THE DEVELOPMENT OF A FRAMEWORK FOR THE EVALUATION OF THE CAPACITY-BUILDING COMPONENTS IN RURAL DEVELOPMENT PROJECTS*

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Abstract

Trends in rural development indicate that increasing emphasis is being placed on the achievement of sustainable results through increasing the capacity of the people and institutions involved. This article describes the development of a framework for evaluating the capacity-building components in rural development projects. This study was based on a documentary analysis of project records and related documents. The developed framework provided a valuable tool for evaluating capacity-building components of selected rural development projects. The original framework was revised based on its usefulness in the original evaluation process. The new framework should be used by all those involved in development projects who wish to ensure that factors affecting capacity-building are not overlooked at any stage in the project development process. Development professionals need to be aware of the importance of evaluation. The framework developed in this study provides a useful tool for evaluation of development projects and their capacity-building components.

Introduction

In development situations in both the United States and developing countries, there is a concern with the development of the capacity of people to identify and solve their own problems and to determine their own future (Program Development Ad Hoc Committee, 1974; Bryant & White, 1982; Rajasekaran & Martin, 1990). Capacity may be defined as the ability to anticipate and influence change, make informed decisions, attract and absorb resources and manage resources to achieve objectives (Gow & Van Sant, 1985). Capacity-building is the development of the conscious capability of individuals, groups and organizations to establish a foundation for development that will be self-sustaining after the withdrawal of donor inputs (Conyers, Warren, & van Tilburg, 1988). A process approach to development, where implementation is regarded as a learning process and project managers are able to revise their approaches in the light of feedback from the environment, is seen as facilitating the goal of improving capacity (Bryant & White, 1982).

Trends in rural development indicate that increasing emphasis is being placed on the achievement of sustainable results through increasing the capacity of the people and institutions involved (The Institute of Cultural Affairs International, 1985). At one time in its history, the United States Agency for International Development (USAID) identified institutional development as one of the four leading elements of its development strategy (Uphoff, 1986). More recently, development agencies have been placing emphasis on indigenous knowledge and empowerment of people (den Biggelar, 1991).

In the United States, the Cooperative Extension Service has been involved for many years in community education for development (Compton & McClusky, 1980). It has been involved in working with and training community leaders, helping establish community councils, and in providing assistance in analyzing community problems and needs. Community resource development has always been a part of the extension philosophy, but since the early 1970s, it has been recognized as one of the four major extension program areas from an administrative and financial viewpoint (Prawl, Melin, & Gross, 1984).
The Situation

The increased emphasis on capacity-building in development requires changes in project implementation and evaluation that must be built into the initial project design. There are many factors affecting project planning and implementation that either facilitate or hinder the successful implementation of development, and more specifically may affect the capacity-building components in rural development projects (Van Sant & Crawford, 1985; Binnendijk, 1989). When factors affecting development projects are inadequately addressed, inappropriate strategies may be implemented and implementation problems may arise (Van Sant & Crawford, 1985).

It is essential for those involved in rural development to understand the complexities of the constraints affecting the projects they are involved with if successful implementation is to be achieved. This necessity is particularly true of the capacity-building components in rural development projects that are difficult to evaluate because their results tend to be qualitative and less easily monitored and measured.

Agricultural extension professionals are one example of personnel for whom the analysis of the capacity-building components in rural development projects is important. Since agriculture is of great importance to the livelihood of rural populations, rural development frequently has agriculture as its central focus (Binnendijk, 1989). In rural development projects, agricultural extension professionals are actively involved in the process of technology transfer and developing the capacity of individuals and institutions to make use of that technology. It is therefore essential that those involved in agricultural extension in a rural development context are aware of the implications of the strategies that they implement, or of which they are a part.

Purpose

The overall purpose of this article is to describe the development of a framework for evaluating the capacity-building components in rural development projects. The process of developing the framework involved the following steps:

1. Develop a framework to evaluate the process of planning, implementing, monitoring, and evaluating rural development projects with particular reference to capacity-building objectives.

2. Test the framework by using it on selected rural development projects, in both the United States and developing countries where the development of capacity was one of the overall goals.

3. Identify the practices in the process that facilitated or constrained the building of capacity.

4. Identify and assess the indicators of development of capacity used by the project, and the extent they were useful in measuring improved capacity of people or institutions.

5. Revise the framework in the light of information gathered.

Methods and Procedures

Design

To meet the objectives of this study, a documentary analysis of project administrative records and related documents was chosen as the most appropriate approach. Given the wide geographical area of inquiry, documentary analysis provided an economical and feasible way of studying the topic in question. Furthermore, since the subject of study was the evaluation process, evaluation documents provided the most appropriate data. A naturalistic, qualitative approach was taken to develop an in-depth study that could be sensitive to unanticipated variations and individual characteristics in the project evaluations.

Instrumentation

To make comparisons among the projects, a conceptual framework was developed, and questions were formulated to establish whether and how an increase in capacity was encouraged and monitored during the evaluation process. The body of literature related to development and project evaluation revealed valuable information for selecting specific problem areas in process-oriented development that needed to be
investigated. This review led to the development of the framework and the questions that needed to be addressed when conducting this study. The framework and questions were not intended to represent a rigid plan, rather a starting point for investigation. To provide as complete an analysis as possible, an emergent approach was used and the plan was adapted in the light of the information discovered in the records.

The Conceptual Framework

The conceptual framework is illustrated in Figure 1. The main factors indirectly affecting the development of capacity may be divided into three categories: overall management, development approach and external factors. In addition, there are factors directly related to capacity-building which affect success in the development of skills.

The Questions

The so-called CIPP (Context, Input, Process, Product) model for evaluation, developed by Stufflebeam in the late 1960s, as reviewed and updated by him in 1983 (Stufflebeam, 1983) provided a suitable structure within which to frame the initial questions for analyzing the monitoring and evaluation of the capacity-building components in rural development projects. It pays attention to all elements of the planning and implementation process, providing information for decision making and evaluation, and considers both process and product. In addition, it provides valuable background data against project outcomes that may be interpreted and understood.

Stufflebeam (1983) redefined evaluation as a process of providing useful information for decision making. It was conceptualized as including context, input, process, and product evaluations to assist with planning, structuring, implementing, and recycling decisions respectively.

Context evaluation is related to objectives and needs assessment. Its purpose is to identify the strengths and weaknesses of an object such as an institution, program or population, and to provide direction for improvement. Input evaluation is related to input specification and strategy. Its main purpose is to help prescribe a program to bring about needed changes. Process evaluation is related to guidance for implementation. It is an ongoing check on the implementation plan, providing feedback to managers and staff about whether the project is going according to plan. It will also provide guidance to the implementors for modifying the plans as the project progresses, and assist in assessing how capable the program participants are in accepting and carrying out their roles. Product evaluation is related to guidance for termination, continuation, modification or installation. It will measure, interpret and judge the attainments of a program to see if the program has met the needs of the people it was intended to serve.

The initial questions, based on the CIPP model of Stufflebeam (1983), included the following:

Context Evaluation

1. What were the project objectives?
2. Were the project objectives clear?
3. Were the project objectives operational?
4. Were the project objectives flexible rather than rigid?
5. Were the capacity-building and skills transfer objectives identified and clearly stated?
6. Were the objectives of the project compatible with donor and host country goals? Explain why/why not.
7. What were the indicators of the qualitative/capacity-building objectives?
8. Were indicators of qualitative objectives valid and reliable? Is there any evidence of this?
Figure 1. Conceptual framework for the evaluation of the capacity-building components in rural development projects.

- **Overall Management**
  - e.g., clear objectives, prescribed plan, extensive record of process, interpretation of output in light of process

- **Capacity-Building**
  - e.g., clear objectives related to skills transfer, capacity-building objectives reflected in design, monitoring and evaluation related to capacity-building

- **Development Approach**
  - e.g., blueprint or process orientation, training program, participation

- **External Factors**
  - e.g., compatibility with host and donor philosophies and goals, economic policies, local environment
9. Were multiple indicators of qualitative objectives used?

10. Was popular participation used to identify needs? If so, explain how.

11. Are there any further observations of significance to context evaluation? If so, state what.

**Input Evaluation**

1. Was the project design process-oriented? If so, explain how?

2. Were institutional development objectives given increased priority in the design, and were they clearly stated? If so, elaborate.

3. Did the design include resource allocation for capacity-building objectives?

4. Did the design aim to minimize constraints to capacity-building objectives, such as conflicts between host or donor country objectives and those of the project, and the by-passing of local institutions? If so, explain how.

5. Was an evaluation plan included in the project design?

6. Was the evaluation plan intended to be responsive to the needs of audiences and was it viewed as a process? What evidence is there of this?

7. Did the evaluation plan use a combination of methods to collect both qualitative and quantitative data. What were the methods used?

8. Did the evaluation plan determine how the indicators of qualitative objectives could be observed and recorded? If so, elaborate on what was specified.

9. Did the evaluation include the collection of baseline data. If so, what baseline data were collected?

10. Was participatory evaluation planned for the continuous collection of information? If so, describe how.

11. Was popular participation used in planning the project? If so, explain how.

12. Are there any further observations of significance to input evaluation? If so, what are they?

**Process Evaluation**

1. Did the routine collection of data include both quantitative data and qualitative description? What data were collected?

2. Were specific people assigned the responsibility for evaluation? If so, who were they?

3. Did the evaluation utilize popular participation? If so, explain how.

4. Were project processes adapted in the light of the information collected? Give examples.

5. In the implementation of the project, were local institutions by-passed? If so, describe how.

6. Are there any further observations of significance to process evaluation? If so, what are they?

**Product Evaluation**

1. Did product evaluation look at intended and unintended outcomes? Specify which outcomes were observed.

2. Did product evaluation look at positive and negative effects? Specify which effects.

3. Did product evaluation look at short-term and long-term effects? Specify which effects.

4. Were a combination of evaluation techniques used to get a comprehensive view of the project? What techniques were used?
5. Was output measured in terms of skills transfer as well as technical development? If so, explain how.

6. Was the project considered successful in terms of skills transfer or capacity-building?

7. Was the project considered successful in terms of technical development?

8. Was the output of the project interpreted in the light of the descriptions of the processes involved? If so, elaborate.

9. Are there any further observations of significance to product evaluation? If so, what are they?

Units of Analysis

In this study, the units of analysis were the program development processes in selected rural/agricultural development projects in both the United States and selected developing countries, where development of capacity was one of the overall goals.

The cases were selected in a purposeful, rather than a random manner, on the basis of availability and wealth of information related to capacity-building, and suitability for providing a good test for the framework:

Developing Countries

1. Zambia: the Integrated Rural Development Project in Mpika, Chinsali and Serenje Districts (IRDP/SMC), supported by the British Overseas Development Administration (ODA).


2b. Zambia: the Integrated Rural Development Project in Northern Province (IRDP/NP) supported by the SIDA.

2c. Zambia: the Integrated Rural Development Project in Luapula Province (IRDP/LP) supported by the SIDA.

3. Sri Lanka: the Hambantota District Integrated Development Program (HIRDP) supported by the Norwegian Agency for International Development (NORAD).

4. Zaire: the North Shaba Rural Development Project (Project North Shaba, PNS) supported by the United States Agency for International Development (USAID).

5. Haiti: the HACOH Rural Community Development Project supported by USAID.

The United States

1. West Virginia: the Allegheny Highlands Community Development Program implemented through West Virginia University's Center for Appalachian Studies and Development.

2. Iowa: Tomorrow's Leaders Today (TLT) Program supported by the W. K. Kellogg Foundation and conducted by Iowa State University Cooperative Extension Service.

3. Iowa: Vision for the 90s Program conducted by Iowa State University Cooperative Extension Service.

Data Collection and Analysis

The initial questions framed in the CIPP model of evaluation, and the conceptual framework were combined to form a matrix to assist in data recording and analysis (see Figure 2). Initially, each project was analyzed separately, with the exception of the SIDA supported IRDPs in Zambia which were analyzed as a group. A group approach was taken to the SIDA supported projects since much of the documentation referred to the overall IRDP program supported by SIDA in Zambia. However, reference was made to individual IRDPs within the SIDA program where applicable. The contents of the documents were analyzed and categorized, using the matrix as a guide, to provide detailed descriptions of the development of each project, with particular reference to factors which either contributed to, failed to contribute to, or hindered the building of capacity. The projects in Zambia and Sri Lanka provided the richest sources of data. The
### PROJECT DEVELOPMENT PROCESS

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<th>CONTEXT</th>
<th>INPUT</th>
<th>PROCESS</th>
<th>PRODUCT</th>
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<tbody>
<tr>
<td>OVERALL MANAGEMENT</td>
<td>e.g., clear goals and objectives</td>
<td>e.g., prescribed program, procedural designs, budgets, schedules, evaluation plan</td>
<td>e.g., record of implementation, comparison of process with initial plan, monitoring procedures</td>
<td>e.g., interpretation of output in light of process, types of output data collected</td>
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<tr>
<td>CAPACITY-BUILDING</td>
<td>e.g., objectives related to skills transfer and strengthening local institutions, indicators of capacity-building</td>
<td>e.g., capacity-building objectives reflected in design, plan to use local institutions, resources allocated</td>
<td>e.g., feedback related to capacity-building local institutions used, resources spent on capacity-building</td>
<td>e.g., outputs related to capacity-building reported, rating of success in terms of capacity-building</td>
</tr>
<tr>
<td>DEVELOPMENT APPROACH</td>
<td>e.g., flexibility in goal formation</td>
<td>e.g., process or blue-print orientation, training programs planned</td>
<td>e.g., plans modified in light of process evaluation</td>
<td>e.g., plans modified in light of product evaluation, recommendations for improvement</td>
</tr>
<tr>
<td>EXTERNAL FACTORS</td>
<td>e.g., compatibility with host and donor goals, philosophies and policies, environmental factors</td>
<td>e.g., compatibility with host and donor goals, philosophies and policies, environmental factors</td>
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**Figure 2.** Matrix indicating key characteristics to be considered in the analysis of the capacity-building components in rural development projects.
documents from these projects were analyzed first to test whether the matrix was an adequate tool for handling detailed information related to capacity-building in rural development projects. The findings from all the projects were compared and synthesized to produce a holistic view of the project development process to make recommendations for improving the success of the capacity-building components in rural development projects. Key characteristics of the project development process relevant to the building of capacity were identified, and the original matrix was revised in the light of the findings.

In this study, an "audit trial" in the form of the conceptual framework, research questions, matrix, and description of the methods used and steps taken in the study, was provided so that it could be used by other researchers as a guide for replicating the study. A number of people assisted in maintaining the credibility and validity of this study by providing comments and suggestions at various stages in the research process. Faculty members in Agricultural Education, Technology and Social Change, Research and Evaluation, and Family Environment at Iowa State University were asked to comment on the initial design, the findings as they emerged, and key methodological steps in the emergent design. In addition, comments on the results were sought from one or more development professionals involved with the IRDPs in Zambia and Sri Lanka to gain a sense of whether the data and their interpretation in this study were reasonably and meaningful. To improve the generalizability of the findings of this study, detailed description was used to provide sufficiently rich information on which people interested in the generalizability of the data could base their judgment. Also, the cases were selected in a purposeful, rather than a random manner to provide cases which were rich in information.

Revised Framework

The findings were consistent with previous literature and highlighted areas of concern for planners, implementors, and evaluators of projects with capacity-building components. The key characteristics of the project development process relevant to the building of capacity were identified as follows:

Context Evaluation

2. Identification and use of host and donor philosophies and policies.

Input Evaluation

1. The development of a strategy, including plans for monitoring and evaluation which incorporate capacity-building.
2. The intent to work through indigenous institutions.
3. The inclusion of plans for management training.
5. A revolving planning approach.
6. Identification and use of host and donor philosophies.

Process Evaluation

1. Implementation of strategy as planned.
2. The implementation of monitoring and evaluation as planned.
3. The utilization of indigenous institutions as planned.
4. The implementation of training programs carried out as planned.
5. The utilization of process-orientation and flexibility as planned.
6. The utilization of revolving planning as planned.
7. Identification and use of host and donor philosophies.
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<tr>
<td>OVERALL MANAGEMENT</td>
<td>e.g., clear goals and objectives</td>
<td>e.g., overall strategy; planning of monitoring and evaluation to record facts relevant to capacity-building</td>
<td>e.g., implementation of strategy; monitoring and evaluation of process and capacity-building</td>
<td>e.g., interpretation of output in light of factors affecting it</td>
</tr>
<tr>
<td>CAPACITY-BUILDING</td>
<td>e.g., clearly stated capacity-building objectives and indicators of capacity-building</td>
<td>e.g., planning to use indigenous institutions; planning for management training</td>
<td>e.g., utilization of indigenous institutions; operation of training programs</td>
<td>e.g., evaluation of achievement of capacity-building objectives</td>
</tr>
<tr>
<td>DEVELOPMENT APPROACH</td>
<td>e.g., flexibility in approach</td>
<td>e.g., process orientation; flexible or revolving planning</td>
<td>e.g., maintenance of a process-oriented, flexible approach</td>
<td>e.g., examination of the extent to which the process has evolved toward sustainability</td>
</tr>
<tr>
<td>EXTERNAL FACTORS</td>
<td>e.g., compatibility with host and donor goals, philosophies and policies, environmental factors</td>
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**Figure 3.** Revised matrix of key characteristics to be considered in the analysis of the capacity-building components in rural development projects.
Product Evaluation

1. Evaluation of capacity-building as well as other goals.
2. Examination of the extent to which the project development process has evolved.
3. Identification and use of host and donor philosophies.
4. Identification and use of all other previously mentioned factors which may have affected outcomes.

The matrix in Figure 2 was modified and the revised matrix is provided in Figure 3. Although Figure 3 does not differ greatly in content from Figure 2, the revision emphasizes the main areas of concern revealed by the findings, and represents the framework proposed by the authors for use by development professionals.

Evaluation of the Framework

The developed framework provided a valuable tool for evaluating the capacity-building components of rural development projects, providing an overview of all stages in the project development process. The revised matrix (see Figure 3) should be used by all those involved in development projects who wish to ensure that factors affecting capacity-building are not overlooked at any stage in the project development process.

The areas of concern for planners, implementors, and evaluators of projects with capacity-building components that emerged from the evaluation of the selected projects are consistent with previous literature. This consistency indicates that the projects chosen were typical of rural development projects where capacity-building is an objective. It also indicates that the framework focuses on points of concern to evaluators of such projects, whether those projects are in developing or developed countries.

Examination of the data revealed that certain comments could be placed in more than one cell. In particular, in the analysis of process-oriented projects, process and product evaluations tended to merge. In a situation where there was a choice of where to put the data, the researcher chose the cell where the data would best contribute to making a clear overall picture of the project, and placed the comparable data in the same cells for each project. In situations where comparative research is carried out by a number of different reporters, it would be valuable to establish more specific standards on the placement of information that could validly be placed in more than one cell. It should be borne in mind, however, that each project is different, and as more specifications are made about data entry, the framework will be less easily adapted to each circumstance. It would therefore be inadvisable to put unnecessary limitations upon data entry.

For those projects where there was an abundance of information, it would have been possible to report the findings in greater detail, and situations may arise where it would be valuable to use the framework to study one or more projects in greater depth. However, given the scope of this research study, it was necessary to limit the findings reported on each project. The framework may also prove valuable for studying one project overtime. In this case, for one project, a matrix would be drawn for each of a number of time periods. The product evaluation of one period would then provide information for the context evaluation of the next period. The framework may also prove suitable for on-site, case study evaluation of the capacity-building components of rural development projects as well as for documentary analysis alone.

For some projects, certain cells may remain blank. The lack of information in the context-development approach cell is understandable, since development approach may not be considered until the input evaluation stage. However, limited information in other cells may point to important factors that project developers have failed to consider.

Although the framework was developed and utilized as an evaluation tool, it could also be used by planners and implementors of development projects who wanted to ensure that they were considering factors that had implications for capacity-building from the very start of the project.

The matrix provides a valuable tool for ensuring that factors affecting the development of capacity are not overlooked at any stage in the project development process. However, specific details of project planning, implementation, monitoring
and evaluation will vary with the circumstances. Although projects that are directed toward providing a specific learning experience over a short time period may be evaluated using the framework, and many of the listed key areas apply to them, they are not readily compared with long-term projects aimed at building capacity through a more general community development approach. Finally, it should be emphasized that any evaluation can only be as complete as the information made available to the evaluator.

Implications

It is essential for those involved in rural development to understand the complexities of the constraints affecting the projects they are involved with if successful implementation is to be achieved. This necessity is particularly true of the capacity-building components in rural development projects. In rural development projects, development professionals are actively involved in the process of technology transfer and developing the capacity of individuals and institutions to make use of that technology. They may be involved in activities such as needs assessment during the context evaluation stage, the planning of learning experiences, and monitoring and evaluation systems during the input evaluation stage, the implementation and monitoring of planned programs during the process evaluation stage, and the evaluation of the products of a program during the product evaluation stage.

To facilitate the building of capacity, project planners, implementors, and evaluators should work closely together, and utilize the proposed framework in the form of the revised matrix to:

1. Establish capacity-building objectives and ways of evaluating their achievement.
2. Identify external factors affecting the project at all stages in its development, making use of those factors that facilitate, and minimizing those factors which constrain the building of capacity. Also, to interpret project outcomes in the light of these factors.
3. Develop a strategy and implement it.
4. Develop and implement a monitoring and evaluation system which records facts relevant to capacity-building.
5. Utilize indigenous institutions and human resources.
6. Plan and conduct management training.
7. Plan and implement a process approach to development.
8. Consider the evolution of the project development process to gain insight into the degree of success and the future direction of the project.

In conclusion, development professionals need to be aware of the importance of evaluating the capacity-building components in rural development projects. In particular, they should remember that capacity-building is facilitated when it is given serious consideration at all stages in the program development process. The proposed framework will help to ensure that important factors are not overlooked.

*The material in this paper used by permission of Iowa State University Research Foundation. It is part of a larger study, fully documented in A Framework for the Evaluation of the Capacity-Building Components in Rural Development Projects: Implications for Program Development and Agricultural Extension Education.

References


