at Oklahoma State University indicates that education does play a role in providing the needed understanding.

The perception scale as described in Chapter IV was administered to a number of undergraduates in agricultural economics classes, and to graduate students and staff in the department. The results shown in Table XXXIX indicate a high correlation bstween perception score and educational level, and provide an informative contrast with the results obtained fron farmers. It should be remembered that the lower the score, the keener the perception of the current agricultural situation.

## TABLE XXXIX

A COMPARISON OF FARMERS PERCEPTION SCORES WITH THOSE OF COLLEGE STUDENTS AND STAFF

|  | Mhanber | Mean Score |
| :--- | :---: | :---: |
| Farmers | 499 | 34.2 |
| Freshnen | 21 | 33.4 |
| Sophomores | 32 | 30.3 |
| Juniors | 21 | 29.3 |
| Seniors | 27 | 26.0 |
| Graduate students | 20 | 22.4 |
| College staff | 19 | 20.6 |

If education can sharpen an individual's perception of the fam situation, as was indicated by these results, ther the next question is how to take this education to famers. To determine whether they were receptive to educational efforts in this field, farmers in the survey were asked to select the most appropriste of the following three roles for the College of Agriculture and Extension Service in regard to infomation about farm policios and programs:

1. They should pat out as meh unbiased, factual information as possible without expressing opinions.
2. They should take a definite stand on whion types or programs would be bost.
3. They should not put out information on farm programs. Results are shown in Table XI。

TABLE XL
FARMERS OPINIONS ABOUT THE PROPER ROLE OF THE COLIEGE OF AGRICULIPURE AND EXTENSION SERVICE IN DISSEMINATING INFORMATION ABOUT FARM POIIGIES AID PROGRANS

| Role |  | Mercent of Farmers |
| :--- | :---: | :---: |
| Put out only factual <br> information | 388 | 78 |
| Take a definite stand | 77 | 15 |
| Should not put out <br> jnformation | 21 | 4 |
| No answer | 15 | 3 |
| Total | 501 | 100 |

A big majority said the role of these educational agencies is to put out unbiased factual information，which is，in effect，the role these agencies have been attempting to follow the question that remains，in light of Comrone＂s comments，is whether the College of Agrioulture and Extension Service have been devoting enough resources to this purpose。

Only a small minority of the farmers would have the College of Agriculture and Extension Service take a definite stand as to which prom grams would be best．An even smaller percentage would have then refrain from disseminating any program information。

Some persons have asked whether education on farm policies and prow grams would influence the basic values of farmers and their liberal－ conservative orientation．The students and staff of the agricultural economics department were given the liberalmconservative scale as well as the perception scale。 The results showed that educational level had little correlation with the individual＇s liberal－conservative position． A tentative inference from this small sample would be that，on the average， the basic philosophy as to the propex role of government in social and economic affarrs is not likely to be changed substantially by educational programs．Thus additional educational efforts would conform to the widely held value judgnent（even of groups with major differences in political philosophy）that public education should be pursued to make individuals better infomed but not to change their basic philosophic position．

There has been some speoulation that famers do not get enough infomation on program choices to vote intelligently in a referendum． When asked their response to this question，farmers gave the answers
show in Table XLI. Slightly more than onewhalf said they got enough infomation but a substantial number indicated they felt a need for additional information.

In the past, meetings have been one of the primary methods by which the Extension Service has taken new infomation to farmers. Howe ever, in recent years, there has been some discussion among Extension persomel that it is becoming more difficult to get farmers to attend an educational meeting. Farmers in this survey were asked whether they attenced adult classes or meetings held by the Extension Service or Vocational Agriculture on topics other than farm policies and programs. Results shown in table XLII indicate that a majority of farmers do not attend such meetings regularly. Only nine percent said they attended. such meetings often. However, the situation was quite different when farmers were asked whether they had attended any meetings within the past two or three years which were held to explain a particular farm program or policy. Replies to this question are shown in Table XIIII.

## TABLE XLI

## RESPONSE TO QUESTION, SDO YOU FEEL THAT YOU USUALLY GET enough information so that you cai mare the richt CHOICE ON FARM PROGRAMS?"

Answer Number of Farrners Percent of Farmers
Yes $269 \quad 54$

Sometimes $148 \quad 29$
No $61 \quad 12$
Don ${ }^{6}$ t know or no answer . 23
Total $501 \quad 100$

TABLE XLII
FARMER ATTENDANCE AT ADULT CLASSES OR EDUCATIONAL MEETINGS ON TOPICS OTEER THAN FARM POLICIES AND PROGRAMS

| Frequency of Attendence | Number of Fazmers | Percent of Firmers |
| :---: | :---: | :---: |
| Often | 43 | 9 |
| Occasionelly | 167 | 33 |
| Very seldora | 265 | 53 |
| Never | 19 | 4 |
| Ho answer | $\frac{7}{501}$ | $\frac{1}{100}$ |
| Total | 501 | 1.00 |

TABLE XLIII
FARMER ATTENDANCE DURING PAST THREE YEARS AT MEETINGS HELD TO EXPLATN A PARTICULAR FARM PROGRAN OR POLICY

|  |  |  |
| :--- | :---: | :---: |
|  |  |  |
| Frequency of Attendance | Number of Farmers | Percent of Farmers |
| Had attended one or nore | 377 | 75 |
| Had not attended any | 107 | 21 |
| Didn't, remember | 15 | 3 |
| No answer | $\frac{2}{2}$ | $\frac{1}{100}$ |
| Total |  |  |

Three fourths of the famers had attended a meeting in recent years to learn about a farm program or policy. This is evidently a much higher percentage than attended educational meetings of other types. There might be several reasons for this. First, farmers often have to make a specific decision whether to vote for or against, or whether to take part or stay out of a farm program. This need to make a decision on a matter which likely involves a considerable number of complex details may provide a strong stimulus for famaers to attend a meeting at which the program is to be discussed. Second, there may be an element of
interest and concern involved, as farmers appear to like to discuss, or hear discussed, the pros and cons of a farm program. Interest ran very high at the time of the 1963 wheat referendum. The willingness of farmers to fill out the lengthy questionnaire used in this study is evidence of the continuing interest in this subject.

Table XIIV shows that a majority of farmers thought that other farm mers would take time to attend special half-day or evening meetings in their local area to discuss farm policy and programs. Few said they thought that farmers would not attend such meetings.

TABLE XLIV
FARNER RESPONSE TO QUESTION, "DO YOU THINK FARMERS WOUID
TAKE TITE TO ATTEND SPECIAL HALF-DAY OR EVENING MEETINGS IN YOUR IOCAL AREA TO DISCUSS FARM POLICY AND PROGRAMS?"

|  |  |  |
| :--- | :---: | :---: |
| Response |  |  |
| Yes | 301 | Number of Farmers |

One method of public affairs education which has been used quite successfully in recent years is selfwadministered discussion groups. With this method, the College of Agriculture and Extension Service provide background material and an organizational plang but actual discussion is left to conmunity leaders who hold meetings with small groups
of individuals from within their comunities ${ }^{3}$ This technique might be useful for educational efforts on farm prograns and policies. Results of Extension efforts in education preceding the 1963 wheat referendum point up the importance of a continuing program in public affairs. ${ }^{4}$ The depth of educational work (economic analysis of the alternatives) at the time of the referendum was affected inportantly by past experience in public policy education. In areas that had a long history of Extension work on public economic issues, people had learned to expect a greater educational effort by the Extension Service. Also, educational work is most effective before people have made up their minds and are comitted to positions.
${ }^{3}$ ToE.Atkinson, et al., "Reaching the Attentive Public with Discussion Group Fact Sheets," Increasing Understanding of Public Problems and Policies (Chicago, 1961), pp. 12m14。
${ }^{4}$ Lloyd Ho Davis, "What We Heve Learned from the Wheat Referendun" Increasing Understanding of Public Problems and Policies (Chicago. 1963), pp. 109-110。

## CHAPTER VII

## SUNMARY AND CONCLUSIONS

The objective of this study was to determine the role of farmers" attitudes in public policy. More specifically, farmers were asked what they considered to be the causes of the farm problem, what a program should accomplish, and what are the best means of raising farm income from wheat. Farmers were also asked to respond to a series of statew ments designed to measure perception and attitudes toward a number of factors and concepts relevant to the current agricultural situation. These measures were then related to program preferences and other socion ocononic variables. Finally, farmers were asked what sources of infor mation they used in finding out about faxm programs and policies. Interow views were taken in four counties in which wheat is a major orop: Grant and Texas Counties in Oklahona, and Thomas and Washington Counties in Kansas. A total of 501 farmers were interviewed in the summer of 2964.

## Causes of Problem and Coals of Program

Farmers stated that high wages in industxy, high costs of marketing. and lack of bargaining power were three of the major causes of the farm problem. Farmers indicated that poor management or readily available credit did not contribute much to the problem. The findings of this study on farmers ${ }^{\text { }}$ opinions of causes of the farm problem were consistent
with findings of earlier studies. In general, farmers tended to blame factors outside of agriculture. This nay represent a barrier in getting farmers to face realistically the alternatives and to accept prograns which will bring about desirable adjustments.

Farmers felt that the most important objective of a farm program is to keep wheat prices on a par with other prices in the economy. This objective ranked higher than that of increasing farmers' income from wheat. This may indicate that farmers tend to think more in terms of price per bushel rather than in total income. It could also mean that farmers are pursuing their selfeinterest, realizing that 100 percent of parity price could mean greater total profit than 100 percent parity income because of increased volume and efficiency. Other program objectives that ranked high were keeping dow governnent expense and regulation.

Finding more uses for farin products and reducing narketing margins were rated by farmers as the two most desirable ways of raising farm income from wheat. Again famers' attitudes contribute to conflict in policy formulation, since these alternatives are not considered economically feasible in the foreseeable future. Farmers disapproved of methods considered more feasible economically, such as reducing the number of fax ners, increasing the price of bread, or using goverment control of farm product supplies. This last response was in conflict with another part of the study in which three out of four farmers chose some type of governe ment program in preference to a free market. Perhaps the latter choice was really a reflection of conflicts resolved - on the compromise faxmers had made between desire for income and desire for freedom from controls.

The results of the preceding analysis indicate the difficulty of developing farm policies and programs which will bring about desired resource adjustments and yet be widely acceptable to farmers. In gen eral, farmers blamed the farm problem on causes outside of agriculture, such as high wages in industry and high marketing margins. They had conflicting objectives for farm programs whigher prices and incomes vs. more freedom to produce and market. Finally, they fievored unvealistic means for raising farm income, such as finding new uses for farm prom ducts and decreasing marketing margins. Personal goals of price, income, and freedom ranked much higher than society"s goals of efficiency, low food costs, and low goverment costs.

## Parception and Attitudes

Among the factors that affect a farmer"s preferences for farm prow grams are his perception of the current agricultural situation and his attitudes toward program costs and administration. The concept of pero ception or understanding of the agricultural situation seems to be especially important at this time. Only iff farmers have a fairly ream listic idea of what would happen under different types of programs and situations can they make intelligent docisions on prograns.

A set of eleven itens was used to measure farmers ${ }^{\text {g }}$ perception of the current agricultural situation. This perception level was then evaluated in terms of how well it matched what economists would call an informed or keen perception. In a disturbingly large number of cases, many farmers appeared to lack a good understanding of basic econonic relationships in agriculture. These relationships dealt with the
possibility of eating our way out of farm surpluses, level of prices under a free market, the effect of the farr economy on the national. economy, the possibilities of finding new uses for farm products, the need for production controls to accompany price supports. possibilities for using surpluses to feed the world's hungry people, and the effects of technology on faxm prices.

There appeared to be an association between perception score and most preferred program and referendum vote. Those who preferred some type of government progran to a free market and those who voted "yes" in the 1963 referendum had a slightly keener perception. Other farmers Who appeared to have a somewhat keener perception were farmers with more education, were active in commity organizations, had large farms, and attended policy meetings. Perception was not improved by attendance at production-type meetings. These results need to be interpreted with caution because of the small number of items used for the measure and the scoring system used.

Famers as a whole tended to be conservative in their response to a series of items related to governmental participation in various economic activities. They were especially conservative in their response to the ideas that the national debt shonld be reduced, goveranent relief programs have become too large, people should be free to run their businesses as they please, and goverment farm programs are contrary to the free entere prise system.

They were somewhat liberal in their response to the ideas that big businesses make too much money, federal government should help with electric power and housing projects, and government should provide jobs for all people who want to work.

Famers who voted "no" in the 1963 referendum, those who preferred a free market to a government program, and Republicans were more conservam tive than those who voted "yes", preferred a goverment program, or were Democrats. Younger farmers and those with more education also tended to be more conservative. Texas County, Oklahoma, was slightly more con" servative than Washington County, Kansas, but other county comparisons showed no significant differences.

In general, a majority of the farmers interviewed appeared to be concerned about efficiency in the farming sector. The one exception was that most farmers thought it was important to give every boy who wanted to farm the opportunity to do so.

Groups that showed more concern about efficiency in the farming sector were those with more education, those who voted mo" in the referendum, and those with higher total incomes. Tending to show sonew what greater concern were younger famers, those who were active in commuity organizations, those who least preferred a mandatory progrann, those with a high debt to asset ratio, large farners, and Republicans. However, the regression analysis indicated that attitude toward farm efficiency was not strongly related to program preferences.

Farmers in general appeared to be concerned about government costs of farm programs. A majority indicated that such costs should be kept low and disagreed with the statement that farm programs really don ${ }^{0} t$ cost the government much.

Groups showing greater concern about government costs were those who preferred a free narket to a government program, those who voted "no ${ }^{\text {w }}$
in the referendum, and Republicans. Appearing to be somewhet more con cerned about government costs were farmers with less education and small famers.

Farmers also appeared to be concerned about consumer costs for food, although it was shown previously that low consumer prices are not one of the primary goals of famers. About three out of four were against increasing the price of bread as the principal means of boosting farm income from wheat. There was no strong association between this attitude and any of the variables considered. There were indications that the following groups were somewhat more concerned with consumer costs as compared to the other group within their variables: older farmers, those with less education, those with a low debt/asset ratio, those who received little of their income from offofarm sources, and nonwam Bureau members.

Fortyosix percent of the farmers said it was not government's responsibility to support farm prices and incomes while 31 percent said it was. One out of four farmers was undecided on this question. Weshington and Grant County farmers believed the govermment had greater responsibility to support prices than did Texas and Thomas County farmers.

A strong association was found between this a.ttitude toward governw ment's responsibility and the most preferred program and referendum vote variables. Those who preferred a free market and voted "no" thought the goverment had less responsibility to support farm prices and incomes. The same was true for farmers who gave a fair price of wheat of less than \$2. There was some indication that Republicans felt the goverment had less responsibility to support farm prices than did the Dernocrats.

A mejority of farmers felt that allotment systems are unfair and that wheat programs have been poorly administered in the past. Thomas County farmers felt the program had been handled more poorly than did either the Texas or Washington County farmerse A strong association was found between this attitude and the variables of the nost preferred prow gram and referendum vote. As would be expected, those who preferred a free market and those who voted "no" felt that programs had been handled poorly in the past. Other groups who tended to show this feeling, though less strongly, were farmers with less education, those with a low organizam tional index, and Republicans.

Famers indicated that keeping up on farm programs is as important as knowing about the newest production practices. A majority also said the job of determining what programs would be best should not be left up to policy experts. However, three-fourths of the famers said that it's too hard to keep up on prograns and onemithird agreed that the individual farner can ${ }^{\circ} t$ do much about the farm problem anyway.

Kansas farmers appeared to be somewhat less concerned than Oklahoma farmers about program information. There was a strong association botween this attitude and the variables of oducation and attendance at policy meetings. Farmers with more education and those who attended policy meetw ings were more concerned with progran infomation.

The attitudes of farmers who preferred a free market and voted "no" in the referendum can be compared to other famers as follows: more conm servative, more concerned about govemment costs, said that govermment has less responsibility to support farm prices and incomes, had a less favorable attitude toward progran administration, and were less concemed
with program information. Also, these farmers appeared to deviate more from economists ${ }^{\text {P }}$ perception of the agricultural situation.

Regression analysis showed that the predictability of farmers ${ }^{\circ}$ preferences could be increased by using a conbination of attitudinal and socioeconomic variables, rather than either type alone. While the predictive power of the regression equations was not higha results come pared favorably with similar studies in other subject areas. The fact that the predictive power was not high indicates the complicated nature of farmers" preferences, and the possibility of a large "capricious" or random element for individual farmers that cannot be predicted accurately.

Variables which consistently showed a substantial amount of associam tion with program preferences were attitude toward goverment responw sibility to support farm prices, liberal-conservative orientation, cone cern about government costs, perception of agricultural situation, size of wheat allotment, size of total farm, five-year free market price of wheat, and political party.

Variables which showed little association with preferences were con cern about consumer cost and efficiency in farming, average income, age, education, and Farm Bureau mexbership.

## Information Sources

Farmers said that letters fron and visits to their county ASCS office were by far their most useful souxces of information for details of farm programs. This indicates that ASCS offices should carefully review their letters and office visit procedures so that famers can make the most efficient use of these two methods of obtaining informationo

Farmers said they also made substantial use of ASCS special meetings, farm magazines, and newspapers.

A similar response was obtained when farmers were asked what sources of infornation they used when trying to decjde how to vote in referendims. The county ASCS office was rated as the most useful source, followed by farm magazines, newspapers, and neighbors. There appeared to be conm siderable interaction among neighbors on the subject of farm programs. Only about onemird of the farmers said they made much use of farm organizations or the College of Agriculture and county agent.

These relatively low rankings for fam organizations and the College of Agriculture may be a reflection of two factorso First, this study ${ }^{\prime}$ s findings indicate that many farmers may discount information put out by farm organizations because they feel it is too biased. Second, the low ranking of the College of Agriculture may be due to the relatively smell amount of resources devoted to educational efforts with farmers on prow grams and policies.

An overwhelming majority of the farmers said the role of the College of Agriculture and Extension Service should be to disseminate factual information about farm programs without expressing opinions. About 15 percent said the College and Extension Service should take a definite stand as to which type of prograns would be best. Less than five perm cent said these educational agencies should not put out information on farm programs.

## Implications of Findings

A number of implications can be drawn from the results of this study:
I. There is a prossing need to help farmers improve their underm standing of the economic relationships underlying the current agricultural situation。
2. Farmers preferences for farm programs are related to attitudes toward goverment's role in economic affains, government costs, and past program administration.
3. Famers believe the role of the College of Agriculture and Extension Service is to provide unbiased information on farm programs and policies. The results of the perception analysis and the informal survey of university students and staff indicate that education can improve an individual's understanding of certain basic economic relationships.
4. Farners have a considerable amount of interest in farm program topics. ilvidence of this was the cooperation they gave in filling out questionnaires.

The challenge for the College of Agriculture and Extension Service is to capitalige on this interest with informationel prograns and methods that will help famers to increase their understanding of economic relationships and alternatives. This could give farmers a better basis for naking decisions on farm policies and prograns.

Other research has shom that to be most effeotive, such an educam tional program should be a continuing one rather than a shortutine effort developed after a specific issue has arisen. Results of this stady
indicate that the educational program should include a discussion of goals and values as well as dollar and cent relationships.

## Suggestions for Further Research

It would appear that one of the nost useful concepts developed in this study was that of farmers" perception of the current agricultural situation. It has been stated several times that famers need a good understanding of the farm situation if there is to be acceptance of farm programs that will bring about desirable adjustments. The scale used in this study to measure perception could be expanded and refined considerably to give a better indication of farmers total perception of the agricultral situation. Such a measure would be useful to farm leaders for outlining an educational program. Also, such a measure would be useful for deter mining changes in the level of understanding after farmers have been through an educational program. This would provide a measure of the effectiveness of the program. Plans for new educational programs should include procedures for rigorous evaluation of teaching methods used.

A similar approach that might be fruitiful would be to select a few iterns from the perception and attitudinal scales used in this study, and administer then to the participants at the beginning of an educational program. This would get each individual involved inmediately in making decisions and should stimulate greater participation, at least mentally, in later discussions.

It might be useful for educational leaders to know how various other groups and individuals who work with farmers and farm programs perceive the current agricultural situation. Anong these would be ASCS officials,
farm organization leaders, newspaper and magazine editors, and local farm related businessmen. Educational leaders might want to plan special types of programs for certain of these groups and individuals.

Another possibility which could be investigated is the development of special educational materials for 4 mH and high school vocational agricultural groups. Participation in these activities will be the last organized educational experience of many young men who will be operating ferms of the future. If these young men can be stimulated by an introm duction to some basic concepts of the economics of farm programs, they will be more likely to develop a better understanding of economic prom blems during their adult life.

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APPENDIX A

## APPENDIX A, TABLE I

FREQUENCIES OF AGREEMENT-DISAGREEMENT ON CAUSES OF FARM PROBLEM AND TIMES RATED AS MOST IMPORTANT CAUSE, BY AREAS
A. Increased use of fertilizer, irrigation, hybrid seed, and big

|  | SA* | A | $\underline{\square}$ | D | SD | Most Important |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 9 | 34 | 11 | 34 | 13 | 10 |
| Grant | 17 | 58 | 21 | 41 | 13 | 13 |
| Thomas | 7 | 35 | 14 | 23 | 11 | 3 |
| Washington | 24 | 52 | 19 | 45 | 19 | 10 |
| Oklahoma | 26 | 92 | 32 | 75 | 26 | 23 |
| Kansas | 31 | 87 | 33 | 68 | 30 | 13 |
| Total | 57 | 179 | 65 | 143 | 56 | 36 |

B. High costs of processing and marketing after products leave the farm.

|  | SA | A | $\underline{U}$ | D | SD | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 29 | 44 | 7 | 19 | 2 | 11 |
| Texas | 29 | 74 | 13 | 20 | 4 | 17 |
| Grant | 39 | 36 | 11 | 14 | 4 | 13 |
| Thomas | 25 | 65 | 15 | 19 | 8 | 22 |
| Washington | 52 | 68 | 118 | 20 | 39 | 6 |
| Oklahoma | 77 | 101 | 26 | 33 | 12 | 38 |
| Kansas | 145 | 219 | 46 | 72 | 18 | 63 |

C. Past government farm programs.

|  | SA | A | U | D | SD | Most |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 19 | 25 | 20 | 31 | 6 | 17 |
| Texas | 19 | 45 | 22 | 35 | 12 | 26 |
| Grant | 36 | 27 | 22 | 15 | 3 | 12 |
| Thomas | 23 | 45 | 44 | 32 | 12 | 9 |
| Washington | 26 | 70 | 42 | 66 | 18 | 43 |
| Oklahoma | 55 | 72 | 66 | 47 | 15 | 21 |
| Kansas | 49 | 72 | 108 | 113 | 33 | 64 |
| $\quad$ |  |  |  |  |  |  |

$$
\begin{aligned}
* S A & =\text { Strongly Agree, } A=\text { Agree }, U=\text { Undecided, } D=\text { Disagree }, \\
S D & =\text { Strongly Disagree. }
\end{aligned}
$$

APPENDIX A, TABLE I (Continued)

|  | SA | A | $\underline{\text { U }}$ | D | SD | Most Important |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 4 | 11 | 19 | 49 | 18 | 0 |
| Grant | 8 | 23 | 19 | 70 | 30 | 3 |
| Thomas | 6 | 11 | 18 | 42 | 13 | 1 |
| Washington | 5 | 32 | 32 | 62 | 28 | 0 |
| Oklahoma | 12 | 34 | 38 | 119 | 48 | 3 |
| Kansas | 11 | 43 | 50 | 104 | 41 | 1 |
| Total | 23 | 77 | 88 | 223 | 89 | 4 |

E. Farmers try to increase their income by incroasing production.

|  | SA | A | U | D | SD | Most |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 17 | 50 | 5 | 22 | 7 | 4 |
| Texas | 17 | 73 | 10 | 28 | 10 | 13 |
| Grant | 29 | 10 | 38 | 12 | 22 | 8 |
| Thorias | 10 | 75 | 10 | 31 | 12 | 2 |
| Washington | 31 | 46 | 123 | 15 | 50 | 17 |
| Oklahoma | 41 | 113 | 22 | 53 | 20 | 17 |
| Kansas | 41 |  |  |  |  |  |
| $\quad$ Total | 87 | 236 | 37 | 103 | 37 | 22 |

F. High wages in industry cause high prices for what the farmer buys.

|  | SA | A | $\underline{U}$ | D | SD | Most |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 43 | 49 | 1 | 7 | 1 |  |
| Texas | 43 | 79 | 5 | 11 | 4 | 25 |
| Grant | 73 | 57 | 6 | 8 | 4 | 35 |
| Thoras | 38 | 34 | 6 | 9 | 9 |  |
| Washington | 74 | 60 | 8 | 14 | 3 | 28 |
| Oklahoma | 116 | 106 | 6 | 18 | 5 | 60 |
| Kansas | 112 | 94 | 14 | 22 | 7 | 37 |
| $\quad$ Total | 228 | 200 | 20 | 40 | 12 | 97 |

Go Farmers lack bargaining power.

|  | SA | $\underline{A}$ | $\underline{U}$ | $\underline{D}$ | $\underline{S D}$ | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 39 | 39 | 14 | 7 | 2 | 15 |
| Texas | 55 | 68 | 12 | 12 | 3 | 15 |
| Grant | 36 | 33 | 12 | 6 | 3 | 8 |
| Thomas | 36 | 62 | 25 | 8 | 1 | 25 |
| Washington | 63 | 94 | 107 | 26 | 19 | 5 |
| Oklahoma | 94 | 95 | 95 | 37 | 14 | 4 |
| Kansas | 99 | 202 | 63 | 33 | 9 | 33 |
| $\quad$ Total | 193 |  |  |  |  |  |

APPENDIX A, TABLE I (Continued)
H. Poor nanagement is the main reason why farmers have income problems.

|  | SA | $\underline{A}$ | $\underline{U}$ | $\underline{D}$ | $\underline{S D}$ | Most |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 3 | 16 | 14 | 44 | 24 |  |
| Texas | 3 | 19 | 20 | 65 | 40 | 1 |
| Grant | 6 | 12 | 11 | 35 | 26 | 1 |
| Thomas | 6 | 17 | 73 | 34 | 3 |  |
| Washington | 15 | 20 | 17 | 109 | 64 | 2 |
| Oklahoma | 9 | 35 | 34 | 109 | 4 |  |
| Kansas | 21 | 32 | 28 | 108 | 60 | 6 |
| $\quad$Total | 30 | 67 | 62 | 217 | 124 |  |

## APPENDIX A, TABLE II

FREQUENCIES OF AGREEMENT-DISAGREEMENT ON WHAT A WHEAT PROGRAM SHOULD ACCOMPLISH AND TIMES RATED MOST IMPORTANT, BY AREAS

|  |  |
| :--- | :---: | ---: | :---: | :---: | :---: | :---: |

B. Keep wheat prices on a par with other prices in the economy.

|  | SA | A | $\underline{U}$ | $\underline{D}$ | SD | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 56 | 39 | 6 | 0 | 0 | 44 |
| Texas | 92 | 48 | 5 | 1 | 4 | 75 |
| Grant | 48 | 31 | 4 | 6 | 1 | 28 |
| Thomas | 74 | 66 | 13 | 2 | 3 | 63 |
| Washington | 748 | 87 | 11 | 1 | 4 | 117 |
| Oklahoma | 148 | 17 | 8 | 4 | 91 |  |
| Kansas | 122 | 97 | 17 | 8 | 8 | 208 |

C. Keep bread prices low.

|  |  | A | U | D | SD | Most |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Important |  |  |  |  |
| Texas | 1 | 26 | 27 | 39 | 8 | 3 |
| Grant | 9 | 29 | 40 | 62 | 10 | 0 |
| Thomas | 5 | 22 | 26 | 31 | 6 | 0 |
| Washington | 13 | 39 | 49 | 50 | 7 | 0 |
| Oklahoma | 10 | 55 | 67 | 101 | 18 | 3 |
| Kansas | 18 | 61 | 75 | 81 | 13 | 0 |
| $\quad$ Total | 28 | 116 | 142 | 182 | 31 | 3 |

APPEMDIX $A$, TABLE II (Continued)


|  | SA | A | U | D | SD | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Texas | 25 | 60 | 12 | 4 | 0 | 9 |
| Grant | 44 | 78 | 16 | 7 | 5 | 11 |
| Thomas | 29 | 45 | 6 | 9 | 1 | 4 |
| Washington | 38 | 88 | 27 | 9 | 2 | 11 |
| Oklahona | 69 | 138 | 28 | 11 | 5 | 20 |
| Kansas | 67 | 133 | 27 | 18 | 3 | 15 |
| $\quad$ Total | 136 | 271 | 55 | 29 | 8 | 35 |

E. Give farmers freedom to produce and market as they wish.

|  | SA | A | U | D | SD | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Texas | 30 | 25 | 16 | 21 | 9 | 8 |
| Grant | 38 | 40 | 17 | 44 | 11 | 16 |
| Thomas | 33 | 29 | 15 | 11 | 2 | 10 |
| Washington | 36 | 41 | 20 | 46 | 15 | 10 |
| Oklahoma | 68 | 65 | 33 | 65 | 20 | 24 |
| Kansas | 69 | 70 | 35 | 57 | 17 | 20 |
| $\quad$ Total | 137 | 135 | 68 | 122 | 37 | 44 |

F. Keep down governnent expense.

|  | SA | A | $\underline{U}$ | D | SD | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 38 | 43 | 15 | 4 | 1 | 2 |
| Texas | 50 | 70 | 14 | 14 | 2 | 6 |
| Grant | 37 | 43 | 4 | 5 | 1 | 3 |
| Thomas | 37 | 75 | 24 | 10 | 4 | 6 |
| Washington | 45 | 88 | 113 | 29 | 18 | 3 |
| Oklahona | 82 | 118 | 28 | 15 | 5 | 8 |
| Kansas | 170 | 231 | 57 | 33 | 8 | 9 |
| $\quad$ Total |  |  |  |  |  |  |

G. Keep governnent regulation to a minimum.

|  | SA | A | U | D | SD | Most Important |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 45 | 45 | 6 | 4 | 1 | 16 |
| Texas | 68 | 70 | 2 | 9 | 1 | 20 |
| Grant | 46 | 39 | 2 | 2 | 0 | 10 |
| Thamas | 56 | 74 | 21 | 4 | 3 | 8 |
| Washington | 113 | 115 | 8 | 13 | 2 | 36 |
| OKlahoma | 102 | 113 | 23 | 6 | 3 | 18 |
| Kansas | 12 | 31 | 19 | 5 | 54 |  |

## APPENDIX A, TABLE III

## FREQUENCIES OF APPROVAL-DISAPPROVAL ON PRINCIPAL MEANS OF

 RAISING FARM INCOME AND TIMES RATED BEST, BY AREAS|  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| A. Reduce farmers |  |  |  |  |  |  |
|  | SA | cost to grow wheat. |  |  |  |  |
|  | A | $\underline{U}$ | $\underline{D}$ | SD | Best |  |
|  | 25 | 56 | 8 | 10 | 2 | 8 |
| Texas | 34 | 75 | 15 | 14 | 2 | 18 |
| Grant | 14 | 49 | 17 | 9 | 1 | 8 |
| Thomas | 23 | 69 | 36 | 25 | 4 | 9 |
| Washington | 59 | 141 | 23 | 24 | 4 | 26 |
| Oklahoma | 37 | 118 | 53 | 34 | 5 | 17 |
| Kansas | 96 | 259 | 76 | 58 | 9 | 42 |

Bo Reduce the marketing and processing margins of middlemen.

|  | SA | A | $\underline{U}$ | D | SD | Best |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 21 | 42 | 27 | 10 | 1 |  |
| Texas | 38 | 81 | 14 | 14 | 3 | 13 |
| Grant | 23 | 42 | 12 | 11 | 2 | 19 |
| Thomas | 46 | 79 | 21 | 8 | 3 | 33 |
| Washington | 59 | 123 | 41 | 24 | 4 | 34 |
| Oklahoma | 69 | 121 | 33 | 19 | 5 | 52 |
| Kansas | 128 | 244 | 74 | 43 | 9 | 86 |

C. Increase the price of bread.

|  | SA | $\underline{A}$ | $\underline{U}$ | $\underline{D}$ | $\underline{S D}$ | Best |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 6 | 21 | 62 | 11 | 0 |
| Texas | 2 | 7 | 25 | 81 | 35 | 0 |
| Grant | 1 | 7 | 18 | 48 | 16 | 0 |
| Thomas | 1 | 15 | 29 | 76 | 36 | 0 |
| Washington | 3 | 13 | 46 | 143 | 46 | 0 |
| Oklahoma | 2 | 22 | 47 | 124 | 52 | 0 |
| Kansas | 5 | 35 | 93 | 267 | 98 | 0 |

APPENDIX $A$, TABLE III (Continued)
D. Continue present government programs but raise the level of support prices and government paments.

|  | SA | A | D | D | SD | Best |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 12 | 33 | 17 | 26 | 13 | 19 |
| Teras | 22 | 41 | 32 | 34 | 21 | 26 |
| Grant | 8 | 18 | 23 | 30 | 11 | 6 |
| Thomas | 19 | 44 | 41 | 34 | 19 | 20 |
| Washington | 34 | 74 | 49 | 60 | 34 | 45 |
| Okahoma | 27 | 62 | 64 | 64 | 30 | 26 |
| Kansas | 136 | 113 | 124 | 64 | 71 |  |

E. Use government control of supbly of farm products going to market.

|  | SA | A | U | D | SD | Best |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 4 | 13 | 23 | 34 | 27 | 2 |
| Texas | 3 | 16 | 24 | 61 | 46 | 2 |
| Grant | 3 | 15 | 17 | 33 | 22 | 1 |
| Thomas | 3 | 15 | 35 | 61 | 43 | 2 |
| Washington | 7 | 29 | 47 | 95 | 73 | 4 |
| Oklahoma | 6 | 30 | 52 | 94 | 65 | 3 |
| Kansas | 13 | 59 | 99 | 189 | 138 | 7 |

F. Nake it easier for farmers to move off the farm so that there is more "income" for those remaining.

|  | SA | $A$ | $\underline{U}$ | D | SD | Best |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Texas | 2 | 5 | 11 | 45 | 38 | 0 |
| Grant | 2 | 6 | 8 | 59 | 75 | 0 |
| Thomas | 2 | 3 | 10 | 33 | 42 | 0 |
| Washington | 3 | 7 | 24 | 59 | 64 | 0 |
| Oklahona | 4 | 11 | 19 | 104 | 113 | 0 |
| Karsas | 5 | 10 | 34 | 92 | 106 | 0 |
| $\quad$ Total | 9 | 21 | 53 | 196 | 219 | 0 |

APPENDIX $A$, TABLE III (Continued)
G. Increase exports with goverrment subsidies or donations if necessary.

|  | SA | A | $\underline{\square}$ | D | SD | Best |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 7 | 29 | 25 | 25 | 15 | 6 |
| Grant | 12 | 50 | 35 | 30 | 23 | 7 |
| Thomas | 9 | 24 | 27 | 20 | 10 | 6 |
| Washington | 13 | 45 | 44 | 38 | 17 | 6 |
| Oklahoma | 19 | 79 | 60 | 55 | 38 | 13 |
| Kansas | 22 | 69 | 71 | 58 | 27 | 12 |
| Total | 41 | 148 | 131 | 113 | 65 | 25 |
| H. Find more uses for farm products. |  |  |  |  |  |  |
|  | SA | A | $\underline{\mathrm{U}}$ | D | SD | Best |
| Texas | 44 | 54 | 2 | 0 | 1 | 44 |
| Grant | 70 | 72 | 4 | 0 | 4 | 61 |
| Thomas | 39 | 49 | 1 | 1 | 0 | 29 |
| Washington | 78 | 67 | 10 | 1 | 1 | 54 |
| Oklahoma | 114 | 126 | 6 | 0 | 5 | 105 |
| Kansas | 117 | 116 | 11 | 2 | 1 | 83 |
| Total | 231 | 242 | 17 | 2 | 6 | 188 |

APPENDIX B

## APPENDIX B, TABLE I

FREQUENCIES OF APPROVAL-DISAPPROVAL ON ITEMS
USED IN PERCEPTION SCALE, BY AREAS

| A. There is apt to be a shortage of food because so many people are |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| moving off the farm |  |

Bo A depression in agriculture will usually lead the whole country into a depression.

|  | SA | A | U | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 38 | 52 | 7 | 3 | 1 |
| Grant | 66 | 69 | 3 | 11 | 1 |
| Thomas | 31 | 41 | 7 | 7 | 4 |
| Washington | 57 | 87 | 9 | 2 | 3 |
| Oklahoma | 104 | 121 | 10 | 14 | 2 |
| Kansas | 88 | 128 | 16 | 9 | 7 |
| Total | 192 | 249 | 26 | 23 | 9 |
| C. A growing population will eliminate the farm surplus problem within about five years. |  |  |  |  |  |
|  | SA | A | U | D | SD |
| Texas | 3 | 13 | 32 | 48 | 5 |
| Grant | 3 | 21 | 38 | 80 | 8 |
| Thomas | 10 | 22 | 24 | 30 | 4 |
| Washington | 6 | 31 | 53 | 61 | 7 |
| Oklahoma | 6 | 34 | 70 | 128 | 13 |
| Kansas | 16 | 53 | 77 | 91 | 11 |
| Total | 22 | 87 | 147 | 219 | 24 |

## APPENDLX B, TABLI I (Continued)

D. If we went to a free market for farm products, farm income would return to recent levels after a short period of adjustment.

|  | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 5 | 36 | 26 | 29 | 5 |
| Grant | 8 | 47 | 33 | 43 | 19 |
| Thomas | 12 | 26 | 23 | 24 | 5 |
| Washington | 9 | 39 | 55 | 44 | 11 |
| Oklahoma | 13 | 83 | 59 | 72 | 24 |
| Kansas | 21 | 65 | 78 | 68 | 16 |
| $\quad$ Total | 34 | 148 | 137 | 140 | 40 |

E. Finding new uses for farra products doesn ${ }^{\text {t }}$ offer much hope for - solving the farm problem.

|  | SA | A | $\underline{U}$ | $\underline{D}$ | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 0 | 19 | 6 | 63 | 13 |
| Grant | 3 | 40 | 16 | 75 | 16 |
| Thams | 9 | 20 | 9 | 36 | 16 |
| Washington | 6 | 37 | 17 | 84 | 14 |
| Oklahoma | 3 | 59 | 22 | 138 | 29 |
| Kansas | 15 | 57 | 26 | 120 | 30 |
| $\quad$ Total | 18 | 116 | 48 | 258 | 59 |

F. The government should support farm prices but it shouldn ${ }^{6}$ t try to tell a fiarmer what and how much to produce.

|  | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 5 | 23 | 18 | 48 | 7 |
| Grant | 6 | 32 | 18 | 75 | 19 |
| Thomas | 8 | 22 | 14 | 35 | 11 |
| Washington | 15 | 36 | 30 | 68 | 9 |
| Oklahoma | 11 | 55 | 36 | 123 | 26 |
| Kansas | 23 | 58 | 44 | 103 | 20 |
| $\quad$ Total | 34 | 113 | 80 | 226 | 46 |

APPENDIX $B$, TABLE I (Continued)
G. The family farmis rapidly going out of existence.

|  | SA | A | 凹 | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Texas | 20 | 55 | 6 | 18 | 2 |
| Grant | 38 | 88 | 5 | 13 | 6 |
| Thomas | 21 | 46 | 7 | 14 | 2 |
| Washington | 41 | 68 | 13 | 29 | 7 |
| Oklahoma | 58 | 143 | 11 | 31 | 8 |
| Kansas | 62 | 114 | 20 | 43 | 9 |
| $\quad$ Total | 120 | 257 | 31 | 74 | 17 |

H. There's no reason for the United States to have so much surplus food while there are hungry people in the world.

|  | SA | A | $\underline{U}$ | $\underline{D}$ | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 22 | 50 | 13 | 16 | 0 |
| Grant | 30 | 76 | 19 | 23 | 2 |
| Thomas | 18 | 52 | 10 | 9 | 1 |
| Washington | 35 | 64 | 35 | 22 | 2 |
| Oklahoma | 52 | 126 | 32 | 39 | 2 |
| Kansas | 53 | 116 | 45 | 31 | 3 |
| $\quad$ Total | 105 | 242 | 77 | 70 | 5 |

I. The wheat price would be higher than it is now if farmers didn't use new varieties and fertilizers.

| U. | SA | $A$ | $\underline{U}$ | $\underline{D}$ | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 4 | 24 | 11 | 50 | 12 |
| Grant | 9 | 46 | 20 | 51 | 24 |
| Thomas | 2 | 17 | 16 | 43 | 12 |
| Washington | 7 | 62 | 30 | 49 | 10 |
| Oklahoma | 13 | 70 | 31 | 101 | 36 |
| Kansas | 9 | 79 | 46 | 92 | 22 |
| $\quad$ Total | 22 | 149 | 77 | 193 | 58 |

APPENDIX B, TABLE I (Continued)
J. Farners could easily organize to control production and raise prices.

|  | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Texas | 3 | 15 | 20 | 48 | 15 |
| Grant | 9 | 23 | 16 | 71 | 31 |
| Thonas | 4 | 9 | 15 | 48 | 14 |
| Washington | 6 | 21 | 24 | 80 | 27 |
| Oklahona | 12 | 38 | 36 | 119 | 46 |
| Kansas | 10 | 30 | 39 | 128 | 41 |
| $\quad$ Total | 22 | 68 | 75 | 247 | 87 |

Ko When developing a wheat export policy, the United States must consider its effects on other wheat exporting countries.

|  | SA | A | $\underline{U}$ | $\underline{D}$ | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 3 | 61 | 13 | 17 | 7 |
| Texas | 9 | 77 | 30 | 25 | 9 |
| Grant | 6 | 49 | 10 | 21 | 4 |
| Thomas | 7 | 80 | 40 | 25 | 6 |
| Washington | 12 | 138 | 43 | 42 | 16 |
| Oklahoma | 13 | 129 | 50 | 46 | 10 |
| Kansas |  |  |  |  |  |
| $\quad$ | 25 | 267 | 93 | 88 | 26 |

## APPENDIX B, TABLE II

FREQUENCIES OF APPROVAL-DISAPPROVAL ON ITENS USED IN IIDERAL-CONSERVATIVE SCALE BY AREAS


APPENDIX $B$, TABLE II (Continued)

Da Most big businesses make entirely too much profit.

|  | SA | A | U | $\underline{D}$ | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 20 | 34 | 23 | 21 | 3 |
| Grant | 32 | 53 | 38 | 24 | 3 |
| Thomas | 13 | 50 | 14 | 10 | 3 |
| Washington | 41 | 60 | 36 | 19 | 1 |
| Oklahoma | 52 | 87 | 61 | 45 | 6 |
| Kansas | 54 | 110 | 50 | 29 | 4 |
| $\quad$ Total | 106 | 197 | 111 | 74 | 10 |

E. Government relief programs have gotten to be too large.


APPENDIX B, TABLE II (Continued)

Go The Federal goverment should be doing nore to help small town and cities build the schools they need.

|  | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 3 | 34 | 14 | 36 | 14 |
| Grant | 14 | 57 | 21 | 43 | 15 |
| Thonas | 7 | 33 | 18 | 21 | 11 |
| Washington | 19 | 51 | 38 | 36 | 13 |
| Oklahoma | 17 | 91 | 35 | 79 | 29 |
| Kansas | 26 | 84 | 56 | 57 | 24 |
| Total | 43 | 175 | 91 | 136 | 53 |

H. One job of goverment is to see that people are free to run their businesses as they please.

|  | SA | A | U | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 34 | 46 | 10 | 9 | 2 |
| Grant | 36 | 76 | 14 | 19 | 5 |
| Thomas | 25 | 42 | 15 | 8 | 0 |
| Washington | 43 | 58 | 33 | 22 | 1 |
| Oklahoma | 70 | 122 | 24 | 28 | 7 |
| Kansas | 68 | 100 | 48 | 30 | 1 |
| Total | 138 | 222 | 72 | 58 | 8 |
| I. Present government farn programs are contrary to the free enterprise system. |  |  |  |  |  |
|  | SA | A | U | D | SD |
| Texas | 26 | 41 | 13 | 19 | 2 |
| Grant | 30 | 73 | 21 | 19 | 7 |
| Thomas | 20 | 40 | 17 | 12 | 1 |
| Washington | 28 | 59 | 38 | 27 | 5 |
| Oklahoma | 56 | 114 | 34 | 38 | 9 |
| Kansas | 48 | 99 | 55 | 39 | 6 |
| Total | 104 | 213 | 89 | 77 | 15 |

## APPENDIX $\mathrm{B}_{2}$ TABLE III

FREQUENCIES OF AGREEMENT DISAGREEMENT ON ITEMS RELATED TO CONCERN ABOUT EFFICIENCY IN FARMINGg BY AREA
A. What a farmer has grown in the past is a good way to figure allotments for the future.

|  | SA | A | 区 | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 2 | 40 | 15 | 27 | 17 |
| Grant | 4 | 49 | 12 | 60 | 25 |
| Thomas | 6 | 26 | 10 | 32 | 16 |
| Washington | 5 | 56 | 18 | 50 | 29 |
| Oklahoma | 6 | 89 | 27 | 87 | 42 |
| Kansas | 11 | 82 | 28 | 82 | 45 |
| Total | 17 | 171 | 55 | 169 | 87 |

Bo One goal of farm progreans should be to keep increasing efficiency-o that is, produce more food with less land and labor.

|  | SA | A | U | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 11 | 46 | 18 | 21 | 5 |
| Grant | 13 | 79 | 24 | 27 | 7 |
| Thomas | 12 | 35 | 19 | 20 | 4 |
| Washington. | 15 | 65 | 37 | 31 | 10 |
| Oklahoma | 24 | 125 | 42 | 48 | 12 |
| Kansas | 27 | 100 | 56 | 51 | 14 |
| Total | 51 | 225 | 98 | 99 | 26 |
| C. Farmers that are making a good living shouldn ${ }^{9} t$ be allowed to buy or rent any more land. |  |  |  |  |  |
|  | SA | A | B | D | SD |
| Texas | 6 | 8 | 7 | 43 | 37 |
| Grant | 8 | 17 | 13 | 78 | 34 |
| Thomas | 7 | 14 | 6 | 39 | 24 |
| Washington | 10 | 19 | 22 | 70 | 37 |
| Oklahoma | 14 | 25 | 20 | 121 | 71 |
| Kansas | 17 | 33 | 28 | 109 | 61 |
| Total | 32 | 58 | 48 | 230 | 132 |

APPENDIX B, TABLE III (Continued)
D. One sensible way to cut farm production would be to put a limit on the amount of fertilizer that can be used.

|  | SI | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | 3 |  | SD |  |  |
| Texas | 6 | 17 | 13 | 54 | 24 |  |
| Grant | 1 | 13 | 11 | 74 | 42 |  |
| Thomas | 8 | 25 | 10 | 38 | 28 |  |
| Washington | 9 | 24 | 24 | 68 | 39 |  |
| OKlahoma | 9 | 38 | 28 | 128 | 66 |  |
| Kansas | 18 | 62 | 52 | 234 | 67 |  |
| $\quad$ Total |  |  |  |  |  | 133 |

E. The government should see that every farmer makes a decent living.

|  | SA | A | $\underline{U}$ | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 6 | 12 | 13 | 48 | 22 |
| Grant | 12 | 22 | 14 | 77 | 25 |
| Thomas | 11 | 15 | 13 | 31 | 20 |
| Washington | 17 | 27 | 28 | 65 | 21 |
| Oklahoma | 18 | 34 | 27 | 125 | 47 |
| Kansas | 28 | 42 | 41 | 96 | 41 |
| $\quad$ Total | 46 | 76 | 68 | 221 | 88 |

F。 It's important to provide an opportunity to farm for all boys who want to farm.

|  | S4 | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Texas | 18 | 43 | 16 | 20 | 4 |
| Grant | 36 | 69 | 16 | 21 | 8 |
| Thomas | 18 | 44 | 14 | 10 | 4 |
| Washington | 39 | 77 | 17 | 20 | 5 |
| Oklahoma | 54 | 112 | 32 | 41 | 12 |
| Kansas | 57 | 121 | 31 | 30 | 9 |
| $\quad$ Total | 111 | 233 | 63 | 71 | 21 |

APPENDIX B, TABLE III (Continued)
G. Farmers should vote down any wheat program that would raise the cost of vroducing a bushel of wheat.

|  | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Teras | 24 | 45 | 15 | 14 | 3 |
| Grant | 32 | 65 | 26 | 21 | 6 |
| Thomas | 22 | 37 | 16 | 12 | 3 |
| Washington | 24 | 60 | 40 | 29 | 5 |
| Oklahoma | 56 | 110 | 41 | 35 | 9 |
| Kansas | 46 | 97 | 56 | 41 | 8 |
| $\quad$ Tatal | 102 | 207 | 97 | 76 | 17 |

## APPENDIX $B_{3}$ TABLE IV

FREQUENCIES OF AGREEMENTmDISAGREENENT ON ITEMS RELATED TO CONCERN ABOUT GOVERNMENT COST OF FARM PROGRAMS, BY AREAS ${ }^{\text {a }}$

|  | SA | A | $\underline{\square}$ | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 4 | 17 | 14 | 50 | 16 |
| Grant | 4 | 38 | 25 | 60 | 23 |
| Thomas | 5 | 17 | 17 | 34 | 17 |
| Washington | 6 | 33 | 20 | 71 | 28 |
| Oklahoma | 8 | 55 | 39 | 110 | 39 |
| Kensas | 11 | 50 | 37 | 105 | 45 |
| Total | 19 | 105 | 76 | 215 | 84 |

${ }^{a}$ Area frequencies on the other item used in this scale can be found in Appendix A, Table II.

APPENDIX B, TABLE V
FREQUENCIES OF AGREEMENT-DISAGREEMENT ON ITEMS RELATED TO GOVERNMENT'S RESPONSIBILITY TO SUPPORT FARM PRICES AND INCOMESs BY AREAS
A. It is the government's responsibility to support farm prices and incomes.

|  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | SA | A | U | D | SD |
| Texas | 2 | 21 | 27 | 35 | 16 |
| Grant | 7 | 48 | 28 | 48 | 19 |
| Thomas | 4 | 13 | 20 | 37 | 16 |
| Washington | 11 | 46 | 39 | 47 | 15 |
| Oklahoma | 9 | 69 | 55 | 83 | 35 |
| Kansas | 15 | 59 | 59 | 84 | 31 |
| $\quad$ Total | 24 | 128 | 114 | 167 | 66 |

## APPEMDIX B, TABLE VI

FREQUENCIES OF AGRERMENT-DISAGREEMENT ON ITEMS REIATED TO ADMINISTRATION OF PAST GOVERMENT PROGRAMS, BY AREAS

| A. It's not possible to set up an allotinent system that is fair to all farmers. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SA | A | U | D | SD |
| Texas | 12 | 39 | 11 | 27 | 12 |
| Grant | 20 | 60 | 12 | 40 | 18 |
| Thomas | 19 | 39 | 8 | 17 | 7 |
| Washington | 17 | 51. | 21 | 52 | 1.7 |
| Oklahoma | 32 | 99 | 23 | 67 | 30 |
| Kansas | 36 | 90 | 29 | 69 | 24 |
| Total | 68 | 189 | 52 | 136 | 54 |
| Bo Wheat programs have been poorly run (adninistered) in the past. |  |  |  |  |  |
|  | SA | A | U | D | SD |
| Texas | 17 | 37 | 18 | 24 | 5 |
| Grant | 32 | 56 | 24 | 33 | 5 |
| Thomas | 26 | 29 | 15 | 18 | 2 |
| Washington | 24 | 58 | 36 | 33 | 7 |
| Oklahoma | 49 | 93 | 42 | 57 | 10 |
| Kansas | 50 | 87 | 51 | 51 | 9 |
| Total | 99 | 180 | 93 | 108 | 19 |

FREQUENCIES OF AGREEMENT DISAGREEIENT ON ITEMS RELATED TO INPORTANCE OF PROGRAM INFORMATION, BY AREAS

| A. Famexs find it too hard to keep up on alit the government progrems |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| that cone outo |  |  |  |  |  |
|  | $5 A$ | $A$ | 0 | $D$ | SD |
|  |  |  |  |  |  |
| Texas | 27 | 55 | 0 | 17 | 2 |
| Grant | 47 | 77 | 3 | 19 | 4 |
| Thomas | 35 | 42 | 4 | 8 | 1 |
| Washington | 30 | 77 | 13 | 33 | 5 |
| Oklahoma | 74 | 132 | 3 | 36 | 6 |
| Kansas | 65 | 119 | 17 | 41 | 6 |
| Total | 139 | 251 | 20 | 70 | 12 |

Bo An individual farmer can to moch about the farm problem so why worry about it

|  | SA | A | U | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 5 | 19 | 10 | 47 | 20 |
| Grant | 9 | 37 | 8 | 77 | 19 |
| Thomes | 12 | 28 | 11 | 27 | 12 |
| Washington | 19 | 51 | 25 | 50 | 13 |
| Oklahoma | 14 | 56 | 18 | 124 | 39 |
| Kansas | 31 | 79 | 36 | 77 | 25 |
| Total | 45 | 135 | 54 | 201 | 64 |

Co Keeping up on form programs is just as important as knowing about the latest feeding and fertile ang practices.

|  | SA | A | U | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 30 | 63 | 4 | 4 | 0 |
| Grant | 42 | 95 | 9 | 3 | 3 |
| Thomas | 26 | 54 | 5 | 3 | 2 |
| Washington | 41 | 99 | 10 | 5 | 3 |
| Oklahoma | 72 | 156 | 13 | 7 | 3 |
| Kansas | 67 | 153 | 25 | 8 | 5 |
| Total | 139 | 309 | 28 | 15 | 8 |

APPENDIX $B_{8}$ TABLE VII (Continued)
D. Detemining what fam progroms whould be best is really the job of the policy experts.

|  | SA | A | U | D | SD |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Lexas | 0 | 11 | 17 | 37 | 36 |
| Grant | 3 | 22 | 16 | 63 | 46 |
| Thomas | 4 | 12 | 12 | 32 | 30 |
| Washington | 4 | 23 | 26 | 61 | 44 |
| Oklahoma | 3 | 33 | 33 | 100 | 82 |
| Kansas |  |  |  |  |  |
| $\quad$ Total | 8 | 35 | 38 | 93 | 74 |

APPENDIX C

APPENDIX C, TABLE I
MEAN SCORES AND NORMALIZED Z VALUES ON DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH PERCEPTION SCORES, BY AREAS

Education and Perception

|  |  | Mean |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-10 | N | 11-40 | N | Difference | $\underline{2}$ |
| Grant | 33.77 | 49 | 33.60 | 101 | . 17 | . 052 |
| Texas | 35.60 | 33 | 34.22 | 67 | 1.38 | 1.626 |
| Thomas | 34.92 | 42 | 34.46 | 47 | . 46 | . 507 |
| Washington | 35.55 | 86 | 32.19 | 71 | 3.36 | 4.720** |
| Oklahoma | 34.51 | 82 | 33.85 | 168 | . 66 | 1.049 |
| Kansas | 35.35 | 128 | 33.10 | 118 | 2.25 | 4.000** |
| Total | 35.02 | 210 | 33.54 | 286 | 1.48 | 3.690** |

Organizational Index and Perception

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-8 | N | 2-up | N |  |  |
| Grant | 33.86 | 90 | 33.35 | 60 | . 51 | . 891 |
| Texas | 35.00 | 66 | 33.97 | 35 | 1.03 | 1.369 |
| Thomas | 34.69 | 52 | 34.76 | 38 | -. 07 | . 094 |
| Washington | 34.80 | 109 | 32.36 | 49 | 2.44 | 2.908** |
| Oklahoma | 34.34 | 156 | 33.57 | 95 | .77 | 1.500 |
| Kansas | 34.77 | 161 | 33.41 | 87 | 1.36 | 2.031* |
| Total | 34.56 | 317 | 33.50 | 182 | 1.06 | 2.495* |

Most Preferred Program and Perception

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Other | N |  |  |
| Grant | 35.34 | 35 | 33.01 | 111 | 2.33 | 2.932** |
| Texas | 35.68 | 19 | 34.30 | 80 | 1.38 | 1.654 |
| Thomas | 35.29 | 24 | 34.14 | 57 | 1.15 | 1.368 |
| Washington | 36.00 | 23 | 33.57 | 116 | 2.43 | 2.499* |
| Oklahoma | 35.46 | 54 | 33.55 | 191 | 1.91 | 3.086** |
| Kansas | 35.63 | 47 | 33.75 | 174 | 1.88 | 2.689** |
| Total | 35.54 | 101 | 33.65 | 365 | 1.89 | 3.878** |

APPENDIX C, TABLE I (Continued)

Leest Preferred Program and Perceution

|  | Mean Score |  |  |  | Ditference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Marke |  | datory | I |  |  |
| Grant | 32.50 | 38 | 33.91 | 24 | -1. 41 | 1.306 |
| Texas | 33.81 | 27 | 35.60 | 28 | -1.79 | 1.735 |
| Thomas | 33.45 | 11 | 35.65 | 41 | -2.20 | 1.640 |
| Washington | 32.40 | 42 | 34.97 | 45 | -2.57 | 2.555* |
| Oklahome | 33.04 | 65 | 34.82 | 52 | -1.78 | 2.363* |
| Kansas | 32.62 | 53 | 35.30 | 86 | -2.68 | 3.271** |
| Total | 32.85 | 118 | 35.12 | 138 | $\cdots 2.27$ | 4.095** |

Wheat Referendum Vote and Perception

|  |  | Mean |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | N | No | N | Difference | Z |
| Grant | 32.49 | 61 | 34.73 | 79 | -2.24 | 3.078** |
| Texas | 32.55 | 36 | 35.52 | 48 | -2.97 | 3.196** |
| Thomas | 33.22 | 31 | 35.43 | 53 | -2.21 | 2.534* |
| Washington | 32.24 | 54 | 35.30 | 69 | -3.06 | 3.524** |
| Oklahoma | 32.51 | 97 | 35.03 | 127 | -2.52 | 4.307** |
| Kansas | 32.60 | 85 | 35.36 | 122 | -2.76 | 4.300** |
| Total | 32.55 | 182 | 35.19 | 249 | -2.64 | 6.123** |

Fair Price for Wheat and Perception

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1.99 | N | 2.00mup | N |  |  |
| Grant | 34.21 | 33 | 33.50 | 117 | . 71 | . 974 |
| Texas | 35.61 | 13 | 34.33 | 87 | 1.28 | 1.095 |
| Thomas | 35.73 | 19 | 34.45 | 70 | 1.28 | . 823 |
| Washington: | 34.84 | 58 | 33.60 | 96 | 1.24 | 1.531 |
| Oklahoma | 34.60 | 46 | 33.85 | 204 | . 75 | 1.342 |
| Kansas | 35.06 | 77 | 33.96 | 166 | 1.10 | 1.525 |
| Total | 34.89 | 123 | 33.90 | 370 | . 99 | 2.119* |

Five-Year Free Market Price for Wheat and Perception

|  | Mean Score |  |  |  | Difference | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1.0001 .50 | N | Qther | N |  |  |
| Grant | 33.07 | 68 | 34.01 | 70 | -. 94 | 1.187 |
| Texas | 34.01 | 54 | 35.67 | 34 | -1.66 | 1.617 |
| Thomas | 34.20 | 30 | 35.10 | 47 | -. 90 | . 844 |
| Washington | 33.53 | 67 | 34.57 | 66 | -1.04 | 1.444 |
| Oklahoma | 33.49 | 122 | 34.55 | 104 | -1.06 | 1.691 |
| Kansas | 33.74 | 97 | 34.79 | 113 | -1.05 | 1.770 |
| Total | 33.60 | 212 | 34.68 | 217 | -1.08 | 2.483* |

## APPENDIX C, TABLI I (Continued)

Farm Size and Perception

|  |  | Mean |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sna 11 | N | Large | N | Difference | 2 |
| Grant | 35.26 | 23 | 33.63 | 73 | I. 63 | 1.562 |
| Texas | 36.09 | 21 | 34.10 | 49 | 1.99 | 2.210* |
| Thomas | 33.88 | 17 | 35.02 | 40 | - 1.14 | . 979 |
| Washington | 34.11 | 51 | 32.74 | 50 | 1.37 | 1.677 |
| Oklahoma | 35.65 | 44. | 33.81 | 122 | 1.84 | 2.564* |
| Kansas | 34.05 | 68 | 33.75 | 90 | - 30 | . 363 |
| Total. | 34.68 | 112 | 33.79 | 212 | . 89 | 1.816 |

Attendance at Policy Meetings and Percention

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Did Attend | N | Did Not Attend | N |  |  |
| Grant | 33.53 | 130 | 35.31 | 16 | -1.78 | 1.731 |
| Texas | 34.11 | 70 | 35.53 | 28 | - 1.42 | 1.891 |
| Thomas | 34.78 | 71 | 34.55 | 16 | . 22 | . 00 |
| Washington | 33.34 | 105 | 35.53 | 47 | -2.19 | 2.613** |
| Oklahoma | 33.73 | 200 | 35.45 | 44 | -1.72 | 2.792** |
| Kansas | 33.92 | 176 | 35.28 | 63 | -1.36 | 2.019* |
| Total | 33.82 | 376 | 35.35 | 107 | -1. 53 | 3.407** |

Attendance at Educational Meetings and Perception

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Did Attend | 4 | Did. Not Attend | N |  |  |
| Grant | 34.33 | 69 | 32.92 | 79 | 1.41 | 2.143* |
| Texas | 34.27 | 48 | 34.90 | 51 | -. 63 | . 481 |
| Thomas | 35.74 | 31 | 34.27 | 58 | 1.47 | 1.248 |
| Washington | 32.72 | 62 | 34.83 | 95 | -2.11 | 3.041*** |
| Oklahoma | 34.30 | $11 \%$ | 33.70 | 130 | . 60 | 1.452 |
| Kansas | 33.73 | 93 | 34.62 | 153 | -7. 89 | 1.754 |
| Total | 34.05 | 210 | 34.19 | 283 | . 14 | . 254 |

## APPENDIX C. TABLE II

MEAN SCORES AND NORMALIZED Z VALUES OF DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH LIBERAL CONSERVATIVE ORIENTATION, BY AREAS

Age and İberal-Conservative Orientation

|  |  | Me |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-44 | N | $45 \times 20$ | N | Difference | 2 |
| Grant | 23.69 | 49 | 25.62 | 101 | -1.93 | 2.237* |
| Texas | 23.5 ? | 40 | 24.04 | 61 | -. 47 | . 808 |
| Thomas | 23.02 | 37 | 25.32 | 53 | -2.30 | 2.118* |
| Washington | 25.49 | 69 | 26.11. | 87 | -0.62 | . 542 |
| Oklahoma | 23.64 | 89 | 25.03 | 162 | - -1.39 | 2.266* |
| Kansas | 24.63 | 106 | 25.81 | 140 | -1. 18 | 1.669 |
| Total | 24.17 | 195 | 25.39 | 302 | $-1.22$ | 2.690** |

Education and Liberal Conservative Orientation

|  | Mean Score |  |  |  | Difference | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0-10$ | N | 11-up | N |  |  |
| Grant | 26.77 | 49 | 24.12 | 101 | 2.65 | 2.785** |
| Texas | 25.17 | 33 | 23.11. | 67 | 2.06 | 2.250* |
| Thomas | 25.26 | 42 | 23.61 | 47 | 1.65 | 1.843 |
| Washington | 25.68 | 85 | 25.97 | 71 | -. 29 | . 207 |
| Oklahoma | 26.17 | 82 | 23.72 | 1.68 | 2.45 | 3.479** |
| Kansas | 25.54 | 127 | 25.03 | 118 | . 51 | 1.387 |
| Total | 25.78 | 209 | 24.26 | 286 | 1. 52 | 3.638** |

Political Party and Iiberal Conservative Orientation

|  | Mear Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dem $^{\text {a }}$ | M | Repo | N |  |  |
| Grant | 25.83 | 86 | 23.64 | 59 | 2.19 | 2.301* |
| Texas | 24.65 | 55 | 22.27 | 37 | 2.38 | 2.392* |
| Thomas | 26.33 | 39 | 22.76 | 34 | 3.57 | 3.152** |
| Washington | 28.77 | 35 | 24.94 | 109 | 3.83 | 4.153** |
| Oklahoma | 25.37 | 143 | 23.11 | 96 | 2.26 | 3.289** |
| Kansas | 27.48 | 74 | 24.47 | 139 | 3.01 | 4.733** |
| Total | 26.10 | 215 | 23.91 | 235 | 2.19 | 4.793** |

APPENDIX $\mathrm{C}_{9}$ TABLE II (Continued)

Most Preferred Progran and LiberalwConservative Orientation
Mean Score

|  | Mean Score |  |  |  | Difference | $\underline{\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Merket | N | Other | N |  |  |
| Grant | 20.77 | 35 | 26.31 | 111 | -5.54 | 5.252** |
| Texas | 21.94 | 19 | 24.36 | 80 | $\cdots 2.42$ | 1.0824 |
| Thomas | 21.62 | 24 | 25.15 | 57 | -3.53 | 2.761** |
| Washington | 23.43 | 23 | 26.31 | 116 | -2.88 | 1.972* |
| Oklehoma | 21.18 | 54 | 25.49 | 191 | -4.31 | 5.541** |
| Kansas | 22.51 | 47 | 25.93 | 173 | -3.42 | 3.803** |
| Total | 21.80 | 101 | 25.70 | 364 | -3.90 | 7.081** |

Least Preferred Progran and Libera IeConservative Orientation

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | $\begin{aligned} & \text { Mandea } \\ & \text { tory } \end{aligned}$ | N |  |  |
| Grant | 28.78 | 38 | 23.79 | 24 | 4.99 | 4.349** |
| Texas | 26.96 | 27 | 22.39 | 28 | 4.59 | 3.338** |
| Thomas | 27.18 | 11 | 23.17 | 41 | 4.01 | 2.405* |
| Washington | 29.00 | 42 | 23.11 | 45 | 5.89 | 6.057 ** |
| Oklahora | 28.03 | 65 | 23.03 | 52 | 5.00 | 5.660** |
| Kansas | 28.62 | 53 | 23.13 | 86 | 5.49 | 6.623** |
| Total | 28.29 | 118 | 23.10 | 138 | 5.19 | 8.803** |

Referendum Vote and Liberale Conservative Orientation

|  | Mean Score |  |  |  | Difierence | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | H | No | $\pm$ |  |  |
| Grant | 27.91 | 62 | 22.54 | 79 | 5.37 | 6.216\%\% |
| Texas | 26.13 | 36 | 22.16 | 48 | 3.97 | 3.688** |
| Thomas | 26.83 | 31 | 23.05 | 53 | 3.78 | 3.236** |
| Washington | 28.68 | 54 | 23.44 | 69 | 5.24 | 6.464** |
| Oklahoma | 27.25 | 47 | 22.40 | 127 | 4.85 | 7.232** |
| Kansas | 28.01 | 85 | 23.27 | 122 | 4.74 | 7.192** |
| Total | 27.60 | 182 | 22.83 | 249 | 4.778 | $10.149 * *$ |

APPENDIX $C$, TABLE II (Continued)

Fair Price for Wheat and Iiberal Conservative Orientation

|  | Mean Score |  |  |  | Dieference | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0 \times 1.29$ | N | 2.00.up | N |  |  |
| Grant | 22.42 | 33 | 25.71 | 117 | -3.29 | 3.443** |
| Texas | 22.53 | 13 | 24.04 | 87 | -1.51 | . 683 |
| Thomas | 23.57 | 19 | 24.68 | 70 | -1.11 | 1.385 |
| Washington | 24.67 | 58 | 26.54 | 95 | -1.87 | 2.672** |
| Oklahora | 22.45 | 46 | 25.00 | 204 | -2. 55 | 3.136** |
| Kansas | 24.40 | 77 | 25.75 | 165 | -1.35 | 2.666** |
| Total | 23.67 | 123 | 25.34 | 369 | -1.67 | 3.656\%* |

Ratio of Off-Farm to Total Income and Ifiberalm Conservative Orientation


Difference $\quad Z$

| Grant | 24.13 | 76 | 25.87 | 74 | -1.74 | $2.224^{*}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Texas | 23.93 | 45 | 23.80 | 56 | .13 | .065 |
| Thomas | 25.42 | 54 | 22.16 | 18 | 3.26 | $2.233 *$ |
| Washington | 26.08 | 87 | 25.20 | 35 | .83 | .298 |
| Oklahoma | 24.05 | 121 | 24.98 | 130 | -.93 | 1.688 |
| Kansas | 25.82 | 141 | 24.16 | 53 | 1.66 | 1.494 |
| Total | 25.01 | 262 | 24.74 | 183 | .27 | .046 |

## APPENDIX C, TABLE III

MEAN SCORES AND NORMALIZED Z VALUES ON DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH ATPITUDE TOWARD EFICIENCY IN FARM PRODUCIION, BY AREAS

Ase and Concern about Efficiency in Famirg

|  | Mean Score |  |  |  | Difference | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0 \mathrm{Cm4}$ | N | 45 -40 | H |  |  |
| Grant | 17.40 | 49 | 18.48 | 101 | -1.08 | 1.333 |
| Texas | 17.05 | 40 | 18.18 | $6]$ | -1.13 | 1.790 |
| Thomes | 18.05 | 37 | 18.83 | 53 | - .78 | 1.343 |
| Washington | 18.20 | 70 | 20.06 | 87 | -1.86 | 3.016** |
| Oklahoma | 17.24 | 89 | 18.37 | 162 | -1. 13 | 2.172* |
| Kansas | 18.14 | 107 | 19.60 | 140 | -1.46 | 3.095** |
| Total | 17.73 | 196 | 18.94 | 302 | -1. 21 | 3. ${ }^{4}+52^{* *}$ |

Education and Concern about Effictency in Faming

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0.10 | N | 11-40 | M |  |  |
| Grant | 19.61 | 49 | 17.41 | 101 | 2.20 | 2.952** |
| Texas | 18.60 | 33 | 17.29 | 67 | 1.031 | 1.878 |
| Thomas | 19.02 | 42 | 18.10 | 47 | . 92 | 1.218 |
| Washing ton | 19.82 | 86 | 18.46 | 71 | 1.36 | 2.348* |
| Oklahoma | 19.20 | 82 | 17.36 | 168 | 1.84 | 3.474** |
| Kanses | 19.56 | 128 | 18.32 | 118 | 1.24 | 2.631** |
| Total | 19.42 | 210 | 17.76 | 286 | 1.066 | 4.721** |

Organizational Index and Concern about Efficiency in Ferming

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-8 | N | 2w0 | N |  |  |
| Grant | 18.86 | 90 | 17.03 | 60 | 1.83 | 2.818** |
| Texas | 18.22 | 66 | 16.80 | 35 | 1.42 | 1. 969 * |
| Thomas | 18.65 | 52 | 18.31 | 38 | . 34 | . 181 |
| Washington | 19.31 | 109 | 12.00 | 49 | . 31 | . 893 |
| Oklahoma | 18.59 | 156 | 16.94 | 95 | 1.65 | 3.387** |
| Kansas | 19.09 | 161 | 18.70 | 87 | . 39 | . 943 |
| Total | 18.85 | 312 | 17.28 | 182 | 1.07 | 3.034** |

APPENDIX $C$, TABLE III (Continued)
Political Party and Concern about Efficiency in Farming

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dem. | N | Reg. | N |  |  |
| Grant | 18.16 | 86 | 17.94 | 59 | . 22 | . 408 |
| Texas | 18.09 | 55 | 16.83 | 37 | 1.26 | 1.784 |
| Thomas | 19.64 | 39 | 17.83 | 30 | 1.81 | 1.666 |
| Washington | 20.74 | 35 | 18.83 | 110 | 1.92 | 2.864** |
| Oklahoma | 18.13 | 141 | 17.52 | 96 | . 61 | 1.42 |
| Kansas | 20.16 | 74 | 18.62 | 140 | 1. 54 | 2.893** |
| Total | 18.83 | 215 | 18.17 | 236 | . 66 | 1.945 |

Least Preferred Programs and Conern about Efficiency in Farming

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Mendaw tory | W |  |  |
| Grant | 19.39 | 38 | 17.16 | 24 | 2.23 | 2.515* |
| Texas | 17.85 | 27 | 17.28 | 28 | .57 | . 925 |
| Thomas | 19.63 | 11 | 18.31 | 41 | 1.32 | 1.287 |
| Washington | 19.59 | 42 | 18.40 | 45 | 1. 19 | 1.658 |
| Oklahoma | 18.75 | 65 | 17.23 | 52 | 1.52 | 2.790\%* |
| Kansas | 19.60 | 53 | 18.36 | 86 | 1.24 | 2.201* |
| Total | 19.13 | 118 | 17.93 | 138 | 1.20 | 3.209** |

Referendum Vote and Concern about Efficiency in Farming

|  | Mean Score |  |  |  | Difference | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | M | He | N |  |  |
| Grant | 18.75 | 61 | 17.35 | 79 | 1.40 | 2.125* |
| Texas | 18.08 | 142 | 17.29 | 48 | . 79 | 2.372 |
| Thomas | 19.83 | 31 | 17.75 | 53 | 2.08 | 2.150* |
| Washington | 19.74 | 54 | 18.60 | 69 | 1.14 | 1.922 |
| Oklahoma | 18.50 | 97 | 17.33 | 127 | 1.17 | 2.357* |
| Kansas | 19.77 | 85 | 18.23 | 122 | 1.54 | 2.920\%* |
| Total | 19.09 | 182 | 17.78 | 249 | 1.32 | 3.740\%* |

Fair Price for Wheat and Concern about Efficiency in Farming

|  |  | Mea | Ure |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 001092 | N | 20.00 -40 | N | Difference | $\underline{Z}$ |
| Grant | 16.48 | 33 | 18.59 | 117 | -2. 211 | 2.744*** |
| Texas | 18.30 | 13 | 17.67 | 87 | . 63 | . 139 |
| Thomas | 17.36 | 19 | 18.88 | 70 | - 1.52 | 2.072* |
| Washington | 19.31 | 58 | 19.15 | 96 | .16 | . 180 |
| Oklahome | 17.00 | 446 | 18.20 | 204 | -1.20 | 2.137* |
| Kensas | 18.83 | 77 | 19.04 | 166 | = 0.21 | . 794 |
| Total. | 18.14 | 123 | 18.58 | 370 | $\underline{4}+4$ | 1. 486 |

APPENDIX C, TABLE III (Contmed)
Debt to Asset Ratio and Concern about Efriciency in Fexming

| Hean Score |  |  |  | Difference | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0-25 |  | $26 \times 10$ |  |  |  |
| Percent | N | Percent | N |  |  |
| 18.30 | 115 | 17.55 | 34 | . 75 | . 782 |
| 17.97 | 80 | 17.00 | 20 | . 97 | 1.291 |
| 19.03 | 63 | 16.83 | 18 | 2.20 | 2.318* |
| 19.52 | 99 | 18.60 | 38 | . 92 | 1. 340 |
| 18.16 | 195 | 17.35 | 54 | . 81 | 1.487 |
| 19.33 | 162 | 18.03 | 56 | 1.30 | 2.351* |
| 18.69 | 357 | 17.70 | 110 | -99 | 2.495\% |

Total Income and Concern about Efficiency in Eerming

|  |  | May | gre |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | N | H2els | N | Diference | 2 |
| Grant | 19.21 | 73 | 17.10 | 77 | 2.11 | 3.671** |
| Texas | 18.13 | 36 | 17.50 | 65 | . 63 | . 727 |
| Thomas | 21.04 | 24 | 17.35 | 48 | 3.69 | 3.605** |
| Washington | 19.35 | 60 | 19.00 | 62 | . 35 | . 589 |
| Oklahoma | 18.86 | 109 | 17.28 | 142 | 2. 58 | 3.570\%* |
| Kansas | 19.83 | 84 | 18.28 | 110 | 1. 55 | 2.711** |
| Total | 19.28 | 193 | 17.72 | 252 | 1.56 | 4.386** |

Ratio of Offorarm to Total Income and Concerr about Efficiency in Farming

| Mean Score |  |  |  | Difference | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0-25 |  | 26 mp |  |  |  |
| Pexcent | $\mathbb{N}$ | Percent | N |  |  |
| 17.86 | 76 | 18.40 | 74 | 0.54 | . 436 |
| 16.97 | 45 | 18.33 | 56 | -1.36 | 1.758 |
| 19.37 | 54 | 16.22 | 18 | 3.15 | 2.886** |
| 19.44 | $8{ }^{3}$ | 28.48 | 35 | . 96 | 1.319 |
| 12.53 | 121 | 18.37 | 130 | 0.84 | 1.454 |
| 19.42 | 141 | 27.71. | 53 | 3.70 | 2.746\% |
| 18.54 | 262 | 18.18 | 183 | . 36 | 1. $17 / 4$ |

Farm Size and Concern about Effigercion Fomme

|  | Mean Scote |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\operatorname{Sn2} 11$ | N | Laree | 11 |  |  |
| Grant | 19.13 | 23 | 17.04 | 73 | 2.09 | 1.933 |
| Texas | 1.9.04 | 21 | 16.73 | 49 | 2.31 | 2.266* |
| Thomas | 20.23 | 17 | 17.57 | 40 | 2.66 | 1. 569 |
| Washington | 19.49 | 51 | 18.58 | 50 | . 91 | 1.084 |
| Oflahoma | 19.09 | 44 | 16.91 | 122 | 2.18 | 2.988** |
| Kansas | 19.67 | 68 | 18.13 | 90 | 1.54 | 1.961* |
| Total | 12,44 | 112 | 76.43 | 212 | 2.01 | 3.826** |

APPENDIX $C_{9}$ TABLE III (Contimued)
Attendance at Educational Maetings and Concera about Effoiency in Farmine
Mean Sogro

| Did |  | Did Not |  | Difforence | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Attend | N | Attend | § |  |  |
| 17.88 | 69 | 18.39 | 79 | -0. 51 | .583 |
| 16.85 | 48 | 18.45 | 5 | -1. 1.60 | 2.016* |
| 18.09 | 31 | 18.68 | 58 | -. 59 | . 316 |
| 18.75 | 62 | 19.54 | 95 | -. 79 | 1.381 |
| 17.46 | 117 | 18.42 | 130 | -. 95 | 1.757 |
| 18.53 | 93 | 19.22 | 153 | -. 69 | 1.232 |
| 17.93 | 210 | 18.85 | 283 | -0.92 | 2.419* |

Net Worth and Concern about Effoicney in Farming

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Iow | N | High | N |  |  |
| Grant | 18.25 | 68 | 18.03 | 81 | . 22 | . 191 |
| Teras | 18.26 | 75 | 16,32 | 25 | 1. 94 | 2.085* |
| Thomas | 19.19 | 51 | 17.43 | 30 | 1.76 | 1.784 |
| Washington | 19.47 | 107 | 18.44 | 29 | 1.03 | 1.409 |
| Oklahoma. | 18.25 | 143 | 17.63 | 106 | . 62 | . 918 |
| Kansas | 19.38 | 158 | 17.93 | 59 | 2.45 | 2.368* |
| Total | 18.85 | 301 | 17.73 | 165 | 13.12 | 2.668** |

## APPENDIX C, TABIE IV

MEAN SCORES AND NORMALIZED Z VALUES ON DIFFERENCES FOR GROUPS SHOWIHG AN ASSOCIATION WI'TH ATTITUDE TOWARD GOVERNMENT COSTS, BY AREAS

|  | - | Mean | Ore |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0 \times 10$ | N | 1190up | N | Difference | Z |
| Grant | 4.53 | 49 | 4.61 | 101 | -. 0.08 | . 235 |
| Texas | 4.24 | 33 | 4.35 | 67 | $\sim .11$ | . 419 |
| Thomas | 4.26 | 42 | 4.36 | 47 | - 0.10 | . 210 |
| Washington | 4.17 | 86 | 5.00 | 71 | -. 83 | 3.043** |
| Oklahoma | 4.41 | 82 | 4.51 | 168 | $\cdots .10$ | . 453 |
| Kansas | 4.20 | 128 | 4.74 | 118 | -0. 54 | 2.235* |
| Total | 4.28 | 21.0 | 4.60 | 286 | -. 32 | 2.011* |

Organizational Index and Conecen about Goverrment Costs

|  | $0 \times 8$ |  | 9 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grant | 4.77 | 90 | 4.30 | 60 | . 47 | 2.024* |
| Texas | 4.43 | 66 | 4.08 | 35 | . 35 | 1.308 |
| Thomes | 4.01 | 52 | 4.73 | 38 | -. 72 | 1.938 |
| Washington | 4.41 | 109 | 4.83 | 49 | -. 42 | 1.202 |
| Oklahoma | 4.63 | 156 | 4.22 | 95 | . 41 | 2.365* |
| Kansas | 4.28 | 161 | 4.79 | 87 | $=0.51$ | 2.058* |
| Total | 4.45 | 37. | 4.49 | 182 | -. 04 | . 204 |

Political Party and Concerm about Government Costs

|  | an Soore |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Derme | N | Reg. | N |  |  |
| Grant | 4.93 | 86 | 4.21. | 59 | - 82 | 3.037** |
| Texas | 4.47 | 55 | 3.97 | 37 | . 50 | 1.492 |
| Thomas | 4.82 | 39 | 3.63 | 30 | 1.19 | 3.003** |
| Washington | 5.40 | 35 | 4.27 | 110 | 1.13 | 3.116** |
| Oklahoma | 4.75 | 141 | 4.06 | 96 | . 69 | 3.331** |
| Kansas | 5.09 | 74 | 4.23 | 140 | . 96 | 3.739** |
| Total | 4.86 | 215 | 4.10 | 236 | . 76 | 4.909** |

APPENDIX $C$, TABIE IV (Continued)

Most Preferred Program and Concern about Government Costs

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Other | K |  |  |
| Grant | 3.71 | 35 | 4.84 | 111 | - 1.13 | 3.340** |
| Texas | 3.68 | 19 | 4.50 | 80 | - 0.82 | 1.956 |
| Thomas | 3.33 | 24 | 4.54 | 57 | -1. 21 | 2.976** |
| Washington | 3.73 | 23 | 4.66 | 117 | -. 93 | 2.039* |
| Oklahoma | 3.70 | 54 | 4.70 | 191. | \% 1.00 | 4.041** |
| Kansas | 3.53 | 47 | 4.62 | 174 | - 1.09 | 3.833** |
| Total | 3.62 | 101 | 4.66 | 365 | -. 1.04 | 5.932** |

Leost Preferred Program and Concern about Goverment Costs

|  |  | Mea | Score |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Mandatory | N | Difference | Z |
| Grant | 5.50 | 38 | 4.29 | 24 | 1.21 | 2.624** |
| Texas | 4.59 | 27 | 4.25 | 28 | .34 | . 923 |
| Thornas | 5.00 | 11 | 4.17 | 41 | . 83 | 1.814 |
| Wa.shington | 5.07 | 42 | 4.02 | 45 | 1.05 | 2.945** |
| Oklahoma | 5.12 | 65 | 4.26 | 52 | . 86 | 2.705** |
| Kansas | 5.05 | 53 | 4.09 | 86 | .96 | 3.526** |
| Total | 5.09 | 118 | 4.15 | 138 | .94 | 4.623** |

Referendum Vote and Concern about Government Costs

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | M | No | N |  |  |
| Grant | 5.27 | 61. | 4.06 | 79 | 1.21 | 4.001** |
| Texas | 5.16 | 36 | 3.75 | 48 | 1.41 | 4.369** |
| Thomas | 5.16 | 31 | 3.86 | 53 | 1.30 | 3.278** |
| Washington | 5.18 | 54 | 4.14 | 69 | 1.04 | 3.246** |
| Oklahoma | 5.23 | 97 | 3.94 | 127 | 1.29 | 5.839** |
| Kansas | 5.17 | 85 | 4,02 | 122 | 1.15 | 4.660** |
| Total | 5.20 | 182 | 3.98 | 249 | 1.22 | 7.463** |

APPEMDIX $C$, TABIE IV (Continued)

Fair Frice fior Wheat and Concern about Government Costs

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0.1 .29 | N | 2000mup | $\mathbb{N}$ |  |  |
| Grant | 3.78 | 33 | 4.81 | 117 | -1. 1.03 | 3.201** |
| Texas | 4.53 | 13 | 4.31 | 87 | . 22 | . 550 |
| Thonas | 4.05 | 19 | 4.37 | 70 | -. 32 | . 414 |
| Washington | 3.96 | 58 | 4.87 | 96 | -. 91 | 3.053** |
| Oklahoma | 4.00 | 46 | 4.59 | 2046 | - . 59 | 2.31.9* |
| Kansas | 3.98 | 77 | 4.66 | 166 | -. 0.68 | 2.610\%* |
| Total | 3.99 | 123 | 4.62 | 370 | --. 63 | 3.577*** |

Farm Size and Concern about Government Costs

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sma11 | N | Large | N |  |  |
| Grant | 4.34 | 23 | 4.75 | 73 | -0.41 | 1. 120 |
| Texas | 4.47 | 21. | 4.28 | 49 | . 19 | . 432 |
| Thomas | 4.35 | 17 | 4.52 | 40 | - -17 | . 643 |
| Washington | 4.31 | 51 | 5.14 | 50 | -. 83 | 2.263* |
| OkIahora | 4.40 | 44 | 4.56 | 122 | --. 16 | . 618 |
| Kansas | 4.32 | 68 | 4.36 | 90 | -. 54 | 2.111** |
| Total | 4.35 | 112 | 4.69 | 212 | --. 34 | 1.891 |

Attendance at Educational Meetings and Concerg about Government Costs
Mean Score
DidAttend $\mathbb{N}$ Did Not $\mathbb{N}$ Difference $Z$

| Grant | 4.46 | 69 | $\frac{14.68}{4.68}$ | 79 | -0. 22 | . 975 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | 4.39 | 48 | 4.23 | 51. | .16 | . 536 |
| Thomas | 4.35 | 31 | 4.31 | 58 | . 04 | . 154 |
| Washington | 4.96 | 62 | 4.29 | 95 | .67 | 2.266* |
| Oklahoma. | 4.43 | 117 | 4.50 | 130 | -. 09 | . 465 |
| Kansas | 4.76 | 93 | 4.30 | 1.53 | .46 | 1. 9 99** |
| Total | 4.58 | 21.0 | 4.39 | 283 | .19 | 1.109 |

## APPENDIX C, TABLE V

YEAM SCORES AND NORMALIZED 2 VALUES ON DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH ATTITUDE TOWARD CONSUNER COSTS, BY AREAS

|  | Mean Score |  |  |  | Difference | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-44 | N | 45=40 | IV |  |  |
| Grant | 5.63 | 49 | 5.13 | 1.01 | . 50 | 1.763 |
| Texas | 5.80 | 40 | 5.32 | 61 | . 48 | 1.762 |
| Thomas | 5.51 | 37 | 5.24 | 53 | . 27 | 1.116 |
| Washington | 5.31 | 69 | 5.05 | 85 | - 26 | . 868 |
| Oklahoma | 5.70 | 89 | 5.20 | 162 | . 50 | 2.544* |
| Kansas | 5.38 | 106 | 5.13 | 138 | . 25 | 1.273 |
| Total | 5.53 | 195 | 5.17 | 300 | . 36 | 2.558* |

Education and Concern about Consumer Cost

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0 \times 10$ | N | 11-up | N |  |  |
| Grant | 5.12 | 49 | 5.38 | 101 | -. 26 | 1.143 |
| Texas | 5.36 | 33 | 5.62 | 67 | -. 26 | . 788 |
| Thomas | 5.14 | 42 | 5.53 | 47 | -. 39 | 1.673 |
| Washington | 4.78 | 85 | 5.65 | 69 | - 87 | 3.141** |
| Oklahoma | 5.21 | 82 | 5.48 | 168 | -. 27 | 1.416 |
| Kansas | 4.90 | 127 | 5.60 | 116 | -. 70 | 3.505** |
| Total | 5.02 | 209 | 5.53 | 284 | -. 51 | 3.756** |

Least Preferred Program and Concem about Consumer Cost

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | 思 | Mindatory | N |  |  |
| Grant | 5.34 | 38 | 5.41 | 24 | . 07 | . 166 |
| Texas | 6.00 | 27 | 5.17 | 28 | . 83 | 2.155* |
| Thomas | 5.09 | 11 | 5.21 | 41 | -. 12 | . 409 |
| Washington | 5.57 | 40 | 4.93 | 45 | . 64 | 1.690 |
| Oklahoma | 5.61 | 65 | 5.28 | 52 | . 33 | 1.317 |
| Kansas | 5.47 | 51 | 5.06 | 86 | . 41 | 1.235 |
| Total | 5.55 | 116 | 5.15 | 138 | . 40 | 2.007* |

APPENDIX $C, ~ T A B L E ~ V ~(C o n t i n u e d) ~$
Full or Part Time Operation and Concern about Consunder Cost

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fu11 | N | Part Time | N |  |  |
| Grant | 5.25 | 130 | 5.60 | 20 | -. 35 | I. 265 |
| Texas | 5.52 | 82 | 5.47 | 19 | . 05 | . 406 |
| Thomas | 5.22 | 74 | 5.93 | 16 | -. 71 | 1.513 |
| Weshington | 5.09 | 133 | 5.66 | 21 | -. 57 | 1.470 |
| Oklahoma | 5.35 | 212 | 5.53 | 39 | -. 18 | 1.260 |
| Kansas | 5.14 | 207 | 5.78 | 37 | -. 64 | 2.103* |
| Total | 5.25 | 419 | 5.65 | 76 | -. 40 | 2.344* |

Debt to Asset Ratio and Concern about Consuner Cost

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-25 |  | 26mp |  |  |  |
|  | Percent | N | Percent | N |  |  |
| Grant | 5.21 | 115 | 5.55 | 34 | --. 34 | 1.265 |
| Texas | 5.51 | 80 | 5.50 | 20 | . 01 | . 232 |
| Thomas | 5.20 | 63 | 5.88 | 18 | -. 68 | 1.494 |
| Washington | 5.04 | 97 | 5.70 | 37 | -. 66 | 2.184* |
| Oklahoma | 5.33 | 195 | 5.53 | 54 | -. 20 | 1.155 |
| Kansas | 5.10 | 160 | 5.76 | 55 | -. 66 | 2.610** |
| Total | 5.23 | 355 | 5.65 | 109 | -. 42 | 2.674** |

Ratio of Off-Farm to Total Income and Concern about Consumer Cost

|  | Moan Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-25 | N | 26-up | N |  |  |
| Grant | 5.27 | 76 | 5.32 | 74 | -. 05 | . 751 |
| Texas | 5.42 | 45 | 5.58 | 56 | - . 16 | 1.018 |
| Thomas | 5.09 | 54 | 5.88 | 18 | -. 79 | 1.875 |
| Washington | 5.23 | 86 | 5.37 | 35 | -. 14 | . 789 |
| Oklahoma | 5.33 | 121 | 5.43 | 130 | -. 10 | 1.277 |
| Kansas | 5.17 | 1.40 | 5.54 | 53 | -. 34 | 1.729 |
| Total | 5.24 | 261 | 5.46 | 183 | -. 22 | 2.265* |

Farm Bureau Plembership and Concern about Consumer Cost

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Members | N | Non" Menioers | N |  |  |
| Grant | 5.61 | 62 | 5.07 | 88 | . 54 | 2.525* |
| Texas | 5.47 | 34 | 5.53 | 67 | -0.06 | . 560 |
| Thomas | 5.44 | 50 | 5.25 | 40 | -19 | . 322 |
| Washington | 5.48 | 49 | 5.02 | 106 | . 46 | 2.100* |
| Oklahoma | 5.56 | 96 | 5.27 | 155 | . 36 | 1.600 |
| Kansas | 5.45 | 99 | 5.08 | 145 | .38 | 2.040* |
| Total | 5.51 | 195 | 5.18 | 301 | . 33 | 2.545* |

## APPENDIX C, TABLE VI

MEAN SCORES AND NORMALIZED Z VALUES ON DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH ATTITUDE TOWARD GOVERNMENT ${ }^{\circ}$ S RESPONSIBILITY TO SUPPORT FARM PRICES AND INCOMES, BY AREAS

Political Party and Attitude Toward Goverment 's Responsibility to Support Farm Prices and Incomes

|  | Mean Score |  |  |  | Difference | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Demo | N | Repo | N |  |  |
| Grant | 3.01 | 86 | 2.61 | 59 | . 40 | 2.102* |
| Texas | 2.76 | 55 | 2.27 | 37 | . 49 | 2.232* |
| Thomas | 2.92 | 39 | 2.20 | 30 | .72 | 2.472* |
| Washington | 3.25 | 35 | 2.84 | 110 | . 41 | 1.708 |
| Oklahoma. | 2.91 | 141 | 2.47 | 96 | . 44 | 3.042** |
| Kansas | 3.08 | 74 | 2.70 | 140 | . 38 | 2.066* |
| Total | 2.97 | 215 | 2.61 | 236 | . 36 | 3.336** |

Most Preferred Farm Program and Attitude Toward Government's Responsibility to Support Farm Prices and Incomes

|  | Mean Score |  |  |  | Difference | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Other | N |  |  |
| Grant | 1.77 | 35 | 3.18 | 111 | -1.41 | 6.373** |
| Texas | 1.89 | 19 | 2.76 | 80 | -. 87 | 3.308** |
| Thomas | 1.95 | 24 | 2.54 | 57 | -. 59 | 2.594** |
| Washington | 2.26 | 23 | 3.06 | 117 | -. 80 | 3.013** |
| Oklahoma | 1.81 | 54 | 3.01 | 191 | -1.20 | 7.033** |
| Kansas | 2.10 | 47 | 2.89 | 174 | -. 79 | 4.358** |
| Total | 1.95 | 101. | 2.95 | 365 | -1.00 | 8.125** |

Least Preferred Farm Program and Attitude Toward Goverment's Responsibility to Supoort Farm Prices and Incones

|  | Mean Score |  |  |  | Difference | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Markat | N | Mandatory | N |  |  |
| Grant | 3.60 | 38 | 2.50 | 24 | 1.10 | 3.672** |
| Texas | 3.29 | 27 | 2.10 | 28 | 1.19 | 4.247** |
| Thomas | 2.90 | 11 | 2.34 | 41 | . 56 | 1.928 |
| Washington | 3.54 | 42 | 2.33 | 45 | 1.21 | 5.080** |
| Oklahoma | 3.47 | 65 | 2.28 | 52 | 1.19 | 5.643** |
| Kansas | 3.41 | 53 | 2.33 | 86 | 1.08 | 5.672** |
| Total | 3.44 | 118 | 2.31 | 138 | 1.13 | 8.094** |

## APPENDIX C, TABLE VI (Continued)

Referendurn Vote and Attitude Toward Government's Responsibility to Support Farm Prices and Incomes

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | $\underline{N}$ | № | N |  |  |
| Grant | 3.40 | 61 | 2.37 | 79 | 1.03 | 5.238** |
| Texas | 2.97 | 36 | 2.16 | 48 | . 81 | 3.465** |
| Thomas | 2.77 | 31 | 2.33 | 53 | . 44 | 2.046* |
| Washington | 3.42 | 54 | 2.52 | 69 | . 90 | 4.401** |
| Oklahoma | 3.24 | 97 | 2.29 | 127 | . 95 | 6.242** |
| Kansas | 3.18 | 85 | 2.44 | 122 | .74 | 4.715** |
| Total | 3.21 | 182 | 2.36 | 249 | . 85 | 7.768** |

Fair Price for Wheat and Attitude Toward Government's Responsibility to Support Farm Prices and Incomes

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1.92 | N | 2.00-up | N |  |  |
| Grant | 2.42 | 33 | 2.95 | 117 | -. 53 | 2.308* |
| Texas | 2.30 | 13 | 2.64 | 87 | -. 34 | 1.050 |
| Thomas | 2.15 | 19 | 2.58 | 70 | -. 43 | 1.664 |
| Washington | 2.56 | 58 | 3.15 | 96 | -. 59 | 3.143** |
| Oklahoma | 2.39 | 46 | 2.82 | 204 | -. 43 | 2.363* |
| Kansas | 2.46 | 77 | 2.91 | 166 | -. 45 | 2.917** |
| Total | 2.43 | 123 | 2.86 | 370 | -. 43 | 3.682** |

Total Income and Attitude Toward Government's Responsibility to Support Farm Prices and Incomes

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | N | High | N |  |  |
| Grant | 2.93 | 73 | 2.75 | 77 | . 18 | . 963 |
| Texas | 2.77 | 36 | 2.47 | 65 | . 30 | 1.193 |
| Thomas | 3.00 | 24 | 2.35 | 48 | . 65 | 2.460* |
| Washington | 2.65 | 60 | 3.32 | 62 | -. 67 | 3.485** |
| Oklahoma | 2.88 | 109 | 2.62 | 142 | . 26 | 1.721 |
| Kansas | 2.75 | 84 | 2.90 | 110 | -. 15 | 1.037 |
| Total | 2.82 | 193 | 2.74 | 252 | . 08 | . 613 |

## APPENDIX C, TABLE VII

MEAN SCORES AND NORMALIZED Z VALUES ON DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH ATTITUDE TOWARD PROGRAM ADMINISTRATION, BY AREAS

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-10 | N | 11-up | N |  |  |
| Grant | 5.16 | 49 | 5.40 | 101 | -. 24 | .775 |
| Texas | 4.84 | 33 | 5.85 | 67 | -1.01 | 2.739** |
| Thomas | 4.64 | 42 | 5.02 | 47 | -. 38 | . 897 |
| Washington | 5.38 | 86 | 5.98 | 71 | -. 60 | 1.830 |
| Oklahoma | 5.03 | 82 | 5.58 | 168 | -. 55 | 2.364* |
| Kansas | 5.14 | 128 | 5.60 | 118 | -. .46 | 1.792 |
| Total | 5.10 | 210 | 5.59 | 286 | -. 49 | 2.910** |

Organizational Index and Attitude Toward Program Administration

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-8 | N | 2-up | N |  |  |
| Grant | 5.42 | 90 | 5.18 | 60 | . 24 | . 752 |
| Texas | 5.25 | 66 | 6.00 | 35 | -. 75 | 1.886 |
| Thomas | 4.50 | 52 | 5.28 | 38 | -. 78 | 2.087* |
| Washington | 5.48 | 109 | 5.97 | 49 | -. 49 | 1.559 |
| Oklahoma | 5.35 | 156 | 5.48 | 95 | -. 13 | . 562 |
| Kansas | 5.16 | 161 | 5.67 | 87 | -. 51 | 2.176* |
| Total | 5.25 | 317 | 5.57 | 182 | -. 32 | 1.941 |

Political Party and Attitude Toward Program Administration

|  |  | Mean | Ore |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dem $_{0}$ | N | Repo | N. | Difference | $\underline{Z}$ |
| Grant | 5.37 | 86 | 5.27 | 59 | . 10 | . 006 |
| Texas | 5.69 | 55 | 5.02 | 37 | . 67 | 1.417 |
| Thomas | 5.41 | 39 | 4.60 | 30 | . 81 | 1.686 |
| Washington | 6.54 | 35 | 5.39 | 110 | 1.15 | 3.277** |
| Oklahoma | 5.49 | 141 | 5.17 | 96 | . 32 | . 956 |
| Kansas | 5.94 | 74 | 5.22 | 140 | . 72 | 2.729** |
| Total | 5.65 | 215 | 5.20 | 236 | . 45 | 2.328* |

## APPENDIX C, TABLE VII (Continued)

Most Preferred Program and Attitude Toward Program Administration

| Mean Score |  |  |  | Difference | $\underline{\text { Z }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Free |  |  |  |  |  |
| Market | N | Other | $\underline{N}$ |  |  |
| 4.54 | 35 | 5.58 | 111 | -1.04 | 3.003** |
| 4.63 | 19 | 5.71 | 80 | -1.08 | 2.216* |
| 4.50 | 24 | 4.96 | 57 | -. 46 | 1.109 |
| 4.82 | 23 | 5.77 | 117 | -. 95 | 2.237* |
| 4.57 | 54 | 5.63 | 191 | -1.06 | 3.745** |
| 4.65 | 47 | 5.51 | 174 | -. 86 | 2.881** |
| 4.61 | 101 | 5.57 | 365 | -. 96 | 4.702** |

Least Preferred Program and Attitude Toward Program Administration

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Manda tory | $\underline{N}$ |  |  |
| Grant | 5.81 | 38 | 4.95 | 24 | . 86 | 2.126* |
| Texas | 5.88 | 27 | 5.46 | 28 | . 42 | 1.004 |
| Thomas | 5.54 | 11 | 4.75 | 41 | . 79 | 1.284 |
| Washington | 6.35 | 42 | 4.75 | 45 | 1.60 | 4.309** |
| Oklahoma | 5.84 | 65 | 5.23 | 52 | . 61 | 2.094* |
| Kansas | 6.18 | 53 | 4.75 | 86 | 1.43 | 4.710** |
| Total | 6.00 | 118 | 4.93 | 138 | 1.07 | 4.967** |

Referendum Vote and Attitude Towerd Program Administration

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | N | No | $\underline{N}$ |  |  |
| Grant | 5.75 | 61 | 5.03 | 79 | .72 | 2.475* |
| Texas | 6.25 | 36 | 5.14 | 48 | 1.11 | 2.458* |
| Thomas | 5.64 | 31 | 4.35 | 53 | 1.29 | 2.906** |
| Washington | 6.44 | 54 | 5.08 | 69 | 1.36 | 4.358** |
| Oklahoma | 5.93 | 97 | 5.07 | 127 | . 86 | 3.434** |
| Kansas | 6.15 | 85 | 4.77 | 122 | 1.38 | 5.429** |
| Total | 6.03 | 182 | 4.92 | 249 | 1.11 | 6.272** |

Fair Price for Wheat and Attitude Toward Program Administration

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1.99 | N | 2.00-up | N |  |  |
| Grant | 4.96 | 33 | 5.42 | 117 | -. 46 | 1.055 |
| Texas | 5.38 | 13 | 5.57 | 87 | -. 19 | . 417 |
| Thomas | 4.10 | 19 | 5.02 | 70 | -. 92 | 1.973* |
| Washington | 5.36 | 58 | 5.85 | 96 | -. 49 | 1.931 |
| Oklahoma | 5.08 | 46 | 5.49 | 204 | -. 41 | 1.245 |
| Kansas | 5.05 | 77 | 5.50 | 166 | -. 45 | 2.069* |
| Total | 5.06 | 123 | 5.49 | 370 | -. 43 | 2.410* |

## APPENDIX C, TABLEE VIII

MEAN SCORES AND NORMALIZED Z VALUES ON DIFFERENCES FOR GROUPS SHOWING AN ASSOCIATION WITH ATTITUDE TOWARD PROGRAM INFORMATION, BI. AREAS

| Education and Information Orientation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-10 | N | 11-up | $\underline{N}$ | Difference | $\underline{Z}$ |
| Grant | 10.97 | 49 | 10.40 | 101 | . 57 | 1.533 |
| Texas | 10.90 | 33 | 9.76 | 67 | 1.14 | 1.786 |
| Thomas | 12.04 | 42 | 10.57 | 47 | 1.47 | 2.998** |
| Washington | 11.41 | 86 | 10.18 | 71 | 1.23 | 3.026** |
| Oklahoma | 10.95 | 82 | 10.14 | 168 | . 81 | 2.352* |
| Kansas | 11.62 | 128 | 10.33 | 118 | 1.29 | 4.136** |
| Total | 11.36 | 210 | 10.22 | 286 | 1.14 | 5.107** |

Organizational Index and Information Orientation

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-8 | N | 2-up | N |  |  |
| Grant | 10.93 | 90 | 10.08 | 60 | . 81 | 2.116* |
| Texas | 10.68 | 66 | 9.14 | 35 | 1.54 | 3.055** |
| Thomas | 12.38 | 52 | 11.05 | 38 | . 33 | . 607 |
| Washington | 10.98 | 109 | 10.63 | 49 | . 35 | . 636 |
| Oklahoma | 10.82 | 156 | 9.73 | 95 | 1.09 | 3.422** |
| Kansas | 11.11 | 161 | 10.81 | 87 | . 30 | . 74. |
| Total | 10.97 | 317 | 10.25 | 182 | .72 | 2.935** |

Most Preferred Farm Programand Information Orientation

|  | Mean Score |  |  |  | Difference | $\underline{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Free Market | N | Other | N |  |  |
| Grant | 10.80 | 35 | 10.42 | 111 | . 32 | .780 |
| Texas | 11.36 | 19 | 9.88 | 80 | 1.48 | 2.696** |
| Thomas | 10.87 | 24 | 11.24 | 57 | -. 37 | . 576 |
| Washington | 11.95 | 23 | 10.58 | 117 | 1.37 | 2.592** |
| Oklahoma | 11.00 | 54 | 10.19 | 191 | . 81 | 2.161* |
| Kansas | 11.40 | 47 | 10.80 | 174 | . 60 | 1.645 |
| Total | 11.18 | 101 | 10.48 | 365 | . 70 | 2.498* |

APPENDIX C , TABIE VIII (Continued)
Least Preferred Farm Program and Information Orientation

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Froe Market | N | Mandam tory | N |  |  |
| Grant | 10.05 | 38 | 10.66 | 24 | -. 61 | . 868 |
| Texas | 9.66 | 27 | 10.53 | 28 | -. 87 | 1.253 |
| Thomas | 10.81 | 11 | 11.14 | 41 | -. 43 | . 057 |
| Washington | 10.16 | 42 | 11.02 | 45 | -. 86 | 1.695 |
| Oklahoma | 9.89 | 65 | 10.59 | 52 | -. 70 | 1.457 |
| Kansas | 10.30 | 53 | 11.08 | 86 | -. 78 | 1.804 |
| Total | 10.07 | 118 | 10.89 | 138 | -. 82 | 2.603** |

Referendum Vote and Information Orientation

|  | Mean Score |  |  |  | Difference | $\underset{\sim}{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | N | No | N |  |  |
| Grant | 10.14 | 61 | 10.89 | 79 | -. 75 | 1.743 |
| Texas | 9.47 | 36 | 10.33 | 48 | -. 86 | 1.098 |
| Thomas | 11.16 | 31 | 11.30 | 53 | -. 14 | . 042 |
| Washington | 9.44 | 54 | 11.47 | 69 | -2.03 | 4.567** |
| Oklahona | 9.89 | 97 | 10.68 | 127 | -. 79 | 2.108* |
| Kansas | 10.07 | 85 | 11.40 | 122 | -1.33 | 3.806** |
| Total | 9.97 | 182 | 11.03 | 249 | -1.06 | 4.302** |

Attendance at Policy Meetings and Information Orientation

|  | Mean Score |  |  |  | Difference | $\underline{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Did Attend | N | Did Not Attend | N |  |  |
| Grant | 10.52 | 130 | 11.25 | 16 | -. 73 | 1.012 |
| Texas | 9.65 | 70 | 11.42 | 28 | -1.77 | 3.286** |
| Thomas | 11.23 | 71 | 11.18 | 16 | . 05 | . 160 |
| Washington | 10.46 | 105 | 11.72 | 47 | -1.26 | 2.937** |
| Oklahoma | 10.22 | 200 | 11.36 | 44 | -1.14 | 2.762** |
| Kansas | 10.77 | 176 | 11.58 | 63 | -. 81 | 2.398* |
| Total | 10,48 | 376 | 11.49 | 107 | -1.01 | 3.848** |

Attendance at Educational Meetings and Information Orientation

|  | Mean Score |  |  |  | Difference | $\underline{\text { Z }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Did Attend | $\underline{N}$ | Did Not Attend | $\underline{N}$ |  |  |
| Grant | 10.57 | 69 | 10.65 | 79 | -. 08 | . 301 |
| Texas | 9.54 | 48 | 10.70 | 51 | -1.16 | 2.088* |
| Thomas | 11.06 | 31 | 11.36 | 58 | -. 30 | . 470 |
| Washington | 10.43 | 62 | 11.16 | 95 | -. 73 | 1.679 |
| Oklahoma | 10.15 | 117 | 10.67 | 130 | -. 52 | 1.599 |
| Kansas | 10.64 | 93 | 11.24 | 153 | -. 60 | 1.703 |
| Total | 10.37 | 210 | 10.98 | 283 | -. 61 | 2.596** |

## APPENDIX D

Ietter Sent with Questionnaire

## Dear Friend:

You have been selected to be one of a group of Oklahoma wheat growers to take part in a survey. Its purpose is to find out nore about how famers feel toward wheat prograns and wat kind they prefer.

The survey is part of a regional study whion ineludes both Oklahoma and Kansas. Oklahona State University is conducting the survey in this state。

Your opinions as an individual famex are hiohly important to the study. This is vour chance to say how rou feel about different troes of wheat vrograns. Also, you stand to benefit from the oublished survey results wich will show in detail what faymers really prefer.

The results can be analyzed and published sooner if you will fill out the enclosed questionnaire within the next two or three days. It will probably take you about an hour. On most questions you simply circle a number or put a check maxk in the approproate space.

One of us mill call on you within the next three to seven days to pick up the comploted questiomaire. We will have a few more questions then, dealing with specific wheat prices under different types of programs.

All replies you give us will be confidential. The survey is not "trying to sell" any type of program. Its only purpose is to get accurate information about what famew prefer.

We appreciate youx help wery much.

> Sincerely yours.

Delmar Hatesohl
Research Assistant
$\mathrm{DH} / \mathrm{klk}$
Enclosure

## APPENDIX E

Questionnaire Mailed to Respondents

Interview Number $\qquad$

## PART I

## REGIONAL STUDX OF WHEAT FARMERS: PREFERENCES

Mote: Please read the enclosed letter before you fill out this form.

1. Farm operator ${ }^{9}$ s name, address, and telephone.
Name Address Phone No. \& Exchange
2. Farm operatorts age $\qquad$ Year stanted farming $\qquad$
3. Last year of school finished (airole number) Elementarys 1-4 5-8 High Sohool: 1234 Collegel2 34
4. Mrrieds Yes No Number of children at home $\qquad$
5. Would you alass yourself as a fullutime ___ or partutime farmer? (Please oheok one.)
6. Would you class your farming operation as small $\qquad$ average $\qquad$ , or Large $\qquad$ ? (Please check one)
7. Do you plan to contime farming for another 2 or 3 years?

Yes $\qquad$ No $\qquad$ Don't know $\qquad$
8. We would like your opinion on what causes the current farm problem. The following items are sometimes given as causes. Please indicate whether you agree or disagree with each statement by circling one number. The numbers mean:

1. STRONGLY AGREE 2. AGREE 3. UNDECIDED 4. DISAGREE 5. STRONGLY DISAGREE


Which is the most important cause? $\qquad$
9. We would like your opinion as to what a wheat program should accomplish. Suppose someone said the objectives listed below were important. Please indicate whether you agree or disagree with each statement by circling one number. The numbers mean:

1. STRONGLY AGREE 2. AGREE 3. UNDECIDED 4. DISAGREE 5. STRONGLY DISAGREE

12345 a. Keep down farmers costs to grow wheat.
12345 b. Keep wheat prices on a par with other prices in the economy.
12345 c. Keep bread prices low.
12345
d. Increase farmers income from wheat.
$\begin{array}{llll}1 & 2 & 3 & 4\end{array}$
e. Give farmers freedom to produce and market as they wish.

12345
f. Keep down government expense.

12345
g. Keep govermment regulation to a minimum.
h. Others (specify) $\qquad$

Which is the most important objective? $\qquad$
10. The following are some of the general programs that have been discussed for wheat. Please indicate whether you approve or disapprove of each by circling the number which best indicates your feeling toward the program. The numbers mean:

1。STRONGLY APPROVE
2. APPROVE
3. UNDECIDED
4. DISAPPROVE
5. STRONGLY DISAPPROVE

12345
a. Voluntary acreage diversion progran (each individual farmer is free to decide each year if he wants to receive payments to divert land from wheat production and be eligible for price supports).

12345 b. Mandatory controls (all farmers would be required to comply with allotments if approved in a national referendum).

1234
C. Direct payments (no production controls, no marketing controls; a direct goverment payment would be made to farmers to raise famm incone).

1234
d. Longoterm land retirement (similar to Conservation Ressrve, no acreage controls on specific crops).

12345
e. Free market (no acreage allotments, no price or income supports).

12345
fo Two-price plan (wheat used in U.S. supported at a parity level; all wheat beyond that needed in U.S. sold on the world market at the world price).
11. Which one of the six programs described above do you prefer most? $\qquad$
Which one is your last choice? $\qquad$
12. Efforts to raise net farm income from wheat could focus on any one of the following means. Please indicate whether you would approve or disapprove of each as the principal means of raising farm income by circling one number. The numbers mean:

1. STRONGLY APPROVE 2. APPROVE 3. UNDECIDED 4。 DISAPPROVE 5. STRONGLY DISAPPROVE

| 1 | 2 | 3 | 4 | 5 | a. Reduce farmers |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | bo Reds to grow wheat. |
| 1 | 2 | 3 | 4 | 5 | co Increase the price of bread. |
| 1 | 2 | 3 | 4 | 5 | d. Contimue present government programs but raise the level of support |
| prices and government payments. |  |  |  |  |  |

Which one is best? $\qquad$
13. We ${ }^{\text {d }}$ like to know which organizations you have been a member of any time during the last five years. In Column 1, put a check by organizations you have belonged to. In Column 2, check organizations in which you have been or are an officer. In Columns 3, 4, and 5, put a check in the colum which best indicates how often you attended the meetings.

| Organization | Member(1) | Officer$\begin{gathered} 011 \mathrm{e} \cdot \mathrm{~F} \\ \hline \end{gathered}$ | Meeting Attendance |
| :---: | :---: | :---: | :---: |
|  |  |  | often Decasionally Never <br> $(3)$ $(4)$ $(5)$ |
| Grange |  |  |  |
| Farmers Union |  |  |  |
| Farm Bureau |  |  |  |
| NFO |  |  |  |
| Wheat Growers Association |  |  |  |
| Cattlemens Assectation |  |  |  |
| School Board |  |  |  |
| PTA |  |  |  |
| Comop Grain 3levator Board |  |  |  |
| 距A Board |  |  |  |
| FHA Committee |  |  |  |
| Extension Council ( 4 H leader, etc.) |  |  |  |
| ASCS Committee |  |  |  |
| SCS Director |  |  |  |
| 0thers |  |  |  |

14. If you planted the number of acres to wheat you felt best fit your farm, what wheat price per bushel would you need to break even with your cash operating costs (seed, fuel, fertilizer, hired labor, insecticides, etc.)?
15. Suppose there were no controls or support prices on wheat for the next five years what would you expect the price to be at the end of the period? $\qquad$ At that price, would you plant more, the same, or less than the number of acres you planted in 1963 ? Nore $\qquad$ Less $\qquad$ Same $\qquad$ How many acres more or less? $\qquad$
16. a. Now compare your situation with that of other wheat farmers in your neighborhood if there were no controls or price supports on wheat. Would you be better off, worse off, or same shape as other wheat farmers?

Better off $\qquad$ Worse off $\qquad$ Same shape $\qquad$
b. How would you rate your possibilities for income in a nonfarm job as compared to the income you have been making fron farming?

Good $\qquad$ Fair $\qquad$ Poor $\qquad$
17. With your present equipment and labor, assurning no controls, how many acres of wheat could you easily handle? $\qquad$
18. What cio you think is a reasonable cost per bushel for the govemment to spend to support the price of wheat? $\qquad$
19. The following statements are sometimes made about farm programs and farming in general. Please indicate whether you agree or disagree with each statement by ciroling one number. The numbers mean:

1. STRONGLY AGREE 2. AGREE 3. UNDECIDED 4. DISAGREE 5。STRONGLY DISAGREE

12345 a. Farmers find it too hard to keep up on all the govermment prograns that come out.

12345 bo An individual farmer can to do moh about the farm problem so why worpy about it.

12345 o. Keeping up on farm prograns is just as important as knowing about the latestifeding and fertilizing practices.

12345
d. Determining what farm programs would be best is really the job of the polisy experts.

123450 o. It's not possible to set up an allotment system that is fair to all faxmers.
$2 \quad 2345$
12345
12345
12345
i. Many farmers are content with a lower cash income than city people because of the advantages of farm life。

12345
jo What a farmer has grown in the past is a good way to figure allotnents for the future.

1234
K. One goal of farm prograns should be to keep increasing efficiency -that is, produce more food with less land and labor.

1. Farmers that are making a good living shouldn't be allowed to buy or rent any more land.
2. (Continued)

12345 m 。 One sensible way to cut farm production would be to put a limit on the amount of fertilizer that can be used.

12345 no The govemment should see that every famer makes a decent livingo
I 23450 o. It? important to provide an opportunity to fam for all boys who want to farm.

I 2345 p. Farmers should vote dom any wheat programs that would raise the cost of producing a bushel of theat.
20. The following statements are sometumes made about the curent fam situationo Please indicate whether you agree or disagree wth each statemerst by arching one numer the numbers mean:

1. STRONGLY AGREE 2. AGREE 3. UNDECIDED 4.DISAGREE 5. STRONGLY DISAGREE

12345 ac There is apt to be a shortage of food because so many people are moving off the famm.

12345
b。 A depression in agriculture will usually lead the whole country into a depression.

12345
c. A growing population will eliminate the farm surplus problem within about five years.

12345
d. If we weat to a free mayket for farm products. fam income would retum to recent levels after a short period of adjustment.

12345
e. Finding new uses for farm products doesn't offer much hope for solving the farm problem.

12345 fo The government should support farm prices, but it shouldnet try to tell a iarmer what and how much to produce.

12345 g . The family fam is rapidly going out of existence.

20．（Continued）

| 1 | 2 | 3 | 4 | 5 | $h$ | ho There＇s no reason for the United States to have so moh surplus food |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| while there are hungry people in the worid． |  |  |  |  |  |  |

21．The following statements reflect opinions about current issues．Please indicate whether you agree or disagree with each statement by circling one number．The numbers mean：

1．STRONGLY AGREE 20 AGREE 3．UNDECIDED 4。 DISAGREE 50 STRONGIY DTSAGREE

| 1 | 2 | 3 | 4 | 5 | a． | The federal goverment should not get involved in such projects as electrice power and housing． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | b。 | Instead of reducing taxes recently，Congress should have trised to reduce the national debt． |
| 1 | 2 | 3 | 4 | 5 | ¢。 | The federal government ought to see to it that anyone whe wants to work can find a job． |
| 1 | 2 | 3 | 4 | 5 | d． | Most big businesses make entirely too much profito |
| 1 | 2 | 3 | 4 | 5 | $\theta$ 。 | Government relief programs have gotten to be too large． |
| 1 | 2 | 3 | 4 | 5 | fo | It＇s time for Congress to pass a bill that will provide medical care for the aged． |
| 1 | 2 | 3 | 4 | 5 | g． | The federal govemment should be doing more to help small towns and cities build the schools they need． |

27. (Continued)

123 | 1 | 3 | ho One job of goverment is to see that people are free to run their |
| :--- | :--- | :--- | :--- |
| businesses as they please. |  |  | system.

## SOURCES OF IRFORMATION

22. There are many detains involved in price support and loan prograns. Exaroles are size of allotments, support prices, signoup dates, and rules about crosseomplisnce. What sources of infornation do you nee to find out about these details? Check appropriate space.

| USE | USE | USE |
| :--- | :--- | :--- |
| MUCH | SOIE | LITMLE |


22. (Continued)

1. Others (please list)

Which of these would you consider most useful? $\qquad$
23. Occasionally, a price support program comes up on which you have to decide whether to vote "yes" or "no." A good example is the wheat referendum held last year. What sources of information do you use in making up your mind on how to vote in such cases? Check appropriate spaces.

```
\begin{tabular}{lll} 
USE & USE & USE \\
MUCH & SONE & LITTILE
\end{tabular}
```

$\qquad$

``` a. Neighbors.
```

$\qquad$

``` b. Farm organization (Farm Bureau, Farmers Union, Grange, NFO, etc.).
```

$\qquad$

``` c. College of Agriculture or county agent.
```

$\qquad$

``` d. County ASCS office.
```

$\qquad$

``` e. Department of Agriculture in Washington.
```

$\qquad$

``` f. Political party officials.
```

$\qquad$

``` g. Television.
— ho Radio.
__ i. Newspapers.
_ _ _ j. General farm magazines.
— -
k. Landlord.
```

23. (Continued)
———— I. Elevator manager.
m. Others (please list) $\qquad$

Which one of these do you find most useful? $\qquad$
Do any of these sources present only one side of the picture?
$\qquad$ Don't know

If yes, which ones? $\qquad$
24. Do you feel that you usually get enough information so that you can make the right choice on farm programs?

Yes Sometimes _ No ___ Don't know ___
If not, who should be putting out more information? $\qquad$
25. What should be the role of the College of Agriculture and Extension Service in regard to information about farm policies and programs?
_a. They should put out as much unbiased, factual information as possible without expressing opinions.
___ They should take a definite stand on which types of programs would be best.
___ They should not put out information on farm programs.
26. A person often likes to find out what someone else in the community thinks about a new practice or idea. If you could get the opinion of only one other person in your community about a farm program, who would it be?

Name $\qquad$ Occupation $\qquad$
27. Have you attended any meetings within the past two or three years which were held for the special purpose of explaining a particular farm program or policy?

Yes $\qquad$ No $\qquad$ Don ${ }^{9} t$ remember $\qquad$
28. Do you attend other adult classes or meetings on other topics held by the Extension Service or Vocational Agriculture?

Often _Ocasionally _ Very seldom _
29. Do you think farmers would take time to attend special half-day or evening meetings in your local area to discuss farm policy and programs?
$\qquad$

APPENDIX $F$
Questionnaire Taken by Interviewers

## CONFIDENTIAL



PART II
REGIONAL STUDY OF WHEAT FARMERS' PREFERENCES
30. Please use 1964 figures to fill in the following table.

|  | Acres |
| :--- | :--- |
|  | Acres |

Total acres in farm
Cropland acres (including temporary pasture)
Acres Rented and Owned
Irrigated acres
Acres fallowed
Wheat planted (Fall, 1963)
Wheat harvested for grain
Wheat pastured out
Wheat allotment (1964)
Feed grain planted (specify milo, corn barley, oats)
Feed grain allotment
31. How many acres (non-irrigated) that you farm are suitable for growing wheat? $\qquad$
32. If you planted all these acres to wheat, what would be your average wheat yield over a period of years? $\qquad$
33. If you planted only your wheat allotment, what would be your average yield over a period of years? $\qquad$
34. What would be the average yield of grain sorghum (or best alternative to wheat) if you grew it only on land used for wheat? $\qquad$
35. What was your average grain sorghum (or other feed grain) yield in 1963? $\qquad$
36. What would you consider to be a fair or equitable price for wheat if your production costs stay at their present level? $\qquad$
37a. Would you favor a free market if under such conditions the price of wheat would always be below \$ $\qquad$ per bushel? (Fill in answer given in Question 36.) Yes _ No $\qquad$ Don't know $\qquad$
b. How low would the price of wheat have to go before you would favor government price supports of one form or another? $\qquad$
38. What percent of the votes in a national wheat referendum should be in favor of an allotment progran for it to become binding on all growers? Just over two-thirds (past rate) $\qquad$ Just over one-half $\qquad$ Other $\qquad$
39. Check which you prefer:

Each allotment holder be given a single vote $\qquad$
Each farmer be given as many votes as he has allotment acres $\qquad$
40. (Optional) Given your 1964, cropland acreage, how many acres of wheat would you plent for harvest if we had no allotments or price supports, and wheat prices as follows: (Prices of livestock and feed grains would remain at present levels.)

| Price of Wheat | Acres T Would Plan for Harvest with |
| :---: | :---: |
| (Dol. Per Bu.) | No Controls |
| .75 |  |
| 1.00 |  |
| 1.25 |  |
| 1.50 |  |
| 2.00 |  |
| 2.50 |  |

41. Say you have a choice of participating in a wheat program at different allotment levels. What support price would you need to participate if the acres below the base would have to be idle without oiversion payments? If you didn't participate you would have to take the unsupported price of $\$ 1.20$ per bushel.

If your allotment was set $50 \%$ below your 1961 base* - what price would you need to participate? $\$$ $\qquad$

*"Your 1961 base" is associated with a 55 million-acre national allotment and was last fully planted in 1960-61. Since then, acreage diversion and other programs have reduced acreages below this old base. In 1964, for example, the effective allotment is $10 \%$ below the old base allotrient.
42. The govermment spends about $\$ 3.5$ billion each year to support farm prices. About three-quarters of a billion dollars was required to support wheat prices with the 1962 wheat program. This takes into account all costs. What do you believe the government should spend on farm programs in general and on wheat? (Check one on each line.)

General Farm Support Programs: Spend same $\qquad$ \% More $\qquad$ \% Less $\qquad$ None $\qquad$ Wheat Progran:

Spend same $\qquad$ \% More $\qquad$ $\%$ Less $\qquad$ None $\qquad$
43. Below are (briefly described to refresh your memory) the wheat programs we have had since 1961. Please indicate whether you approve or disapprove of each by circling one number. The numbers mean:

1. STRONGLY APPROVE 2. APPROVE 3. UNDECIDED 4. DISAPPROVE 5. STRONGLY DISAPPROVE
$\begin{array}{llll}1 & 2 & 3\end{array}$
a. 1961 brogram

Allotnent $\ldots . .55$ million acres nationally (your old wheat base allotment)
Wheat price ...... $\$ 1.80$ per bushel
1234
b. 1962 program

Allotment .0 .0 .55 million acres (your old wheat base allotment but acreage diversions idled an additional 10\% of the old base)
Wheat price ...... $\$ 2.00$ per bushel
1234
c. $\frac{1963 \text { program }}{\text { and }}$

Allotment .0 .055 million acres (your old wheat base allotiment but voluntary acreage diversions idled $10-20 \%$ of the old base)
Wheat price..... $\$ 1.82$ plus $\$ .18$ paymentmin-kind (PIK fior those who divert below base allotnent)

12345 do 1964 program
Voluntary allotnent..... 50 million acres (you mast leave idle $10 \%$ of your old base allotment to be eligible for certificates)
Wheat price....0 $\$ 2.00$ in domestic market ..... \$1. 55 in export market $\ldots 0.01 .30$ on above wheat not covered by certificates
43. (Continued)

Which one of the above programs do you most prefer? a__ $\qquad$ Which one of the above programs do you least prefer? a__ b__ c__ d__ Undecided _
$\qquad$
If you had a choice between the above prograns and a free market, which would you choose? One of 1961-63 programs
1964 program
Free markets $\qquad$
(To be answered only by those who favor free markets.)
If without price supports the wheat price were $\$ 1.20$ per bushel and your net income from wheat under such conditions was down 50 percent, would you favor:
One of the 1961-64 programs $\qquad$
Market with no allotments or price supports $\qquad$
44. The following are some specific programs proposed for wheat. Please indicate whether you approve or disapprove of each by circling one number. The numbers mean:

1. STRONGLY APPROVE 2. APPROVE 3. UNDECIDED 4. DISAPPROVE 5. STRONGLY DISAPPROVE

12345
a. No price support, no allotment

Wheat price ................................................ $\$ 1.20$ per bushel
Percent of 1962 and 1963 wheat income*............... $50 \%$
Net income per wheat acre**................................ $\$ 13$
12345
b. Thooprice certificate plan without allotments

|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

44. (Continued)

45. (Continued)


46．The alternatives differ under each of the following situations because tighter mandatory allot－ nents bring higher wheat prices and incomes．Note that higher wheat prices and incones come at the＂expense＂of reduced allotments with no payment for iding acres．Also note the differences in government costs．（Check the preferred alternative．）

SITUATION I（Each alternative costs the U．S．Treasury $\$ 250$ million。）

| Alternative $a_{\text {。 }}$ | ```Allotrient .......................Old wheat base allotment but must idle 10% without diversion payment. Wheat price .......................$.95 per bushel Percent of 1962 and 1963 wheat income.70% Net income per wheat acre.............$18``` |
| :---: | :---: |
| ernative b | Allotment ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．0ld wheat base allotment but must idle $27 \%$ without diversion payment． <br> Whett pxace ．o．．．．．．．．．．．．．．．．．．．．．．．．．．．．．$\$ 2.00$ per bushel <br> Percent of 1962 and 1963 wheat income． $100 \%$ <br> Not income per wheat acre ．o．．．．．．．．．．．．$\$ 2$ ？ |

Prefer：$a \quad b \quad$ Undecided
SITUATION II（Rach alternative costs the U．S．Treasury $\$ 500$ million。＊）

| Alternative $\mathrm{a}^{\text {a }}$ | ```Allotment .o.o.o.oc.o............ollo percent of old wheat base allot- ment Wheat price .o.o.o.0....o..........o.$1.45 per bushel Percent of 1962 and 1963 wheat income.75% Net incone per wheat acre ........c.o.$19``` |
| :---: | :---: |
| Alternative b． | ```Allotment .o.o.o.o.................Old wheat bese allotment but must idle 10% without diversion payment. Wheat price .ono:o...................&1.80 per bushel Percent of 1962 and 1963 wheat income.100% Net incone per wheat acre..............$27``` |

46. (Continued)

> must idle $27 \%$ without diver sion payment,
> Wheat price ..................................... $\$ 2.50$ per bushel
> Percent of 1962 and 1963 wheat income......... $135 \%$
> Net income per wheat acre ....................... $\$ 36$

Prefer: a ___ b__ ${ }^{\text {c___ Undecided __ }}$
*Approximate cost of 1962 and l963-type programs, not including storage and administration.
SITUATION III (Each alternative costs the U. S. Treasury $\$ 750$ million.)

prefer: a _ b __ Undecided $\qquad$
You have been asked to stats your preference under each situation. Now would you state the overall single preference from all the alternatives listed in the above three situations.
prefer: (Check only one place below.)

46. (Continued)
"Now let's compare an unsupported market with the situations we have just discussed. Say that under a situation of no supports and no allotrents, wheat price would be $\$ 1.20$ per bushel, wheat income $50 \%$ below 1962 and 1963 income, and net income $\$ 12$ per acre. Which would you choose? (Check one in each row below.)

| Unsupported narkets | A program in Situation I | Undecided |
| :--- | :--- | :--- |
| Unsupported markets |  |  |
| Unsupported markets |  |  |$\quad$| A program in Situation II |
| :--- |
| Undecided |

47. The following programs have been proposed as additional ways to deal with the farm problem. If the programs could be made to work, would you approve or disapprove. Circle one number. The numbers mean:
48. STRONGLY APPROVE 2。APPROVE 3. UNDECIDED 4. DISAPPROVE 5. STRONGLY DISAPPROVE

| 1 | 2 | 3 | 4 | 5 | a. An organization of farmers themselves (independent of the government) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| would control production and raise farm prices and income o |  |  |  |  |  |

48. a. (Optional) Higher price suppoits mean a greater cost to the government. Estimated costs for various support levels are listed below. The total wheat allotment would be the same for ell support levels, 90 percent of the old wheat base allotment or about your compliance base of 1962. Please indicate your first and last choice.
I. With the price supported at $\$ 1.45$, the government cost would be about $\$ 5$ per acre harm vested and the net fanm incone from wheat would be about 30 percent less than 1962 and 1963 .
49. With the price supported at $\$ 1.85$, the government cost mould be about $\$ 10$ per acre harm vested and the net incone from wheat about the same as 1962 and 1963.
50. With the price supported at $\$ 2.25$, the government cost would be about $\$ 15$ per acre harvested and the net incone from wheat would be about 35 percent more than 1962 and 1963.

First choice: $\qquad$ 2 $\qquad$ 3
b。 Now consider the additional choice of an unsupported market. This would represent no cost to the goverment, wheat price of $\$ 1.20$ and a net income from wheat 50 percent below 1962 and 1963.

First choice: 1 _ 2 Unsupported market $\qquad$
49. How many months of hired farm labor did you employ in 1963? $\qquad$
50. How much did you and your wife earn from off-farm work in 1963? $\qquad$
Other nonfarm income in 1963 (investments, rents, dividends, royalties, custom work, etc.)? $\qquad$
Net income in 1963 from crops, livestock, and government payments (farming operations)? $\qquad$
During the last five years (1959-1963), what was your average net income from your famm operations? $\qquad$
What was your highest, net income from farm operations? $\qquad$
What was your lowest net incone from farm operations?
51. What was your 1963 gross income from wheat? $\qquad$
What was your 1963 gross income frcin feed grains? $\qquad$
What was your 1963 gross income from livestock? $\qquad$
What were your total purchases of livestock in 1963 (feeder and breeding stock)? $\qquad$
52.. Please fill in your total inventory value of the following property:

Jan. 1, 1964 Jan。1, 1964
Total Current Value
Farm Real Estate (owned land)
Nonfarm Real Estate (houses, lots)

$\qquad$

Owed to bank, PCA or others
Other Farm Property (machinery; livestock, feed, household equipment)

Vaiue of Financial Investment (bonds, savings
accounts; investments in comops) $\qquad$
53. Did you comply with the 1964 wheat program?

Yes $\qquad$ No $\qquad$
54. Did you have to destroy any wheat acreage to comply? Yes ___ No $\qquad$
55. Some people consider themselves to be conservative in their political viewso Others consider. themselves to be liberal. What would you consider your viewpoint to be?

Liberal $\qquad$ Conservative $\qquad$ Neutral $\qquad$ Don't know $\qquad$
56. What is your pointical party? Democrat ___ Republican ___ Independent $\qquad$
57. How did you vote in the last wheat referendum? Yes__ No Did not vote ___

Why? $\qquad$

If answer is "wanted different type of program," what type of program would you like to have?
58. What are your main criticisms of government farm programs?
$\qquad$
$\qquad$

远



$\qquad$
$\qquad$

$\qquad$

VITA
DELMAR EDWARD HATESOHL
Candidate for the Degree of
Doctor of Fhilosophy

Thesis: THE MEASUREMENT AND ROIE OF FARMERS ATIITUDES IN PUBLIC POLICY

## Major Field: Agricultural Economics

Biographical:
Personal Data: Born near Linn, Kansas, September 19, 1929, the son of Ernest $F_{0}$ and Rosa E. Hatesohl.

Education: Graduated from Linn Rural High School, Linn, Kansas, May, 1946; received the Bachelor of Science Degree in Agricultural Journalism from Kansas State University in January, 1951; received the Master of Science Degree in Agricultural Economics from the University of Missouri in January, 1959; completed requirements for the Doctor of Fhilosophy Degree in May, 1966.

Professional Experience: Served with the U. S. Air Force, June, 1952, until June, 1954; joined the Agricultural Editor"s staff of the University of Missouri in September, 1954, and is currently Associate Agricultural Editor and Associate Professor of Extension Education; served as Research Assistant at Oklahona State University from September, 1963, until June, 1965, while on study leave from the University of Missouri.


[^0]:    2Earl 0. Heady, Preface to Goals and Values in Agricultural Policy (Ames, 1961), po vi.

[^1]:    ${ }^{3}$ Jack R. Davidson and Ronald Lo Mighell, "Tracing Famers Reactions to Uncertainty," Journal of Farm Economios. XLV (1963), pp. 581w582.

    4Dale E. Hathaway, Government and Agriculture (New York, 1963), p. 61.

[^2]:    ${ }^{8}$ J. R. Tompkin and Jerry Sharples, The Role of Operators ${ }^{\text {S }}$ Expectations in Femp Adiustment, Ohio Agricultural Experiment Station Bulletin 936 (Columbus, 1963)。
    ${ }^{9}$ paul Hasbargen, "Profit Motive in Farm Program Participation," Minnesota Rarm Business Notes, University of Minnesota, October, 1963.
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    ${ }^{25}$ Stroup，p． 78.

[^4]:    ${ }^{4}$ Philip Jo Thair，＂Research Problems in Dynamic Economios，＂pro－ ceedings of Research Conference on Risk and Uncertainty in Agriculture， North Dalota Agricultural Experiment Station Bulletin 400 （Fargo，1955） p． 51 。
    ${ }^{5}$ Davidson and Mighells p．581．－582．
    ${ }^{6}$ S．A．Stauffer，Social Research to Test Ideas（New York，1962），p．291．
    7W。E。Dening，＂On Errors in Surveys；＂Anerican Sociological Revieuf． IX（1944），pp． $359 \cdots 369$ 。

[^5]:    19Marketing, U. S. Department of Agriculture Yearbook (Washington, 1954), p. 415.

[^6]:    4 Cochrane, p. 455.

[^7]:    HHadwiger, p. 7, suggested that local activities of ASCS and Farm Bureau prior to the 1963 wheat referendum did much to motivate farmers to vote but did little to persuade them how to mark their ballot.

[^8]:    ${ }^{2}$ Percent of farmers answering question.

[^9]:    ${ }^{1}$ See Stroup, pp, 6-27, for a descriphion of develorments in pubic affairs education.
    ${ }^{2}$ Cochrane, pp. 459-460.

