COUNTY EXTENSION AGRICULTURAL AGENTS' PERCEPTIONS OF THE EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE OKLAHOMA COOPERATIVE EXTENSION

By

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1984

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE July, 1985

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ACKNOWLEDGEMENTS

The author sincerely expresses his appreciation to all persons who have provided assistance, guidance, cooperation and support to make the completion of this study possible.

Much gratitude is expressed to the major adviser, Dr. Robert Reisbeck for his concern, guidance and rich counseling throughout the study. The same gratitude is extended to other members of the thesis advisory committee, Dr. Eddy Finley and Dr. Larry Hynson, for their patience and able counseling throughout the study. Also, the writer expresses his appreciation to all friends, faculty and staff of the Agricultural Education Department, especially Dr. James P. Key, Dr. Roy Lessly, Dr. James L. Mosely and Dr. Bob Price for their suggestions and support during the study.

To the County Directors and the County Extension Agricultural Agents in Oklahoma State, the writer is most grateful for their kindness in completing the questionnaire. Special appreciation is extended to Stacey Welch for her efficient typing of this study.

Sincere appreciation is expressed to the writers parents, Chief David Isoh and Mrs. Auguster Isoh for their patience, love, sacrifices and prayers. The writer also expresses his love and gratitude to his wife Brigid and his daughter Ofonime for their love and support.

The greatest of appreciation and thankfulness goes to the Eternal Father - God who is the source of health, knowledge, and the finances much needed in the completion of the study.

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CHAPTER I

INTRODUCTION

All publicly funded agencies and institutions are faced with the growing demand to demonstrate program accountability. The Cooperative Extension Service is no exception. All kinds of programs, methods, activities and situations in Extension can be evaluated.

Byrn et al. (1967) described the concept of evaluation as a process of collecting information and applying standards or criteria in drawing conclusions, forming judgments, or making decisions, and emphasized that it is useful because it can be applied to all kinds of situations confronting extension workers.

Cooperative Extension was established by the passage of the Smith-Lever Act of 1914 with the primary mission of carrying research based agricultural and related information from each of the States' Land Grant Universities to the people of rural America. It is a nonformal educational thrust designed to help local people, farmers, homemakers, youths, professional and lay-people alike identify their problems and needs and, then to provide information and educational programs that will help people solve these problems and meet their needs for a better living.

In Oklahoma, the Cooperative Extension Program is comprised of many planned educational activities to reach educational goals in the program areas of Agriculture, Home Economics, 4-H and Rural Development. Program input resources are available and innumberable, but there often are not

clearly defined measures of Extension output effectiveness for documentation purposes. Few attempts have been made to determine the perceptions of the importance placed on the program objectives as well as the extent of the effectiveness of the criteria used by the evaluators of program accomplishments.

Nitsch (1980) postulated that the traditional method of conducting evaluation studies of agricultural extension programs is not sufficient when evaluating the impact on rural development, and must, therefore, be complemented by qualitative studies and careful evaluations of program objectives based on farmer needs. He went on to explain that traditional experimental evaluation studies do not register what happens between the before-and-after measurements nor show how changes actually occur, and therefore, do not indicate how a program might be improved or how it might work in a different setting.

Weiss and Rein (1969) analyzed the experimental approach critically and suggested an alternative methodology to overcome certain deficiencies. They advocated a need for more qualitative and process-oriented studies, in which the evaluation follows the program in operation and includes qualitative evidence in a description of what happens. They further explained that such an alternative evaluation approach emphasizes more on "learning what happens" as the result of a program than measuring change in one or another characteristic. Weiss and Rein finally asserted that by more qualitative and process-oriented evaluation, the evaluators would be in a better position to assess the quality of past programs and understand how to improve the quality of future programs.

The importance of evaluating program objectives has been recognized for a long time. Frutchey (1959, p. 8) stated,

After the needs and interests have been identified, the people, working with the help of Extension personnel, can decide on their objectives. This involves a definition of what is to be accomplished in relation to the various needs and interests, both immediate and long-time, as well as how and by whom the accomplishments are to be instrumented. Criteria for this stage can be established and evaluations of both content of the objectives and procedures followed in their determination can be made.

Since the ultimate aim of the extension program evaluation is to measure the extent to which specific predefined objectives are attained, context evaluation is much used. The most crucial part of context evaluation is to identify and assess needs as a basis for evaluating objectives, Stufflebeam et al. (1972).

With increased availability and application of technology, changing social forms and the financial crunch faced by institutions such as the Cooperative Extension Service, the need for, and the interest in, evaluation of Extension programs should be intensified. In the Oklahoma Cooperative Extension Service, the county agricultural agent has the responsibility of the leadership of the Program Planning Advisory Committee and others in program planning and implementation, in the program area of agriculture. It therefore follows that the Extension Agricultural Agent should also evaluate the programs with the persons who were responsible for the program as part of the evaluation team. With these in mind the researcher developed interest in carrying out this research study.

If the perceived level of importance that the County Extension Agricultural Agents place on various program evaluation criteria, and their perceptions of the effectiveness of these criteria, could be identified and analyzed, then efforts could be made to reassess the evaluation criteria for improvements. Thus, the study primarily aims at gaining knowledge as to what improvement is needed, be it in determining measurable objectives for programs, appropriate evaluation criteria, future program adjustment, measurement tools and methods or interpretation as basis for decision taking.

Educational programs are the primary mission of the Cooperative Extension Service. In each of the 77 counties in Oklahoma, there are professional Extension Agents working in their assigned areas of Agriculture, Home Economics, 4-H and Rural Development.

Among the many and varied roles of the Extension Agricultural Agents in the various counties is the provision of leadership in the educational program planning implementation and evaluation. Besides possessing skills and knowledge in the different areas of technical agriculture and Extension educational methods, the Extension Agricultural Agents also possess skills and compentencies in management, supervision, public relations, human behavior and general administration. They acquire these skills both during their formal education and through years of experience on the job. As in other program areas, since the Extension Agricultural Agents organize and direct education program planning and implementation, there is the need for their finding discrepancies that exist between what they think should be happening and what actually happens in the program.

Statement of the Problem

There is agreement among those both in and out of Cooperative Extension that evaluation of process as well as progress of educational programs is necessary and important. There is, though, less agreement as to criteria for evaluation, and even less as to methodology for evaluation of various criteria. Skills, abilities and resources of county extension staff members may often very well pose the biggest obstacle to effective evaluation.

The latter is at the core of this study. Of various criteria used in evaluation of programs, what is the importance attached to each by agents? And even more important, perhaps; how effective do agents see the criteria, or in other words, how practical and useful are the various criteria seen by agents?

Purpose of the Study

The purpose of this study was to ascertain the perceived importance and the perceived effectiveness of selected criteria used in the Oklahoma Cooperative Extension program Evaluation as held by the County Extension Agricultural Agents.

Objectives

The objectives of the study were to:

1. Determine the perceived level of importance that the County Extension Agricultural Agents in Oklahoma have placed on the selected criteria for program evaluation.

2. Determine the level of perceived effectiveness the County Extension Agricultural Agents have of these criteria.

3. Compare the agents' perceived level of importance and perceived level of effectiveness of the program evaluation in reference to the Extension Program objectives and other selected criteria.

4. Identify areas of needed improvement for use in future extension program planning, program adjustment, reports and decision taking.

Rationale for the Study

Of the many studies found on Extension output measure, evaluation in

Extension, evaluating the objectives of Agricultural Extension Programs, scarcely any dealt with the perceptions of the effectiveness of criteria for program evaluation by the county agriculture agents. The researcher was unable to locate any studies that may possibly have been conducted in Oklahoma as to program evaluation. The only information about Oklahoma, was the Oklahoma Cooperative Extension Service, Development Guide, Evaluation Phase, which was not a research study. This with other reasons made this research study necessary.

Apart from disseminating and translating research-based information, County Extension Agents work with their County Extension Program Planning and Advisory Committees (PPAC) to determine needs of the local people for Extension education programs. This is an annual event but the county agent can meet with the PPAC for the program development as need arises. This is one of the duties for the County Extension Agricultural Agent in the program area of agriculture. As a leader in the program planning, and implementation, the agricultural agent should also lead in the program output measurement.

Although man has been associated with evaluation from time immemorial, the concept of scientific and process-oriented evaluation has been introduced in many public agencies, including the Cooperative Extension Service in recent years. There are different levels of evaluation. Evaluation could be done at county, district or state level in the Oklahoma Cooperative Extension Service, depending on the level at which decision is made. Also, there are stages of evaluation. Means-evaluation could be used at the different steps of the program development, and Ends-evaluation could be used to measure the end products of the extension work. It is necessary

to assess the change in knowledge, attitude, skills and the aspirations of the people who are affected by Extension educational activities.

It is not the intention of the researcher in this research study to undermine what the agricultural extension agents have done in the past regarding program evaluation, but to contribute documented knowledge to it. The findings in this study might be used as the basis for future program improvement, program justification, policy making and program publicity. Furthermore, the findings might be used by the County Extension Agricultural Agents to explore possible areas of their personal professional improvement and development.

Assumptions

The following assumptions were made about the study:

1. The County Extension Agricultural Agents understood the questionnaire and expressed their sincere perceptions of each item.

2. The items in the questionnaire could be grouped under six subsections.

3. The respondents reacted to the questionnaire in accordance with the researcher's intention.

4. The data from this study would be useful in identifying areas that need improvement in future programming, implementation and evaluation.

5. The Agricultural Agents who are also County Directors would respond to the questionnaire as Agricultural Agents.

Scope of the Study

The study covered all of Oklahoma. The population of the study comprisedprised all the County Extension Agricultural Agents in the 77 Counties each of which represents a Cooperative Extension Center. The professional

Agent in each of the 77 Extension Centers or counties assigned to the area of Agriculture has the responsibility of providing leadership in the Extension educational program planning, implementation and evaluation. Therefore, the researcher deemed it necessary to have all county agricultural agents to complete a questionnaire. Since the study was limited to those groups of Extension Staff in Oklahoma, generalizations beyond that State could be risky and would not be encouraged.

Definition of Terms

The following definitions of terms are furnished to provide, as nearly as possible, clear and concise meanings of terms as used in this study:

1. <u>Cooperative Extension Service</u>: Is a nonformal educational system, established by the Smith-Lever Act of 1914, designed to help local people identify their own problems, needs and opportunities, and then to provide educational input which will help them overcome their own problems and needs, thereby improving their standard of living. The main agencies are the Land-Grant Universities which have professional Extension Agents to carry research based information to the people of rural America in the areas of Agriculture, Home Economics and related subjects. It is a cooperative effort between the United States Department of Agriculture, each of the Land-Grant Universities in the States and the County governments. The term "Cooperative Extension", "Extension Service", and "Extension" will be used and are considered synonymous with the defined term. The letters "C.E.S." will also be used to designate the term.

2. County Extension Agricultural Agent:

The professional Extension Agent who lives and works with the people

in the area of Agricultural program in each county. The term "Agricultural Extension Agent", "County Extension Agent - Agriculture", "County Agricultural Agent" will also be synonymous with the definition of this term.

3. Professional Development:

The skills and knowledge that a county extension agent acquires through various formal and informal educational activities during tenure as an agent.

4. County Extension Director:

The title given to one of the County Extension Agents, who is assigned the administrative duties for the county extension office. Other terms such as "County Extension Agent - Chairman", "Staff Chairman", or "County Extension Administrator", will also be considered synonymous with the definition of this term.

5. Program Planning:

Refers to the processes and strategies involved in establishing, conducting, and evaluating a county extension educational program.

6. In-Service Training:

Refers to the training received by workers or employees in any organization such as the Cooperative Extension Service. The primary aim is to update skills or as a refresher to the workers.

7. Program Inputs:

Refers to resources acquired and allocated such as time, people and funds to a program in the planning of the objectives or goals.

8. Program Outputs:

Refers to the end results or the end produce which may include the attainment of the ultimate objectives or failure to achieve the set objectives. "Program Outcome" is considered to be synonymous with the defined term.

9. Target Audience:

Refers to the group of people or persons that the educational program is designed to reach.

10. Program Planning and Advisory Committee:

(PPAC): Refers to a body of lay persons selected to represent people of all works of life in the county, with the major responsibility of priority problem identification and teaming up with the Extension Agents to overcome the peoples problems. Each of the program areas of Agriculture, 4-H, Home Economics and Rural Development in a County, has a PPAC.

CHAPTER II

REVIEW OF LITERATURE

INTRODUCTION

In this chapter the literature regarding what has been said, written or done by others in ascertaining county agricultural extension agents' perceptions of the criteria for program evaluation effectiveness is to be discussed. Many and careful searches were carried out to gather materials for the study. Among the sources examined were books, reports, bulletins, professional journals, manuscripts, periodicals, directives, notifications, directly or indirectly related, that would be cited in the study.

Numerous information was found by the researcher about program accountability, extension output measures, evaluation in extension, evaluating the objectives of agricultural extension programs, evaluation criteria, evaluation methods, measurement instruments and program evaluation. Nevertheless, the researcher narrowed the resource materials to program evaluation, evaluating the objectives of agricultural extension, while concentrating on the perceptions of the evaluation criteria, importance, and effectiveness by the county extension agricultural agents in Oklahoma.

Computerized searches were carried out in the ERIC - Educational Resources Center, RIE - Resources in Education and Dissertation Abstracts International for relevant information. Manual searches were also

carried out of the past and current student thesis and dissertations, Bibliographic index, Bibliography of Agriculture and the Oklahoma State University Card Catalogs.

The key word descriptors used in the computerized searches were:

- 1. Rural Extension and Program Evaluation
- 2. Rural Extension and Program Implementation
- 3. Extension Agents and Program Evaluation
- 4. Extension Agents and Program Implementation
- 5. Rural Extension and Planning
- 6. Extension Agents and Planning

Of the 50 citations retrieved by the computerized searches, eight were relevant to this study and were thoroughly reviewed. There were no citations retrieved that were found to be related to the topic already conducted in the state of Oklahoma. The reviewed citations will be used in the remaining sections of this chapter. Even though the materials cited in this study may not be exhaustive to the topic, the intention was to present essential and directly or indirectly related literature on county extension agricultural agents' perceptions of program quality in Oklahoma.

The following subheadings were identified to be useful in the presentation of the literature.

- 1. Concept of Program Evaluation in Extension
- 2. Changing Evaluation Strategy in Extension
- 3. Needs and Criteria for Program Evaluation
- 4. Related Research

5. Summary

Concept of Program Evaluation in Extension

Several theorists have dealt with the concepts of program evaluation. The definitions and explanations of the concept vary as the theorists differ in their opinion. Byrn et al. (1967) and Nitsch (1980) definitions and explanations of the concept of program evaluation were given earlier in chapter 1. The United States General Accounting Office (GAO) (1978:23-24)

defined evaluation as an appraisal that determines: 1) the extent to which program objectives are achieved, 2) the extent to which perceptions and expectations of public officials, interested groups and/or publics are satisfied, and 3) the extent to which programs result in desirable and undesirable effects.

The performance of any organization consists of activities that include the satisfaction of members and clientele. This was conceptualized by Gross (1965). Bass (1952) had argued that the "Ultimate Criteria" for assessing organizational worth included the degree to which it: 1) is productive, 2) is of value to its members, and 3) the degree to which it and its members are of value to the society. The work of these people involved the use of multiple criteria in evaluating program effectiveness. By this concept, customer satisfaction, measures of external criteria and internal criteria including the satisfaction of the employees and the agency were ensured.

For the purpose of this study, Byrn et al. 91967) and Nitsch (1980) definitions of evaluation were considered most pertinent. The two considered the process of collecting information, applying standards or criteria in drawing conclusions and making decisions as well as the involvement of nontraditional and qualitative evaluation of program objectives based on farmers needs.

Holzer (1976) indicated that while managers of public agencies have no general indicators of efficiency comparable to profit-loss

statements, measures of "effectiveness of output" can be developed in terms of quality, utility, social benefit or client satisfaction that are analogous to the sales and profit data for the private sector. Holzer further emphasized that ratios of client satisfaction to program cost or resources could be used.

Glennan (1972) criticized the use of only economic benefits--cost analysis in evaluating public agencies. He pointed out that program benefits for clients often, cannot or should not, be solely expressed in monetary terms. Katz and Colleagues (1975) also questioned the usefulness of economic benefit--cost analysis when evaluating public agencies. They advocated reliance upon client reactions and satisfactions during their analysis of the satisfactions of adult Americans with public agencies, and further called for efforts to match agency personnel with clientele in order to relate responses of clients to the realities of programs being administered.

Pennings and Goodman (1976) conceptualized both internal and external constituencies that may differentially influence goal selections, goal restraints and frames of references used when evaluating effectiveness. Recent conceptualizations, and the results of empirical research, suggest however, that different constituencies may form different assessments of effectiveness, and there may be contradictions among assessments provided by internal and external constituencies (Connolly, Conlon, and Deutsch, 1980; Hall and Clark, 1980; and Schneider, Parkington and Buxton, 1980).

Changing Evaluation Strategy in Extension

The purpose of the Cooperative Extension Service, according to

the Smith-Lever Act passed by Congress in 1914, was to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same. The objectives and scope of cooperative extension educational programs are determined within the framework of this legislation and other acts related to education. It is therefore, the function of the Extension to teach people how to assess their own needs and how to solve their own problems, to help them acquire knowledge and understanding, and to inspire them into action.

The basic unit or center for the extension education is the county. It is here that educational programs are planned and where extension teaching is done under the direct leadership of the County Extension Agent either in the area of Agriculture, Home Economics, 4-H or Rural Development. For the purpose of this study, literature in the area of agriculture will be reviewed in depth. Plafcan (1983, p. 12) noted,

Organizations in today's world often have a need to make changes in their structure to meet the needs of a changing society and rapidly advancing technology. Cooperative Extension is certainly no exception, for the areas of agriculture, home economics and related fields are constantly changing, thus causing program change.

Also Campbell (1977) observed the need for, and interest in, evaluation of Extension programs because of increased availability and application of technology, changing social forms, and more recently the financial crunch faced by institutions or organizations. Changes in organizations are not necessarily restricted to structure, but could be effected in the program planning, implementation and evaluation policies.

Nitsch (1980) advocated a change from the traditional method of conducting evaluation studies of agricultural extension programs

to a more qualitative studies and careful evaluations of program objectives based on farmer needs. He further explained that traditional experimental evaluation studies do not register what happens between the before-and-after measurements nor show how changes actually occur, and therefore, do not indicate how a program might be improved or how it might work in a different setting.

Davies (1980) asserted that the "co-production" of projects by professionals in organizations and by clients stands in contrast to the traditional view which sees professionals as "delivering services" to passive clients. He went on to explain that when clients co-produce with professionals, clients are involved in planning, in the delivery of services, and in the evaluation of outcomes. Davies stressed that co-production requires mutually agreed upon goals and shared responsibility, thus such clients involved in co-production will be more likely to assess the programs favorably.

Needs and Criteria for Program Evaluation

Mounting demand by legislators, policy makers, and administrators that program effectiveness be demonstrated through formal evaluation, reinforced the desire by Extension staff to obtain sound evidence of the extent to which Extension programs are successful (Bennett, 1976). He went on to describe formal evaluation as entailing conscious procedures for placing values on programs according to: 1) explicit criteria and 2) designs for collection and analysis of evidence. Bennett identified seven broad levels or categories of criteria which are useful in formally evaluating the effectiveness of Extension programs, as

follows:

1. Inputs level: Plans (objectives) to allocate certain kinds and amounts of resources (time, staff and funds).

2. Activities level: Plans to perform through the inputs, a certain number of specified activities in order to induce education. Subject matter contents and educational methodology are considered.

3. People involvement level: Criteria are within plans that certain types and numbers of persons, groups, or communities will be involved in the activities, such as: Numbers, characteristics and continuity.

4. Reactions level: Criteria are within plans to obtain certain reactions to involvement in activities, in terms of interest in activities and acceptance of leadership.

5. KASA change level: Criteria are within plans that certain knowledge, attitudes, skills, and aspirations (KASA) will ensue from participants engagement in program activities, including: Direction, content and duration of change.

6. Practice change level: Criteria are within plans for certain changes in individual practices, technology, and/or social structures. These consequences of knowledge and practice change are in terms of individual innovation and adoption, and collective (structural) change.

7. End results level: Criteria are within plans that certain effects and satisfactions will be achieved through practice change. These plans are called ultimate objectives and emphasize the prevention, checking, reduction, or solution of overall problems of individuals and groups. For purpose of this study these seven levels were reworded, restructured, and used to develop the researcher's data-gathering instrument.

It is important that measurement of the major activities in support of the program development process be part of a frame-work to measure organizational effectiveness. According to Rutman (1977, p. 18)

. . .While evaluation research places major emphasis on the use of generally accepted scientific procedures to collect reliable and valid data, the focus of evaluation is on program processes and not merely on effects or outcomes.

According to Byrn and Colleagues (1967, p. 96) "The ultimate goal of the evaluation process in Extension is the increased effectiveness of our programs." They added, "Evaluation helps in this respect by telling us how much progress our clienteles have made towards their educational objectives." They further emphasized the grave need for more systematic evaluation in Extension because as technology changes particularly in the areas of communication and transportation, people are more easily contacted through various channels by mass media, these same people are also influenced by agencies and organizations other than Extension through these same channels.

Matthews (1967) discussed five important benefits among others we can gain from Extension evaluation:

1. Extension workers have to make endless decisions and act according to what they understand to be the mandates of their decisions.

2. Good evaluation is essential as periodic checks on the effectiveness of educational programs to decide where improvements are needed.

3. The feeling of security that a good evaluation can give the worker who is doing a good job.

4. As basis for public relation. There is no better basis for sound public relations than a careful and comprehensive evaluation. This does not mean superficial impressions or value-clouded opinions.

5. The professional improvement derived by the worker who uses scientific evaluation technique. Inevitably, he will adopt more objective and systematic ways of thinking about his work and his accomplishments.

Bennett (1976) described the major purpose of evaluation as assisting in reaching decisions on future directions, designing and funding of programs. He also asserted that decisions on whether programs should be terminated, curtailed, maintained, or expanded were aided by program evaluations. Finally, Bennett observed that such evaluations may also suggest reformulation of program objectives, strategy, delivery organization, educational methodology, and intended audience.

Related Research

It was indicated in the introduction of this chapter, that eight major studies were found and used by the researcher that related to program evaluation in Agricultural Extension. The eight studies dealt with the importance and the effectiveness of the criteria or factors considered in program output measurements.

A study by Young et al. (1977) was reviewed, and the findings included 43 criteria that Extension agricultural clientele in Ohio said they considered as they evaluated the quality of extension agricultural programs in their counties. The study showed that Ohio agricultural clientele used criteria other than state or national objectives.

in their evaluation and that these criteria were grouped into four subscales as following: 1) the quality of the information they received; 3) the methods used; and 4) the quality of the educational programs. The results showed that the instrument and the subscales were reliable, thus, it was recommended that the instrument be used by others, both as evaluation tool and for further research.

Kappa Systems, Inc. (1979), on reviewing over 350 Extension studies directed toward evaluation of Extension program impact, made some findings which were categorized in terms of: 1) Learning by clientele, 2) applications of learning resulting in practices or actions carried out by clientele and 3) results of applications including social or economic benefits accruing to clientele. One of the earliest studies reviewed was the study by Suchman (1967). In his widely circulated "Evaluation Research," he found that inherent in evaluation was the process of assigning value to some objectives. He therefore recommended a careful examination of the value of program objectives including an analysis of the relationship of objectives to their underlying assumptions.

Among the most recent research reviewed was the study by Nitsch (1980) on "Evaluating the Objectives of Agricultural Extension Programs in the Swedish University of Agricultural Sciences. Findings showed a considerable variation among the farmers with respect to their attitudes and aspirations in farming. The research also indicated that farmers differ in their derived needs for agricultural extension programs and so perceived the usefulness and applicability of information differently.

To this end, the study recommended that the assessment of program quality must include a careful examination of program objectives based on the farmer's needs.

In the early 1970's the University of Missouri-Rolla launched a thorough reappraisal of academic and extension programs of the 4-campus institution. It was a self-evaluation of Extension programs, coupled with reviews by teams of educators from across the nation, who helped establish the basis for judgements about future Extension programs and program development procedures, (Campbell, 1976). The evaluation effort involved a major commitment of Extension personnel. Observations from the evaluation teams about program weaknesses and possible remedies were of a general nature, but the team reports revealed the following four items that were of recurring concern: 1) Programming procedures should be developed to encourage greater involvement of all campuses in Extension; 2) the relationships and responsibilities of the campus and university wide Extension personnel should be more clearly defined; 3) the reward system of the university should be amended to provide recognition for performance of Extension responsibilities equal to that for performance of teaching and research; and 4) the current allocation of resources should be reviewed, with particular attention to the share allocated for urban campuses and other areas.

Orden et al. (1980) in a research to evaluate the effectiveness of Cooperative Extension Service small-farm programs found out that most participants made modest improvements in their production practices, resource management, and farm sales revenue. The results suggested that a large number of factors affected the program outcomes. Among them was the fact that sales increases were enhanced by

participation in a variety of individual and group activities conducted by the small-farm programs. Also, qualifications and experience of the field staff together with their training, supervision and workload were found to influence program success. The results of the analysis were recommended for use by local program supervisors in the design of local implementation strategies and as a basis for assessing the trade-off's associated with alternative program policies, and for evaluating observed program outcomes.

Klonglan and others (1981) conducted a research study at Iowa State University of Science and Technology, entitled "Perceived Benefits and Costs for Clients from Extension's Community Resource Development Projects." They found among other items, that the external data obtained from knowledgeable citizens clearly complemented the data obtained from Community Resource Development field staff. The internal and external data were found to be consistent and did not conflict. They recommended that other people should join them in the exploration of the utility of internal and external evaluation data as they continued in it.

One of the most recent research found was by Ladewig (1983). The study attempted to demonstrate how measurement of the organizational effectiveness of the Cooperative Extension Service could be enhanced utilizing a multidimensional perspective in measuring outcomes of various organizational activities, carried out at the Texas A & M University System. Findings included the fact that since the major activities of Cooperative Extension Service related closely to the involvement of constituents in the program development, measures of

organizational effectiveness should be based on the Extension educational system of program development. It was further postulated that the conceptual framework of organizational effectiveness as proposed in the study measured critical behavior necessary for effective performance (inputs), individual performance (outputs) and changes in behavior of constituency (program results). For such a framework to provide accurate and relevant results, five procedural requirements were recommended : (1) A needs assessment of relevant problems, (2) a job analysis of critical incidents as a basis for deriving defensible standards, (3) multivariate measurement and analysis must be utilized in 👘 the program evaluation to assess the organizational effectiveness, (4) analysts and others must recognize the existence of factors beyond organizational control and the range of options available, and (5) the provision and committment of adequate resources and administrative support to the task. Finally, the author remarked that to do otherwise would not enable Extension to adequately answer the question, "did it make any difference whether Extension was involved?"

Summary

As discussed in this chapter, the various literature reveals that the Cooperative Extension Service, like any other organization, must be evaluated for effectiveness. To evaluate program effectiveness multiple criteria (internal and external), including the satisfaction of the clientele, the employees or agents and the agency must be ensured. Because Extension is a people oriented organization, it follows that as people within

and people who are served by Extension change, so should the Extension programs vary and change to meet the peoples needs.

Program evaluation is generally the process of collecting information, applying standards or criteria in drawing conclusions and making decisions as well as the involvement of nontraditional and qualitative assessment of program objectives based on farmer needs. The ultimate goal of the evaluation process in Extension is the increased effectiveness of our programs. In addition, evaluation assists in reaching decisions on future directions, design and funding of programs.

Among the benefits gained from Extension evaluation discussed in this chapter was the professional improvement derived by the worker who used scientific evaluation technique. Such an individual inevitably adopts more objective and systematic ways of thinking about his work and his accomplishments. Also, well and formally done evaluations could suggest reformulation of program objectives, strategy, delivery organization, educational method and intended audiences.

Seven broad levels or categories which were useful in formally evaluating the effectiveness of Extension programs were discussed. These were: Input, activities, people involvement, reactions, KASA change, practice change and end result levels. Of the studies reviewed, three provided very good data gathering instruments which were subsequently modified and used in the instruments for this study.

CHAPTER III

DESIGN AND CONDUCT OF THE STUDY

The procedures used in conducting the study depended primarily on the purpose and objectives earlier stated in Chapter I. The specific objectives were to:

1. Determine the perceived level of importance that the County Extension Agricultural Agents in Oklahoma have placed on the selected criteria for program evaluation.

2. Determine the level of perceived effectiveness the County Extension Agricultural Agents have of these criteria.

3. Compare the agents' perceived level of importance and perceived level of effectiveness of the program evaluation in reference to the Extension Program objectives and other selected criteria.

4. Identify areas of needed improvement for use in future extension program planning, program adjustment, reports and decision taking.

The sections covered in this chapter were:

1. Determining the population for the study.

2. Developing the data collection instrument.

3. Collection of data.

4. Analysis of data and methods used.

Population of the Study

The population of this study was made up of all County Extension

Agricultural Agents in Oklahoma State. There are 77 counties in Oklahoma with each county serving as a basic unit of the Extension Center. Each of the 77 counties in Oklahoma has a professional Extension Agent working in the assigned area of Agriculture. Since they were not very many, the researcher decided to use all of the 77 County Extension Agricultural Agents for this study thus covering the entire state. The final population used in this study was 71 because one county had no Agricultural Extension Agent, one other county had a vacant position which was not filled, and four counties could not return the questionnaire.

Development of the Instrument

Several steps were involved before the final questionnaire used in this study was developed.

The researcher first of all decided to use the mail questionnaire as the data collection instrument beacuse it was the most practical, time saving and less expensive way, according to Wallace (1954). Of the several questionnaires examined during the review of literature, there was no instrument found that dealt directly with the program objectives and the possible criteria used in evaluating extension programs in the area of agriculture in Oklahoma. As the result, a questionnaire pertinent to this study was developed. However, three of the studies reviewed provided good data gathering instruments which were modified and used in the data gathering instrument for this study.

The other important sources for compiling the data-gathering instrument were, the goals and objectives, Division of Agriculture,

Oklahoma State University, revised January 10, 1983, studies by Bennett (1976) and Young et al. (1977). Seven broad levels of criteria useful in formally evaluating the effectiveness of Extension programs were identified by Bennett (1976) and were very useful in this research study.

McGhee (1983) described the qualities of a well-designed questionnaire that can promote a high percentage response. Among his considerations that were used in compiling of the questionnaire for this research study included:

1. Reduction of indifference by making each question meaningful and interesting.

2. Reduction of negligence through timing the mailing and simplifying the survey form.

3. Making the questions short and simple.

4. Avoiding threatening questions.

5. Asking important questions that pertain to the stated purpose of the study.

The thesis major adviser and other members on the researcher's graduate advisory committee checked through the 30 items or criteria for evaluation for correct content, sequence and the wording of the questions, as well as for the instrument's understandability. A pretest of the questionnaire was conducted among a selected number of people. County Extension Agricultural Agents who were graduate students in the Department of Agricultural Education in Oklahoma State University and who were mostly from neighboring states of Arkansas, Kansas and New Mexico were involved in the exercise as a test panel. Their comments and suggestions along with the findings in the pilot test helped greatly when the author drafted the final copy of the questionnaire. The questionnaire was so designed that the two responses to each item of possible criteria for evaluating Extension program were separated by the item listing with "importance" responses to the left column and the "effectiveness" responses to the right column.

A five-pointLikert-type rating scale was used for each response. The respondents were asked to circle the response in the columns from "1" to "5", with "1" indicating, "Not Important" and "Not Effective" and "5" indicating "Extremely Important" and "Extremely Effective" respectively. The absolute limits categories and ranges on the scale were: 1-Low (1-1.49); 2-Below average (1.50-2.49); 3-Average (2.50-3.49); 4-Above average (3.50-4.49); 5-High (4.50-5.00).

Data Collection

One questionnaire was to be mailed to each of the 77 County Extension Agricultural Agents on or before May 5, 1985 (Appendix). Later on, the researcher knew of a statewide inservice training for all Agricultural Extension County and Area Agents on Oklahoma State University Campus beginning May 15, 1985. After due consultation with other committee members, the thesis major adviser administered the questionnaire on May 15, 1985 at the inservice training meeting to County Agricultural Extension Agents in attendance. Of the 77 Counties in Oklahoma State, 71 County Agricultural Agents were present to complete and return the questionnaire. Two counties had no Agricultural Agents at the time the questionnaire was administered.

Four County Agricultural Agents who were not in attendance at the inservice training to complete the questionnaire, had one questionnaire

mailed to each of them. This brought the total number of questionnaires issued to 75. After several telephone calls to follow up so that the four counties could return the completed questionnaire proved abortive, the population for the study remained at 71 which represented 94.7 percent return of the questionnaire.

Analysis of Data

The author used the descriptive statistics after consultation with the thesis primary adviser and the committee. Also, the percent return of the questionnaire was one of the determining factors for the statistical method used in the data analysis. The major statistics of the study included the calculation of the mean, frequency count, and percentages for each item. To determine the degree of variation from the mean, the standard deviation for each item was calculated.

Even though the differences between the importance mean and the effectiveness mean were also calculated, absolute limits on the fivepoint Likert scale were used to identify those criteria that were perceived as important and effective. The absolute limits categories used according to the scale were: 1-low (1-1.49); 2-below average (1.50-2.49); 3-average (2.50-3.49); 4-above average (3.50-4.49); 5-high (4.50-5.00). Those criteria that had the importance mean and the effectiveness mean within the absolute limits range of (3.50-4.49) or 4 category were above average and were considered to be important and effective. Similarly, criteria with the importance mean and the effectiveness mean below this absolute limits range (3.50-4.49) were to be reviewed and improved upon for use in future program evaluation.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

INTRODUCTION

As earlier discussed in the previous chapters, the main purpose of this study was to ascertain the perceived importance and the perceived effectiveness of selected criteria used in the Oklahoma Cooperative Extension Program Evaluation as held by the County Extension Agricultural Agents.

In this chapter, an analysis of data that has been compiled from the responses of the County Extension Agricultural Agents in Oklahoma is discussed. The respondents were requested to respond to a listing of 30 selected criteria for program evaluation to the questionnaire. They were asked to circle one of the five-points on the "Likert" scale which best expressed the "importance" they placed on each possible criterion for program evaluation in their county and on a similar scale for perceived "effectiveness" of that criterion for program evaluation.

To ease presentation and interpretation, the terms and the numerical points assigned on the five-point Likert-type rating scale used, were: Low-1 indicating, "Not Important" and "Not Effective"; Below Average-2 indicating, "Slightly Important" and "Slightly Effective"; Average-

3 indicating, "Important" and "Effective"; Above Average - 4 indicating, "Highly Important" and "Highly Effective"; High - 5 indicating, "Extremely Important" and "Extremely Effective". The questionnaire was designed such that the two responses to each item of the listed possible criteria for evaluating Extension Programs were separated by the item listing with "importance" responses to the left column and the "effectiveness" responses to the right column (Appendix).

A computerized analysis of the data was carried out with the mean for "importance" and "effectiveness" for each of the 30 items calculated. Frequency of the response and percentages for each item as well as the mean difference were also calculated. To determine the degree of variation from the mean, the standard deviation for each item was calculated. Means were rounded to the nearest hundredths and the percentages were rounded to the nearest tenths.

To know the criteria which were perceived as important as effective, that should be given priority for use in future extension program evaluation, absolute limits ranges of the importance mean and effectiveness mean were used. Following the five-point Likert scale, the absolute limits categories were: 1-low (1-1.49); 2-below average (1.50-2.49); 3-average (2.50-3.49); 4-above average (3.50-4.49); 5-high (4.50-5.00). Consequently, criteria with the importance mean and the effectiveness mean of category 4 (3.50-4.49) and above were considered above average, important and effective. Also, those criteria with the importance mean and effectiveness mean below the absolute limit range of (3.50-4.49) were not perceived as effective and had to be reassessed for improvement for use in future extension program evaluation.

The population used for this study finally included 71 County Extension Agricultural Agents as of May 15, 1985. Of the 77 counties in Oklahoma, one county originally had no Agricultural Agent, one county had the position for an Agricultural Agent vacant at the time and four others could not return the questionnaire sent to them. In essence, out of 75 questionnaires issued 71 were returned representing 94.7 percent response.

Selected Characteristics of the Respondents

In Table I shown are the summarized data of the number of years the respondents have been employed by the Co-operative Extension Service. Respondents in the 11-20 years category were largest in number, 25 agents representing 35.2 percent of the population. Nine agents in the 21-25 years of employment group, representing 12.7 percent, was the smallest group of respondents. It was interesting to observe that 23 agents (32.4 percent) had been employed by the Extension Service 10 years or less, while 48 agents (67.6 percent) had been employed more than 10 years. Agents employed 26 years and over numbered 14 representing 19.7 percent and agents with less than 26 years of employment were 57 or 80.3 percent.

Data in Table II reflected the distribution of respondents by years of experience as County Agricultural Agents. There was only one County Agricultural Agent (1.4 percent) in the 21-25 years of experience group, and this was the smallest group. In the largest group were 26 agents

TABLE I

DISTRIBUTION OF RESPONDENTS BY YEARS EMPLOYED IN THE COOPERATIVE EXTENSION SERVICE

Years of Employment	Total (N	N = 71) %
1 - 5	13	18.3
6 - 10	10	14.1
11 - 20	25	35.2
21 - 25	9	12.7
26 +	14	19.7
Total	71	100%

TABLE II

DISTRIBUTION OF RESPONDENTS BY YEARS OF EXPERIENCE AS COUNTY AGRICULTURAL AGENTS

	Total	(N = 71)
Years of Employment	N	%
1 - 5	22	31
6 - 10	16	22.5
11 - 20	26	36.6
21 - 25	1	1.4
26 +	6	8.5
Total	71	100%

(36.6 percent) with 11-20 years experience. A noteworthy observation in this data was the fact that 22 agents (31 percent) from the population had less than 5 years experience and 6 agents (8.5 percent) had more than 26 years experience as County Extension Agricultural Agents. Also, 38 agents or 53.5 percent had less than 10 years experience in the position.

In Table III shown are the data of the distribution of respondents by the highest academic degrees earned. The largest group of agents, 41 in number or 57.8 percent earned the Master's degrees, while the smallest group of agents, only two in number or 2.8 percent earned the Doctor in Education degrees. Of the population 28 agents representing 39.4 percent earned only the Bachelor's degree. It is glaring here and worth noting that 43 agents in the population or 60.6 percent did graduate work.

Table IV contains a summary of the data on the distribution of respondents by inservice training or special courses on program development and evaluation. In the population 17 County Extension Agricultural Agents representing 23.9 percent indicated that they had special training in program development and evaluation. A greater number of the respondents, 54 or 76.1 percent indicated that they had no inservice or special training in program evaluation.

Findings of the Study

The other parts of this chapter are concerned with the presentation and analysis of data pertaining to the perceived level of importance and the perceived level of effectiveness that the County Extension Agri-

TABLE III

DISTRIBUTION OF RESPONDENTS BY THE HIGHEST ACADEMIC DEGREES EARNED

Degree	Total N	(N = 71) %
Bachelor's degree only	28	39.4
Master's degree only Doctor in Education	41 2	57.8 2.8
Total	71	100%

TABLE IV

DISTRIBUTION OF RESPONDENTS BY INSERVICE OR SPECIAL COURSES ON PROGRAM DEVELOPMENT AND EVALUATION

T 1 0 110	Total	(N = 71)
Inservice or Special Courses		
on Program Evaluation	N	%
Specially trained	17	23.9
Not trained	54	76.1
Total	71	100%

cultural Agents in Oklahoma place on the selected criteria for program evaluation. In this chapter, the findings of the study were discussed under the six subsections into which the criteria were grouped and the specific objectives of the study. The demographic data is also used in the presentation of comparison in this chapter.

A summary of data have been enumerated in the subsequent tables. The frequency distribution of the respondents for "importance" and the corresponding percentage of the population represented by that number were calculated. Similar information using the same calculations were determined for the responses for "effectiveness" of the selected criteria for program evaluation as were listed on the questionnaire. Futhermore, in the preparation of the tables, a listing of the mean responses for "importance" and for "effectiveness" as well as the mean differences were included.

As earlier stated in this chapter, the criteria with the importance mean and the effectiveness mean of absolute limit category 4 (3.50-4.49) and above were considered above average, and perceived as effective by the respondents. Thus, criteria with the importance mean and the effectiveness mean below this category or absolute limit range of 3.50-4.49 were listed for review, reassessment and improvement for use in future program evaluation. Absolute limits categories were also used to analyze the population characteristics data as they affected the respondents' perceptions of the selected criteria for evalution on the questionnaire.

Comparison of Perceived Level of Importance with Perceived Level of Effectiveness by Population Characteristics

Data in Table V indicated that County Extension Agricultural Agents

with 26 years and over of employment had the highest mean (4.57) for overall importance of the 30 criteria on the questionnaire while agents with 1-5 years of employment had the lowest mean (4.45) for this very characteristic. Agents in the 6-10 years employment group had the greatest mean difference which shows that this group perceived the criteria as highly important but their effectiveness was not as high as the perception of agents in other groups. For the overall effectiveness of the selected criteria for program evaluation in this study, the agents in the 1-5 years of employment had the largest mean (4.42). Agents in the 6-10 years employment perceived the effectiveness of the criteria on the whole as being somehow lower with a mean response of 4.03. It is interesting to note that agents with 21-25 years employment had similar perception of the effectiveness of the criteria as those in 6-10 years employment group, mean response (4.03). In general, all the group's perception was above average in importance and effectiveness.

Data in Table VI showed the overall comparison of importance and effectiveness by years of experience as County Agricultural Agents in the Cooperative Extension. The only agent in the 21-25 years experience group perceived the criteria to be highly important with overall mean of 4.70; and the agents in the 26 years experience and over came next in perceiving the importance of the criteria as being high with a mean of 4.61. Again the only agent in the 21-25 years experience perceived the effectiveness as being high with overall mean of 4.57 while group 11-20 had the lowest effectiveness mean of 4.11. There was no outstanding mean difference that could indicate if a group had a relative high overall importance and low overall effectiveness. Variation

TABLE V

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE WITH THE EFFECTIVENESS OF THE EVALUATION CRITERIA BY RESPONDENTS TENURE IN THE COOPERATIVE EXTENSION SERVICE

Verse of Employment	Ň	•	Effectiveness	Difference
Years of Employment	N	Mean	Mean	in Mean
1 - 5	13	4.45	4.42	0.23
6 - 10	10	4.55	4.03	0.52
11 - 20	25	4.49	4.12	0.36
21 - 25	9	4.50	4.03	0.47
26 +	14	4.57	4.15	0.43

TABLE VI

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF THE EVALUATION CRITERIA BY YEARS OF EXPERIENCE IN THE COOPERATIVE EXTENSION

Years of Experience	N	Importance Mean	Effectiveness Mean	Difference in Mean
1 – 5	22	4.46	4.12	0.34
6 - 10	16	4.50	4.13	0.37
11 - 20	26	4.52	4.11	0.41
21 - 25	1	4.70	4.57	0.13
26 +	6	4.61	4.13	0.48

between each experience group was insufficient to warrant any conclusion that experience had any effect on the responses.

Data in Table VII was summarized to determine whether inservice training or special courses in program evaluation may have affected the county agent's perception. The overall importance mean for the 17 agents who received training in evaluation (4.52) was higher than the overall importance mean for the 54 agents who have not been trained in program evaluation (4.50) mean. Similarly, the 17 agents who have been trained in program evaluation perceived the criteria as being more highly effective than the 54 agents who received no training in program evaluation, as evidenced by overall effectiveness means of 4.25 and 4.08 for the respective groups. Judging from the overall importance mean and the effectiveness mean, it was evident that inservice training or special courses in program evaluation affected the agents' perception of the effectiveness of the criteria for evaluation.

Program Objectives

Data in Table VIII showed the distribution of responses for importance and effectiveness of the selected criteria for program evaluation in the subsection of program objectives. There were five criteria to be considered under this subsection. The entire population for the study (71 agents) or 100 percent of the County Extension Agricultural Agents perceived item number 3, "discovering the peoples problems and needs", as the criterion highly important. The next two criteria perceived as highly important were item 4, "Being aware of the identified

TABLE VII

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF SELECTED EVALUATION CRITERIA BY INSERVICE TRAINING OR SPECIAL COURSES IN PROGRAM DEVELOPMENT AND EVALUATION

Inservice training	N	Importance	Effectiveness	Difference
or special courses		Mean	Mean	in Mean
Trained	17	4.52†	4.25	0.27
Not trained	54	4.50	4.08	0.42

†Significant difference

TABLE VIII

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE SUBSECTION PROGRAM OBJECTIVES

	Impor	Importance		iveness	Difference
Selected criteria	Mean	S.D.*	Mean	S.D.*	in Mean
Target Audience	3 44	0.82	2 0 2	0.96	0.50
		•••	· · · •	0.86	0.52
Program Goals Support		0.43	4.27	0.70	0.49
Peoples Problems/Needs	4.79		3.89	0.67	0.90
• Awareness by People Joint Program	4.76	0.43	3.62	1.01	1.14
Development	4.63	0.51	3.42	1.35	1.21

*Standard Deviation

problems and needs by the people" by 65 (91.5 percent) of the agents, and item 2, "Knowing and supporting the program goals by the people" by 48 (67.6 percent) of the agents. The mean responses for these three items reflected the top three rankings of importance with 4.79, 4.76 and 4.76, respectively. Each of the five items in the subsection of the program objectives had higher mean responses for "importance" than mean responses for "effectiveness". Of the five items in the subsection, item 1 "target audience" (2.92) effectiveness mean and item 5, "Development" (3.42) effectiveness mean, were below the absolute limits category of 4 (3.50-4.49) and so were not perceived as being effective.

Seventy agents (98.6 percent) perceived the criteria overall level of importance as "above average", while 69 (97.2 percent) perceived the criteria overall level of effectiveness as "above average" for the subsection of program objectives.

With the absolute limits category below 4 (3.50-4.49) for a criteria to be considered for reassessment, review and readjustment for improvement, items 1 and 5 were subject to consideration for readjustment for improvement for use in the future program evaluation. Item one also had low standard deviation which indicated less variation in the responses and item 5, which had a standard deviation of 1.35 in the effectiveness showed less consistency in the responses.

Inputs Activities

In Table IX the data represented the responses of the County Extension Agricultural Agents for the perceived importance and the effectiveness of the five evaluation criteria in the subsection of Inputs Activities.

TABLE IX

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE SUBSECTION OF INPUTS ACTIVITIES

	Impor	tance	Effect	iveness	Difference
Selected Criteria	Mean	S.D.*	Mean	S.D.*	in Mean
Meetings and Seminars Adequate time for	4.80	0.50	4.18	1.19	0.62
education	4.70	0.72	4.11	1.30	0.59
Promotion materials	4.86	0.35	4.06	1.27	0.80
Radio and TV programs	4.51	0.69	4.08	1.27	0.43
Combining Resources	4.76	0.46	4.42	1.08	0.34

*Standard Deviation

Item 8 "preparing and distributing promotion materials" had mean responses that ranked it first for the level of importance and lowest for the level of effectiveness with a mean difference of 0.80. The "high" mean response of 4.86 for this item was the highest for "importance" and the mean response of 4.06, though above average, was the lowest for "effectiveness". Further examination of the frequency and percentage data revealed that 71 Agents (100 percent) rated this subsection "above average" or "high" for the perceived importance and above average for the level of perceived effectiveness. In essence, all the criteria in this subsection were perceived as both important and effective.

People Involvement

Table X summarized the responses from the County Extension Agricultural Agents regarding their perceived level of importance and effectiveness of selected criteria for program evaluation in the subsection of People Involvement. Five items were considered in the subsection. Data in the table revealed that item 11, "Knowing the number of people in attendance at meetings, tours or lectures" had the highest mean for importance (4.87) with the greatest mean difference of 1.02. The second item with high mean for importance of 4.79 was item 12, "Number of people requesting information" with the mean difference of 0.90. This was followed by item 13, "Involving key people" with the high mean for importance of 4.58 and the mean difference of 0.72. Item 15, "The socioeconomic level of clientele", had the importance mean of 3.37 and the effectiveness mean of 3.42 with the resultant mean difference of -0.05. It was interesting to observe that the criterion was neither perceived as important nor perceived as effective,

TABLE X

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE SUBSECTION OF PEOPLE INVOLVEMENT

	Importance		Effect	iveness	Difference
Selected Criteria	Mean	S.D.*	Mean	S.D.*	in Mean
11 2 5 5 1					
11 Number of People at					
Meetings	4.87	0.38	3.85	1.70	1.02
12 Number of Requests,			_	-	
Phone Calls	4.79	0.56	3.89	1.66	0.90
13 Involving Key People	4.58	0.77	3.86	1.32	0.72
14 Involving Clientele	4.32	0.79	3.94	1.05	0.38
15 Socioeconomic Status		-			
of Clientele	3.37	1.07	3.42	1.27	-0.05

*Standard Deviation

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because the importance mean and the effectiveness mean were not up to the absolute limits category of 4 (3.50-4.49). All other items in the subsection were above average except item 15, "considering the socioeconomic status of clientele", which had to be reexamined for improvement.

Reactions and Response of the Audience

Table XI showed the responses of the agents relative to their perception of the importance and the effectiveness of selected criteria for program evaluation in the subsection of reactions and response of the audience. It is of interest to note that two items, 16 "Clientele Interest" and 17 "Peoples Enthusiasm", had identical but high mean for importance of 4.82 with mean difference of 0.57 and 0.75 for each. The next item with a high mean for importance was 19, "People Interested in Learning Activities", had a mean for importance of 4.70 and the mean difference of 0.66. All the criteria in the subsection met the absolute limit category of 4 (3.50-4.49) and were perceived as effective by the respondents.

On the whole, all the 71 County Extension Agricultural Agents perceived the criteria in this subsection as above average in importance and in effectiveness. This was indicated by the high importance mean and the above average effectiveness mean for the criteria.

Change in Knowledge and Practice

Table XII contains the data summarizing responses of the 71 County Extension Agents' perceptions of the level of importance and effectiveness of five selected criteria for evaluation in the subsection of changes in knowledge and practice. A close examination of the data in this table

TABLE XI

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE SUBSECTION OF REACTIONS AND RESPONSES OF THE AUDIENCE

	Importance		Effect	iveness	Difference	
Selected Criteria	Mean	S.D.*	Mean	S.D.*	in Mean	
6 Clientele Interest	4.82	0.49	4.25	1.02	0.57	
7 Peoples Enthusiasm	4.82	0.42	4.07	1.07	0.75	
8 Use of Resource People 9 People Interested in	4.63	0.57	4.44	0.79	0.19	
Learning Activities O Agents Relations with	4.70	0.60	4.04	1.34	0.66	
Local People	4.52	0.79	4.48	0.71	0.04	

*Standard Deviation

TABLE XII

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COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE SUBSECTION OF CHANGES IN KNOWLEDGE AND PRACTICE

		Impor	tance	Effect	iveness	Difference	
	Selected Criteria	Mean	S.D.*	Mean	S.D.*	in Mean	
21	Promoting Change in						
	Knowledge, Attitudes						
	Skills and Aspirations	4.56	0.75	4.55	0.65	0.01	
22	Direction of Change	4.35	0.93	4.68	0.58	-0.33	
23	Observable Results	5.00	0.00	4.96	0.20	0.04	
24	Agents Leadership						
	in Program Evaluation	4.13	0.96	4.00	1.10	0.13	
25	People Accepting the						
	Extension Agent	4.48	0.77	4.45	0.79	0.03	
			0.77	4.45	0.19	0.03	

•

*Standard Deviation

revealed that item 23 "Considering Observable Results" had extremely high mean for importance of 5.00 with a standard deviation of 0.00 and a very high effectiveness mean of 4.96, with the effectiveness standard deviation of 0.20. This item was in the absolute limit category of 5 (4.50-5.00), indicating high effectiveness. The next two items with high mean for importance and high mean for effectiveness were items 21, "Promoting Change in Knowledge and Practice" and 25 "People Accepting the Extension Agents". These items had 4.56 for importance mean, 4.55 for effectiveness mean and 4.48 for importance mean and 4.45 for effectiveness mean respectively. Another interesting point worth noting in this subsection was that item 22, "Direction of Change" had greater effectiveness mean of 4.68 than importance mean of 4.35. This was an indication that the criterion was perceived as above average in importance but was perceived as higly effective. The data also reveals that all the 71 agents (100 percent) rated the items "above average" for the level of importance and for the level of effectiveness.

End Results and Final Outcome

Contained in Table XIII was the summary of data collected from 71 County Extension Agricultural Agents on their perceived level of importance and effectiveness of five selected criteria for evaluation grouped under the subsection of end results and final outcomes. All the 71 County Extension Agricultural Agents perceived item 26 "Examining the End Results to See if the Peoples Needs Have Been Met", as being highly important and as being highly effective with the importance mean of 4.96 and the effectiveness mean of 4.92.

TABLE XIII

COMPARISON OF THE PERCEIVED LEVEL OF IMPORTANCE AND EFFECTIVENESS OF CERTAIN CRITERIA FOR PROGRAM EVALUATION IN THE SUBSECTION OF END RESULTS AND FINAL OUTCOMES

		Impor	tance	Effect	iveness	Difference
	Selected Criteria	Mean	S.D.*	Mean	S.D.*	in Mean
						,
26	Examining End Results	4.96	0.20	4.92	0.33	0.04
27	Collecting Feedback	4.86	0.42	4.89	0.40	-0.03
28	Impersonal Assessment					
	of Program Output	4.72	0.59	4.86	0.54	-0.14
29	Interpreting Program					00111
	Outputs	3.44	1.18	3,65	1.30	-0.21
30	Using Program Outcome			0.45	1000	0.21
	for Future Planning	3.30	1.11	3.56	1.28	-0.26
						0.20

*Standard Deviation

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The mean range for importance was from 4.96 for item 26, to 3.30 for item 30, "Using Program Outcome for Future Planning, Improvement and for Policy Decisions". The mean range for effectiveness also was from item 26, (4.92) to item 30 (3.56 mean). All the other criteria in this subsection were perceived as high in importance and effectiveness because they were in the absolute limit category of 5 (4.50-5.00), except items 29, "interpreting program output" and 30, "using program outcome for future planning". It was worthwhile noting that these two items were perceived as being average in importance and being above average in effectiveness. However, all the criteria in this subsection were perceived by the respondents as being effective.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter is presented the summary of the study's methodology and the major findings in relation to its purpose and objectives. The study's conclusions and recommendations as found in this chapter are based on the analysis of data collected and in observations made throughout the study.

Summary of the Study

Purpose

The main purpose for this study was to ascertain the perceived levels of importance and perceived levels of effectiveness of selected criteria used in the Oklahoma Cooperative Extension Program Evaluation as held by the County Extension Agricultural Agents, to identify those criteria and the areas that need improvement or readjustment for future program output measurement.

Specific Objectives

The four specific objectives of the study were:

1. To determine the perceived level of importance that the County Extension Agents in Oklahoma have placed on the selected criteria for program evaluation.

2. To determine the level of perceived effectiveness the County Extension Agricultural Agents have of these criteria.

3. To compare the agents' perceived level of importance and perceived level of effectiveness of the program evaluation in reference to the Extension Program Objectives and other selected criteria.

4. To identify areas of needed improvement for use in future extension program planning, program adjustment, reports and decision taking.

Rationale

Program accountability has been the concern of many institutions including the Cooperative Extension Service. Besides disseminating and translating research-based information, County Extension Agents work with their County Extension Program Planning Committees (PPAC) to determine needs of the local people for Extension education programs. This is one of the duties for the County Extension Agricultural Agents in the program area of agriculture. As a leader in the program planning and implementation, the agricultural agent should also lead in the program evaluation. Although people have been associated with evaluation for a long time, the concept of scientific and process-oriented evaluation has recently been introduced in many public agencies, including the Cooperative Extension Service. The author therefore felt the need to find out the importance and the effectiveness of certain criteria used in program evaluation in Oklahoma Cooperative Extension program area of agriculture, as perceived by the County Agricultural Agents. The idea behind the need for this study was to identify those criteria or areas that needed improvements or readjustment for use in future for program evaluation.

Procedures

After a thorough review of related research and literature, the task of designing and conducting the study began. The sections covered in the procedures were: (1) determining the population of the study; (2) developing the data collection instrument; (3) collection of data; (4) analysis of data and methods used.

The population for the study was made up of 71 County Extension Agricultural Agents in Oklahoma State. The agents were serving in the position as of May 15, 1985. Of the 77 Counties in Oklahoma State, six of them were not involved in the study because one of the counties had no county agricultural agent and one of them had a vacant position that was not filled at the time. The agents in the remaining four counties could not return the completed questionnaire despite repeated telephone calls. The researcher decided to use the mail questionnaire which was designed to elicit responses. The questionnaire was reviewed by the thesis major adviser and other members on the researcher's advisory committee, and was thereafter pretested among a selected number of people.

The questionnaire which contained five demographic questions and 30 items of possible criteria for evaluation was so designed that the two responses to each item of the criteria were separated by the item listing with "importance" responses to the left column and the "effectiveness responses to the right column.

Seventy-one questionnaires were administered on May 15, 1985 in

a statewide inservice training for County and Area Agricultural Agents in Oklahoma State University Campus, by the major adviser. Four agents who were not in attendance for the inservice training had one questionnaire mailed to each of them, but they could not return the completed questionnaire.

Descriptive statistics was used for analysis of data. Areas or criteria for improvement or readjustment were determined by the mean difference of .50 or more between the mean for importance and the mean for effectiveness. The same criteria set was used for comparison of the population characteristics.

Summary of the Findings

The completed questionnaires were received and analyzed. First, the personal characteristics of the respondents were analyzed and then the perceptions of the importance and the effectiveness of the 30 selected criteria used for program evaluation. For ease of analysis and interpretation and as earlier assumed, the 30 possible criteria for program evaluation were grouped under six subsections: Program objectives, inputs and activities, people involvement, reactions and response of audience, change in knowledge and practice, end results and final outcome. (See Table XIV for a summary).

Selected Characteristics of the Respondents

Out of the 71 respondents in the population, 14 (19.7 percent) had 26 or more years of employment in the Cooperative Extension Service. Nevertheless, 23 (32.4 percent) of the County Agricultural Agents had 10 years or less employment in the Cooperative Extension Service.

TABLE XIV

SUMMARY OF MEAN RESPONSES AND MEAN DIFFERENCES OF SELECTED CRITERIA FOR PROGRAM EVALUATION FOR EACH OF THE SIX SUBSECTIONS

1	mportance	Effectiveness	Mean
elected Criteria	Mean	Mean	Difference
rogram Objectives			
. Identifying the target audience in the program plannin and implementation	g 3.44	2.92	0.52
 Knowing and Sup- porting the program goals by people in the county. 	4.76	4.27	0.49
 Discovering the peoples problems and needs. 	4.79	3.89	0.90
 Being aware of the identified problems by the people. 	4.76	3.62	1.14
 Developing local programs jointly wi the people in the county. 	th 4.63	3.42	1.21
nputs and Activities			
. Scheduling meetings and educating the people through semi conferences and dem strations.	nars,	4.18	0.62
 Assigning adequate time for the educat program. 	ion 4.70	4.11	0.59
Preparing and distributing pro- motion materials, newsletters, news- paper articles, magazine articles			
and columns.	4.86	4.06	0.80

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		portance	Effectiveness	Mean
<u>Sel</u>	ected Criteria	Mean	Mean	Difference
9.	vision programs to	4.51	4.08	0.43
10 .	Combining every avail able resources to reach educational objectives in the program.	- 4.76	4.42	0.34
reo	ple Involvement			
11.	Knowing the number of people in atten- dance at meetings, tours or lectures	4.87	3.85	1.02
12.	Knowing the number of people requesting for information, phon calls and office visits	e 4.79	3.89	0.90
13.	Identifying and in- volving key people of the county at meetings.	4.58	3.86	0.72
14.	Involving clientele and advisory committe (PPAC) in program planning and im- plementation.	e 4.32	3.94	0.38
15.	Considering the socioeconomic characteristics of participants, their interaction with the agent.	3.37	3.42	-0.05
	-			
Rea	ctions and Response of	the Audie	nce	
16.	Observing general in- terest in the educa- tional program objectives by the			
	people.	4.82	4.25	0.57

TABLE XIV (Continued)

• •		-	Effectiveness	Mean
Sel	lected Criteria	Mean	Mean	Difference
17.	Stimulating the peoples enthusiasm in program activitie	es 4.82	4.07	0.75
18.	Making adequate use resource people, loc leaders and voluntee in the program.	al	4.44	0.19
19.	The number of people interested in learning activiti meetings.		4.04	0.66
0.0	-	4.70	4.04	0.00
20.	Considering how agents relate to local people.	4.52	4.48	0.04
<u>Cha</u>	nge in Knowledge and	Practice		
21.	Engaging in program activities that promote KASA change (in knowledge, attit skills and aspira- tions)	udes 4.56	4.55	0.01
22.	Following up to ensu the direction, conte and extent of KASA changes		4.68	-0.33
23.	Considering ob- servable results, in creased yeilds, more income and adoption of new or improved	_		
	practices.	5.00	4.96	0.04
24.	Agents leading in program planning, implementation and			

TABLE XIV (Continued)

		mportance	Effectiveness	Mean
<u>Sel</u>	ected Criteria	Mean	Mean	Difference
25.	Accepting the ex- tension agent and Extensions' in- fluence in improving the peoples standard of living.	4.48	4.45	0.03
End	Results and Final Out	come		
26.	Examing the end results to see if the peoples needs have been met.	e 4.96	4.92	0.04
27.	Collecting feedback on the program success or failure at meetings.	4.86	4.89	-0.03
28.	Assessing program outputs through phone calls and mailed questionnaire.	4.72	4.86	-0.14
29.	Interpreting program outputs into docu- mented reports and decisions.	3.44	3.65	-0.21
30.	Using program out- come reports for future program planning, program improvement and policy making.	3.30	3.56	-0.26

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The responses of the agents in the 26 years and over group and 6-10 years group as the analysis of data revealed, could be related to the number of years of service. The findings were based on the absolute limits category of 4 (3.50-4.49) of the importance and the effectiveness means, which were above average.

Twenty-six agents (36.6 percent) had 11-20 years of experience in the position of County Extension Agricultural Agents. Twenty-two agents (31 percent) had five years or less in the position while six agents (8.5 percent) had 26 or more years of experience in the position as County Agricultural Agents. There were no significant response differences in this variable.

Seventeen or 23.9 percent of the County Extension Agricultural Agents indicated having taken special courses or had inservice training on program development and evaluation. Fifty-four agents (76.1 percent) had no training regarding this variable. It could be inferred that though this variable did not reveal much variance, it affected the way agents responded.

Program Objectives

Two items were below the absolute limits category 4 (3.50-4.49) as follows: Item 1 "Identifying the target audience in program planning and implementation" and item 5, "Developing local programs jointly with the people in the county". Thus, these two items were not perceived as effective and were to be reexamined for improvement.

Inputs and Activities

Item 6, "Scheduling meetings and educating the people through

seminars, conferences and demonstrations", item 7, "Assigning adequate time for the educational program" and item 8, "Preparing and distributing promotion materials" and other items were perceived as having high importance means and above average effectiveness means. These were evidenced by the importance means which fell in the absolute limit category 5 (4.50-5.00), and the effectiveness means which were in the absolute limits category of 4 (3.50-4.49).

People Involvement

Three items, 11 "Knowing the number of people in attendance at meetings, tours or lectures", 12, "Number of people requesting information, phone calls and office visits", and 13, "Identifying and involving key people of the county", were items ranked highest in terms of importance in this subsection. Only one criterion or item was not perceived as important and effective in this subsection because the means were below the absolute limit category of 4 (3.50-4.49). This was item 15, "Considering the socioeconomic status of the clientele".

Reaction and Response of Audience

All the criteria in the subsection were perceived as effective by the 71 respondents as evidenced by the effectiveness means which met the absolute limit category of 4 (3.50-4.49).

Change in Knowledge and Practice

The mean for importance and effectiveness of all criteria in this subsection were above average, with item 23, "Considering observable results" rated the highest in importance and the highest in effectiveness.

There was no criterion that was below the absolute limits category of 4 (3.50-4.49).

End Results and Final Outcome

In this subsection the highest importance mean was 4.96 and the highest effectiveness mean was 4.92, all for item 26, "Examining the end results to see if the peoples needs have been met". All other items had above average importance mean and effectiveness mean, except item 29, "interpreting program output", and item 30, "using program outcome for future program planning", which were perceived as average in importance. These two items however, met the absolute limits category of 4 (3.50-4.49) in effectiveness and so were perceived as effective. The 71 agents (100 percent) perceived the criteria in this subsection to be effective.

Conclusions

In reference to the specific objectives of this study and of the findings, the following conclusions were reached:

1. Of the 30 selected criteria for program evaluation listed on the questionnaire, only four criteria were perceived as not being important. This is because each of these four criteria could not meet the absolute limits category of 4 with the range of 3.50-4.49 which indicated above average in the importance mean. The four criteria were: 1, "identifying the target audience in the program planning and implementation"; item 15, "considering the socioeconomic characteristics of participants and their interaction with the agents"; item 29, "interpreting program outputs into documented reports and decisions"; and item 30, "using program outcome reports for future program planning, program improvement and

policy making". These four criteria were to be reassessed for improvement. On the whole the 71 county agricutural agents perceived 26 items as highly important.

2. For the level of perceived effectiveness, the county extension agricultural agents perceived 27 criteria out of the 30 criteria as being highly effective. The three criteria that could not meet the absolute limits category of 4 (3.50-4.49) and were not perceived as effective included: item 1, "identifying the target audience in program planning and implementation"; item 5, "developing local programs jointly with the people in the county"; and item 15, "considering the socioeconomic characteristics of participants and their interaction with the agents". These three items were to be reexamined for improvement for use in future program evaluation.

3. Conclusions on the comparison of the agents perceived level of importance and perceived level of effectiveness of the program evaluation criteria in reference to the extension program objectives and other selected criteria on the questionnaire were based on the six subsections into which the 30 criteria were grouped. In the subsection of "program objectives", only items one and five were not perceived as effective. A11 the items in the "inputs and activities" group were perceived as above average in effectiveness. Of the five items in the, "people involvement" subsection, only item 15, was not perceived as effective as discussed above in the second conclusion. In the subsection of, "reaction and responses of the audience", all the criteria were perceived as highly effective. The five criteria in the subsection of, "changes in knowledge and practice", were perceived by the 71 agents as above average in effectiveness. For the "end results and final outcome" subsection, all the five criteria were perceived as effective, but items 29, and 30

were not perceived as important, as earlier discussed in the first conclusion.

4. The areas identified that needed improvement in future program planning, program adjustment, evaluation, reports and decision making were in the following items which needed to be improved upon for their importance: 1, "identifying the target audience in the program planning and implementation', 15, "considering the socioeconomic characteristics of participants and their interaction with the agents", 29, "interpreting program outputs into documented reports and decisions" and 30, "using program outcome reports for future program planning, program improvement and policy making". The criteria in the following three items which were perceived as not being effective, had to be reexamined for improvement in their effectiveness: 1, "identifying the target audience in program planning and implementation", 5, "developing local programs jointly with the people in the county", and 15, "considering the socioeconomic characteristics of participants and their interaction with the agents". Since more than half of the population, 54 agents or 76.1 percent indicated not having been trained in evaluation technique and as evidenced by the effect this variable had in the respondents perception of the importance and the effectiveness of the criteria, inservice training was a worthwhile area to be considered for future improvement.

Recommendations

Based on the result of analysis of data and the findings of the research, the author makes the following recommendations:

1. Findings of this study be communicated to the Oklahoma Cooperative Extension Service personnel at the State, District and County levels so that the information may be considered in the review of certain program objectives and readjustment of some criteria for program evaluation in the future, as well as for designing inservice courses in program evaluation for the agents.

2. Three of the 30 selected criteria which were not perceived as effective, should be reviewed and readjusted for effectiveness in future program evaluation. The three criteria were: item 1, "identifying the target audience," item 5, "developing local programs jointly with the people," and item 15, "the socioeconomic characteristics of the people."

3. Consideration should be given to exposure in program evaluation or courses completed in program development and evaluation before the hiring of future county agricultural extension agents.

4. The importance of program objectives and the discussion of possible criteria for program evaluation should be incorporated in some of the Agricultural Education courses in Oklahoma State University for students in that department.

5. While in the advanced degree and in the Bachelor's degree programs, students of agriculture education should be given workshops or internship period in program development, implementation and evaluation.

The author makes the following recommendations for future research regarding extension program evaluation:

1. Similar research be conducted to determine the perceived importance and the perceived effectiveness of possible criteria used for program evaluation in the program areas of Home Economics, 4-H and Rural Development, as held by the agents in these program areas.

2. Research be conducted to identify factors that Oklahoma farmers consider when evaluating their county's extension agricultural program.

3. Research be conducted to determine the basis for judgements about future extension education programs and program development procedures.

4. Research be conducted to determine the effectiveness of the evaluation system in the Oklahoma Cooperative Extension Service on the County and District levels.

5. Research be conducted to evaluate the objective of Agricultural Extension Programs in Oklahoma.

6. Research be carried out to investigate if special training in program planning, implementation and evaluation affects the performance of the agents.

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APPENDIX

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QUESTIONNAIRE

County Extension Agricultural Agents' Perceptions of the Effectiveness of Selected Criteria for Program Evaluation in the Oklahoma Cooperative Extension

INTRODUCTION

Purpose of the study:

The main purpose of this study is to ascertain the perceived importance and the perceived effectiveness of selected criteria used in the Oklahoma Cooperative Extension Program Evaluation as held by the County Extension Agricultural Agents. The listing of items you have been requested to respond to has been composed from Agricultural Extension program objectives and other research.

Findings in this study may identify areas of improvement needed in the evaluation method, or identify criteria that may be used for future program output measurement.

General Instructions:

- 1. There are no <u>right</u> or <u>wrong</u> responses. Please record your most sincere feelings and opinions for each item.
- 2. You are please requested to respond to all items.
- 3. Signatures are not required. All questionnaires will be treated as confidential.

DEMOGRAPHIC INFORMATION

- 1. Your age:
- Number of years you have been employed by the Cooperative Extension Service.
- 3. Number of years of experience as an Extension Agricultural Agent._____
- 4. What is the highest academic degree you have earned?
- 5. Have you ever had inservice training or special courses on program development and evaluation? Yes No

For each of the underlisted items, please circle the response in the left column which best express the importance you place on the possible criteria for program evaluation, and in the right column their effectiveness in evaluating Extension Agricultural Program in your county.

	Not Important day	ort	anc	Highly Important o	Extremely Important		Possible Criteria For Evaluating Extension Agricultural Program	Not Effective h h	Cri	ter	ia	
-	- .	cir	cle	one					cir	cle	one	
	1	2	3	4	5	1.	Identifying the target audience in your program planning and implementation.	1	2	3	4	5
	1	2	3	4	5	2.	Knowing and supporting the pro- gram goals by the people in the county.	1	2	3	4	5
	1	2	3	4	5	3.	Discovering the peoples problems and needs.	1	2	3	4	5
	1	2	3	4	5	4.	Being aware of the identified problems and needs by the people.	1	2	3	4	5
	1	2	3	4	5	5.	Developing local programs jointly with the people in the county.	1	2	3	4	5
	1	2	3	4	5	6.	Scheduling meetings and educating the people through seminars, con- ferences and demonstrations.	1	2	3	4	5
	1	2	3	4	5	7.	Assigning adequate time for the educational program.	1	2	3	4	5
	1	2	3	4	5	8.	Preparing and distributing pro- motion materials - newsletters, newspaper articles, magazine articles and columns.	1	2	3	4	5
	1	2	3	4	5	9.	Using radio and television pro- grams to educate the people.	1	2	3	4	5

Imp	ati ort ter	anc	e o	f			of	Cri	ter	nes ia ati	
Not Important	Slightly Important	Important	Important	Important			Effective	Effective	Effective	Effective	Effective
			Highly	Extremely		Possible Criteria For Evaluating Extension Agricultural Program	Not	Slightly		Highly	Extremely
c	irc	1e :	one				ċ	irc	le	one	
1	2	3	4	5	10.	Combining every available resource to reach educational objectives in the program.	1	2	3	4	5
1	2	3	4	5	11.	Knowing the number of people in attendance at meetings, tours or lectures.	1	2	3	4	5
1	2	3	4	5	12.	Knowing the number of people re- questing for information phone calls and office visits.	1	2	3	4	5
1	2	3	4	5	13.	Identifying and involving key people of the county at meetings.	1	2	3	4	5
1	2	3	4	5	14.	Involving clientele and advisory committees (PPAC) in program planning and implementation.	1	2	3	4	5
1	2	3	4	5	15.	Considering the socioeconomic characteristics of the parti- cipants, their frequency and continuity of interaction with the Extension Agent.	1	2	3	4	5
1	2	3	4	5	16.	Observing general interest in the educational program objectives by the clientele.	1	2	3	4	5
1	2	3	4	5	17.	Stimulating the peoples enthusiasm in the program activities.		2	3	4	5
1	2	3	4	5	18.	Making adequate use of resource people, local leaders and volun- teers in conducting the group.	1	2	3	4	5
1	2	3	4	5	19.	The number of people interested in learning activities meetings.		2	3	.4	5

Rela Impo Crii	orta	Important	Highly Important	Extremely Important			Not Effective Lo b 1	Crit	Effective na	Highly Effective pr m	
C.	LLCI		Jue				Ľ.	LT C.		Jue	
1	2	3	4	5	20.	Considering how agents relate to the local people.	1	2	3	4	5
1	2	3	4	5	21.	Engaging in program activities that promote KASA change (in knowledge, attitudes, skills and aspirations.	1	2	3	4	5
1	2	3	4	5	22.	Following up to ensure the direc- tion, content and extent of KASA changes.	1	2	3	4	5
1	2	3	4	5	23.	Considering observable results - increased yields, more income and adoption of new or improved prac- tices.	1	2	3	4	5
1	2	3	4	5	24.	Agents leading in program planning implementation and evaluation.	1	2	3	4	5
1	2	3	4	5	25.	Accepting the extension agent as a change agent and Extensions' in- fluence in improving the peoples standard of living.	1	2	3	4	5
1	2	3	4	5	26.	Examining the end results to see i peoples needs have been met.	f 1	2	3	4	5
1	2	3	4	5		Collecting feed-back on the progra success or failure at meetings.	m 1	2	3	4	5
1	2	3	4	5	28.	Assessing program outputs through phone calls and mailed question- naires.	1	2	3	4	5

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Important	Important	Important	Important	Important			Effective	Effective	Effective	Effective	Effective
Not	Slightly		Highly	Extremely		Possible Criteria For Evaluating Extension Agricultural Program	Not	Slightly		Highly	Extremely
C	irc	le	one				(cir	cle	one	3
1	2	3	4	5	29.	Interpreting program outputs into documented reports and decisions.	1	2	3	4	5
1	2	3	4	5	30.	Using program outcome reports for future program planning, program improvement and policy making.	1	2	3	4	5

VITA '

Aloysius David Isoh

Candidate for the Degree of

Master of Science

Thesis: COUNTY EXTENSION AGRICULTURAL AGENTS' PERCEPTIONS OF THE EFFECTIVENESS OF SELECTED CRITERIA FOR PROGRAM EVALUATION IN THE OKLAHOMA COOPERATIVE EXTENSION

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