

MACRO AND MICRO LEVEL CHALLENGES TO PROGRAM EVALUATION AND ACCOUNTABILITY

Rama Radhakrishna
Clemson University

Abstract

The demand for documenting outcomes of extension programs continues to increase. This study examined challenges to program evaluation and accountability. The challenges were categorized into two levels--macro level (national) and micro level (grass roots or state level). The findings indicated several challenges--five macro and six micro level challenges. Based on the review and personal experience of the author, a framework to address the challenges was developed. The framework consisted of three components--using accountability information, customer satisfaction, and developing a generic evaluation instrument to assess program impact. In addition, three strategies--communication, teamwork and distance education were suggested to build evaluation capacity among county staff.

Introduction

In the past Extension programs focused on convincing clientele to follow certain practices such as planting hybrid corn, preserving food safely, etc. An Extension agent was viewed as a change agent (Sawyer, 1984). The concept of "innovators" "early adopters" became a focal point of a program of research. Attempts were made to evaluate Extension programs using the "educational objective" approach of the formal school system. The concept of "program objectives" then came into existence. And following that the focus of extension programs shifted more toward knowledge, attitudes/opinions, skills, and aspirations (KA(O)SA) change (Bennett, 1979). Extension agents were viewed as educators (Sawyer, 1984). During this time, large amounts of money were allocated to social intervention programs which aimed at eliminating poverty and improving health care. Extension programs were also expanded to reaching urban and other non-traditional audiences. Evaluation of these programs tended to be of informal judgment rather than formal assessment. Systematic measurement of outcomes was elusive and programmers used testimonials, case studies, happiness indexes etc., to show the worth of their programs. The expected outcomes were hard to document using these methods (Patton, 1978; Smith, 1981; and Sawyer, 1984, Boyle, 1996).

Several federal statutes were enacted which demanded greater accountability. Examples of legislation included: 1) Federal Regulations for the Community Mental Health Centers Act of 1964, which required needs assessment; 2) the Social Security Amendment Act of 1972, which established reviews for checking appropriateness and quality of services provided; 3) Federal Regulations for the Community Mental Health Center Amendment Act of 1975, which authorized for funds to do evaluation; 4) the Farm Bill of 1977, which mandated large-scale evaluations of the social and economic consequences of Extension programs; and 5) the Sunset Act of 1978, which combined concepts of program review and zero-based budgeting. These legislations made clear that it was no longer enough to report dollars spent on what and how many participated etc. This led to competition of funds and greater demands for program effectiveness and efficiency. Number of programs offered, participants reached, hours worked and dollars spent were no longer adequate to assess program effectiveness.

Accountability is not new to extension. However, its importance has become more pronounced because of stricter mandates from federal, state, local and university level legislation. According to Ladewig (1997), Cooperative Extension, like all public agencies, has seen an increased emphasis from government on program performance and accountability. The role of accountability in the budget process is certainly on the rise (Irwin, 1999) and Cooperative Extension is no exception. Accountability is defined as an implied or explicit requirement to accept responsibility for performance, progress, accomplishment, effectiveness or success of a program, activity, or project in terms of results achieved (South Carolina State Government Quality Network Association, 1998).

Accountability requirements and reporting systems at the federal level have gone through a variety of different approaches throughout the history of Extension from the Extension Management Information System (EMIS) in 1970 to the National Accomplishments Reporting System (NARS) in 1982 to the Program Planning and Reporting System (PPARS) in 1992 to Government Performance Results Act (GPRA) in 1993. These frequent changes in reporting systems in Extension indicate the complexity of the reporting systems, burden on states to comply with new systems of reporting, and challenging states to develop their own reporting systems to meet state, federal and local mandates. Almost all land-grant universities, including 1890s and 1994s, have some method of reporting--DOS, electronic, Web-based, and other manual means of collecting information to comply with state and federal reporting requirements.

Furthermore, several studies have identified lack of time, lack of resources, and limited expertise in evaluation methodology, in developing surveys, data analysis and reporting, as factors inhibiting agents to conduct systematic evaluation of their programs (Kiernan, Fennelly, Mulkeen, Mincemoyer, Cornell, Masters, Radhakrishna, Lewis, and Baggett, 1994; Ott, 1996; and Depp, 1996).

Today, the educational programs delivered by extension agents today are more varied than they have ever been and will continue to change to meet the changing needs of the clientele they serve (Radhakrishna, and Martin, 1999). Coupled with a diversity of programs being delivered, there has been an increased emphasis from government and other public agencies on program performance and accountability (Ladewig, 1997). The enactment of Government Performance and Results Act (GPRA) in 1993 and several states adopting performance-based budgeting for Extension are good examples. Funders, policy makers, and decision makers now want data relating to program results, impact, and social and economic consequences. As a result, the traditional paradigm of evaluation has changed from reporting numbers to using results in the new performance measure paradigm (Mustian, 1999).

The most frequently asked question for Extension professionals is "What happened as a result of your program?" Extension administrators, faculty, specialists, and agents are constantly hearing buzz words such as documentation, impact, outcome, output, benchmark, trends, effectiveness, and accountability. This expanded requirements to document program results and impact calls for use of innovative and multiple approaches to systematically evaluate Extension programs.

As we look toward the year 2000 and beyond, the press for accountability, reduction in government funding for all programs will be a major concern. Further, the ever-changing world, the information explosion and the demand on professionals to demonstrate the usefulness of services they perform is likely to increase tremendously in the new millennium (Boyle, 1996). It is believed that such demand will create more opportunities for Extension professionals, especially for those involved in program evaluation and accountability, to assess needs, demonstrate program outcomes and impact on targeted audiences.

Purpose and Objectives

The overall purpose of the study was to present a historical perspective relative to challenges and opportunities to program evaluation and accountability. Such perspective would serve as a springboard for discussing issues relative to program evaluation and accountability in the new millennium. Specific objectives of the study were to:

1. identify and describe macro level challenges to program evaluation and accountability;
2. identify and describe micro level challenges to program evaluation and accountability;
3. suggest strategies to address some of the challenges and opportunities in the new millennium.

Methods and Procedures

Review of literature and personal experience of the author were the data sources for the study. A number of books, journal articles, conference proceedings and government documents were reviewed to identify and describe challenges to program evaluation and accountability. Informal discussions and interviews with a number of faculty and staff were also documented as evidence of data. In addition, visits to counties and discussion meetings with county staff on issues related evaluation and accountability were also documented. The information thus collected were summarized to identify and group the challenges into micro and macro level. Finally, the summary and synthesis of information gathered provided a basis for suggesting strategies to address the challenges to program evaluation and accountability in the new millennium.

Results and/or Findings

Objective 1: Identify Macro Level Challenges

The first objective of the study was to identify macro level challenges to program evaluation and accountability. The following five macro level challenges were identified based on extensive review of literature and discussion with experts in the field.

1. The changing world
2. Heightened concern for relevance of Extension programs
3. Greater demand to determine "impact" or "outcomes of programs
4. Demand for greater accountability and changing accountability systems
5. The information explosion

1. *The Changing World:* We are in a changing world and we must recognize that changes are inevitable and these changes reshape the social, economic, cultural and political landscape of the environment we live in. In addition, these changes impact the lives of clientele we serve and the nature of Extension programming.

2. *Heightened Concern for Relevance of Extension Programs:* During the last decade, Extension faced major challenges of relevance in society that was encountering phenomenal change (Boyle, 1996). Though Extension has responded to the challenges of change throughout history, it is under intense scrutiny over its present and future programs. Some traditional clientele and supporters think that Extension has disavowed its long term commitment to agriculture. They do not see changing agricultural programs to focus on priority issues of biotechnology, farm

profitability, sustainability, community and economic development, youth programs, etc. They do not see that many youth from rural areas, including farm youth, also have alcohol and drug problems. Therefore, there is a need to communicate and convince traditional stakeholders the importance and value of investing Extension efforts in non-traditional programs.

3. Greater Demand to Determine "Impact" or "Outcomes" of Programs: Extension professionals are frequently asked to determine impact of Extension programs. One of the major challenges faced by Extension professionals is defining appropriate "impact" indicators. Indicators guide collection data--evidence that will indicate the degree to which program objectives or targets are achieved (Rockwell, 1994). Unfortunately, early identification of defined and needed indicators through program objectives are not practiced by many county staff (Radhakrishna, 1998).

Perhaps agents are not skillful enough to put time and effort to address this challenge. As a result, it becomes complicated at later stages to gather evidence to document impact of programs. Early identification of indicators through developing measurable program objectives will help strengthen planning and evaluating Extension programs. As one moves in the Bennett's hierarchy of Extension programming, greater is the need for evidence. Further, as the cost of obtaining evidence of program impact generally increases as the hierarchy is ascended (Rockwell, 1994). In addition, there are several other challenges which needs to be addressed. These include: scattered sources of evidence, program impact versus impact of other sources of change, and greater time lag of outcomes following programs. Therefore, program developers and evaluators should consider, prior to implementation of a program, the action specifying the "chain of program events" and the "kinds of evidences" and or appropriate "indicators" for each event in the chain (Verma and Burnett, 1999).

4. Demand for Greater Accountability and Changing Accountability Systems: Accountability is not new to Extension. However, its importance has become more pronounced in recent years because of mandates from federal, state, local and university level legislation (Radhakrishna, 1998). Accountability requirements and reporting systems have gone through a variety of different approaches throughout the history of Extension. For example, in the last 30 years, we have seen accounting and reporting systems change from NARS in the early 1970's to GPRA in the 1990's. The problem with the accounting system is that it is so complex and does not really address the practical or field level problems of reporting. The recent enactment of the Agricultural Research Education and Extension Reforms Act (1998) is a good example. The frustrations in preparing the recent plan of work included lack of communication from the federal government, lack of time, frequent changes to reporting guidelines and formats, and lack of understanding of the guidelines. In addition, there is a lack of communication between federal, state and university administration, and county staff, relative to plan of work

and reporting of accomplishments.

5. The Information Explosion: Instant worldwide communication has brought a rapidly changing knowledge base. Technology development and usage are expanding at a rapid rate. New electronic delivery methods are altering the way Cooperative Extension and Outreach systems are operating nationwide (Spanier, 1996). The rapid development of technology has both advantages and disadvantages relative to Extension programming. The advantages are thinking of many things that Extension can do with the technology--distance learning, on-line courses, putting Extension publications and educational materials on the Internet. The disadvantage is that Extension does not have the capacity and resources to embrace the fast changing information explosion. If Extension cannot embrace this, they are missing the boat.

Objective 2: Micro Level Challenges

The following micro level challenges were identified based on literature, discussions with experts in the field, and personal experience of the author.

1. Emphasizing evaluation procedures and criteria up-front
2. Evaluation stops at the lower level of Bennet's hierarchy
3. Extensive reliance on single method of program evaluation
4. Limited skills in interpreting evaluation results
5. Philosophical roles of Extension agents
6. Reporting evaluation and accountability results

1. Emphasize Evaluation Procedures and Criteria Up-front: Based on review of evaluation plans for a variety of Extension programs, it was found that county staff is not treating evaluation as a part of program planning process (Radhakrishna, 1998). As a result, educational objectives that are developed are not measurable, observable, and realistic. Because of this lack of emphasizing evaluation criteria up-front, county staff are frustrated that they could not accomplish what they had originally planned. Manipulating evaluation process to fit into Extension programs should be avoided. What is best for the program to be evaluated should be emphasized.

2. Evaluation Stops at the Lower Level of Bennett's Hierarchy: In most instances, programs are evaluated only up to the level of KOSA (knowledge, opinion, skill, and aspiration). Assessment doesn't go beyond the KOSA level to determine "impact." In addition, county staff rarely follow-up to determine outcomes of Extension programs and resulting practice change. As discussed earlier, there are multitude of problems why evaluation efforts of county agents don't go beyond KOSA. First, there is no cooperation and communication between the agent and the specialists regarding developing an evaluation plan to assess impact of programs. Second, a majority of agents do not have the time and resources to do a follow-up of program participants to determine practice change and/or program impact. Third, a number of agents do not possess the needed skills to develop an evaluation plan, implement that plan and report outcomes of such evaluation efforts. The course, Targeting Outcomes of Programs (TOP) by Rockwell and Bennett (1994) is an excellent resource to address some of the issues relative to assessing program impact.

3. Extensive Reliance on Single Method of Program Evaluation: A majority of county staff relies extensively on single method of evaluation which limits assessing of program impact. Perhaps, agents may not have the knowledge or skills needed to use multiple methods. As indicated earlier, the problems are many, especially at the county level. First, agents do not have the time or skills to use multiple methods to evaluation. Lack of support from the specialists adds to the existing problem. Second, the use of multiple methods is very time consuming and as a result, agents get frustrated and will not be in a position to accomplish the set goals. It is cautioned, however, one must take into account the purpose or goal of evaluation, the evaluation design and the methodology to use.

4. Limited Skills in Interpreting Evaluation Results: A number of studies have reported county staff lack skills in interpreting evaluation results (Radhakrishna, 1998 and Kiernan, et al., 1994). There is a greater need to make sure that county staff understands everything they do about evaluation. As said earlier, county staff and specialists need to treat evaluation as an integral part of the program planning process. How interpretation of results helps market Extension programs should be communicated to county staff.

5. Philosophical Role of Extension Agent: Agents' primary function is to act as a change agent. In reality, he/she is not a change agent, but an educator having multiple program responsibilities--agriculture, food safety, 4-H, environment, community development, etc. Need to convey this message to stakeholders that agent is more than a change agent. Fear, anxiety, and uncertainty exist among county staff regarding evaluation. In addition, an attitude is developing among agents that Government Performance Results Act (GPRA) is just another reporting mechanism. There is a need to convey to the agents that GPRA is more than just reporting, and emphasize up-front how GPRA reports can be used to improve extension programs, reallocate resources, and to make managerial and personnel decisions (Walker, 1997). Agents perceive program evaluation as reflecting upon their own personal performance. This negative perspectives on evaluation should be changed. There is a need to emphasize that evaluation is a way of garnering information to help agents to improve their programs, but not to evaluate their performance.

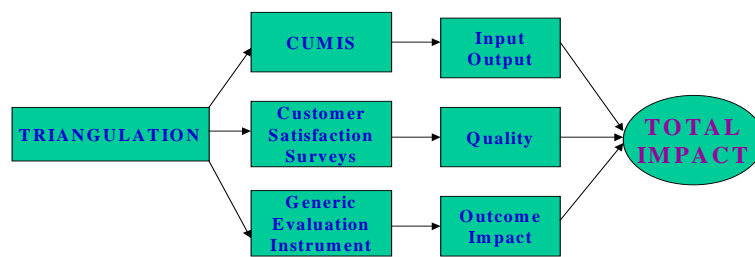
6. Reporting Evaluation and Accountability Results: How to report evaluation and accountability results is going to be a major challenge for Extension professionals dealing with accountability. Good evaluation data often times don't get reported. Even if reported, too much information is presented which may not be useful to the stakeholders. Lack of communication and/or marketing appears to be a problem in reporting evaluation results. Need exists for developing simple communication procedures where results are presented in a short and concise format, supported with charts and graphs would help convey the results better. Highlighting significant parts of a program plus some unique findings would encourage people to read the information. Using existing communication and information technologies would help prepare reports easier and faster.

Objective 3: Strategies to address the Challenges:

The foregoing review suggest that there are many challenges to program evaluation and accountability. The review also suggest that we must change to address many of the challenges identified. An evaluation framework to address the challenges are presented. In addition, key strategies with examples to address the challenges are also discussed.

Evaluation Framework: A three-prong evaluation framework has been designed to assess the effectiveness and impact of Extension programs (Figure 1). The three components of this framework are: 1) Clemson University Management Information System (CUMIS), 2) Customer Satisfaction Surveys (CSS), and 3) Generic Evaluation Instrument (GEI). This evaluation framework is being used for all Extension programs included in the POW. A brief discussion of each of the components is presented in the following paragraphs.

The CUMIS system provides data relative to time spent, contacts made by gender, race and limited resource, number of programs/activities conducted, number completing programs, number increasing knowledge, number adopting practices and six other indicators specific to each project. In addition, narrative stories are also included.



EVALUATION FRAMEWORK

Figure 1. Component 1: CUMIS

Component 2: Customer Satisfaction Surveys

A customer satisfaction survey (CSS) has been developed and being currently pilot tested in the counties. The major purpose of the CSS is to assess the quality of services provided by Extension staff in the 46 counties of the state. Specifically, it measures customer's satisfaction with information obtained from calling or visiting the Extension office. The goal of CSS is to help county staff find ways to improve program quality, information delivery, and more important, to assist in the accountability process.

Each county will randomly select 30 individuals who have received Extension services or information. For purposes of accuracy and ease, two categories of participation were identified. These include: 1) office visits and 2) planned programs. Once the 30 individuals are identified, a team of agents/staff will call these 30 individuals and collect data relative to the four indicators--1) Extension information being up-to-date, useful, relevant and easy to understand, 2) the extent to which recipients had the opportunity to use the information, 3) the extent to which they have shared the information with others, and 4) the extent to which they are satisfied with the services provided by Extension.

Component 3: Generic Evaluation Instrument

A generic evaluation instrument (GEI) has been developed to collect information to assess impact of select Extension educational programs on individuals who had participated in Extension programs in all the 46 counties. Impact will be assessed through: 1) knowledge gained, 2) behavior change, 3) adoption of practice, and 4) economic gain through generation of income or savings as a result of participation and using Extension information and services. Bennett's hierarchy of Extension programming will be used as a guideline to assess program impact.

Two programs/projects in each of the five PSA goals will be randomly selected for each county. In all, 460 (2x5x46) programs/projects will be selected for gathering information on GEI. Once the selection of programs/projects is completed, a list of participants in those programs/projects will be identified. Then, a random sample (depending on total number of participants) of participants will be selected. The GEI will be administered via telephone. Data thus collected will be analyzed to assess impact. Data from CSS and CUMIS reports will also be used to assess impact.

The above mentioned evaluation framework will address more of accountability challenges and somewhat less of program evaluation challenges. Therefore, additional strategies are discussed which specifically address the micro level challenges to program evaluation and accountability. The strategies include: 1) a two-year program to build evaluation capacity of county staff and 2) establishing a evaluation clearing house for Clemson Extension Service. A brief description of the two strategies are presented in the following paragraphs.

Building Evaluation Capacity of County Staff: A two-year program is being developed to build evaluation capacity of county staff. Currently, Clemson Extension Service employs about 250 agents and program assistants in the 46 counties of the state. These 46 counties are further grouped into 14 clusters. The proposed program requires each and every agent and program assistant to undergo an intensive 2-3 day training relative to program evaluation and accountability. Seven clusters are selected each semester (fall and spring) with six to eight agents and program assistants per cluster participating in the training. Training will be offered at the cluster level so that agent travel is minimized. Primary area of program responsibility of agents will also be considered in the design and delivery of training. Training will be coordinated jointly by the subject matter specialist and evaluation specialist.

Evaluation Clearing House: In addition to enhancing evaluation capacity of county staff, establishing an evaluation clearing house is being proposed. The major purpose of this clearing house is to help Extension specialists, county agents, program assistants, departments and other units in the college regarding planning, implementing, and conducting systematic evaluation of Extension programs. The clearing house will offer technical services in the areas of instrumentation, data collection and analysis, and report writing. A nominal fee will be charged for the services provided. It is believed that the clearing house will be of immense help to all engaged in Extension program development and evaluation. It not only saves time and resources for conducting systematic evaluation, but also helps specialists and agents focus more on program development and program delivery.

Conclusions and Recommendations

The need for documenting extension program outcomes and providing accountability information continues to increase in the new century. As dollar amounts continue to shrink, this need becomes even more critical.

The foregoing review suggests that there are many challenges that need to be addressed in the new century if we are to effectively communicate Extension program outcomes to the stakeholders. The evaluation framework suggested would help provide useful information to determine program outcomes, impact, and managerial decision making.

Communication, teamwork, and use of technology in program evaluation and accountability becomes increasingly important as we look at opportunities in the new millennium. Constant communication between federal, state, university and county staff is very important. Expectations of each agency or institution relative to program evaluation and accountability need to be communicated in an understandable way. Federal and state governments who develop accountability measures must take into account the practical and real problems agents, specialists, and other county staff face in meeting accountability requirements. Perhaps, agencies and governments may want to seek input from county staff when they design accountability measures.

Teamwork is a key to successful implementation of program evaluation and accountability measures. It is recommended that a team of individuals interested in program evaluation and accountability at the county level be formed to provide guidance and technical support to the county staff conducting evaluations. This team of individuals should be adequately trained in evaluation methodology so that they assist in measuring impact of extension programs. County staff will appreciate and better understand when one of their peers discuss and share their efforts and experiences. Such understanding and appreciation will help address many of the micro level challenges identified in this study.

Finally, use of technology is critically important as we prepare to address the challenges in the new millennium. Distance education technology should be used to offer courses in program evaluation and accountability. In addition, educational materials relative to program evaluation and accountability should be put on the World Wide Web so that users can access information at any time and anywhere. A question and answer section suitable for electronic communication should be developed so that county staff get immediate information and guidance on evaluation and accountability.

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