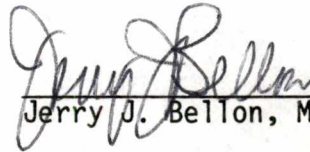


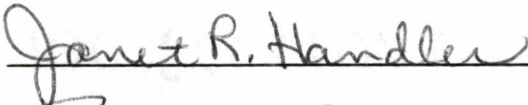
To the Graduate Council:

I am submitting herewith a dissertation written by Bahari Bin Yatim entitled "Analysis of Factors that Contribute to Success and Effectiveness in Planning RISDA's Small Farmer Development Programs in Malaysia." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Curriculum and Instruction.

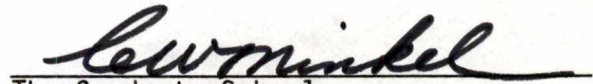


Jerry J. Bellon, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:


The Graduate School

ANALYSIS OF FACTORS THAT CONTRIBUTE TO SUCCESS AND
EFFECTIVENESS IN PLANNING RISDA'S SMALL
FARMER DEVELOPMENT PROGRAMS
IN MALAYSIA

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

Bahari Bin Yatim

August 1984

Copyright © Bahari Bin Yatim, 1984

All rights reserved

ACKNOWLEDGMENTS

The writer would like to express his appreciation to Dr. Jerry Bellon for support and guidance throughout his doctoral program. The writer is grateful to Dr. Janet R. Handler, Russell L. French and John M. Peters for their valuable assistance.

The writer would like to thank Dr. Robert S. Dotson and Dr. Cecil E. Carter for their continued encouragement. Financial assistance from the University of Agriculture, the writers' employer, and the Government of Malaysia is greatly appreciated. A special thanks is due to the writer's wife Puan Habibah bte Alias for her assistance and sacrifices and his children, Noor Azleen, Harris and Nazreen for their understanding.

ABSTRACT

The purpose of this study was to analyze factors that contribute to success and effectiveness in planning RISDA's small farmer development programs in Malaysia. A review of related literature was conducted to identify success and failure factors. The factors were organized into categories developed for this study. A small farmer agency, RISDA, was selected in order to confirm the factors identified in the literature.

The data were collected from field workers and county supervisors. Mail questionnaires were used to determine the process used and should be used in planning and implementing RISDA's programs. Semistructured interviews were conducted to validate the results of mail questionnaires.

The major findings of the study were:

1. Decisions were mostly made by project administrators in ineffective small farmer programs.
2. The target clients to be served by effective programs were clearly spelled out, and measures were established to make sure that the small farmers were not dominated by the more literate, progressive farmers.
3. RISDA field workers were encouraged to participate in making decisions related to program implementation, but they were not involved in identifying goals, strategies and procedures for implementation.

4. RISDA's goals were not derived from the small farmers' interests, problems and expectations.
5. There was no planning conducted at the county level. Activities were developed based on the annual budgetary guides prepared by state administrators, directives and on-going field programs.

The more important conclusions of this study were:

1. RISDA's programs were planned without participation of the small farmers or county personnel. RISDA was more concerned with the delivery of materials and services rather than developing the clients' capabilities.
2. The process used to develop the small farmers made a difference in the outcomes of small farmer programs.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Statement of the Problem	3
Purpose of the Study	4
Significance of the Study.	5
Assumptions.	6
Delimitation	6
Definitions.	6
Methods and Procedures	9
Organization of the Study.	11
II. REVIEW OF RELATED LITERATURE	12
Introduction	12
Planning Process	12
Overview of Small Farmer Programs.	17
Factors That Contribute to Effectiveness of Selected Small Farmer Programs.	24
Summary.	41
III. METHODS AND PROCEDURES	43
Introduction	43
Descriptive Study.	43
Source of Data	45
Instrument Development	48
Data Collection.	55
Analysis of Data	57
IV. FINDINGS	61
Introduction	61
Research Question One.	61
Research Question Two.	71
Research Question Three.	100
V. SUMMARY, FINDINGS, GUIDELINES, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY.	112
Summary.	112
Findings	114
Recommended Guidelines for Analyzing and Improving RISDA's Programs	120
Conclusions.	122
Recommendations for Further Study.	122
BIBLIOGRAPHY	124

CHAPTER	PAGE
APPENDICES	130
APPENDIX A. RESEARCH INSTRUMENTS.	131
APPENDIX B. TABLES OF CONSISTENCY IN RESPONSE	150
APPENDIX C. LIST OF ADDITIONAL SMALL FARMER PROGRAMS ANALYZED.	167
APPENDIX D. TABLES ON IMPORTANCE OF ITEMS LISTED IN MAIL QUESTIONNAIRE	169
APPENDIX E. TABLE ON PROCESSES THAT SHOULD BE USED IN PLANNING AND IMPLEMENTING RISDA'S PROGRAMS.	184
APPENDIX F. LETTER TO THE RESPONDENTS	187
VITA	189

LIST OF TABLES

TABLE	PAGE
II-1. Number of Families Served by Selected Small Farmer Programs	25
III-1. Relationship Between Research Questions and Categories of Items in Mail Questionnaires.	51
III-2. Relationship Between Categories for Analyzing Research Question Two and Questions Included in Interview Guide.	54
III-3. Source of Data by Research Questions	60
IV-1. Background Characteristics of Selected Effective Small Farmer Programs.	63
IV-2. Selected Organizational Processes Used by Selected Effective Small Farmer Programs.	64
IV-3. Program Development Processes Used by Selected Effective Small Farmer Programs.	67
IV-4. Implementation and Evaluation Procedures Used by Selected Effective Small Farmer Programs	69
IV-5. Ratings of Items Related to Organization of RISDA's Programs as Perceived by County Supervisors.	72
IV-6. Ratings of Items Related to Organization of RISDA's Programs as Perceived by Field Workers	74
IV-7. Consistency in Response Related to Organizational Processes as Given by Supervisors.	76
IV-8. Consistency in Response Related to Organizational Processes as Given by Field Workers.	77
IV-9. Ratings of Items Related to Program Development as Perceived by County Supervisors.	81
IV-10. Ratings of Items Related to Program Development as Perceived by Field Workers	83

TABLE	PAGE
IV-11. Consistency in Response Related to Program Development Processes as Given by Supervisors.	84
IV-12. Consistency in Response Related to Program Development Processes as Given by Field Workers.	85
IV-13. Ratings of Items Related to Program Implementation as Perceived by County Supervisors.	87
IV-14. Rating of Items Related to Program Implementation as Perceived by Field Workers	90
IV-15. Consistency in Response Related to Implementation and Program Outcomes as Given by Supervisors	94
IV-16. Consistency in Response Related to Implementation and Program Outcomes as Given by Field Workers	95
IV-17. Ratings of Items Related to Procedures to Analyze Program Outcomes as Perceived by Supervisors	98
IV-18. Ratings of Items Related to Procedures Used in Analyzing Program Outcomes as Perceived by Field Workers	99
IV-19. Items That Were Perceived Important and Which Differ Significantly from What Was Being Done in RISDA.	101
B-1. Consistency in Response Related to the Organizational Process as Perceived by Supervisors.	151
B-2. Consistency in Response Related to Program Development Process as Perceived by Supervisors.	154
B-3. Consistency in Response Related to the Implementation Process as Perceived by Supervisors.	155
B-4. Consistency in Response Related to Analysis of Outcomes as Perceived by Supervisors.	158
B-5. Consistency in Response Related to the Organizational Process as Perceived by Field Workers.	159
B-6. Consistency in Response Related to Program Development Process as Perceived by Field Workers.	162
B-7. Consistency in Response Related to the Implementation Process as Perceived by Field Workers.	163

TABLE	PAGE
B-8. Consistency in Response Related to Analysis of Outcomes as Perceived by Field Workers.	166
C-1. Additional Small Farmer Programs Analyzed Using Content Analysis Procedure	168
D-1. Importance of Organizational Processes as Perceived by County Supervisors	170
D-2. Importance of Items Related to Organization of RISDA's Programs as Perceived by Field Workers	172
D-3. Importance of Program Development Processes as Perceived by County Supervisor	174
D-4. Importance of Items Related to Program Development as Perceived by County Supervisor	175
D-5. Importance of Program Implementation Processes as Perceived by County Supervisors.	176
D-6. Importance of Items Related to Program Impelementation as Perceived by Field Workers.	179
D-7. Importance of Items Related to Program Outcomes as Perceived by Supervisors	182
D-8. Importance of Items Related to Procedures Used in Analyzing Program Outcomes as Perceived by Field Workers.	183
E-1. Processes That Should be Used in Planning and Implement- ing RISDA's Programs	185

CHAPTER I

INTRODUCTION

Development experts are giving increasing attention to the problems of subsistence farmers. Numerous programs have been initiated throughout the world to help small farmers who form the majority of the labor force in less developed countries.

According to Morss et al. (1976), most of the programs did not have effective means of reaching the small farmers. Only a small percentage of the clients received the services. The main beneficiaries of the programs were the richer, commercial farmers. Similar benefits were experienced by small producers in Latin America, Asia, and Africa.

In most cases, the rural poor were not treated as equal in terms of their contribution towards development efforts. The small farmer inputs were usually ignored. Decision making and management of activities were controlled by the agencies that financed the program. In many programs, new ideas were seldom tested under local conditions. Values, desires and preferences of the clients were sometimes not considered at all (Williams, 1981 and Heyer et al., 1981).

The experiences of small farmer programs in tropical Africa indicated that some of the programs were only concerned with services, facilities or creation of new institutions. The clients were regarded as incapable of running the facilities. This assumption does not encourage the development of the clients' self-help capability.

Methodology for evaluating the success or failure of development efforts was inadequate. Appropriate criteria for evaluation were not established. Success was usually measured in terms of quantity of services extended to the clients. The information gathered from results of the past programs did not help decision makers or implementors in understanding the factors that are relevant for improving activities and procedures. Heyer (1981) indicates that there is no adequate explanation given to success or failure of small farmer development programs. Appropriate guidelines are needed for planning, implementing and evaluating the process of small farmer programs.

The determination of appropriate future action pertaining to what should be the ends and means involves making choices and judgments. Davidoff and Reiner (1962) state that values of the clients and other constraints must be taken into account. Issues need to be discussed. A set of criteria is needed to guide the decision making process.

Two groups of clients must be considered in planning. The primary clients are key decision makers, legitimizers, the gate keepers, the implementors and others affected by the program. The secondary clients refer to the ultimate audience who benefits from the program. Willingness and commitments of the planning clients greatly influence the characteristics and outcomes of the program.

Planning is a process for clients' development. It involves analysis of the situation, communication, interaction and decision making. The various options and consequences must be discussed. There

should be agreement among those who are interested in the outcomes of the plan. Planning is concerned with the decision making functions that enhance the probability of success in implementing a program.

Service delivery programs for small farmers are inefficient and uncoordinated. A clear direction of purpose is not established. Means selected are often in conflict with the purpose. Methods and procedures adopted are more concerned with the subject matter rather than the clients. Sound criteria for planning and evaluation are not identified.

Planning for small farmer development is not limited to providing services and facilities. Various forms of support services are necessary, but roles of development workers in planning and delivering the services need to be clarified. The literature suggests that clients' participation in making decisions and management increases their self-help capability. There is a need for a plan to gradually help the clients increase their experiences and commitments without being dependent on external assistance.

I. STATEMENT OF THE PROBLEM

Planning service delivery program for small farmer development is an important activity. It affects more than fifty percent of the total population in less developed countries. A considerable amount of funds have been allocated, but past performance from the world-wide experience indicated that the small farmer did not benefit much from the services offered by national and international development agencies (Heyer et al., 1981).

A number of articles have been written about programs for the small farmer, but they do not specifically deal with development of the small farmer. Though the literature portrays some of the problems of implementing small farmer programs, there is very little emphasis being given to the analysis of goals and means to carry out the goals.

Specific information about small farmer development is lacking. Factors that are associated with the problems of the small farmers are not known. These factors are related to inefficient use of resources of funding agencies, implementing agencies and the clients. Dissatisfaction exists among those affected by the program. As it is, planners are not sure of what the appropriate goals are and what the appropriate means of developing the clients are. With so many problems, a good place to start would be to analyze the planning components which include goals, organization, operation and outcomes. This study analyzes factors that contribute to success and effectiveness in planning a service delivery program for the small farmers.

II. PURPOSE OF THE STUDY

The major purpose of the study was to identify factors that contribute to the success and effectiveness of RISDA's small farmer development programs.

Specifically, the study was designed to answer the following questions:

1. What are the factors that contribute to success and effectiveness of small farmer development programs, as indicated in the literature?

2. What processes are used in planning and implementing RISDA's small farmer programs?
3. What processes should be used in planning and implementing RISDA's small farmer programs?
4. What guidelines can be suggested for analyzing and improving RISDA's small farmer programs in Malaysia?

III. SIGNIFICANCE OF THE STUDY

This study is important and relevant to the body of knowledge on small farmer development. The information can be used by individuals or institutions for improving a program design or analyzing an on-going program. Higgs (1977) states that very little information is available which specifically deals with the problems and methods of reaching the small farmers.

This study is important to non-formal education and adult development. Key issues examined in this study are not emphasized in earlier studies. The information is also useful to planning. It provides data relevant to the processes involved in setting goals and in formulating the means. The gaps in knowledge suggest a need for this descriptive study.

This study will analyze factors that are important to success and effectiveness of small farmer programs. It will provide a conceptual tool for identifying an effective development strategy. Guidelines will be prepared for analyzing and improving RISDA's programs for small rubber farmers in Malaysia.

IV. ASSUMPTIONS

The following assumptions provide the frame of reference for this study:

1. Goals of a program should be derived from values, interests and preferences of the clients.
2. Planning needs clear direction of purpose, effective means of organizing the personnel and resources, strategies and procedures appropriate for the program, and a plan for monitoring the means used as well as the outcomes of the program.
3. Participation in making decisions and implementation is a determinant in assuring the success of a program.

V. DELIMITATION

The review of literature is limited to an analysis of factors that contribute to success and effectiveness of programs directed to small farmer development. The review analyzed factors involved in planning and implementing of such services.

This study is limited to a specific small farmer organization, Rubber Industry and Smallholder Development Authority in Malaysia. It is confined to planning small rubber farmer programs. Only selected small farmer development programs are analyzed.

VI. DEFINITIONS

The following definitions are used in this study:

1. County supervisor refers to the administrators of RISDA programs in a given county. Administratively, the administrator

is given the title of RISDA Officer. When the county is too large to operate, a given county may be operated by two separate administrative units.

2. Development agencies refer to national and international organizations which finance programs for small farmer development. International agencies may also provide advisors to the host country. National development agencies, however, provide personnel for implementing the programs for the small farmers.
3. Development programs refer to educational plans for small farmer learning. A development program may have multiple goals to be achieved. Each goal should reflect the needs, interests and problems of the small farmers.
4. Development workers refer to paid-employees of development agencies. They can be planners, administrators or field workers of development programs.
5. Front-line workers are the field workers who work closely with the small farmers. They are also described as change agents, adult educators and community development workers. Goals of the programs, in most cases, are determined by the agencies involved. The role of front-line workers is to design and implement activities based on the goals of the agencies.
6. Goals refer to a broad statement of expected outcomes which are timeless and non-measurable.

7. Planning refers to the process of determining appropriate future action. It includes goal-setting, ranking of goals, identifying the feasible alternative means, selecting the most promising alternative, designing procedures for implementing and monitoring its progress and communication the decisions made with the clients. The planning process requires appropriate participation of its clients in identifying the problems, determining the program direction and specifying the means to accomplish the program goals. The manner in which planning is being carried out influences the degree of support and commitment of its clients during the implementation stage.
8. Program design refers to the framework which guides activities for program implementation. It provides the implementor with information on program goals, the target audience, major performance objectives, strategies and methods for its implementation, subject-matter content to be covered, and procedures for diagnosing the learners and determining the outcomes of learning.
9. RISDA is the agency that implements programs for small rubber farm development. Rubber Industry and Smallholder Development Authority, Malaysia provides its services to more than 400,000 small farmers. Its primary role is to replant about five percent of the total small farmer rubber acreage annually. Its secondary role includes providing advisory service, rubber

processing and marketing facilities, economic activities which are not related to rubber, building for small farmer associations and credit facilities.

10. Rubber is a perennial crop. The bark of rubber trees produces latex which is then coagulated and dried. A small farmer may sell his produce in a dry or in liquid form.
11. Small farmer refers to underprivileged, low-income farm families with limited access to services or opportunities. They include landowners, share croppers or renters of land. They depend heavily on external support and assistance.

VII. METHODS AND PROCEDURES

The purpose of the study was to analyze factors that contribute to success and effectiveness in planning development programs for rubber small farms. This descriptive study was conducted using content analysis of selected small farmer programs, questionnaires and semistructured interviews. Research questions developed for this study were based on the review of related literature.

As part of the procedure a computer search was conducted to identify a number of small farmer programs funded by local and international agencies. Selected small farmer programs were analyzed using content analysis procedures. Categories and units of analysis were obtained from the literature. The major categories were goals, assumptions, organization, procedures for implementation and procedures for analyzing outcomes.

A small farmer development agency in Malaysia, Rubber Industry and Smallholder Development Authority, was selected for this study. The agency is responsible for the development of 400,000 rubber small farm families. RISDA administrators had been contacted, and they had indicated their interest in participating in the study.

The respondents of this study were 82 county supervisors and 669 area front-line workers. Mail questionnaires and semistructured interviews were used for gathering information from the respondents.

The questionnaires were administered to all county supervisors and 305 field workers selected using the stratified random sampling procedure. Face-to-face interviews were conducted with 18 supervisors and two of their assistants in three Malaysian states. The states were also selected using stratified random sampling procedures. Information from interviews was necessary to validate data collected by questionnaires and to collect in-depth, first-hand information related to the planning process used by RISDA. Selected official documents were analyzed to verify information given by the respondents.

Research instruments were translated into Malaysian language. The first pilot test was conducted with eight Malaysian students enrolled at The University of Tennessee, Knoxville. A second pilot test was carried out with four RISDA personnel who were not respondents of this study.

Responses to mail questionnaires were coded and analyzed for consistency, similarities and differences between the respondent groups. Data collected by interview schedules were categorized and analyzed using

content analysis procedure. Research questions were used to guide the analysis of information collected through the review of related literature, mail questionnaires and interview schedules.

VIII. ORGANIZATION OF THE STUDY

Chapter I describes the statement of the problems, the purpose of the study, assumptions and delimitations, definitions and methods and procedures of the study.

Chapter II includes a review of the literature. Chapter II explains the methods and procedures for the collection of the data.

Chapter IV deals with the presentation and analysis of the data.

Chapter V presents the conclusion and recommendations of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

I. INTRODUCTION

Planning provides the framework for program development. A plan or program is a general decision making guide for implementation. Thus, planning sets the direction for decisions related to organization, program development, implementation and outcomes. Planning seeks to develop acceptable ends and means. There should be effective procedures for periodic review of progress and outcomes (Higgs, 1977).

Everyone involved in a program has a role to play in decisions relevant to their roles (Redman, 1983). Involvement of the people affected by the plan improves the quality of decisions and the degree of their commitment during implementation. Ineffective planning results in inferior programs. The program goals may not reflect needs and problems of the target audience. Means or strategies used in a program may be generated from goals that are not related to the clients' constraints, interest, and expectation. Similarly, an effective program may have been designed, but the services offered may benefit only a small number of intended clients.

II. PLANNING PROCESS

Planning is a process of preparing a set of decisions related to what is to be achieved and how it should be accomplished. It involves

the process of organizing people for identifying ends and means. It is a methodology of thought and action, rather than preparing a blueprint for a definite course of action (Dror, 1963).

Planning involves different groups of clients with different interests and background. In this manner, decisions are made through a sequence of choices. Davidoff and Reiner (1962) indicate that decisions have to be made for formulating goals, identifying means, setting standards and selecting procedures for implementation.

Planning is derived from many disciplines. It could be classified into substantive and process-oriented theories. The first is more concerned with basic discipline or subject matter, while the latter emphasizes procedures. Content as well as process are needed in planning (Faludi, 1973, p. 7).

Planning is a means for guidance and control. Planning aims at future growth. It identifies the best way of attaining ends in terms of organizational structure and processes.

Planning procedures are aimed at formulating agreed upon goals and procedures. Tasks to be accomplished are clearly defined. Procedures for making decisions, utilizing resources and obtaining feedbacks are developed. Green (1983, pp. 29-30) states that planners are also responsible for applying the plan and for the results of the plan.

Planning usually starts with a preliminary statement of the problem. It includes clarifying issues, situations and opportunities. Once a decision to proceed with planning is given, there is a need to structure the decision-making process (Nadler, 1982). Decisions are made to

clarify purpose, tasks, roles, approaches and procedures of planning. In practice, decisions are made at three levels involving executives, supervisors and operators. Decision makers provide broad direction and guidelines. Middle management personnel are responsible for planning strategies, funds and personnel. The implementors are responsible to prepare a detailed procedure for carrying out specific programs. Each level has a role in monitoring activities at the implementation stage.

Program Development

Goal setting includes activities which are related to data collection, analysis of problems, identifying goals, and determining their priorities. Goals of a program reflect values, problems, and expectations of the clients (Friedmann, 1979). Planning focuses on the people involved and affected by the plan. Thus, information about their interests, constraints and needs are collected and analyzed. The data are used for identifying program goals. Goals are then ranked or arranged as a hierarchy to reflect their relative importance. They must be accepted by those involved in planning (Krumholtz, 1979). Goals are used as the basis for program development and evaluation.

Means identification involves several activities. Objectives and constraints are clarified. Criteria for design and implementation are established (Lichfield et al., 1975). A number of alternative plans are identified. Each alternative is then evaluated. Several rounds of formulation and evaluation are involved until an optimal program is identified (Mayerson and Banfield, 1965). In a time of limited

resources, an optimal program that satisfies all requirements should be considered. Selection is done without having to list all possible alternatives.

Feedback and Evaluation

A plan is a general decision-making guide related to policies, objectives, strategies and procedures. At implementation stage, activities are organized according to guidelines prepared in the program. Some forms of control are required to insure that the work is carried out as planned. Chawick (1978, p. 332) indicates that operational activities are organized and managed by the plan. A plan regulates the use of resources through regular feedback (Raymond, 1979, p. xxiv). The process towards goals are evaluated at intervals. Feedback data are analyzed to determine whether the results achieved are consistent with the plan. The data are needed for decisions related to program modification, termination or expansion at various stages of implementation.

Participation in the Planning Process

Haymann and Brown (1982, pp. 37-38) state that participation in planning is an effort to integrate and coordinate the activities among different levels. Individuals who participate and understand the different dimensions of planning will more likely accept and work to achieve those plans.

Planning utilizes inputs from all levels of management and operation. The participants are involved in making decisions related

to their roles and responsibilities with leadership coming from those who develop policies, goals and strategies. It is a structured communication of the goals and expectations (Redman, 1983, p. 25). Planners have the responsibility to assure that assumptions, objectives and strategies are understood and consistently applied.

Planners have to understand that there are limitations within which they operate. Goals and the preferred course of action are usually determined by decision makers and those affected by the program (Burchell and Sternlieb, 1979, p. 299). Planning with the parties involved increases the probability of successful implementation (Heroux, 1981, p. 4). Individuals must be made to understand and agree on the same set of premises if coordination of efforts is to be achieved (Kahalas, 1982, p. 16).

An effective program is planned and controlled through strategic planning, short-range planning and operational planning (Redman, 1983). Strategic planning involves executive officers and supervisors. It is concerned with establishing goals, objectives, strategies and policies related to use of resources. Expectations of the organization, planning participants and the ultimate clients are considered in defining the overall aims of a program. Short-range planning involves executive officers, supervisors and implementors. It is concerned with establishing operating objectives, targets, strategies and allocation of resources. At the lowest level, operational planning requires participation of supervisors and implementors to develop the program that will effectively and efficiently utilize resources.

A number of factors influence the effectiveness of the planning process. Heroux (1981) suggests that planning effectiveness could be improved by:

1. Introducing the importance of planning for future growth.
2. Developing guidelines on what to do and how to do it.
3. Relating how planning could improve performance.
4. Introducing in-house training on planning.
5. Getting support and commitment of policy makers related to roles, procedures for promoting coordination in planning and implementation.
6. Developing procedures for measuring progress.

III. OVERVIEW OF SMALL FARMER PROGRAMS

Articles related to small farmer development were reviewed. The major points raised by the authors were presented in this section. Included in the review were seminar papers, studies and articles related to the topics.

Organization

Analysis of small farmer programs showed that the clients were not beneficiaries of the services rendered by the program. Those who were already better off usually received most of the benefits. The target clients of small farmer programs were seldom identified (Stavis, 1979). Without adequate information on the number and characteristics of the

audience to be served, it is difficult to plan and use the resources effectively. In a study conducted in Kenya, Leonard (1977) found that implementors devoted most of their efforts working with the more progressive farmers. The audience to be reached was not clearly defined. When the beneficiaries of the program were identified, the majority of the target audience received the benefits.

Inadequate attention was given on procedures used in identifying the goals and objectives. Coombs and Ahmad (1974) indicate that in many instances, program sponsors focused their attention entirely on project organization, schedule and logistic support with little efforts to define the goals and context of the programs. Programs were developed without any reference to the clients' needs and problems (Cohen, 1975). There was not much emphasis being given to diagnose the clients' needs and shape the design in order to fit the needs of the small farmers.

Little attention was given to methods that could be used to help the small farmers and village leaders to identify their problems, establish priorities and set goals. Methods of formulating programs and procedures for evaluating outcomes were seldom analyzed. Roskelly (1981) indicated that the roles of the clients and development workers were not clarified. In order to be effective, programs were required. The plan should focus on how to help people by doing. Topics had to be carefully chosen. Appropriate strategies had to be selected.

There were no significant changes in the procedures used to suit the target groups' needs. Many new programs were not much different

from the traditional approach (Khan, 1978). The government agent delivered techniques, fertilizers and credit. Interests of the clients were seldom considered.

Systematic planning and training had increased the productivity of field workers. The World Bank's Training and Visit System (Benor, 1977) served as an example of a highly structured program. The field workers had to devote most of their time mainly on educational activities. They were required to plan regular discussions with selected farm leaders in small groups every two weeks. Activities planned and implemented were documented. The system was found effective in monocropping areas.

In the FUTURO projects, the field staff were assigned a specified number of communities to serve (Morss et al., 1976). They were given the freedom to plan and implement their activities. During the monthly staff meeting, each staff had to present the proposal and progress of their activities. Each field worker was utilized effectively to work with 30 communities. The Nigerian Tobacco Company project developed procedures to be performed and standards to be achieved by the front-line workers. Each field worker was assigned to work with 200 families. A number of approaches were used to monitor and supervise the activities of field personnel. The average income of project participants had increased by 400 percent compared to what they received before being involved in the project.

Program Development

Many programs did not attempt to reach the target farmers and to involve them in the decision making process (Higgs, 1977). The projects were intended to help the small farmers, but the means were rarely worked out. Opportunities to develop the clients' abilities were not provided. It was suggested that there was a need to see the clients as capable of making rational decisions.

Coombs and Ahmad (1974) indicated that most of the programs reviewed had a limited view regarding the concept of development. Many programs emphasized improvement in terms of materials and services of the clients. There was not much attention being given to helping the clients develop their own capabilities.

United Nation Food and Agricultural Organization suggested five criteria to be considered in planning and implementing small farmer programs:

1. An assumption that the people themselves would play a leading role in development.
2. That intervention was to be in response to an initiative coming from the people rather than solutions that had already been worked out by the sponsors.
3. To strengthen institutions at the community level.
4. That essential resources were those of the community and that external resources should be supplementary.
5. The procedure was at least as important as technical knowledge.

Participation of clients in making decisions during project design had promoted the clients' self-help capability and willingness to make resource contribution adoptions of proven technology. Participation of the clients had promoted discussion on local problems and implementation of group projects (Morss et al., 1976).

Participation was considered to be the most ambiguous concept used by practitioners (Banskota and Roy, 1981). Reference was seldom made as to which target group had not been able to benefit from policies and programs. Participation should be perceived as the process of involving people in those decisions that affect their lives.

The poor farmers were usually exploited and dominated by a few who controlled the local organizations. The small farm groups or organizations were assumed to have internal cohesion, mutual obligation and rational actions (Lessen, 1980). It should be noted that the clients would participate if they were not exploited.

Local groups encouraged participation of the small farmers (Adams and Coward, 1972). It served as means for the farmers to share decision making activities, interests, plan and control activities affecting the community. Local organizations were responsible for promoting individual contributions, controlling equity problems and preventing any harm by individuals (Stavis, 1979).

Implementation

Inappropriate technologies were often promoted to the audience. The Puebla project in Mexico encouraged the farmers to use fertilizer mixtures that were not available in the market (Whyte, 1981). The Northern Nigerian project requested the farmers to plant cotton using new farm practices. The small farmers were reluctant to follow the recommendation because local practices were more superior in terms of convenience, yield and acceptance by members of the family (Norman,

1980). The credit program in Brazil encouraged the farmers to use credit. However, it was not accompanied by appropriate technology (Adam, 1979).

Adoption of a recommended practice was influenced by its quality and the procedure used to promote the innovation. Leagan (1979) stated that a higher rate of adoption was achieved if the farmers were asked to use technologies that had been tested under local condition. Adoption was facilitated if closed supervision was given and the small farmers were involved in testing, demonstrating, selecting and promoting the innovations.

Organization of farmers was an essential factor in facilitating the delivery of services. Any new idea should not be imposed upon the clients. Establishment of local organization had to be the result of small farmers' needs for access to services (Cisneros, 1977). Lele (1975) suggests that local organizations are needed to provide, administer and integrate services to small farmers. They are used as a mechanism for communal control and to sustain development. They are utilized as part of a delivery system. In practice, many small farmer organizations were established and controlled by the sponsors and the government. Opportunity to develop the clients' decision making and management capability was not given (Parsons, 1977). Local organizations were not guided to mobilize local resources.

Participation had also increased if local organizations were developed with clearly defined roles that the small farmers could perform such as decision making, promoting adoption of recommended technologies, delivering supplies and services, maintaining local infrastructure and mobilizing local resources.

The Taiwan Farmers' Associations extended most of the services needed by the members (Kwoh, 1974). Members had to pay for services provided by the organization. The FAs were controlled by small farmers. FAs paid salaries of technicians who were made accountable for the success of the organizations. Services of other agencies were coordinated by local government. The role of local organizations in mobilizing local resources must be promoted. Increase in foreign aids could reduce the small farmers' capability to mobilize local resources (Higgs, 1978). Availability of resources would make them dependent on external aids.

Greater number of small farmers adopted improved practices if selected participants were given regular off-farm training and were utilized to promote ideas or innovations and demonstrations (Morss et al., 1976). The majority of the small farmer projects attempted to promote imported technologies without local testing and demonstration. The clients' constraints and preferences were not taken into consideration.

Whyte (1981) indicates that the effectiveness of the CADU project in Ethiopia was affected since the small farmers were not consulted concerning strategies and procedures for implementation. They were excluded from making decisions during the implementation process. The clients were only expected to follow the recommendations developed by the sponsors.

High involvement of clients in making decisions and control over project implementation increased the small farmers' participation, adoption of recommended practices, income, availability of supplies and services.

Outcomes

Higgs (1977) indicates that evaluation of small farmer programs had been poorly done. The programs were implemented without effective control procedures. Measures for assessing progress were not developed. Evaluation procedures developed at the design stage would enable corrective action to be taken at the implementation stage.

IV. FACTORS THAT CONTRIBUTE TO EFFECTIVENESS OF SELECTED SMALL FARMER PROGRAMS

Individual small farmer programs were reviewed. Twenty-seven articles had adequate description on projects' background, organization, planning, implementation and outcomes. Programs which had rendered their services to a majority of the target clients (Table II-1) were analyzed using content analysis procedure. Their strengths and weaknesses were discussed according to categories developed for this study. Major factors that had contributed to ineffectiveness of the remaining fourteen projects (Table C-1) were also highlighted in the discussion. The analysis made was limited to information available in the literature.

Project Organization

Roles and responsibilities of field workers. From the limited information available, it was found that the field workers involved in the thirteen projects were given adequate instructions about their roles

Table II-1. Number of Families Served by Selected Small Farmer Programs

Program	Project Size	No. of Families Served
BIRIWA Project, Ghana ^a	4 communities	500
Comilla Project, Bangladesh ^b	sub-county	800,000
FUTURO Project, Columbia ^a	200 communities	5,000
IBRD Project, Gambia ^a	sub-county	3,000
Lirembe Project, Kenya ^a	1 community	
Mixed Vegetable Scheme, Gambia ^a	30 communities	900
Nigerian Tobacco Company, Nigeria ^a	sub-county	2,100
Plan Maize, Mexico ^a	1 province	31,620
Small Farmer Development Program, Nepal ^c	2 communities	366
TETU Project, Kenya ^a	sub-county	2,000
Tiv Bams and Farmers' Associations, Nigeria ^a	--	33,000
UBOMA Project, Nigeria ^a	1 community	380
Vicos Project, Peru ^a	1 community	380

^aSee Morss et al. (1976).

^bSee Whyte (1981), Raper (1970) and Steven (1975).

^cSee Lahoni (1981).

and responsibilities. Roles and guidelines were discussed with the field workers on a regular basis.

Emphasis of small farmer programs. The thirteen small farmer programs analyzed had three major emphases. Four programs were more concerned with problems of the small farmers. Activities were designed to help the target audience overcome their social as well as economic problems. There were five programs that had greater emphasis on farming methods or techniques. Activities designed were mostly directed toward helping the small farmers to upgrade their production practices. Four other programs stressed more on cultivating the clients' self-help capabilities. The audiences were guided to examine their problems, identify constraints and opportunities, plan and implement activities. Two of these self-help programs were adopting community development technique which emphasized on mobilizing local resources without external material aids (project for the community of Vicos in Peru and FUTURO project in Colombia). Two other self-help programs (SFDP in Nepal and Comilla in Bangladesh) emphasized use of local as well as external resources. Self-help programs also encouraged the clients to implement group and community projects.

Target audience. A major feature that was common to all the thirteen programs reviewed was the procedures used to select the project area and the clients to be reached. Project area and number of families to be served had to match the resources of the sponsoring agencies. The small farmers were identified, while the richer, commercial farmers

were excluded from the programs. There were seven programs which utilized incremental approach to planning. During the initial stage, services were directed to certain areas or number of farm families. Activities were then expanded depending on the performance of earlier activities. The second approach used was to specify the project area or number of families to be covered during the project life. This approach was adopted by five small farmer programs. Short-term objectives were developed based on the total number of families or communities to be served. Only one program (Nigerian Tobacco Company) directed its service based on the ratio of small farmers per field worker. Each field worker was instructed to work with approximately 200 small farmers involved in the program.

Difficulties in differentiating between the small farmers and progressive farmers were experienced in the Commila, TETU and Uboma programs. Sponsors of TETU program in Kenya overcame the problem by requesting potential clients to provide some basic data. This information was used to exclude progressive farmers from participating in the program. Other programs utilized the small credit group approach where members were asked to recruit and select other members for the group. The approach was effectively used as a requirement before aids and services were extended to small farmers.

Adapting programs to small farmer conditions. The field workers had certain working procedures to be followed. In twelve programs, they were requested to adjust the guidelines according to local conditions.

However, the Nigerian Tobacco Company had a highly structured program with specific tasks to be performed. Strict control over procedures had helped the small farmers to improve the quality of their produce. Adequate training and supervision were given at every step of tobacco leaf production.

Information on problems, needs and expectations. Formal and informal approaches were used to generate data for making decisions. Formal interviews were utilized as the prime source of information in five of small farmer programs analyzed. The data collected were presented to the clients for additional comments and suggestions. In one program, information was mainly collected from official records. Seven other programs were designed solely based on information collected through informal interactions with potential clients. Issues related to local problems were presented to the clients. Constraints of small farmers and possible solutions were discussed in small groups. The data collected were used as the basis for program development.

Involvement of field workers in program planning. Ten programs were designed with participation of field workers. Only three programs were developed without involvement of field staff, but the workers involved were informed about goals of the programs, procedures to carry out the activities and roles that they had to perform. Discussions on roles and procedures were conducted regularly with the field workers concerned.

Procedures for monitoring small farmer programs. Seven of the small farmer programs reviewed had established procedures for monitoring field activities. Information was collected through progress reports made by field workers, field visits and interviews with selected project participants. It was not possible to determine the monitoring procedures used by the six other small farmer programs.

Procedures used to phase out from the project area. Most of the programs reviewed had no plans to prepare the clients for self-help prior to withdrawal from the project area. Only five programs had procedures to withdraw from the project area or to keep the clients from being dependent on external assistance.

The sponsors of Lirembe project in Kenya had clearly indicated that their financial support would be terminated at the end of the contract. All projects had to be approved by the sponsors and funds were to be released in four phases. An official from the agency was directed to review the progress of the project and make recommendations at the beginning of each phase.

The BIRIWA project in Ghana offered financial support as well as technical assistance. Local organization was strengthened. Each family had to support community services. Commercial ventures were initiated. Services from government agencies had been provided in response to the demands made by the clients. A significant number of local residents were given vocational training. At the end of the contract, the clients were running a strong local government and had been actively involved in commercial activities.

The Small Farmer Development Program in Nepal offered training as well as credit facilities to local farmers. Small farmer commercial ventures were encouraged. Market outlets were created. Full employment was achieved within four years. The clients' income had increased 400 percent compared to what they received before being involved in the program.

The FUTURO project in Colombia did not provide the clients with technical or material support. The clients were motivated toward self-help from the start. They were not encouraged to be dependent on outside help. They were requested to share skills and resources with their neighbors. Farmers in Tiv Bams and Farmers Association in Nigeria had been conducting activities on their own. Extension agents working in the area made no attempts to introduce the clients' dependency on external help. The clients were guided to organize and manage local resources for long-term benefits.

The community of Vicos in Peru was assisted in order to strengthen local government and carry out commercial activities. The community continued to develop for about seven years after withdrawal of foreign advisors. However, their potato crop was damaged by blight and properties were destroyed by the 1970 earthquake. Since then, they have reverted to traditional methods and practices. It was found that clients' business enterprise was limited to potato. Other alternatives were not considered by the project designers. It was also noted that the farmers were totally left on their own without any supervision by local development workers.

Development of local field workers was not taken into consideration in designing the project.

The majority of fourteen other small farmer programs listed in Appendix C did not include procedures to disengage their services from the project area. Internationally known Chilalo Agriculture Development Unit project in Ethiopia did not even include development of managerial and operational capabilities of local personnel and the small farmers for the first two years of their operation.

Criteria for design and implementation. The literature indicated that seven out of thirteen programs were developed with some criteria or guidelines for program development. Standards were used to develop procedures for periodic review of progress and outcomes. Based on the information available, it was not possible to make inferences as to whether the other six programs had some standards of operation or not.

Training program for field personnel. Involvement of field workers in planning inservice training programs was not indicated in the literature. On-going renewal activities for field personnel were provided in seven programs, while field workers involved in six other programs were selected based on their past achievements and competencies.

Program Development

Thirteen programs selected for this study were designed with full support and commitment of the target audience. Ideas were introduced.

Discussion with the clients was held with involvement of formal and informal local leaders. Approval of the clients was sought to initiate the programs.

Three of these programs were initiated in response to requests made by local leaders and members of the communities. Other programs were initiated by program sponsors, elected officials, training institutions or local development agencies. Though there were variations in terms of approaches used, small farmer programs were mostly initiated according to the following sequence of activities:

1. introduction of ideas into the clients' system;
2. clarifying purpose of the programs;
3. discussion on issues, problems and possibilities;
4. obtaining support and approval of the clients' power structure;
5. organizing the clients for making decisions and implementation;
6. clarifying local contributions and obligations; and
7. identifying procedures for program development and implementation.

Extra efforts were used to implement the first three activities. Early in the program, initiators involved in the program had to obtain background information concerning the target clients and their environment. Local leaders to be involved in the program were identified. They were then utilized to initiate discussions on local problems. Adequate time was given for the clients to formulate ideas and generate local interests. Ideas and strategies were debated in small group

meetings. It was also necessary to gain support and commitment of local clubs, organizations, government and line agencies operating in the area. Initial activities were mostly directed to gain the clients' commitment in making decisions and implementing the program.

Decentralization of decision making process. All thirteen projects analyzed in this study emphasized involvement of small farmers in decisions related to their problems. There were no attempts made to impose ideas or recommendations on the clients. Decisions made by the clients were indicated as an essential element to get their cooperation and commitments at the implementation stage. Lack of clients' involvement in making decisions had contributed to ineffectiveness of many small farmer programs including the Puebla project in Mexico and CADU project in Ethiopia.

Organizing the small farmers. Development of local organization was one of the factors that had contributed to effectiveness of small farmer programs. Twelve of the programs analyzed had emphasized organizing the clients into strong local organizations. The TETU project in Kenya was the only project which provided its services on an individual basis. Continued expansion of the TETU project depended on availability of competent field workers as well as development of locally trained paraprofessional workers.

Three approaches were adopted to develop or strengthen small farmer organizations. Small credit groupings were used in four programs.

The farmers had to organize small groups before they were eligible for credit services offered by the sponsors. Loans were extended with group liability. All members in a small group had to be involved in planning, approving the amount of loan to be requested, implementing the projects and administering the repayment of loan.

Local cooperatives were promoted in four programs. Cooperatives were needed to provide production and marketing services to small farmers. Development of higher level cooperatives or farmers' associations were based on demand for services made by local farmers at the community level (TIV Bams Farmers' Associations, Comilla Project and SFDP in Nepal).

There were three programs that emphasized development of local community councils to plan, organize and direct activities of small farmers. Services of local government were effectively used in BIRIWA and VICOS projects. A community was divided into several zones. A local resident was elected in each zone to represent the group in the governing council. Each council member was given certain tasks for the community and the group they represented. Interactions between local government and residents were facilitated by council members. Activities and services were coordinated by local community organizations.

Procedures for development of small farmer groups or organizations. The twelve programs that emphasized development of small working groups or organizations had a common approach to organize the clients. Decisions to organize had to emerge from small farmers. Group

discussions were held to clarify purpose and problems of grouping the clients. The clients were guided to identify the structure of a suitable organization. Committee members were elected with full involvement of small farmers. Roles and responsibilities of elected officials were formulated. Procedures for administering local organizations were established. Local groups were responsible to recruit other farmers as members of the organization.

Mobilization and development of local resources. There were three programs that specifically emphasized development of local resources (TIV Bams Farmers' Associations, Vicos and Futuro projects). During the development process, the clients were not promised of possible external assistances. From those programs that utilized outside funds for small farmer development, there were two programs that encouraged the clients to participate in commercial ventures (SFDP in Nepal and BIRIWA project in Ghana). Cooperative activities of four other programs were limited to providing services related to farming activities.

Developing local programs. Eight small farmer programs were initiated specially to help the clients make decisions related to their problems. The following procedures were used to guide the small farmers in planning local activities:

1. discussion of local problems;
2. identifying objectives to be accomplished;
3. setting local priorities;

4. identifying and selecting alternatives;
5. establishing procedures for implementation; and
6. identifying and scheduling use of local resources.

Field workers involved in the programs were more concerned with helping the clients to initiate, develop and plan local programs.

Projects to be carried out by small farmers had been identified by the sponsoring agencies in five programs. Planning activities were limited to identifying resources and procedures to carry out the activities. Each program promoted a single enterprise. Its success depended on availability of technical and marketing services. Ineffectiveness of Vicos project in Peru was mainly due to inability of small farmers to initiate other income generating projects after the failure of their commercial potato production. Farmers involved in Puebla project were not involved in selecting maize varieties suitable for consumption and for sale in local markets. Maize varieties promoted were not accepted by the clients and local dealers.

Training for small farmers. Selected farmers were given training in seven of the programs reviewed. Training programs were implemented to improve skills related to farm management (five programs), management of local cooperatives (six programs) and other vocational areas (two programs). Farm management trainings were conducted for leaders of small farm groups who were provided with credit services. They were expected to share their knowledge and skills with other members of the group. Management trainings were offered to farmers elected to manage

local cooperatives. Vocational trainings were given to those interested in boat repairs, carpentry and home economic activities.

Implementation

Participation in project administration. The majority of programs included in this study were managed by the project participants. Although they were given guidelines, technical services and materials aids, small farmers controlled decisions over implementation of their activities. Only one program was administered by line agencies. In this program (TETU project in Kenya) services of the sponsoring agency were provided on an individual basis. There were eight ineffective small farmer programs that were controlled by the sponsoring agencies. The target clients were not given the opportunity to make decisions over project administration.

Development and promotion of improved technologies. It was indicated that project participants in the programs reviewed were utilized to conduct local demonstration and promotion of improved technological packages. Proven innovations were introduced if they were within the interests and capabilities of the clients. Local trials were initiated in ten programs. Local farmers were given the opportunity to select the innovations in seven programs. Where technologies had been fully developed, the farmers were made aware, interested and convinced through a variety of teaching methods. In most instances, selected local leaders were asked to explain, discuss and promote improved ideas. Simple ideas were used. Promotion was done in stages.

Analysis of information on ineffective programs showed that:

1. technologies that had not been proven beneficial to small farmers were promoted (eight programs);
2. the farmers were not given the opportunity to identify and select appropriate innovations (six programs);
3. small farmers were persuaded to adopt externally generated technologies without adaptive research or small scale trials (two programs); and
4. local farmers were not involved in the development and promotion of new ideas (two programs).

Two programs were expanded while they were still in the development stage (ICA project in Equador and Community Development in India).

Community projects. Six small farmer programs promoted projects for the benefit of the whole community. Contributions were made in the form of cash and labor. In three programs, local communities were involved in the construction of road, building and irrigation facilities (Vicos, Comilla and BIRIWA projects). Local tax was introduced in three projects (TIV Bams Farmers' Association, BIRIWA and Lirembe projects) to finance public services.

Complementary inputs and services. The majority of the programs reviewed provided adequate complementary services. In one program (FUTURO project in Colombia) complementary services were not included in the program other than puersuasion and guidance. The farmer had to

provide his own services. Complementary services included in the programs were credit facility, market outlets, farm supplies, training, building for social activities and technical guidance. The Nigerian Tobacco Company and Plan Maize projects utilized agricultural research stations to train local farmers and to carry out experimentations. TETU project in Kenya requested services of local universities to prepare the program design as well as monitoring field activities. The sponsor of Comilla project utilized its training facility as demonstration and weekly training for selected farmers.

Roles of local organizations. Eleven programs which utilized small farm groups, organizations, cooperatives, associations or community organizations were analyzed. The literature indicated that local organizations conducted planning activities for small farmers. Small farmers activities were coordinated (ten programs). Supply of production inputs and marketing services were organized (ten programs). The small farmers had to pay all services extended by local organizations (five programs). Administrative expenses were maintained by small farmers (six programs). Local organizations administered credit and collection of loans made to members (ten programs). Services of line agencies were coordinated by local community government (Lirembe and BIRIWA projects).

Involvement of local agencies. Five programs were implemented with involvement of line agencies from the start. Efforts were mostly directed at coordinating activities of line agencies. Local agencies

participated in planning and working with small farmers. Six other programs were initiated by agencies that were not directly involved with operation of field programs. While these agencies put greater emphasis on development of small farmers, there were no efforts made to involve them during the implementation stage. There were not many commitments provided by line agencies as evidenced in Comilla project, SFDP project in Nepal and UBOMA project in Nigeria.

Outcomes

Collection of data on program outcomes. Formal evaluation procedures were used in five small farmer programs (Nigerian Tobacco Company project, TETU, FUTURO, Comilla and SFDP in Nepal). Information on procedures and outcomes were analyzed and used to improve the programs while they were in progress. Evaluation of six other programs were done using informal unstructured procedures.

Evaluation by project management. Eight small farmer programs reviewed the progress of field activities at intervals. The data were communicated to field workers in five programs (Nigerian Tobacco Company, UBOMA, FUTURO, Comilla and SFDP in Nepal). Evaluation in TETU project was mainly used to modify procedures for implementation. Evaluation of Lirembe project was done in stages by the funding agency to monitor the progress of the program. There was no formal evaluation performed in BIRIWA project. Decisions were made during the weekly meetings.

Involvement of small farmers in evaluation. Active involvement of small farmers in monitoring their activities were indicated in twelve programs. Meetings were also held with full attendance of all farmers in six programs. In three programs, only local leaders were involved. Whereas, in three other programs, representatives of line agencies were invited to review the progress of field activities.

V. SUMMARY

The purpose of this chapter was to present a review of literature. Involvement of policy makers, managers and implementors was an essential factor in the decision making process. At the local level, the small farmers had to make decisions and administer their programs. Clients' participation in planning helped increase their commitments during the implementation stage.

Literature on planning provided information related to the planning purpose, tasks in planning, the outcomes of planning and roles of planners. The success of planning was partly dependent on how it was structured and promoted. Roles, values, interests and constraints of the clients must be taken into consideration.

Literature on small farmer programs generated information on what had been attempted and concluded. Only two studies were conducted to analyze strategies for small farmer development. The first study was conducted by the World Bank (Coombs and Ahmad, 1974); while the second study was funded by the United States Agency for International Development (Morss et al., 1976). Information on each program was collected by

a team of researchers who visited the project area. Observations made by the researchers were used in making the conclusions. However, there was no analysis made on goal-setting and organizational processes.

CHAPTER III

METHODS AND PROCEDURES

I. INTRODUCTION

This study analyzed factors that contributed to the success and effectiveness in planning and implementing programs for small farmer development. Specific research questions developed for this study were:

1. What are the factors that contribute to success and effectiveness of small farmer programs?
2. What processes are used in planning and implementing RISDA's small farmer programs?
3. What processes should be used in planning and implementing RISDA's small farmer programs?
4. What guidelines can be suggested for planning and evaluating RISDA's small farmer development programs?

II. DESCRIPTIVE STUDY

The descriptive research procedure was used in this study to review literature related to small farm development programs, to confirm the data with programs of a specific small farmer agency, and to develop guidelines for planning and evaluating the agency's small farmer development programs. The study procedure used is presented in Figure III-1.

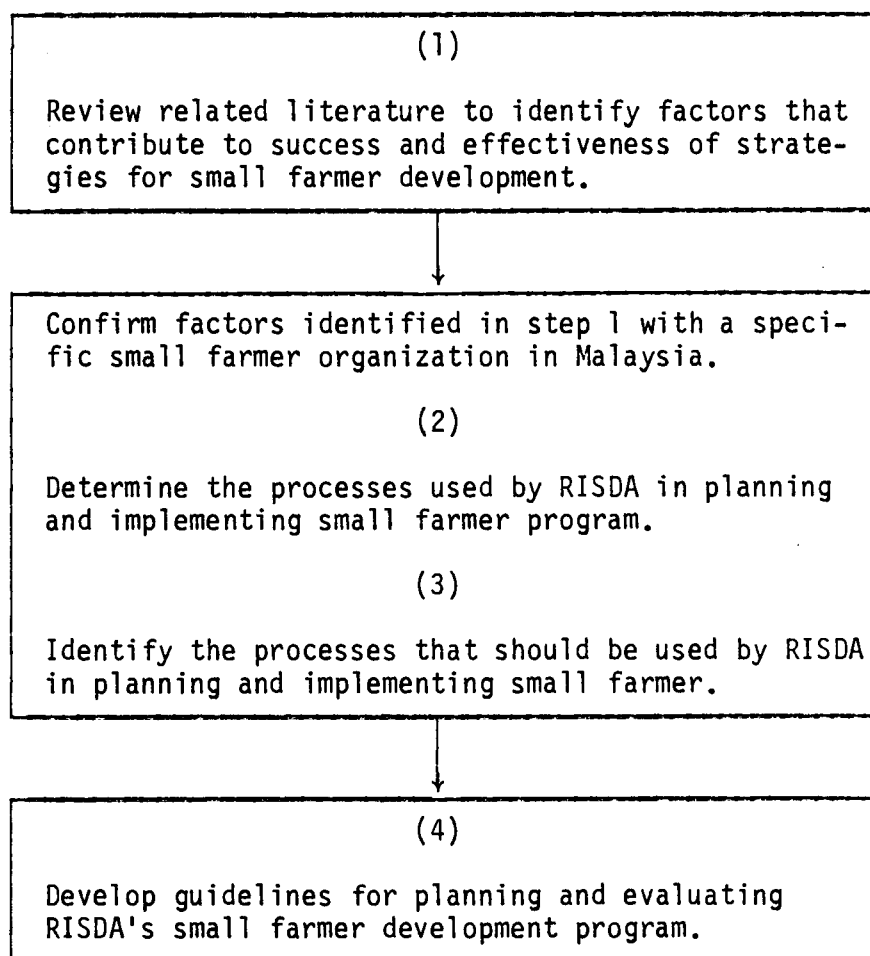


Figure III-1. Summary of Study Procedure.

Murdick (1969, p. 64) indicates that descriptive research goes beyond mere presentation of data. The researcher has to identify the problems, conceptualize, analyze, evaluate, deduce the patterns identified, explain why and how, make inferences and conclusions. The researcher may generalize and seek an application of the information collected.

A descriptive study is not limited to any one method of data collection (Selltiz, 1976, p. 102). In this study, content analysis procedure, mail questionnaires and semistructured interviews were utilized.

III. SOURCE OF DATA

The data needed for this study were collected from related literature and field personnel engaged in a small farmer development program.

Literature on Small Farmer Programs

Written materials were identified and analyzed. Related literature provided information on what had been attempted. The data were needed in order to identify factors that had contributed to success and effectiveness of small farmer programs and processes that should be used in planning and implementing small farmer program. Two programs might have been implemented successfully, but one of the programs could have utilized the resources more effectively compared to the other.

An AGRICO computer search was conducted to identify literature on small farmer programs. Related articles, reports and studies were

selected. Materials which were not available at The University of Tennessee, Knoxville, were requested through inter-library service. Letters were sent to international development agencies and institutions involved in small farmer development. Effective and ineffective programs were reviewed. Written materials were classified and analyzed using content analysis procedure.

Population

The population of this study was RISDA county personnel. RISDA had 82 county supervisors and 669 area field workers. Field workers who had at least two years of experience and were assigned to work with a number of communities were identified.

Respondents

Information was also collected from county personnel of a development agency, Rubber Industry and Smallholder Development Authority in Malaysia. Perceptions and opinions of implementors were collected to confirm factors identified in the literature with a specific small farmer organization. The data collected were analyzed to determine the processes used by RISDA in planning and implementing small farmer programs and to identify the processes that should be used by RISDA in planning and implementing its small farmer programs. The summary and conclusions made from related literature and respondents were used to develop guidelines for planning and evaluating RISDA's programs.

Sampling

Perceptions and opinions of county personnel were used to generate information needed for this study. A census was taken to include

all RISDA county administrators as respondents of this study. RISDA field workers were selected using a stratified random sampling procedure. The country's four regions were used as the basis for stratification. From each region, a state was selected using random sampling procedure. All 305 area field workers in the four selected states were included as respondents of this study. The table on sample size indicated 244 (36 percent) was needed from a population of 669 units. Thus, 305 out of 669 field workers (46 percent) was more than the minimum sample size required for this study.

An indepth study was conducted in three of the country's four regions to ascertain information related to the processes used by RISDA in planning and implementing small farmer programs. The fourth region was excluded due to extensive rainfall and flooding at the time of the study. Initially, a state was selected from each region using a random sampling method. Counties with RISDA supervisors were identified in each of the selected states. Individual supervisors were requested to select two of their field workers using a set of guidelines. The field workers were selected from those who:

1. had at least two years of work experience;
2. were familiar with RISDA's policies and programs;
3. were assigned to work with a number of communities; and
4. could explain the procedures, programs and strategies used by RISDA at county level.

The supervisors were reminded not to limit their choice to those who had more work experience. The selected states had eighteen county supervisors.

IV. INSTRUMENT DEVELOPMENT

Mail questionnaires were used to collect information related to processes used and processes that should be used in planning and implementing programs for small farmer development. An indepth study on the processes used by RISDA was conducted through semistructured interviews.

Mail Questionnaires

The respondents of this study were RISDA county supervisors and field workers in the four states selected. They were distributed throughout Malaysia. With limited resources in terms of funds and time available to the researcher, the mail questionnaires technique was selected to generate information needed for this study. The survey instrument had undergone two rounds of pilot tests with non-respondents prior to its implementation. Babbie (1973, p. 169) states that appropriate technique of pilot tests relating to all aspects of a study design had to be conducted. The instrument is then ready for collecting specific information from respondents who are widely dispersed geographically (Good and Hatt, 1952). A careful planning, administration and follow-up procedures were used to achieve a high rate of response.

Questions

Questions included in the mail questionnaire were developed from factors indicated in literature on small farmer programs, materials related to small farmer development and literature on planning. They were structured for collecting data relevant to research questions.

Structured questions were used to collect information on knowledge, opinions and preferences of the respondents.

Related literature provided information on factors related to success and effectiveness, processes used and processes that should be used in planning and implementing small farmer programs. The information was then organized into four categories by adapting the framework outlined by Bellon and Handler (1982). The categories used were organization, program development, implementation and outcomes. Organization includes procedures, structures and responsibilities. Program development refers to procedures for planning local programs. Implementation refers to roles of development workers. Outcomes includes procedures for analyzing the programs.

A total of 60 factors were finally selected. The factors identified were converted into statements and used in the survey instrument. Related to the processes used by RISDA, the respondents were asked how often each of the statements listed in the questionnaire was being done in RISDA. A numerical rating scale was used for the respondents to indicate their knowledge and preferences. The response scale selected were consistently done--4; usually done--3; seldom done--2; and never--1. Down et al. (1980, p. 357) states that rating scales give direct information about respondents' degree of knowledge and preference.

Regarding the processes that should be used in RISDA, the respondents were asked, "How important are each of the statements listed to small farmer programs?" Rating scales used were: very important--4;

important--3; somewhat important--2; and unimportant--1. Table III-1 shows the relationship between items in mail questionnaires and research questions.

Pilot Test

A pilot test of the survey questionnaire was conducted with eight Malaysian students at The University of Tennessee, Knoxville. It was needed in order to omit errors, refine questions and test the adequacy of the structure. Survey instruments were administered in English and in the Malaysian language. Four of the students had similar educational backgrounds as RISDA area supervisors. The remainder had only Malaysian high school education which was similar to field workers. All of them were familiar with RISDA's programs.

The pilot tests were conducted individually with non-respondents. Revisions were made after each test. Suggestions given pertaining to the vocabulary, relevancy, organization, and appropriateness of the statement and questions were used for making revisions.

A second pilot test was conducted with four RISDA personnel who were not included in this survey. Comments and suggestions given were recorded. Improvement was made pertaining to relevancy of questions, vocabulary, readability, clarity, organization, sequence and wording of the questions. Mail questionnaires used in this study are presented in Appendix A.

Table III-1. Relationship Between Research Questions and Categories of Items in Mail Questionnaires

Categories of Items	Research Questions	
	RQ2 ^b	RQ3 ^a
Organization	Items 1 to 9, 11 to 21	1 to 9, 11 to 21
Program Development	Items 22 to 26, 29, 30, 32 and 36	22 to 26, 29, 30, 32 and 36
Implementation	Items 10, 27, 28, 31, 33 to 35, and 37 to 55	10, 27, 28, 31 33 to 35, and 37 to 55
Outcomes	Items 56 to 60	56 to 60

RQ--Research question.

^aImportance of items related to processes of planning and implementing small farmer programs.

^bHow frequently items related to processes of planning and implementing were being done in RISDA.

Semistructured Interviews

The data collected through mail questionnaires were somewhat limited. The respondents were asked to indicate their agreement on prepared statements which did not provide adequate information on the procedure used by RISDA in planning and implementing its programs. Semistructured interviews were used to collect information on procedures, collect indepth answers and extensive probing. Indepth questioning was possible through interaction and clarification (Gordon, 1975, p. 39). A high level of interest could be maintained throughout the interview (Down et al., 1980, p. 354).

Face-to-face interviews were used in studying the planning and implementing processes which were not documented. Dijkstra and Zouwen (1982, p. 2) state that interviews are appropriate in studying phenomena that are not observable. Interviews were selected to study procedures adopted by RISDA as well as to validate information gathered through mail questionnaires. Robertson et al. (1965, p. 19) state that interviews are relevant in order to study a past event that is not documented. In addition, Gordon (1975, p. 39) explains that interviews can be conducted with participants who have experienced the phenomena when available documents are irrelevant to research objectives.

Questions

Questions were constructed using information given in related literature as well as categories and items used in mail questionnaires. The information was organized into major categories developed for this

study. Open-ended questions were constructed for each category. Adequate number of questions were included in each category. These questions were analyzed for their relationship within a given category and relationship between categories. They were then cross-checked with categories and items in mail questionnaires to make sure that the instrument had included adequate number of topics to be covered in the semistructured interviews. Table III-2 shows the relationship between categories for analyzing research question two and questions in the interview schedule.

Pilot test. Questions in the interview schedule were given a pilot test. The instrument was administered to non-respondents involved in the pilot test for questionnaires. Comments were recorded. Their suggestions were used in making the final revision. The sample interview guides used in this study are presented in Appendix A.

Rationale for Content Analysis Procedure

Literature on small farmer programs was analyzed using content analysis procedure. Inferences were made using frequency measures. The data obtained were compared with factors discussed in related literature on development of small farmers.

Budd (1977) states that content analysis is appropriate for analyzing contents and process of communication. It is appropriate for analyzing written materials. It identifies the characteristics of the text systematically and objectively (Stone et al., 1966, p. 5).

Table III-2. Relationship Between Categories for Analyzing Research
Question Two and Questions Included in Interview Guide

Categories	Interview Guide Questions	
	County Supervisor	Field Worker
Warm-up questions	1 and 2	1 and 2
Organization	3, 4, 5, 6, 8, 9, 11, 12, and 13	3, 4, 5, 6, 8, 9, 11, 12 and 13
Program Development	14, 15 and 18	14, 15 and 18
Implementation	7, 10, 16, 17 and 19	7, 10, 16, 17 and 19
Outcomes	20	20

The researcher had to use his judgement and skill in making the interpretation.

Quantitative description can be meaningful if some standards are used based on accumulated data or expert opinion (Berelson, 1971). In this study, the standards were developed using factors that were emphasized in literature on small farmer development.

Categories and items have to be identified in making the analysis and items have to be identified in making the analysis. They should be mutually exclusive, exhaustive and relate to the need of the study (Buddy, Throp and Donahue, 1967). In this study categories and items used in each research instrument were cross-checked against one another for its relevance, adequacy and relationship. Categories and items developed from related literature were used in content analysis procedure. They reflect the purpose, problems and research questions.

V. DATA COLLECTION

Mail Questionnaires

During the early phase of this study, a letter was sent to RISDA to explain research objectives and at the same time request permission to carry out the study. The request was approved in August 1983. RISDA's Development Division was instructed to assist the researcher in conducting the survey.

Prior to the survey, the researcher was informed that the questionnaires could be effectively administered by sending them to RISDA

regional officers. Addresses of the respondents were obtained from RISDA central office. Questionnaires for respondents in a given county were enclosed in an envelope. A personal letter and permission to carry out the study were attached to each questionnaire. The personal letter described the purpose of the study and how RISDA could benefit from the findings. A self-addressed stamped envelope was also enclosed together with the questionnaire. Approximately two weeks later a reminder letter was sent to county supervisors who had not completed the questionnaire.

Out of 82 RISDA supervisors, 50 of them (61 percent) responded to the survey. The field workers had a higher return rate (66 percent) with 202 of them completing the questionnaires from the sample size of 305 respondents.

Semistructured Interviews

The researcher had to decide how to sequence interviews and mail questionnaires since some RISDA personnel were respondents of both research instruments. In this study, mail questionnaires were administered approximately ten days prior to semistructured interviews. Downs, Smeyak and Martin (1980, p. 357) state that once the respondents had checked their preferences, the researcher could explore through personal interviews why the respondents had made the choice. Answers to the question "how" and "why" are more valuable than the choice itself.

A personal letter together with permission from the agency was sent to state administrators a week prior to the interviews. It was followed by a personal telephone call to request the official concerned in scheduling the visit with county supervisors and field workers.

Before conducting the interviews, an official visit was made to RISDA state office. This was done to make sure than county personnel had been informed about the scheduled interviews.

Semistructured interviews were conducted in RISDA's office. All interviews were personally administered by the researcher. Study objectives were explained. The respondents were informed that RISDA had an interest in the outcomes of the study.

Interviews were conducted in 18 counties. Sixteen supervisors and 37 field workers were personally interviewed by the researcher. Two supervisors were attending a two-week inservice training program during the scheduled visit. Semistructured interviews were conducted in November 1983. About an hour was spent with each respondent. It should be noted that a field worker who was not selected for the interview had volunteered himself as a respondent. Thus, in one of the counties three field workers were interviewed instead of two.

VI. ANALYSIS OF DATA

Literature on Small Farmer Programs

Literature on small farmer programs were analyzed using content analysis procedures. The data were classified into categories and items

prepared for analysis. Frequencies were used to make inferences in analyzing the factors that had contributed to success and effectiveness of small farmer programs. Inferences were made separately for each research question.

Mail Questionnaires

Responses to mail questionnaires were coded and analyzed using the Statistical Package for Social Science procedure. The data were presented in terms of frequency, percentages and mean. Responses to each item were analyzed for its consistency in order to determine if the respondent had rated related items consistently. Inconsistent responses were not considered for further analysis. The WILCOXON Matched-pairs signed-rank test for correlated samples was utilized to determine the consistency of ratings made by each group of respondents.

Responses obtained from the two samples were compared for similarities and differences. The Median test was used to determine if responses from the two groups differ significantly from one another.

Semistructured Interviews

Responses to each question were analyzed separately. Similar responses were grouped into one classification. Frequency count was used to indicate the number of respondents who had given the same response. Responses given by supervisors and field workers were compared for similarities and differences. The data were primarily used to provide information related to the process used by RISDA in planning and implementing small farmer programs.

Analysis of Data for Each Research Question

The data collected from each source of information were classified into categories developed for this study. Information obtained from related literature was summarized to provide answers for research question one. Information collected from county supervisors and field workers was analyzed to generate data for research question two. The data collected from both groups of respondents and related literature were compared to answer research question three. Summary and conclusions of the first three research questions were used to develop guidelines for planning and implementing RISDA's small farmer development programs (research question four). Table III-3 shows source of data for each research question.

Table III-3. Source of Data by Research Questions

Research Question	Source of Data
1. Factors that contribute to success and effectiveness of small farmer programs	Literature on small farmer programs
2. Processes used by RISDA in planning and implementing small farmer programs	County supervisors and field workers
3. Processes that should be used by RISDA in planning and implementing small farmer programs	Related literature, county supervisors and field workers
4. Guidelines for planning and evaluating RISDA's programs	Summary and conclusions of research questions one, two and three

CHAPTER IV

FINDINGS

I. INTRODUCTION

The analysis of data is presented in this chapter. The data were collected from the review of related literature, RISDA county supervisors and field workers. Mail questionnaires and interview schedule used in this study are given in Appendix A.

The data collected were analyzed and presented in tables and written description. Part of the mail questionnaires was designed to obtain information on the processes used by RISDA in planning and implementing small farmer development programs. The second part of the mail questionnaires was constructed to identify factors that were perceived important by the two categories of county personnel. Each part was analyzed for consistency in response. Information collected through interviews was used to validate information obtained in mail questionnaires. A separate analysis was made for each research question.

II. RESEARCH QUESTION ONE

What are the Factors That Contribute to Success and Effectiveness of Small Farmer Programs?

The data were obtained from the review of related literature. Projects with adequate description of their background, organization, implementation and outcomes were selected. Twenty-seven projects

appropriate for this descriptive study were identified. Thirteen of the projects had effectively served the clients (Table IV-1). Selected projects were analyzed according to the categories and subcategories developed for this study. Factors that had contributed to success and effectiveness of the programs were discussed.

Organization

All thirteen effective small farmer programs had specifically indicated the target farmers to be served in the long run as well as by stages (Table IV-2). Measures to discourage involvement of progressive farmers were consistently applied in Nigerian Tobacco Project, SFDP in Nepal and IBRD in Gambia.

Program goals were based on small farmers' interests, problems and expectations. The data were collected and used to guide decisions related to ends and means. Eight programs emphasized the development of clients' decision making and management capabilities.

Goals were developed through a process involving decision makers, supervisors, implementors and the project participants. The process had generated commitment of those involved and affected.

Roles of field workers were frequently discussed in seven programs. The field workers were given guidelines to help the small farmers. Field workers of C milla and IBRD projects developed their own roles and responsibilities.

Training of field workers in seven programs was mostly job-related. Capabilities of field workers were developed before they

Table IV-1. Background Characteristics of Selected Effective Small Farmer Programs

PROGRAMS													
Characteristics	Biriwa (Ghana)	Comilla (Bangladesh)	Futuro (Colombia)	IBRD (Gambia)	Lirembé (Kenya)	Mixed Vegetables (Gambia)	Nigerian Tobacco (Nigeria)	Plan Maize (Mexico)	SFDP (Nepal)	TETU (Kenya)	Tiv Bams FAS (Nigeria)	UBOMA (Nigeria)	Vicos (Peru)
Nature of program promoted	1	1	1	2	2	2	2	2	1	2	2	2	1
1. Self-help													
2. Service-oriented													
Number of projects promoted	2	2	2	1	2	1	1	1	2	1	2	2	2
1. Single project													
2. Multiple projects													
Sponsorship	1	1	1	2	1	2	3	2	1	2	2	3	1
1. Foreign agency													
2. Local public agency													
3. Local private agency													
Number of families served	500	800,000	5,000	3,000	500	900	2,100	31,620	366	2,000	33,000	380	380
Project size (number of communities)	1	Sub-county	200	Sub-county	1	30	Sub-county	Province	2	Sub-county	-	4	1
Emphasis of the program	1	3	3	2	1	2	3	2	3	2	3	1	3
1. Overcome local problems													
2. Improve farming methods													
3. Develop self-help capability													

Table IV-2. Selected Organizational Processes Used by Selected Effective Small Farmer Programs

Characteristics	PROGRAMS												
	Biriwa (Ghana)	Comilla (Bangladesh)	Futuro (Colombia)	IBRD (Gambia)	Lirembé (Kenya)	Mixed Vegetables (Gambia)	Nigerian Tobacco (Nigeria)	Plan Maize (Mexico)	SFDP (Nepal)	TETU (Kenya)	Tiv Bams FAS (Nigeria)	UBOMA (Nigeria)	Vicos (Peru)
Clarify the target audience	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Adapt programs to local condition	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Collect data on needs and problems through 1. formal methods 2. informal procedures 3. official records	2	1	2	2	2	2	3	2	1	1	2	1	1
Field workers participate in planning	✓	✓	✓	✓	✓	✓	x	✓	x	✓	✓	x	✓
The project management develop procedures for monitoring the programs	x	✓	✓	x	✓	x	✓	x	✓	✓	x	✓	x
Plan steps to phase out from the project area	✓	x	✓	x	✓	x	x	x	✓	x	x	x	✓
Develop criteria for design and implementation	✓	✓	✓	x	x	x	✓	✓	✓	x	x	✓	x
Develop capabilities of field workers on an on-going basis	x	✓	✓	x	x	x	✓	✓	✓	✓	x	✓	x
Roles of field workers: 1. are frequently reviewed 2. are developed by field workers	1	2	1	2	x	x	1	1	1	x	1	1	x

✓-- indicates a presence of the characteristic in a program; x--indicates 'no' not present or lack of information.

were being given new roles. Emphasis was given more to strategies for small farmers development compared to technical competency. Six other programs employed competent field workers.

Decisions were usually made at three levels. Decisions were made on broad direction and guidelines. At the managerial level, decisions were made pertaining to strategies, materials and personnel. At operational level, detail procedures for implementation were prepared. Field workers in seven programs were involved in making decisions at the lower two levels.

Planning was used as the process of organizing people for making decisions in relation to ends and means. Decisions made were based on the information collected. Planning focused on procedures for implementation, including guidelines for periodic review of progress and outcomes. Involvement of implementors was emphasized in planning (nine programs).

Procedures or strategies to develop the clients' abilities were emphasized in five programs. The number of target clients was clearly stated in all the thirteen programs reviewed.

Program Development

Commitment and approval of small farmers and local leaders were seldom developed in most instances. In order to seek their commitment, the small farmers were selected and used in the promotion of ideas (eight programs). They initiated local discussion. They clarified issues and problems. The small farmers identified alternative solutions

to their problems. The process of analyzing ideas, clarifying issues and generating alternatives had promoted the small farmers' commitment to implement the programs (Table IV-3).

Decisions were not centrally controlled in all programs, except the TETU project in Kenya. The clients made their own decisions. The field workers did not create the clients' dependency on external aids in five programs. The participants initiated discussions, identified procedures and resources, and developed their programs.

The small farmers identified and organized local resources in TIV Bams, Vicos and FUTURO projects. External aids were used to supplement those made available by the clients. Self-help capabilities were maximized by providing the supplementary services after the small farmers had committed their resources (Comilla and BIRIWA projects).

The small farmers were guided to discuss the problems and purpose of local organization in all programs except the TETU project. The decision to organize came from the farmers. They formulated the roles and responsibilities. The small farmers developed procedures for administering local organization. In order to improve the effectiveness of local organization, small farm groups were organized. Representatives of small farm groups were appointed to administer the community organization (TIV Bams, Comilla, SFDP and BIRIWA projects). During the development stage, the small farmers were trained and given clear tasks to be performed.

Continuous training was given to elected members of local organizations (Nigerian Tobacco Company, Comilla, SFDP, Plan Maize, TETU,

Table IV-3. Program Development Processes Used by Selected Effective Small Farmer Programs

Characteristics	PROGRAMS												
	Biriwa (Ghana)	Comilla (Bangladesh)	Futuro (Colombia)	IBRD (Gambia)	Lirembé (Kenya)	Mixed Vegetables (Gambia)	Nigerian Tobacco (Nigeria)	Plan Maize (Mexico)	SFDP (Nepal)	TETU (Kenya)	Tiv Bams FAS (Nigeria)	UBOMA (Nigeria)	Vicos (Peru)
Obtain support from small farmers	2	1	1	3	2	2	3	3	3	3	1	1	1
1. Develop commitment													
2. Follow/support farmers' requests													
3. Discuss, negotiate and organize the farmers													
Clients control decisions in planning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mobilize local resources	1	1	1	2	2	2	2	2	2	2	1	2	1
1. Emphasize use of local resources													
2. Use external resource													
Clients organize local organization	4	3	4	2	2	2	1	1	3		3	3	4
1. Small credit groups													
2. Local cooperatives													
3. Small groups and cooperatives													
4. Local organizations													
Training of small farmers	1	1	2	2	1	2	1	1	1	1	2	2	2
1. Identify and train selected farmers													
2. Did not emphasize off-farm training													
Local development agencies were involved from the start	✓	x	x	x	✓	x	x	✓	x	x	x	x	x

✓--indicates 'yes' or presence of the characteristic; x--indicates 'no' not present or lack of information.

BIRIWA and Lirembe projects). Training programs were organized to improve their decision making and managerial competencies. Other forms of training were organized based on individual interests (BIRIWA and Lirembe projects).

Implementation

Involvement in project administration provided the small farmers with opportunity to make decisions and administer local programs. It was used as a strategy to develop their self-help capability in all programs except the TETU project (Table IV-4).

The small farmers played an active role in the development and promotion of new ideas. Simple and beneficial ideas were promoted. The small farmers were involved in local trial, local demonstration and in selecting new innovations. Only proven technologies were promoted in all programs.

Field workers were responsible for implementing activities related to small farmer development (seven programs). Training opportunities were made available to the farmers. They were guided to acquire new skills. Close supervision was provided. Participation in group activities was encouraged.

Local leaders were responsible to plan and administer local programs (all programs except the TETU project). They were actively involved in the development and promotion of improved ideas.

Local organizations were needed to control and coordinate activities of the farmers (12 programs). Local organizations were frequently

Table IV-4. Implementation and Evaluation Procedures Used by Selected Effective Small Farmer Programs

Characteristics	PROGRAMS												
	Biriwa (Ghana)	Comilla (Bangladesh)	Futuro (Colombia)	IBRD (Gambia)	Lirembé (Kenya)	Mixed Vegetables (Gambia)	Nigerian Tobacco (Nigeria)	Plan Maize (Mexico)	SFDP (Nepal)	TETU (Kenya)	Tiv Bams FAS (Nigeria)	UBOMA (Nigeria)	Vicos (Peru)
Small farmers administer local programs	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Clients participate in the development and promotion of improved technologies	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Field workers emphasize development of small farmers	✓	✓	✓	x	x	x	✓	x	✓	x	✓	x	✓
Local organizations control and coordinate activities	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Field workers were informed of their performance regularly	x	✓	✓	x	x	x	✓	x	✓	x	x	✓	x
The small farmers were given complementary services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Evaluation by the project management at intervals	✓	✓	✓	x	✓	x	✓	x	✓	✓	x	✓	✓
Regular review by local leaders	✓	✓	✓	x	✓	✓	✓	✓	✓	x	✓	x	✓
Full participation of small farmers	x	✓	x	x	x	x	✓	x	✓	x	✓	x	x

✓--indicates 'yes' or presence of the characteristics; x--indicates 'no' not present or lack of information.

used to deliver services required by the members (10 programs). Activities of other line agencies were usually channelled through local organizations (five programs).

Field workers were informed on how well they were doing (five programs). Supervisors collected information on outcomes, and discussed the progress made with field workers. The data needed for feedback were collected through interactions with project participants, observations and official records.

Complementary services were made available in all programs except the FUTURO project. However, complementary services were provided in addition to contributions made by the small farmers.

Support of line agencies was made available when required. To insure their support and commitment, line agencies were invited to participate in the planning process (Plan Maize, BIRIWA and Lirembe projects).

Outcomes

Evaluations were needed to check compliance with the plan and carry out on-going improvement. Ends were evaluated in all programs. Procedures were evaluated and modified in seven programs. Information collected by the management was communicated to the field workers. At the local level, meetings were conducted with full attendance of the small farmers (TIV Bams, Comilla and SFDP projects). Line agencies were invited in the discussions (four programs).

III. RESEARCH QUESTION TWO

What Processes Are Used in Planning and Implementing RISDA's Programs?

The data needed for this research question were obtained from RISDA county supervisors and field workers. Sixty items were included in the mail questionnaires for the respondents to indicate how each item was being done in RISDA. Responses given by county personnel are presented in the table for each category. Statistical analysis related to consistency of response is summarized in Appendix B.

Organization

The subcategories included under organization were target farmers and procedures to develop goals, roles, programs and inservice training plans. Responses to each item are given in Tables IV-5 and IV-6. Items in each cluster were described as perceived by supervisors and field workers. Consistency in response to matched items are given in Tables IV-7 and IV-8. Information collected through semistructured interviews was used to supplement those obtained through mail questionnaires.

Goals. Four items related to goal setting were analyzed. More than two-thirds of supervisors and field workers indicated that data on the clients' interests, problems and expectations were collected (item 2). About two-fifths of the respondents point out that the data collected were not analyzed (item 3). Discussions on programs/goals were seldom held (item 4), but the clients were informed about general objectives of RISDA's programs (item 5). Responses to all items in this

Table IV-5. Ratings of Items Related to Organization of RISDA's Programs as Perceived by County Supervisors

Items	Response in Percentages ^a				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
1. Keep an up-to-date record of target farmers	4	12	50	34	3.14
2. Collect data on small farmer interests, problems and what they hope to accomplish	-	28	50	22	2.94
3. Compare information on current achievement and what the small farmers expect to accomplish	4	44	38	14	2.62
4. Discuss with the small farmers about what is to be achieved in the long-run	10	48	38	4	2.36
5. Inform the small farmers clearly about general program objectives	-	18	54	28	3.10
6. Discuss policies, office procedures and responsibilities with field workers	-	14	40	46	3.32
7. Request each field worker to prepare his/her duties and responsibilities	4	18	52	26	3.00
8. Arrange the field workers so that it enables the agency to expand its workload	6	12	50	32	3.08
9. Allocate more funds and manpower to programs with more important long-term objectives	10	14	42	34	3.00
11. Involve the field workers in making decisions and solving problems	6	14	56	24	2.98

Table IV-5 (Continued)

Items	Response in Percentages ^a				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
12. Request the front-line workers to plan their own inservice training program	4	18	56	22	2.96
13. Involve the front-line workers in planning the long-range and short-range programs	2	28	50	20	2.88
14. Encourage the front-line workers to plan what they expect to achieve in a given period or during the year	2	22	56	20	2.94
15. Seek help from specialist to develop the guidelines (criteria) for planning and evaluation	20	58	14	8	2.10
16. Discuss the possible ways to reach the target farmers with field workers	-	16	48	36	3.20
17. Prepare a plan which outlines all programs in the county	18	42	30	10	2.32
18. Request all front-line workers to prepare a plan for each program	10	40	38	12	2.52
19. Make sure that each plan indicates long-term objectives and the number of target farmers	2	22	51	16	2.79
20. Develop a number of specific objectives for each program	4	28	50	18	2.82
21. Use the specific objectives to plan their activities	6	38	40	16	2.66

n = 50.

^aScale score: 1 = never; 2 = seldom; 3 = usually; and 4 = consistently.

Table IV-6. Ratings of Items Related to Organization of RISDA's Programs as Perceived by Field Workers

Items	Response in Percentages ^a				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
1. Keep an up-to-date record of target farmers	2	20	55	23	2.99
2. Collect data on small farmer interests, problems and what they hope to accomplish	5	20	58	16	2.86
3. Compare information on current achievement and what the small farmers expect to accomplish	6	34	49	10	2.63
4. Discuss with the small farmers about what is to be achieved in the long-run	12	31	44	13	2.58
5. Inform the small farmers clearly about general program objectives	1	19	51	30	3.09
6. Discuss policies, office procedures and responsibilities with field workers	1	21	53	25	3.02
7. Request each field worker to prepare his/her duties and responsibilities	3	20	56	22	2.97
8. Arrange the field workers so that it enables the agency to expand its workload	2	21	55	22	2.97
9. Allocate more funds and manpower to programs with more important long-term objectives	4	29	51	16	2.79
11. Involve the field workers in making decisions and solving problems	3	25	56	16	2.86

Table IV-6 (Continued)

Items	Response in Percentages ^a				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
12. Request the front-line workers to plan their own inservice training program	5	27	50	18	2.81
13. Involve the front-line workers in planning the long-range and short-range programs	2	30	59	9	2.77
14. Encourage the front-line workers to plan what they expect to achieve in a given period or during the year	4	29	48	20	2.85
15. Seek help from specialist to develop the guidelines (criteria) for planning and evaluation	14	45	35	5	2.32
16. Discuss the possible ways to reach the target farmers with field workers	3	25	52	20	2.90
17. Prepare a plan which outlines all programs in the county	16	39	33	12	2.41
18. Request all front-line workers to prepare a plan for each program	5	41	41	12	2.60
19. Make sure that each plan indicates long-term objectives and the number of target farmers	3	24	54	20	2.91
20. Develop a number of specific objectives for each program	7	25	57	10	2.71
21. Use the specific objectives to plan their activities	3	29	58	10	2.75

n = 202.

^aScale score: 1 = never; 2 = seldom; 3 = usually; and 4 = consistently.

Table IV-7. Consistency in Response Related to Organizational Processes as Given by Supervisors

Sub-Categories	Items Included in Mail Questionnaire	Matched-Items
Target farmers	1	1 and 19
Goal	2, 3, 4 and 5	2 and 3,* 3 and 57,* 4 and 5,* 5 and 59*
Procedures used to develop roles of field workers	6 and 7	6 and 10, 7 and 12
Training of field workers	12	12 and 14
Decision making procedures	11	11 and 16
Planning	8, 9, 13, 14, 15, 16 and 17	8 and 9, 13 and 17,* 11 and 16, 12 and 14, 17 and 18
Plan-of-work	18, 19, 20 and 21	17 and 18, 17 and 19,* 20 and 21

* Matched-items which were rated inconsistently by the respondents.

Table IV-8. Consistency in Response Related to Organizational Processes as Given by Field Workers

Sub-Categories	Items Included in Mail Questionnaire	Matched-Items
Target farmers	1	1 and 19
Goal	2, 3, 4 and 5	2 and 3,* 3 and 57,* 4 and 5,* 5 and 59*
Procedures used to develop roles of field workers	6 and 7	6 and 10,* 7 and 12*
Training of field workers	12	12 and 14
Decision making procedures	11	11 and 16
Planning	8, 9, 13, 14, 15, 16 and 17	8 and 9,* 13 and 17,* 11 and 16, 12 and 14, 17 and 18
Plan-of-work	18, 19, 20 and 21	17 and 18,* 17 and 19,* 20 and 21

* Matched-items which were rated inconsistently by the respondents.

subcategory were inconsistent, except the supervisor's rating as to whether RISDA had analyzed the information on current achievement in relation to what the clients expected to accomplish.

Respondents of semistructured interviews described how the agency attempted to get all field personnel developed programs based on data collected from individual farm families. Guidelines for data collection, analysis, program development, implementation and evaluation were given to all field personnel since early 1982. Each week, ten to twenty farm families were surveyed. The data collected had not been analyzed and used for goal formulation. The respondents indicated that they did not understand how to use the information they had collected.

Target Audience

County personnel were asked to indicate how often they kept up-to-date information on target farmers (item 1). A majority of supervisors (84 percent) and field workers (79 percent) indicated that they usually kept record of target audiences. Respondents involved in face-to-face interviews explained that RISDA only kept record of farmers who received aids provided by the agency. All counties visited during the interviews had no information on the potential clients of the agency's various programs.

Procedures used to develop roles of field workers. A majority of supervisors and field workers (more than three-fourths in each group) stated that field personnel were involved in the discussions on policies, procedures and responsibilities (item 6). Field staff had

also been requested to prepare their duties and responsibilities (item 7). The field workers interviewed (30 field workers) agreed that their roles and job assignments were frequently discussed at county level. Roles related to rubber replanting, the main RISDA's activity, were prepared by the agency. The field workers had to prepare tasks related to other programs.

Training of field workers. The data indicated that county field workers were usually requested to plan their own inservice training program (78 percent supervisors and 68 percent field workers). Respondents involved in the interviews explained that a list of possible short courses had been distributed to all front-line staff. Field workers were requested to indicate their interests and to add suggestions for consideration by RISDA. Short-courses were organized at federal and state levels. Participants for training programs were selected by state and county administrators.

Decision making. The information collected showed that field workers were involved in making decisions and solving problems (80 percent supervisors and 72 percent field workers). The majority of county personnel interviewed provided similar response.

Planning. More than two-thirds of respondents in each category perceived that the field workers were involved in planning RISDA's programs (item 13). Field workers had been encouraged to plan personal goals (item 14). Possible ways of reaching the target audiences

were discussed with the implementors (item 16). However, RISDA had no guidelines for planning and evaluation (item 15). Similarly, the agency had no document that outlined all programs in the county (item 17).

Responses from interviews showed that RISDA personnel used the budgetary guides to develop field activities. Other program documents were not available. An analysis of official documents indicated that all field workers were encouraged to develop personal goals (RISDA Extension System, 1982). Responses to matched-items in this sub-category were inconsistent.

Plan-of-work. The four items (items 18, 19, 20 and 21) included in this sub-category were regarded seldom done by a majority of supervisors and field workers. Responses to semistructured interviews show a similar response. The data showed that each program had no document to indicate target clients to be reached, objectives and activities to accomplish the objectives.

Program Development

Activities related to small farmer participation in planning were grouped in this category. The sub-categories included were developing local programs, organizing the small farmers, training of small farmers and mobilizing local resources.

Developing local programs. Items included in this sub-category were considered seldom done by a majority of the respondents (Table IV-9)

Table IV-9. Ratings of Items Related to Program Developments as Perceived by County Supervisors

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
22. The small farmers discuss their problems with local leaders frequently	8	34	42	16	2.66
23. The small farmers identify program in order to solve their problems	24	46	28	2	2.08
24. The small farmers develop methods on how to carry out their programs	26	50	20	4	2.02
25. The small farmer and local leaders plan the funds and materials needed by their programs	10	60	24	6	2.26
26. The small farmers arrange local manpower, funds and other materials to carry out their programs	18	50	24	8	2.22
29. The small farmers and local leaders discuss and choose a suitable local organization	12	38	42	8	2.46
30. The small farmers and local leaders develop procedures for their organization	12	48	30	10	2.38
32. The small farmers make local leaders responsible to the success of their organization	18	30	32	12	2.38
36. Guide and train local leaders appropriate to their roles	6	28	44	22	2.82

n = 50.

and Table IV-10). The information showed that the small farmers seldom discussed their problems with local leaders (item 22). Programs were not identified by the project participants (item 23). Methods to implement the programs were not developed by the farmers (item 24). Information collected through semistructured interviews showed a similar trend. RISDA identified local problems, developed programs and indicated procedures for implementation. Responses related to whether the small farmers discussed local problems with their leaders were observed inconsistent for both categories of respondents (Tables IV-11 and IV-12).

Organizing the small farmers. The data showed that the small farmers seldom discussed and chose a suitable local organization (item 29). Procedures for use by the local organization were seldom developed by the participants (item 30). Local leaders were not made responsible to the success of local organization (item 32). Lack of clients' involvement in identifying an appropriate local organization was also indicated by respondents who were interviewed.

Training of small farmers. Both groups of respondents indicated that local leaders were guided and trained appropriate to their roles (item 36). A similar response was obtained through interviews. The small farmers were given technical training (12 supervisors and 30 field workers) and training on administration of local programs (4 supervisors and 8 field workers).

Table IV-10. Ratings of Items Related to Program Development as Perceived by Field Workers

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
22. The small farmers discuss their problems with local leaders frequently	3	36	47	15	2.73
23. The small farmers identify program in order to solve their problems	25	42	40	3	2.31
24. The small farmers develop methods on how to carry out their programs	15	51	30	5	2.23
25. The small farmer and local leaders plan the funds and materials needed by their programs	19	38	36	7	2.30
26. The small farmers arrange local manpower, funds and other materials to carry out their programs	14	44	32	10	2.38
29. The small farmers and local leaders discuss and choose a suitable local organization	10	35	43	12	2.57
30. The small farmers and local leaders develop procedures for their organization	14	34	44	8	2.46
32. The small farmers make local leaders responsible to the success of their organization	10	32	47	11	2.59
36. Guide and train local leaders appropriate to their roles	3	32	52	13	2.76

n = 202.

Table IV-11. Consistency in Response Related to Program Development Processes as Given by Supervisors

Sub-Categories	Items Included in Mail Questionnaire	Matched-Items
Developing local program	22, 23 and 24	22 and 23,* 23 and 24
Mobilizing local resources	25 and 26	25 and 26
Organizing the small farmers	29, 30 and 32	29 and 30, 30 and 32
Training of small farmers	36	36 and 40

* Matched-items which were rated inconsistently by the respondents.

Table IV-12. Consistency in Response Related to Program Development Processes as Given by Field Workers

Sub-Categories	Items Included in Mail Questionnaire	Matched-Items
Developing local program	22, 23 and 24	22 and 23,* 23 and 24
Mobilizing local resources	25 and 26	25 and 26
Organizing the small farmers	29, 30 and 32	29 and 30,* 30 and 32
Training of small farmers	36	36 and 40

* Matched-items which were rated inconsistently by the respondents.

Mobilizing local resources. More than one-half of respondents stated that the small farmers seldom planned (item 25) or organized materials, funds and manpower needed to implement their programs (item 26). The same response was given during face-to-face interviews. The farmers were usually promised possible assistance coming from the agency if they made official requests. Resources were given to those who participated in RISDA's programs.

Implementation

Roles of implementors and the clients were discussed in this category. The sub-categories included were participation in project implementation, roles of field workers and feedback. Tables IV-13 and IV-14 show a summary of the findings.

Participation in project implementation. Five items related to roles of the small farmers were included in this sub-category. About one-half of the respondents indicated that the small farmers involved in RISDA's programs seldom:

1. implemented their programs (item 27);
2. coordinated activities of other line agencies (item 28);
3. reviewed their goals regularly (item 41);
4. made sure that services were available on time (item 46); and
5. managed the delivery of materials and supplies (item 53).

Six items related to development of local organizations were included in the mail questionnaires. Two-thirds of supervisors and two-fifths of field workers indicated that:

Table IV-13. Ratings of Items Related to Program Implementation as Perceived by County Supervisors

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
10. Inform the front-line workers about how well they are doing at regular intervals	6	8	50	36	3.16
27. The small farmers and local leaders carry out their programs	8	42	36	14	2.56
28. Local leaders coordinate activities of other agencies	14	46	32	8	2.34
31. The small farmers use local organization to discuss their problems with field workers of development agencies	28	36	30	6	2.14
33. Local organization plan self-help activities for its members	28	44	24	4	2.04
34. Local organization maintains expenses for their buildings and equipment	30	48	10	12	2.04
35. Local organization provides farm supplies, credit and marketing services to their members	24	48	20	8	2.12
37. Review the progress of local organization regularly	12	38	44	6	2.44
38. Control activities of individual and groups with special interests	20	24	44	12	2.48
39. Encourage the small farmers to work for personal goals and the community goals	4	18	56	22	2.96
40. Guide the small farmers on how to obtain external help	4	46	36	14	2.60

Table IV-13 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
41. Assist the small farmers to regularly review their goals	6	46	38	10	2.52
42. Use informal leaders to promote new ideas	2	32	50	16	2.80
43. Spend their time only on activities that benefit the small farmers	2	24	64	10	2.82
44. Select and promote ideas that are relevant to the small farmers	2	20	64	14	2.90
45. Use proven ideas which have been tried by local farmers	4	20	52	24	2.96
46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time	8	30	50	12	2.66
47. Provide subsidies to small farmers who adopt risky techniques	24	28	38	10	2.34
48. Early in the program the small farmers use only simple ideas and methods	2	12	64	22	3.06
49. The small farmers receive a close supervision when they use complex ideas or techniques	4	16	56	24	3.00
50. Volunteer farmers conduct experiments and demonstrations	12	52	22	14	2.38
51. The small farmers use group activities to share their experience	10	22	44	24	2.82

Table IV-13 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
52. The small farmers promote new ideas and techniques	4	26	44	26	2.92
53. Local leaders deliver materials and supplies to the small farmers	34	34	20	12	2.10
54. Field workers conduct follow-up visits to small farmers' farms	-	16	50	34	3.18
55. Field workers use several methods or approaches to achieve each specific objective	2	18	38	42	3.20

n = 50.

Table IV-14. Rating of Items Related to Program Implementation as Perceived by Field Workers

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
10. Inform the front-line workers about how well they are doing at regular intervals	2	23	60	15	2.89
27. The small farmers and local leaders carry out their programs	14	29	38	19	2.62
28. Local leaders coordinate activities of other agencies	18	37	39	7	2.35
31. The small farmers use local organization to discuss their problems with field workers of development agencies	11	29	40	20	2.65
33. Local organization plan self-help activities for its members	13	35	42	10	2.49
34. Local organization maintains expenses for their buildings and equipment	24	40	31	5	2.18
35. Local organization provides farm supplies, credit and marketing services to their members	20	37	37	6	2.30
37. Review the progress of local organization regularly	7	24	58	11	2.73
38. Control activities of individual and groups with special interests	14	27	42	17	2.62
39. Encourage the small farmers to work for personal goals and the community goals	2	13	64	21	3.04
40. Guide the small farmers on how to obtain external help	4	30	55	11	2.73

Table IV-14 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
41. Assist the small farmers to regularly review their goals	4	37	48	11	2.66
42. Use informal leaders to promote new ideas	6	29	54	11	2.69
43. Spend their time only on activities that benefit the small farmers	3	21	57	19	2.92
44. Select and promote ideas that are relevant to the small farmers	2	22	57	19	2.95
45. Use proven ideas which have been tried by local farmers	2	20	63	16	2.95
46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time	5	27	54	15	2.79
47. Provide subsidies to small farmers who adopt risky techniques	6	23	57	13	2.77
48. Early in the program the small farmers use only simple ideas and methods	3	12	58	27	3.09
49. The small farmers receive a close supervision when they use complex ideas or techniques	1	16	57	26	3.07
50. Volunteer farmers conduct experiments and demonstrations	5	35	52	8	2.64
51. The small farmers use group activities to share their experience	4	28	57	11	2.76

Table IV-14 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
52. The small farmers promote new ideas and techniques	5	27	57	10	2.73
53. Local leaders deliver materials and supplies to the small farmers	20	40	33	6	2.26
54. Field workers conduct follow-up visits to small farmers' farms	5	8	58	29	3.12
55. Field workers use several methods or approaches to achieve each specific objective	1	17	58	24	3.06

n = 202.

1. The small farmers seldom used local organizations to discuss their problems (item 31).
2. Local organizations seldom planned activities for the members (item 33).
3. Administrative expenses were not paid by local organizations (item 34).
4. Members of local organizations were seldom provided with farm supplies, credit and marketing services (item 35).
5. The progress of local organizations was rarely reviewed (item 37).

The respondents of semistructured interviews provided almost similar responses. According to the respondents, RISDA's field workers frequently contributed more efforts in project administration compared to the project participants (11 supervisors and 21 field workers). It should be noted responses related to the delivery of services and materials (items 46 and 53) were not consistent for the two groups of respondents (Tables IV-15 and IV-16).

Roles of field workers. Eight of the items included in this sub-category were related to approaches to the development and promotion of improved innovations. The data showed that volunteer farmers were seldom used to conduct local farm trials and demonstrations (item 50), as indicated by the two groups of county personnel. On the other hand, eight items were usually done in RISDA.

1. Informal leaders were utilized to promote new ideas (item 42).

Table IV-15. Consistency in Response Related to Implementation and Program Outcomes as Given by Supervisors

Sub-Categories	Items Included in Mail Questionnaire	Matched-Items
Participation in project implemen- tation	27, 28, 41, 46 53, 31, 33, 34 35 and 37	27 and 28, 30 and 31, 33 and 35, 34 and 35, 30 and 37, 41 and 38, 46 and 53*
Roles of field workers	42, 44, 45, 47 48, 49, 50, 51 52, 38, 39, 40 43, 54 and 55	42 and 50, 43 and 44, 45 and 48, 43 and 47,* 49 and 54, 51 and 27,* 52 and 50,* 38 and 41, 39 and 41, 55 and 21
Feedback	10	10 and 6
Outcomes	56, 57, 58, 59 and 60	56 and 57,* 57 and 58, 59 and 60

* Matched-items which were rated inconsistently by the respondents.

Table IV-16. Consistency in Response Related to Implementation and Program Outcomes as Given by Field Workers

Sub-Categories	Items Included in Mail Questionnaire	Matched-Items
Participation in project implemen- tation	27, 28, 41, 46 53, 31, 33, 34 35 and 37	27 and 28,* 30 and 31,* 33 and 35,* 34 and 35,* 30 and 37,* 41 and 38, 46 and 53*
Roles of field workers	42, 44, 45, 47 48, 49, 50, 51 52, 38, 39, 40 43, 54 and 55	42 and 50,* 43 and 44, 45 and 48,* 43 and 47,* 49 and 54, 51 and 27, 52 and 50, 38 and 41, 39 and 41,* 55 and 21*
Feedback	10	10 and 6
Outcomes	56, 57, 58, 59 and 60	56 and 57,* 57 and 58, 59 and 60

* Matched-items which were rated inconsistently by the respondents.

2. Relevant ideas were selected and promoted (item 44).
3. Proven ideas which had been tested under local environment were used (item 45).
4. Subsidies were given to farmers who adopted risky techniques (item 47).
5. Simple ideas and methods were promoted (item 48).
6. The small farmers were given a close supervision when they used complex ideas (item 49).
7. Group activities were used for the farmers to share their experiences (item 51).
8. The small farmers promoted new ideas and techniques (item 52).

Responses to items related to use of risky techniques (item 47), use of volunteer farmers to conduct trials and demonstrations (item 50), and promotion of new ideas by the clients (item 52) as given by supervisors were observed inconsistent. Front-line workers' ratings on use of proven ideas (item 45), adoption of risky techniques (item 47), and promotion of simple ideas (item 48) were not consistent.

Six additional items related to roles of front-line workers were included in the questionnaire. The data indicated a similarity in response by the two respondent groups. A majority of county personnel stated that activities of individuals and groups with special interests were seldom controlled (item 38). The small farmers were seldom guided to obtain external assistance (item 40). Very little time was spent on development related activities (item 43). The small

farmers were encouraged to work for personal goals (item 39). The small farmers were given follow-up visits (item 54). Several methods or approaches were used to achieve a specific objective (item 55). Responses given by the two groups of respondents on encouraging the clients to work for personal goals (item 39), and use of several methods to achieve a specific objective (item 55) were not consistent.

The data collected through semistructured interviews revealed that RISDA field workers were more involved in the distribution of farm inputs and services related to rubber replanting program.

Feedback. A majority of the respondents (95 percent supervisors and 98 percent field personnel) stated that RISDA implementors were usually informed at intervals about how well they were doing. Information obtained through interviews showed that feedback was given through individual conference (29 field workers) and during staff meetings (25 field workers).

Outcomes

The five items presented to the respondents were regarded usually done in RISDA (Table IV-17 and Table IV-18). The information obtained showed that:

1. The data on achievement and methods used were collected on regular basis (item 56).
2. The data collected were compared with what the field workers planned to accomplish (item 57).
3. Strengths and weaknesses of methods used were analyzed (item 58).

Table IV-17. Ratings of Items Related to Procedures to Analyze Program Outcomes as Perceived by Supervisors

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
56. Field workers collect information on achievement and methods they use on regular basis	4	18	48	30	3.04
57. Field workers compare what they accomplish and what they plan to achieve	4	34	38	24	2.82
58. Field workers identify the strenths and weaknesses of methods they use	8	26	44	22	2.80
59. Supervisor, field workers and local leaders review county programs by identifying the strengths and weaknesses of methods they use	8	28	42	22	2.78
60. Field workers, county supervisor and local leaders make changes or improvement using information they had collected	6	34	32	28	2.82

n = 50.

Table IV-18. Ratings of Items Related to Procedures Used in Analyzing Program Outcomes as Perceived by Field Workers

Items	Response in Percentages				Mean Scale Score
	1 Nev	2 Sel	3 Usu	4 Con	
56. Field workers collect information on achievement and methods they use on regular basis	2	15	62	21	3.03
57. Field workers compare what they accomplish and what they plan to achieve	3	18	66	13	2.90
58. Field workers identify the strengths and weaknesses of methods they use	1	22	61	16	2.93
59. Supervisor, field workers and local leaders review county programs by identifying the strengths and weaknesses of methods they use	2	27	55	16	2.86
60. Field workers, county supervisor and local leaders make changes or improvement using information they had collected	3	25	56	16	2.85

n = 202.

4. County personnel and local leaders reviewed the small farmer programs (item 59).
5. Modification and adjustments of local programs were made by county personnel and local leaders (item 60).

Responses on collection of data by field personnel were observed inconsistent for both groups of respondents.

Analysis of responses collected through interviews pointed out that collection of data in RISDA was limited to reporting the progress of monthly activities. County personnel indicated that approaches used by RISDA and outcomes were not analyzed.

IV. RESEARCH QUESTION THREE

What Processes Should be Used by RISDA in Planning and Implementing Small Farmer Development Programs?

The data needed for research question three were extracted from research question one, research question two and processes that were perceived important by RISDA county personnel (Appendix D). Items which were perceived important by the respondents and which differ significantly from what was being done in RISDA were also referenced in making the analysis (Table IV-19).

Processes That Should be Used by RISDA as Indicated by Respondents

Organization. The general audience of RISDA's programs was small farm families who were involved in rubber farming. The audience to be

Table IV-19. Items That Were Perceived Important and Which Differ Significantly from What Was Being Done in RISDA

Category	Respondent	
	Supervisor	Field Worker
Organization	Item 6 to 12, 14, 16 19, 20 and 21	10, 11, 12, 14, 16, 19, 20 and 21
Program Development	Items 25, 26, 32 and 36	25, 26 and 32
Implementation	Items 27, 31, 33, 34, 35, 37 to 48, 51 and 54	27, 33, 42, 43, 49 to 52 and 54
Outcomes	Items 57 to 60	57 to 60

reached was seldom identified. Usually, RISDA county personnel had to campaign annually to gain participation of small farmers. Mass media and group approaches were used to generate interests of the clients. The data collected through questionnaires showed that the agency usually kept up-to-date information on target farmers. RISDA only kept records of those who requested its aids and services. Both groups of respondents perceived that it was important to keep up-to-date information on target audience (98 percent of supervisors compared to 96 percent of field workers). RISDA should have information on the number of farmers by age of rubber crop. RISDA should then specify the number of farmers or communities to be served in a given year. Activities are then expanded based on performance of the previous year.

RISDA had annual goals that were prepared by state administrators. RISDA's primary goal was to replant rubber for the smallholders. Some data on the small farmers had been collected, but were not used to develop program goals. Information on the clients' interests, problems and expectations was perceived important to small farmer programs (more than 95 percent of supervisors and field workers). The data should be analyzed and discussed with the clients. A summary of what should be accomplished should be communicated clearly to the audience.

Information collected from interviews showed that roles of field workers were developed by RISDA (30 field workers). Frequent discussions were held either in groups or individually. Both categories of respondents perceived that regular conferences should be held and field workers should develop their roles. Opportunity should be given to get

RISDA field workers involved in designing the roles that they have to perform. People will be more willing to accept roles in which they can participate.

The field workers were usually requested to plan their own in-service training programs (78 percent supervisors and 68 percent field workers). Having individual training plans was considered important by both groups of respondents (88 percent supervisors and 86 percent field workers). County personnel were usually given a list of topics by state RISDA. All field staffs were requested to indicate areas relevant to their interests. Selection of participants was made by state officials. Individual workers did not have plans to develop their capabilities. RISDA's training should focus more on procedures or strategies to help the small farmers.

Field workers were usually asked to give their views in making decisions (80 percent supervisors and 72 percent field workers). Involvement of field staffs was regarded important as perceived by 92 percent of the supervisors and 93 percent of the field workers. Opportunities for involvement were provided by RISDA, but the agency should emphasize involvement of field workers in identifying short-term goals, strategies and procedures for implementation.

County personnel stated that RISDA had no criteria for planning and evaluation, though they were encouraged to develop personal goals and discuss possible ways of reaching the farmers. Planning was closely related to its annual budgeting procedures. There was no plan that outlined all programs in the county. In order to improve the programs,

the agency should initiate planning at county level. There should be a long-range plan to indicate program direction and strategies. Short-range plans should be developed to outline goals, procedures and roles to be performed. Operational plans for each program should be prepared to specify detailed procedures for implementation. Field workers should be involved in developing the program documents. Procedures related to feedback and periodic review of outcomes must be designed.

The data showed that there was no plan developed for each program. The document had three columns, namely, date, task and comments. Activities for all programs were included under the task column. RISDA field workers should prepare an annual plan for each group of target audience. Information from several annual plans is used to develop weekly activities. The Plan-of-Work should emphasize development of the clients' capabilities.

Program development. Responses collected from the respondents indicated that the small farmers seldom discussed local problems, identified programs and developed procedures for implementation. RISDA should initiate planning with the clients. Decisions should be decentralized. The small farmers must be given the opportunity to participate in decisions that affect their lives. Programs must be initiated and developed by the clients. The audience should identify resources needed to carry out the programs.

The farmers were promised aids if they participate in RISDA's programs. County supervisors and field workers indicated that it was

important for the small farmers to plan and organize resources required by their programs. In the past, the clients seldom organized and used their resources.

The small farmers seldom discussed and chose a local organization. The small farmer seldom had the opportunity to develop procedures for local organization. Local leaders were seldom made responsible for the success of local organization. These factors were considered important by the majority of supervisors and field workers. The farmers were informed of possible RISDA's assistance in the form of buildings, processing machines and marketing service. RISDA paid the construction cost.

Training was usually given to the small farmers (70 percent and 65 percent field workers). Ninety-four percent of supervisors and 96 percent of field workers stated that it was important to train the small farmers appropriate to their roles. A majority of respondents interviewed stated that small farmers were given technical training on rubber processing. RISDA's training should be given to selected farmers who could share their experiences with other members in the community. Training should be related to roles to be performed by trainees. Priority should be given to representatives of small farm groups.

Implementation. The small farmers were not actively involved in project administration. Ninety-two percent of supervisors and 87 percent of field workers stated that it was important for small farmers to implement their programs. RISDA should have a continuous on-the-job

training for farm leaders so that the clients are less dependent on external help. The small farmers should control decisions over planning and project administration. Centrally controlled planning would reduce the effectiveness of the programs.

The data showed that the small farmers were utilized in the development and promotion of new technologies. The small farmers were encouraged to work for their goals. They were given adequate follow-up visits. The field workers were more involved in rubber replanting activities. Activities related to small farmer development were not emphasized in RISDA. Thus, RISDA should develop roles for field workers focusing on participation and development of the small farmers. Activities to be designed must encourage the small farmers to make decisions and manage their programs.

Responses from mail questionnaires showed that the small farmers seldom:

1. implemented their programs;
2. coordinated activities of other line agencies;
3. reviewed their goals regularly;
4. made sure that services were available on time;
5. administered the delivery of materials and supplies.

The majority of supervisors and field workers indicated that:

1. The small farmers had seldom used local organization to discuss their problems.
2. Local organizations had seldom planned activities for their members.

3. Local organizations had seldom maintained administrative expenses.
4. Members of local organizations were seldom provided with farm supplies, credit and marketing services.
5. The progress of local organizations were rarely reviewed.

Almost a similar response was obtained through semistructured interviews. A majority of the respondents stated that RISDA's field personnel had contributed more efforts in project administration compared to the small farmers (11 supervisors and 21 field workers). RISDA's local leaders should be more involved in the delivery services to rubber smallholders. They should use group activities as a means for small farmers to share their experiences. Local leaders should coordinate activities of line agencies operating in an area.

RISDA should utilize its local organization in planning small farmer programs. Local organizations should be guided to maintain administrative expenses. Inputs and services needed by the small farmers should be provided by local organizations.

The field workers were informed about how well they were doing at regular intervals. The field workers interviewed stated that they were usually informed of their progress during staff meetings and through individual conference. Feedback was considered important by 95 percent of supervisors and 98 percent of field workers. County supervisors were mainly involved in supervising and coordinating local programs. Field workers were also assisted in implementing their activities. RISDA should establish procedures for monitoring field

activities. Information on means and outcomes should be collected. Supervision of field activities must be based on feedback information.

RISDA's support services were given early in the program. This approach could reduce the probability for small farmer programs becoming self-sustaining. Complementary services should be given when the farmers have shown their commitment to implement the programs. Credit or materials aids are provided after the clients had committed their resources.

One of the problems raised by county personnel was lack of commitment from other development agencies. Some activities require technical support of other line agencies. RISDA should involve other development agencies from the early stage. When people participate in making decisions they would be more willing to support the programs.

Outcomes. County personnel indicated that RISDA reviewed the outcomes of its programs regularly with the small farmers. But, there were no efforts made to analyze objectives and strategies used by the agency to help the small farmers. Continuous revisions were considered important by more than 90 percent of the respondents in each category.

Problems were continually discussed with project participants. Evaluation was needed to modify procedures for on-going improvement. Evaluation was conducted with full attendance of project participants. Implementors from other line agencies were also invited. RISDA should design procedures to analyze its strategies and outcomes of the programs. The information should be used for modifying procedures to

develop the small farmers. Project participants and other line agencies must be involved in discussing the progress of activities.

Processes That Should be Used in Planning and Implementing
Small Farmer Development Programs as Indicated in
the Literature

Organization. The potential clients to be served by small farmer programs should be identified. The richer, progressive farmers should be excluded from the programs. In order to meet the needs of the small farmers, information on the clients' interests, problems and expectations must be collected. The data should be used as the basis for identifying goals and means. Implementors and the farmers should participate in setting goals and in identifying the means. The related literature showed that programs were effectively implemented when field workers were given clear instructions about roles and responsibilities related to small farmer development. Roles of field personnel should be discussed regularly. The field workers should be encouraged to develop their own roles and inservice training programs. The related literature suggested that the field workers should participate in making decisions that affect their roles and responsibilities. The field staff should also participate in planning the county programs. Strategies and procedures for implementation should be developed with active participation of the implementors.

Program development. The literature reviewed suggested that small farmer programs could be implemented effectively if decisions related to planning and organization are made by the clients. The small farmers should discuss issues, opportunities, tasks and procedures. They should identify resources needed to carry out the programs. Their capabilities in making decisions and solving local problems should be promoted. Possible external assistance should be avoided or provided only after the clients had made their contributions. The small farmers should discuss and choose a local organization. They should develop procedures for administering the local organization. Clear tasks to be performed by the clients should be provided. Small working groups should be created. Leaders of small farm groups should be given regular off-farm training.

Implementation. The literature showed that effective small farmer programs were controlled and managed by the clients. Centrally controlled programs should be avoided. Participation in project administration was an opportunity to develop the clients' decision making and management capabilities. Thus, field workers should be made responsible to initiate, guide and supervise activities for the small farmer development. Local leaders should be responsible to organize and coordinate local activities. The literature indicated that information on programs of field activities should be supervised. Visits to selected participants should be made. The participants should be given the chance to present their views and comments. Other line agencies

should be involved in planning the programs. If they are involved from the beginning, line agencies would continue to support the programs.

Outcomes. Program goals and means should be regularly reviewed. The data needed for analysis could be collected through formal or informal procedures. The clients and the field workers should analyze their programs in order to modify procedures and regulate the use of resources.

A summary of the process that should be used by RISDA as perceived by the respondents is presented in Appendix E. Discussion on research question four is given in Chapter V.

CHAPTER V

SUMMARY, FINDINGS, GUIDELINES, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

I. SUMMARY

This study reviewed and analyzed literature related to small farmer development. Processes used in planning and implementing the programs were identified. The related literature was used to develop research instruments. The data were collected from county personnel of a small farmer agency in Malaysia. Specific guidelines for planning and evaluating the programs were developed.

The Problem

Personnel of development agencies must be aware of factors and processes related to small farmer development. Many of the programs were ineffective. Studies related to the topic were seldom conducted. The purpose of this study was to identify factors that contribute to the success and effectiveness of RISDA's small farmer development programs. The following questions were developed to generate information needed in this study:

1. What are the factors that contribute to success and effectiveness of small farmer development programs, as indicated in the literature?

2. What processes are used in planning and implementing RISDA's small farmer programs?
3. What processes should be used in planning and implementing RISDA's small farmer programs?
4. What guidelines can be suggested for analyzing and improving RISDA's small farmer programs in Malaysia?

Procedures

The sample was selected from RISDA county supervisors and front-line workers. The respondents were responsible to help rubber small farmers in the counties. A stratified random sampling procedure was utilized in selecting the sample. Factors frequently discussed in the related literature were used to develop questions for mail questionnaires and semistructured interviews. Data collection instruments were pilot tested with non-respondents including eight Malaysian students at The University of Tennessee, Knoxville, and four RISDA personnel. Comments given during the pilot test were used to improve the instruments.

The data were collected in November and December 1983. Completed mail questionnaires (202 field workers and 50 supervisors) and interview schedules (37 field workers and 16 supervisors) were analyzed. Similar responses were grouped into the same classification. Content analysis procedures were utilized. The data were coded and calculated for frequency counts. The categories developed for collecting information were used in making the analysis. The factors identified were compared with information discussed in related literature. Both success and failure factors were considered.

Factors that contributed to success and effectiveness of small farmer programs answered research question one. Processes adopted in planning and implementing RISDA's small farmer programs provided answers for research question two. The data related to question one, question two and the processes that should be used by RISDA as perceived by respondents were compared to generate information for research question three. The summary and conclusions of the first three questions were used to develop guidelines for analyzing and improving RISDA's small farmer programs in Malaysia.

II. FINDINGS

Research Question One: What Are the Factors That Contribute to Success and Effectiveness of Small Farmer Development Programs?

Effectiveness of small farmer programs was increased if the clients to be served were identified. Data on small farmer needs and interests were collected using structured or unstructured procedures. The information collected was used for decisions on goals and strategies. Decisions were made with participation of field workers and the target audience.

The field workers' roles were discussed frequently. Training programs were mostly job-related. The implementors were given regular training related to strategies for small farmer development. The field workers participated in planning and making decisions.

During the program development, the initial activities focused on obtaining support and commitment to implement the program. The small farmers were selected to promote ideas and initiate discussions on local problems. During the interactions, issues and problems were clarified. Possible solutions were identified. Decisions were mostly made by the clients. The clients were not induced to be dependent on external assistance. They identified local resources, developed local organizations, set procedures and administered programs. Training was given to elected group leaders and those who indicated their interests.

The literature indicated that program effectiveness was enhanced when the clients controlled decisions and coordinated activities at the implementation stage. The target audience was involved in testing and promotion of new ideas. Simple and proven technologies were used. The clients were encouraged to select innovations relevant to their interests. Group activities were emphasized. Close supervision was carried out. While the farmers were requested to use their resources, complementary services were given once the clients had indicated their commitments. Support services were organized to supplement activities initiated by the clients.

Participation of line agencies during the initiation stage had increased the effectiveness of some programs reviewed. The field workers were given feedback on the progress of their activities. Means used and outcomes of the programs were evaluated at intervals. Changes were made using the information collected. It was observed that the

project participants were actively involved in evaluating their activities.

The clients were the active participants. Clear roles to be performed were assigned by field workers. Services provided to small farmers were mainly aimed at promoting initiatives and development of the clients' capabilities.

Research Question Two: What Processes Are Used in Planning and Implementing RISDA's Small Farmer Programs?

Information on project participants was being kept in RISDA, but the number of potential clients by different programs was not known. Information on needs and problems was collected since early 1982. However, county personnel were unable to analyze the data they had collected.

RISDA's primary goal was to replant rubber for the small farmers. Annual tasks were indicated in the annual blueprint. The document was prepared by state administrators without participation of field workers or the clients. The field workers were encouraged to develop their personal goals. They were involved in discussing the possible ways to reach the farmers. Both categories of respondents indicated that RISDA had no program document which outlined all programs in the county. Similarly, there was no plan developed for each program. The field workers had Plan-of-Work which described activities they intended to implement in a given month.

The field workers were involved in making decisions and solving problems. Their roles and responsibility were being discussed frequently, though job specifications were prepared by the agency. Field personnel did not have plans for individual development, but they were given adequate opportunity to improve their capabilities.

In relation to program development procedures, the respondents indicated that programs were implemented without discussions on the issues, problems and possible solutions by the clients. The small farmers had seldom planned and organized local resources. Material aids were made available by RISDA.

Local organizations were seldom used to discuss local problems, plan and coordinate activities. Goals of local organizations were seldom reviewed. The small farmers were given technical and managerial training, but they were not actively involved in making decisions related to project administration.

The two groups of respondents stated that information on progress of activities was collected. County supervisors, field workers and the clients collectively analyzed the programs. However, the data obtained through semistructured interviews indicated that RISDA had no procedures to review the programs at intervals. Analysis of outcomes was limited to identifying whether the activities in the monthly Plan-of-Work were implemented as planned. Program effects and procedures used were not analyzed by RISDA.

Research Question Three: What Process Should Be Used in
Planning and Implementing RISDA's Small Farmer Programs?

Information on potential target audience for different RISDA's programs should be collected. The data on the clients' needs, problems and expectations must be gathered and analyzed to identify what the small farmers hope to accomplish. The information should be used in setting goals and priorities of county programs. Goal formulation requires active involvement of implementors and the target clients. Future RISDA programs should be based on agreed-upon goals rather than the budgetary outline prepared by the state administrators.

RISDA should encourage county administrators and field workers to initiate planning for small farmers in the county. The program documents should indicate: long-range goals and strategies; short-term goals, strategies and procedures; and detailed operational procedures for each program. Annual plans should become the basis for identifying monthly or weekly activities.

In order to attain self-sustaining programs, RISDA should guide the farmers to analyze their problems and constraints. Local leaders who could provide their cooperation should be identified and utilized to initiate group discussions. The small farmers must identify opportunities. Obligations that the clients had to contribute must be clarified. The clients must identify and organize local resources. The small farmers should be given clear tasks to be performed. The decision to organize must be made by the farmers based on their needs for services of local organizations. Issues and problems must be

discussed. The audience should develop structures and procedures. Tasks to be performed by elected officials must be clarified. RISDA should encourage small working groups based on common interests. Members of a group should be made responsible to plan, implement and monitor the success of the group. Training could then be implemented to develop capabilities of group leaders. Leaders of small working groups should decide how to manage the community organizations. It is important to note that a procedure should be established to involve other development agencies in planning activities relevant to their roles. Participation in planning would increase their commitment during implementation stage.

Emphasis at the implementation stage should focus on developing the clients' ability to administer local programs. In the past, the small farmers were not active in project administration. Decisions must be controlled by the clients from the start. Regular training related to their activities and supervision must be provided.

Small rubber farmers should be utilized fully in the development and promotion of improved ideas. They should participate in local trials and demonstrations. Only proven and beneficial technologies need to be promoted. Promotion should be done in stages depending on performance of early adopters. The small farmers should be given the opportunity to select ideas that are appropriate to their capabilities.

Local leaders and local organizations should initiate activities and guide the small farmers. Local organizations are responsible to

plan local programs, deliver services required by the members and maintain administrative expenses.

The field workers are more involved in the implementation of activities. Procedures used by field workers must be reviewed. RISDA should establish a feedback procedure to inform the implementors the progress of their activities.

RISDA's programs should be reviewed at intervals. Procedures used and effects of the programs must be compared with the plan. Modifications and adjustments are made based on incoming information. Evaluation should be done at the county, community organization and small working group levels. Those who participate in planning and implementation should participate in decisions that affect their roles.

III. RECOMMENDED GUIDELINES FOR ANALYZING AND IMPROVING RISDA'S PROGRAMS

Problems and constraints related to small farmer programs were presented in the literature. Few studies were being done to analyze the factors involved and suggest guidelines for improving the programs. As part of this study, a set of guidelines were suggested for RISDA to implement improvement activities (research question four).

1. Each program should specify the type and number of audience to be reached.
2. In order to serve the needs of the target audiences, information on their needs, interests and expectations should be collected and analyzed. The data obtained should be used as the basis for identifying goals and priorities.

3. The small farmers must participate in setting program goals.
4. Each county RISDA should initiate planning with active involvement of the field workers. Decisions made should indicate the long-range goals and strategies, the short-range goals and strategies, and detailed operational procedures.
5. RISDA should collect information for improving the performance of field workers.
6. Field workers should design their roles and responsibilities.
7. Inservice training programs should be developed by individual field staff.
8. RISDA's services should be used as a means rather than an end in order to develop the small farmers' capabilities.
9. The small farmers should identify and analyze local problems, opportunities, resources and procedures.
10. The small farmers should administer their programs.
11. The small farmers should decide whether to organize or not. They should determine the structure and procedures for administering local organizations.
12. The data on periodic progress and outcomes must be collected. Modifications and adjustments are made based on incoming information.

IV. CONCLUSIONS

The following conclusions are made based on findings of the study:

1. RISDA's programs were planned without participation of the small farmers as well as county personnel. The data showed that RISDA was more concerned with the delivery of materials and services rather than helping the clients to develop their capabilities.
2. A review of the related literature showed that the process used to develop the small farmers made a difference in the outcomes of the programs.
3. Participation of the small farmers and field workers in decisions related to their roles had increased the effectiveness of small farmer programs.

V. RECOMMENDATIONS FOR FURTHER STUDY

As a result of this study, the following recommendations are made:

1. Similar studies should be made to analyze factors that contribute to success and effectiveness of small farmer programs. A comparison should be made with factors identified in this study to examine similarities and differences.
2. RISDA should use the guidelines developed in this study for analyzing and improving its programs. The strengths

and weaknesses of each guideline should be further studied and analyzed.

3. More specific studies should be conducted to analyze the processes involved in each category of analysis used in this study. The results should be used to improve the theoretical framework for planning small farmer programs.
4. Similar studies should be conducted with other small farmer agencies in Malaysia. The findings should be compared with the results of this study to identify the discrepancy between theory and practice.
5. The gap between the processes used by RISDA and factors that were perceived important by county personnel should be studied. The results should be used for improving the organizational processes used by the agency.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Adams, D. W. and Coward, E. W., Jr. Small Farmer Development Strategies: A Seminar Report (Agriculture Development Council, Inc., July 1972).
- Babbie, E. R. Survey Research Methods (Wadsworth Publishing Company, Inc., 1973, p. 169).
- Banskota, M. and Roy, P. "Participation, Local Organization and Rural Development," Proceedings of Workshop on Small Farmers Development and Credit Policy (Katmandu, Nepal, June 1981).
- Bellon, J. J. and Handler, J. R. Curriculum Development and Evaluation: A Design for Improvement (Kendall/Hunt Publishing Company, 1982, pp. 1-16).
- Benor, Daniel. Agricultural Extension, World Bank (May 1977).
- Berelson, Bernard. Content Analysis in Communication Research (New York, Hafner, 1971).
- Biggs, H. H. and Tinnermeier, R. L. Small Farm Agricultural Development Problems (Colorado State University, Fort Collins, Colorado, 1974).
- Budd, R. W. An Introduction to Content Analysis (State University of Iowa, 1963).
- Budd, R. W., Thorp, R. K. and Donohew, L. Content Analysis of Communications (MacMillan, New York, 1967).
- Burchell, R. W. and Sternlieb, G. "Seven Hills on the Way to the Mountain: The Role of Planning and Planners," Planning Theory in the 1980's (The Centre for Urban Policy Research, Rutgers University, New Jersey, 1979, p. 299).
- Chadwick, George. A System View of Planning (Pergamon Press, Inc., 1978, pp. 127 and 366).
- Cisneros, H. D. "Comments on John Higgs," Paper on Reaching the Small Farmers for Rural and Agricultural Development in Strategies for Improving Small Farmer Development in the Tropics (Cooperative Extension Service, University of Hawaii, Miscellaneous Publication 152, 1977).
- Cochrane, Willard W. Agricultural Development Planning (Prager Publishers, Inc., 1974).

- Cohen, John M. "Effects of Green Revolution Strategies on Tenants and Small Scale Landowners," The Journal of Developing Areas, Vol. 19, No. 3, April 1975.
- Cohen J. M. and Normal T. Uphoff. "Rural Development Participation: Concepts and Measures for Project Design, Implication and Evaluation" (Cornell University, Rural Development Committee, Rural Development Monography No. 2, Jan. 1977).
- Coombs, P. H. and Ahmed, M. Attacking Rural Poverty (The Johns Hopkins University Press, 1974).
- Coulson, Andrew. "Agricultural Policies in Mainland Tanzania, 1946-1976," in Rural Development in Tropical Africa, by Heyer et al., the MacMillan Press Ltd., 1981.
- Coward, E. W. and Ahmad, B. "Village Technology and Bureaucracy: Patterns of Irrigation Organization in Comilla District," Journal of Developing Areas, No. 13, July 1979.
- Davidoff, P. and Reiner, T. "A Choice Theory of Planning," Journal of American Institute of Planners, Vol. 28, 1962.
- Dijkstra, W. and Zouwen, J. V. D. Introduction in Response Behavior in Survey Interview (Academic Press, 1982).
- Downs, Smeyak and Martin. Professional Interviewing (Harper and Row Publishers, New York, 1980, pp. 354-358).
- Dror, Yehezhelel. "The Planning Process: A Facet Design," International Review of Administrative Science, No. 29, 1963.
- Espenschade, A. S. and Rarick, G. L. "Descriptive Research," in Research Methods (American Association for Health, Physical Education and Recreation, 1973, pp. 271-288).
- Faludi, Andreas. Planning Theory (Pergamon Press, Oxford, 1973).
- Friedman, John. "Innovation, Flexible Response and Social Learning: A Problem in the Theory of Meta-Planning," in Planning Theory in the 1980's, by Burchell and Sternlieb, The Centre for Policy and Urban Research, Rutgers University, New Jersey, 1979.
- Goode, W. J. and Hatt, P. K. Methods in Social Research (McGraw Hill Book, Inc., 1952).
- Goods, Carter V. Essentials of Educational Research (Meredith Publishing Company, 1966, p. 310).

- Gordon, Raymond L. Interviewing: Strategy, Techniques and Tactics (The Dorsey Press, Homewood, Illinois, 1975, p. 39).
- Green, Larry. "Planning and Decision Making in the Small Business," Managerial Planning, Vol. 31, No. 6, July and August, 1983.
- Haymann, H. G. and Brown, K. C. "Maintaining the Fundamental in a Planning System," Managerial Planning, Vol. 33, No. 3, 1982.
- Heroux, Richard L. "How Effective is Your Planning," Managerial Planning, Vol. 30, No. 2, September, October 1981.
- Heyer, Judith et al. "Rural Development," in Rural Development in Tropical Africa, The MacMillan Press, Ltd., 1981.
- Heyer, Roberts and Williams. Rural Development in Tropical Africa (St. Martin's Press, New York, 1981).
- Higgs, John. "Strategies for Improving Small Farmer Development in the Tropics: Proceedings, Miscellaneous Publication No. 152, Cooperative Extension Service, University of Hawaii, January 1978.
- Kahalas, Harvey. "A Look at Planning and Its Components," Managerial Planning, Vol. 30, No. 4, pp. 13-16 and 34, January and February 1982.
- Khalil, H. M. M. "The Sudan Gereira Scheme: Some International and Administrative Aspects," Journal of Administrative Overseas, Vol. IX, No. 4, Oct. 1970, pp. 273-285.
- Khan, Akhter Hameed. "Ten Decades of Rural Development: Lessons from India," MSU Rural Development Paper No. 1, 1978.
- Kwoh, Mong-Hsioh. "Farmers' Association in Taiwan--An Example of Effective Partnership," in A Strategy for Agricultural and Rural Development in Asian Countries, by Chi-Wen Chang, SEARCA, Laguna, Philippines, 1974.
- Krumholtz, et al. "Make No Big Plans Planning in Cleveland in the 1970's," in Planning Theory in the 1980's, by Burchell and Sternlieb, The Centre for Policy and Urban Research, Rutgers University, New Jersey, 1979.
- Lahoni, P. C. "Small Farmers Development Programme in Nepal," in Proceedings of Workshop on Small Farmer Development and Credit Policy, Katmandu, Nepal, June 1981.

- Lassen, Cherry. "Reaching the Assetless Poors-Project and Strategies for Their Self-Reliant Development," Rural Development Committee, Centre for International Studies, Cornell University, LNL. No. 6, Oct. 1980.
- Leagans, J. P. "Adoption of Mordem Agricultural Technology by Small Operator: An Interdisciplinary Model for Researches and Strategy Builders," Cornell University, 1979.
- Lele, U. The Design of Rural Development (John Hopkins University Press, 1975).
- Leonard, David. Reaching the Peasant Farmers: Organizational Theory and Practice in Kenya (University of Chicago Press, 1977).
- Lichfield, N., Kettle, P. and Whitbread, M. Evaluation in the Planning Process (Pergamon Press, Inc., 1975, pp. 32-33).
- Malaysian Business, November 1977.
- Mayerson, M. and Banfield E. Policies, Planning and the Public Interests: The Case of Public Housing in Chicago (New York Free Press, 1955).
- Miller, et al. "Approaches to University Extension Work With the Rural Disadvantage," West Virginia University, Morgantown, September 1972.
- Morss, et al. Strategies for Small Farmer Development, Vol. I and II, Westview Press, Inc., 1976.
- Murdick, Robert C. Business Research: Concept and Practice (International Textbook Company, 1969).
- Nachmias and Nachmias. Research Methods in the Social Sciences (St. Martin's Press, New York, 1976).
- Nadler, Gerald. The Planning and Design Approach (John Wiley and Sons, 1981, p. 36).
- Norman, David W. "The Farming Systems Approach: Relevancy for the Small Farmers," MSU Rural Development Paper No. 5, Michigan State University, 1980.
- Norman, D. W. and Hays, H. W. "Developing a Suitable Technology for Small Farmers," National Development, April 1979, pp. 67 -75.

- Norman, Pryor and Gibbs. "Technical Change and the Small Farmers in Hausaland, Northern Nigeria," Michigan State University, 1979.
- Parsons, Kenneth H. "A Comment on a Few Issues Suggested by John Higgs Paper," Miscellaneous Publication No. 152, Cooperative Extension Service, University of Hawaii, January 1978.
- Raper, Arthur F. Rural Development in Action (Cornell University Press, Ithaca, 1970).
- Raymond, George M. "The Role of the Physical Urban Planner," in Planning Theory in the 1980's, by Burchell and Sternlieb, The Centre for Urban Policy Research, New Jersey, 1979.
- Redman, Louis N. "The Planning Process," Managerial Planning, Vol. 31, No. 6, May/June 1983, p. 24.
- Richardson, et al. Interviewing Its Forms and Functions (Basic Books Inc. Publishers, 1965).
- Roskeley, R. W. "Review of a Paper by John Higgs, 'Reaching Small Farmers for Rural and Agricultural Development,'" Cooperative Extension Service, University of Hawaii, Miscellaneous Publication No. 152, January 1978.
- Selltiz, et al. Research Methods in Social Relation (Holts, Richard and Winston, Inc., 1976, p. 102).
- Spencer, D. S. C. "Technical Change, Labour Use and Small Farmer Development. Evidence from Sierra Leone," Michigan State University, 1976.
- Stavis, Benedict. "Agricultural Extension for Small Farmers," MSU Rural Development Services, Paper No. 3, Department of Agricultural Economics, Michigan State University, 1979.
- Stevens, R. D. "Comilla Rural Development Program," in Rural Development in Bangladesh and Pakistan, by Steven, et al., The University Press of Hawaii, 1976, pp. 95-128.
- Tinnermeier, R. L. "Supervised Credit and the Small Farmers," Agricultural Development Council, 1971.
- William, G. "World Bank and the Peasant Problem," in Rural Development in Tropical Africa, by Heyer et al., The MacMillan Press Ltd., 1981.
- Whyte, W. F. "Participatory Approaches to Agricultural Research and Development: A State of the Art," Rural Development Committee, Centre for International Studies, Cornell University, 1981.

APPENDICES

APPENDIX A

RESEARCH INSTRUMENTS

INTERVIEW GUIDE

'For County Supervisor'

I would like to get information about RISDA's programs. The data are important for future small farmer programs.

1. Where were you working before being appointed as RISDA county supervisor in this county?
2. How long have you been working as county supervisor?
3. What are your general duties as county supervisor?
4. What are some of the main things that RISDA tries to accomplish?
5. How does RISDA set its goals?
6. How does RISDA plan its programs in general?
7. While the programs are in progress, what kinds of information are usually collected?

Now, I would like to ask about procedures that are generally used by RISDA.

8. How do you communicate working procedures to all field workers?
9. How does RISDA plan staff development programs? Who was or is involved?
10. How do you get information on how well you are doing from your superior? Please describe it.

11. How do you get information from your staff? Which methods of giving information are commonly used by field workers?
12. How do you give information to your staff?
13. How are important decision made? Who participates in making the decisions?

I want to ask about RISDA workers.

14. How do RISDA field workers develop their programs? Please describe the process.
15. What are the main duties of RISDA field workers? Describe how they work with the small farmers and local leaders.

I need information on local leaders and small farmer associations.

16. Please describe the roles of local leaders.
17. How does RISDA train the local leaders?
18. How does RISDA set up small farmer associations? How do they get funds, buildings, and rubber processing machines? How do they plan and administer their projects?
19. What do you emphasize in training elected leaders of small farmer associations?
20. What procedures are used to determine the success and failure of RISDA's programs? Are there regular meetings held? Who is involved?
21. Are there comments that you would like to add?

INTERVIEW GUIDE

'For Field Workers'

I would like to get information about RISDA's programs. The data are important for future small farmer programs.

1. Where were you working before being appointed as Assistant RISDA Officer in this county?
2. How long have you been working in this county?
3. What are your main duties as Assistant RISDA Officer?
4. With which RISDA programs are you currently involved?
5. What are the main things that RISDA tries to accomplish from programs in which you are currently involved?
6. How does RISDA plan its programs in general?
7. What information do you collect while the programs are in progress?

I would like to ask about procedures that are generally used by RISDA.

8. Please explain how your agency prepares working procedures and assigns what needs to be done by individual field workers?
9. How does RISDA plan staff development programs?
10. How do you get information from your superior on how well you are doing?

11. In general, how do you get information from co-workers and the county supervisor?
12. How do you give information to your co-workers and your superior?
13. How does your agency make important decisions?

Now, I need to get more information about your programs.

14. How do you prepare your program of work?
15. What are some of the main things that you try to accomplish in working with small farmers?
16. What are the roles of local leaders who participate in your program?
17. How does RISDA train the local leaders?
18. How does RISDA set up small farmer associations?
19. What do you emphasize in training elected leaders of small farmer associations?
20. How do you determine the success and failure of your program?
Are there meetings held to review the program? Who is involved?
21. Are there comments that you would like to add?

A SURVEY OF FACTORS THAT CONTRIBUTE TO SUCCESS AND
EFFECTIVENESS IN PLANNING SERVICE DELIVERY
PROGRAMS FOR SMALL RUBBER FARMS
IN MALAYSIA

State Date
County.
Respondent Code

I. Please provide the following information:

1. Your occupational status (place the proper number in the proper box provided).
 - a. Risda county supervisor
 - b. Senior Assistant RISDA Officer
 - c. Assistant RISDA Officer
2. Actual number of years employed as RISDA development worker.

II. The following factors are related to success of small farmer programs. Please respond to the questions:

1. "How important is this statement to small farmer programs?"

and

2. "Is this done often enough by your agency (as needed to be effective)?"

Follow the instructions given in Step 1 and Step 2.

Step 1

1. Read the 'items for response' in the middle column.
2. Look at the question and categories in column (A).
3. Choose a category that you most agree and circle one number appropriate to each item.
4. Respond to all items in column (A).
5. Go to Step 2.

Step 2

1. Read each statement in the middle column.
2. Look at the question and categories in column (B).
3. Choose a category and circle one number appropriate to each item.
4. Respond to all items in column (B).
5. Go to the next page.

COLUMN (A)				COLUMN (B)					
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?					
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE					
				Consistently 4	Usually 3	Seldom 2	Never 1		
4	3	2	1	1.	Keep an up-to-date record of target farmers (Source: Whyte, Williams and Tinnermeier)	4	3	2	1
4	3	2	1	2.	Collect data on small farmer interests, problems and what they hope to accomplish (Source: Benor and Heyer)	4	3	2	1
4	3	2	1	3.	Compare information on current achievement and what the small farmers expect to accomplish (Source: Heyer and Morss)	4	3	2	1
4	3	2	1	4.	Discuss with the small farmers about what is to be achieved in the long run (Source: Heyer)	4	3	2	1
4	3	2	1	5.	Inform the small farmers clearly about general program objectives (Source: Heyer)	4	3	2	1

COLUMN (A)				COLUMN (B)					
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?					
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE					
				Consistently 4	Usually 3	Seldom 2	Never 1		
4	3	2	1	6.	Discuss policies, office procedures and responsibilities with field workers (Source: Benor)	4	3	2	1
4	3	2	1	7.	Request each field worker to prepare his/her duties and responsibilities (Source: Bellon and Handler)	4	3	2	1
4	3	2	1	8.	Arrange the field workers so that it enables the agency to expand its workload (Source: Biggs, Heyer and Williams)	4	3	2	1
4	3	2	1	9.	Allocate more funds and manpower to programs with more important long-term objectives (Source: Bellon and Handler)	4	3	2	1
4	3	2	1	10.	Inform the front-line workers about how well they are doing at regular intervals (Source: Tinnermeier)	4	3	2	1

COLUMN (A)				COLUMN (B)				
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE				
				Consistently 4	Usually 3	Seldom 2	Never 1	
4	3	2	1	11. Involve the field workers in making decisions and solving problems (Source: Miller)	4	3	2	1
4	3	2	1	12. Request the front-line workers to plan own in-service training program (Source: Benor, Morss and Miller)	4	3	2	1
4	3	2	1	13. Involve the front-line workers in planning the long-range and short-range programs (Source: Miller)	4	3	2	1
4	3	2	1	14. Encourage the front-line workers to plan what they expect to achieve in a given period or during the year (Source: Biggs and Miller)	4	3	2	1
4	3	2	1	15. Seek help from specialists to develop the guidelines (criteria) for planning and evaluation (Source: Biggs, Heyer and Miller)	4	3	2	1

COLUMN (A)				COLUMN (B)					
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?					
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE					
				Consistently 4	Usually 3	Seldom 2	Never 1		
4	3	2	1	16.	Discuss the possible ways to reach the target farmers with field workers (Source: Morss and Norman)	4	3	2	1
4	3	2	1	17.	Prepare a plan which outlines all programs in the county (Source: Morss and Norman)	4	3	2	1
4	3	2	1	18.	Request all front-line workers to prepare a plan for each program (Source: Norman)	4	3	2	1
4	3	2	1	19.	Make sure that each plan indicates long-term objectives and the number of target farmers (Source: Benor, Coulson and Morss)	4	3	2	1
4	3	2	1	20.	Develop a number of specific objectives for each program (Source: Benor and Morss)	4	3	2	1
4	3	2	1	21.	Use the specific objectives to plan their activities (Source: Norman)	4	3	2	1

COLUMN (A)				COLUMN (B)				
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE				
				Consistently 4	Usually 3	Seldom 2	Never 1	
4	3	2	1	22. The small farmers discuss their problems with local leaders frequently (Source: Heyer)	4	3	2	1
4	3	2	1	23. The small farmers identify programs in order to solve their problems (Source: Williams)	4	3	2	1
4	3	2	1	24. The small farmers develop methods on how to carry out their programs (Source: Heyer and Morss)	4	3	2	1
4	3	2	1	25. The small farmer and local leaders plan the funds and materials needed by their programs (Source: Williams)	4	3	2	1
4	3	2	1	26. The small farmers arrange local man-power, funds and other materials to carry out their programs (Source: Morss)	4	3	2	1

COLUMN (A)				COLUMN (B)				
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE				
					Consistently 4	Usually 3	Seldom 2	Never 1
4	3	2	1	27. The small farmers and local leaders carry out their programs (Source: Morss and Williams)	4	3	2	1
4	3	2	1	28. Local leaders coordinate activities of other agencies (Source: Morss)	4	3	2	1
4	3	2	1	29. The small farmers and local leaders discuss and choose a suitable local organization (Source: Biggs and Morss)	4	3	2	1
4	3	2	1	30. The small farmers and local leaders develop procedures for their organization (Source: Biggs and Morss)	4	3	2	1
4	3	2	1	31. The small farmers use local organization to discuss their problems with field workers of development agencies (Source: Biggs)	4	3	2	1
4	3	2	1	32. The small farmers make local leaders responsible to the success of their organization (Source: Morss)	4	3	2	1

COLUMN (A)

COLUMN (B)

How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?							
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE							
				Consistently 4	Usually 3	Seldom 2	Never 1				
4	3	2	1	33.	Local organization plans self-help activities for its members (Source: Biggs)			4	3	2	1
4	3	2	1	34.	Local organization maintains expenses for their buildings and equipments (Source: Morss)			4	3	2	1
4	3	2	1	35.	Local organization provides farm supplies, credit and marketing services to their members (Source: Morss)			4	3	2	1
4	3	2	1	36.	Guide and train local leaders appropriate to their roles (Source: Biggs, Denor and Morss)			4	3	2	1
4	3	2	1	37.	Review the progress of local organization regularly (Source: Biggs, Heyer and Morss)			4	3	2	1
4	3	2	1	38.	Control activities of individual and groups with special interests (Source: Heyer)			4	3	2	1

COLUMN (A)					COLUMN (B)				
How important is this statement to small farmer programs?					Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE					
					Consistently 4	Usually 3	Seldom 2	Never 1	
4	3	2	1	39. Encourage the small farmers to work for personal goals and the community goals (Source: Burns)	4	3	2	1	
4	3	2	1	40. Guide the small farmers on how to obtain external help (Source: Biggs)	4	3	2	1	
4	3	2	1	41. Assist the small farmers to regularly review their goals (Source: Biggs)	4	3	2	1	
4	3	2	1	42. Use informal leaders to promote new ideas (Source: Burns)	4	3	2	1	
4	3	2	1	43. Spend their time only on activities that benefit the small farmers (Source: Benor)	4	3	2	1	
4	3	2	1	44. Select and promote ideas that are relevant to the small farmers (Source: Coulson and Morss)	4	3	2	1	

COLUMN (A)				COLUMN (B)				
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE				
				Consistently 4	Usually 3	Seldom 2	Never 1	
4	3	2	1	45. Use proven ideas which have been tried by local farmers (Source: Morss)	4	3	2	1
4	3	2	1	46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time (Source: Coulson and Benor)	4	3	2	1
4	3	2	1	47. Provide subsidies to small farmers who adopt risky techniques (Source: Morss)	4	3	2	1
4	3	2	1	48. Early in the program the small farmers use only simple ideas and methods (Source: Benor, Coulson and Morss)	4	3	2	1
4	3	2	1	49. The small farmers receive a close supervision when they use complex ideas or techniques (Source: Morss)	4	3	2	1

COLUMN (A)				COLUMN (B)				
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE				
				Consistently 4	Usually 3	Seldom 2	Never 1	
4	3	2	1	50.	Volunteer farmers conduct experiments and demonstrations (Source: Coulson and Morss)			
				4	3	2	1	
4	3	2	1	51.	The small farmers use group activities to share their experience (Source: Biggs and Coulson)			
				4	3	2	1	
4	3	2	1	52.	The small farmers promote new ideas and techniques (Source: Morss and Whyte)			
				4	3	2	1	
4	3	2	1	53.	Local leaders deliver materials and supplies to the small farmers (Source: Morss and Whyte)			
				4	3	2	1	
4	3	2	1	54.	Field workers conduct follow-up visits to small farmers' farms (Source: Morss)			
				4	3	2	1	

COLUMN (A)				COLUMN (B)				
How important is this statement to small farmer programs?				Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE				
				Consistently 4	Usually 3	Seldom 2	Never 1	
4	3	2	1	55.	Field workers use several methods or approaches to achieve each specific objective (Source: Diggs)			
				4	3	2	1	
4	3	2	1	56.	Field workers collect information on achievement and methods they use on regular basis (Source: Benor, Coulson and Heyer)			
				4	3	2	1	
4	3	2	1	57.	Field workers compare what they accomplish and what they plan to achieve (Source: Coulson and Heyer)			
				4	3	2	1	
4	3	2	1	58.	Field workers identify the strengths and weaknesses of methods they use (Source: Benor and Heyer)			
				4	3	2	1	
4	3	2	1	59.	Supervisor, field workers and local leaders review county programs by identifying the strengths and weaknesses of methods they use (Source: Benor and Heyer)			
				4	3	2	1	

COLUMN (A)		COLUMN (B)				
How important is this statement to small farmer programs?		Is this done often enough by your agency (as needed to be effective)?				
Very Important 4	Important 3	Somewhat Important 2	Unimportant 1	ITEMS FOR RESPONSE		
				Consistently 4	Usually 3	Seldom 2 Never 1
4	3	2	1	60.	Field workers, county supervisor and local leaders make changes or improvement using information they had collected (Source: Heyer and Miller)	1

APPENDIX B

TABLES OF CONSISTENCY IN RESPONSE

Table B-1. Consistency in Response Related to the Organizational Process as Perceived by Supervisors

Items	z-value	Probability
1. Keep an up-to-date record of target farmers and 19. Make sure that each plan indicates <u>long-term</u> objectives and the number of target farmers.	-1.65	.10
2. Collect data on small farmer interests, problem and what they hope to accomplish, <u>and</u> 3. Compare information on current achievement and what the small farmers expect to accomplish.	-2.53*	.01
3. Compare information on current achievement and what the small farmers expect to accomplish, <u>and</u> 57. Field workers compare what they accomplish and what they plan to achieve.	-1.54	.12
4. Discuss with the small farmers about what is to be achieved in the long run, <u>and</u> 5. Inform the <u>small</u> farmers clearly about general program objectives.	-4.45*	.00
5. Inform the small farmers clearly about general program objectives, <u>and</u> 59. Supervisors, field workers and local leaders review county program by identifying the strengths and weaknesses of methods they use.	-2.02*	.04
6. Discuss policies, office procedures and responsibilities with field workers, <u>and</u> 10. Inform the front-line workers about how well they are doing at regular intervals.	-1.12	.27

Table B-1 (Continued)

Items	z-value	Probability
7. Request each field worker to prepare his/her duties and responsibilities, and 12. Request the <u>front-line</u> workers to plan their own inservice training program.	-0.29	.77
8. Arrange the field workers so that it enables the agency to expand its workload, and 9. Allocate more <u>funds</u> and man-power to programs with more important long-term objectives.	-0.60	.55
11. Involve the field workers in making decisions and solving problems, and 16. Discuss the possible ways to reach the target farmers with field workers.	-1.55	.12
12. Request the front-line workers to plan their own inservice training program, and 14. Encourage the <u>front-line</u> workers to plan what they expect to achieve in a given period or during the year.	-0.16	.87
13. Involved the front-line workers in planning the long-range and short-range programs, and 17. Prepare a plan which <u>outlined</u> all programs in the county.	-3.55*	.00
16. Discuss the possible ways to reach the target farmers with field workers, and 10. Inform the <u>front-line</u> workers about how well they are doing at regular intervals.	-0.18	.85

Table B-1 (Continued)

Items	z-value	Probability
17. Prepare a plan which outlined all programs in the county, and		
18. Request all front-line workers to prepare a plan for each program.	-1.64	.10
19. Make sure that each plan indicates and the number of target farmers.		
19. Make sure that each plan indicates and the number of target farmers, and	-3.13*	.00
17. Prepare a plan which outlined all programs in the county.		
20. Develop a number of specific objectives for each program, and		
21. Use the specific objectives to plan field activities.	-1.76	.08

* Significant at .05 level.

Table B-2. Consistency in Response Related to Program Development Process as Perceived by Supervisors

Items	z-values	Probability
22. The small farmers discuss their problems with local leaders frequently, and 23. The <u>small</u> farmers identify programs in order to solve their problems.	-3.60*	.00
23. The small farmers identify programs in order to solve their problems, and 24. The <u>small</u> farmers develop methods on how to carry out their programs.	-0.59	.56
25. The small farmer and local leaders plan the funds and materials needed by their programs, and 26. The small farmers arrange local <u>man-power</u> , funds and other materials to carry out their programs.	-0.37	.71
30. The small farmers and local leaders develop procedures for their organization, and 29. The small farmers and local leaders discuss and choose a suitable local organization. 32. The small farmers make local leaders responsible to the process of their organization.	-1.12	.26
36. Guide and train local leaders appropriate to their roles, and 40. Guide the small farmers on how to obtain external help.	-1.70	.09

* Significant at .05 level.

Table B-3. Consistency in Response Related to the Implementation Process as Perceived by Supervisors

Items	z-value	Probability
10. Inform the front-line workers about how well they are doing at regular intervals, <u>and</u> 6. Discuss policies, <u>office</u> procedures and responsibilities with field workers.	-1.16	.27
27. The small farmers and local leaders carry out their programs, <u>and</u> 28. Local leaders coordinate activities of other agencies.	-1.61	.11
31. The small farmers use local organization to discuss their problems with field workers of development agencies, <u>and</u> 30. The small farmers and local leaders develop procedures for their organization.	-1.71	.09
33. Local organization plan self-help activities for its members, <u>and</u> 35. Local organization provides farm supplies, credit and marketing service to their members.	-0.80	.42
34. Local organization maintains expenses for their buildings and equipment, <u>and</u> 35. Local organization provides farm supplies, credit and marketing services to their members.	-0.82	.41
37. Review the progress of local organization regularly, <u>and</u> 30. The small farmer and local leaders develop procedures for their organization.	-0.61	.54

Table B-3 (Continued)

Items	z-value	Probability
41. Assist the small farmers to regularly review their goals, and		
38. Control activities of individual and groups with special interests.	-0.24	.81
39. Encourage the small farmer to work for personal goals and the community goals.	-2.88*	.00
42. Use informal leaders to promote new ideas, and		
50. Volunteer farmers conduct experiments and demonstrations.	-2.65*	.01
43. Spend their time only on activities that benefit the small farmers, and		
44. Select and promote ideas that are relevant to the small farmers.	-0.78	.43
47. Provide subsidies who adopt risky techniques.	-3.80*	.00
45. Use proven ideas which have been tried by local farmers, and		
48. Early in the program the small farmers use only simple ideas and methods.	-1.03	.30
46. Assist leaders to make sure that funds, materials and advisory services are available to the small farmers on time, and		
53. Local leaders deliver materials and supplies to the small farmers.	-3.51*	.00
49. The small farmers receive a close supervision when they use complex ideas or techniques, and		
54. Field workers conduct follow-up visits to small farmer's farm.	-1.81	.07

Table B-3 (Continued)

Items	z-value	Probability
51. The small farmers use group activities to share their expenses, and 27. The small farmers and local leaders carry out their programs.	-1.74	.08
52. The small farmers promote new ideas and techniques, and 50. Volunteer farmers conduct experiments and demonstrations.	-3.44*	.00
53. Local leaders deliver materials and supplies to the small farmers, and 46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time.	-3.51*	.00
55. Field workers use several methods or approaches to achieve each specific objectives, and 21. Use specific objectives to plan their activities.	-3.35*	.00

* Significant at .05 level.

Table B-4. Consistency in Response Related to Analysis of Outcomes as Perceived by Supervisors

Items	z-value	Probability
57. Field workers compare what they accomplish and what they plan to achieve, and	-2.42*	.02
56. Field workers collect information on achievement and methods they use on regular basis.		
58. Field workers identify the strengths and weaknesses of methods they use.	-0.20	.84
59. Supervisors, local leaders and field workers review county programs by identifying the strengths and weaknesses of methods they use, and	-0.47	.64
60. Supervisors, <u>Local</u> leaders and field workers make changes or improvement using information they had collected.		

* Significant at .05 level.

Table B-5. Consistency in Response Related to the Organizational Process as Perceived by Field Workers

Items	z-value	Probability
1. Keep an up-to-date record of target farmers and 19. Make sure that each plan indicates long-term objectives and the number of target farmers.	-1.11	.27
2. Collect data on small farmer interests, problem and what they hope to accomplish, and 3. Compare information on current achievement and what the small farmers expect to accomplish.	-3.53*	.00
3. Compare information on current achievement and what the small farmers expect to accomplish, and 57. Field workers compare what they accomplish and what they plan to achieve.	-3.81*	.00
4. Discuss with the small farmers about what is to be achieved in the long run, and 5. Inform the small farmers clearly about general program objectives.	-6.48*	.00
5. Inform the small farmers clearly about general program objectives, and 59. Supervisors, field workers and local leaders review county program by identifying the strengths and weaknesses of methods they use.	-3.62*	.00
6. Discuss policies, office procedures and responsibilities with field workers, and 10. Inform the front-line workers about how well they are doing at regular intervals.	-2.06*	.04

Table B-5 (Continued)

Items	z-value	Probability
7. Request each field worker to prepare his/her duties and responsibilities, and 12. Request the front-line workers to plan their own inservice training program.	-2.41*	.02
8. Arrange the field workers so that it enables the agency to expand its workload, and 9. Allocate more funds and man-power to programs with more important long-term objectives.	-2.71*	.01
11. Involve the field workers in making decisions and solving problems, and 16. Discuss the possible ways to reach the target farmers with field workers.	-0.81	.42
12. Request the front-line workers to plan their own inservice training program, and 14. Encourage the front-line workers to plan what they expect to achieve in a given period or during the year.	-0.58	.56
13. Involved the front-line workers in planning the long-range and short-range programs, and 17. Prepare a plan which outlined all programs in the county.	-4.75*	.00
16. Discuss the possible ways to reach the target farmers with field workers, and 10. Inform the front-line workers about how well they are doing at regular intervals.	-0.16	.87

Table B-5 (Continued)

Items	z-value	Probability
17. Prepare a plan which outlined all programs in the county, and		
18. Request all front-line workers to prepare a plan for each program.	-2.95*	.00
19. Make sure that each plan indicates and the number of target farmers.	-6.61*	.00
19. Make sure that each plan indicates and the number of target farmers, and		
17. Prepare a plan which outlined all programs in the county.	-6.61*	.00
20. Develop a number of specific objectives for each program, and		
21. Use the specific objectives to plan field activities.	-0.77	.44

* Significant at .05 level.

Table B-6. Consistency in Response Related to Program Development Process as Perceived by Field Workers

Items	z-values	Probability
22. The small farmers discuss their problems with local leaders frequently, and 23. The <u>small</u> farmers identify programs in order to solve their problems.	-5.32*	.00
23. The small farmers identify programs in order to solve their problems, and 24. The <u>small</u> farmers develop methods on how to carry out their programs.	-1.40	.16
25. The small farmer and local leaders plan the funds and materials needed by their programs, and 26. The small farmers arrange local <u>man-power</u> , funds and other materials to carry out their programs.	-1.17	.20
30. The small farmers and local leaders develop procedures for their organization, and 29. The small <u>farmers</u> and local leaders discuss and choose a suitable local organization. 32. The small farmers make local leaders responsible to the process of their organization.	-2.08*	.04
36. Guide and train local leaders appropriate to their roles, and 40. Guide the small farmers on how to obtain external help.	-1.89 -0.25	.06 .80

* Significant at .05 level.

Table B-7. Consistency in Response Related to the Implementation Process as Perceived by Field Workers

Items	z-value	Probability
10. Inform the front-line workers about how well they are doing at regular intervals, <u>and</u> 6. Discuss policies, <u>office procedures and responsibilities</u> with field workers.	-2.06	.04
27. The small farmers and local leaders carry out their programs, <u>and</u> 28. Local leaders coordinate activities of other agencies.	-3.48*	.00
31. The small farmers use local organization to discuss their problems with field workers of development agencies, <u>and</u> 30. The small farmers and local leaders develop procedures for their organization.	-3.08*	.00
33. Local organization plan self-help activities for its members, <u>and</u> 35. Local organization provides farm supplies, credit and marketing service to their members.	-3.10*	.00
34. Local organization maintains expenses for their buildings and equipment, <u>and</u> 35. Local organization provides farm supplies, credit and marketing services to their members.	-2.01*	.04
37. Review the progress of local organization regularly, <u>and</u> 30. The small farmer and local leaders develop <u>procedures</u> for their organization.	-3.67*	.00

Table B-7 (Continued)

Items	z-value	Probability
41. Assist the small farmers to regularly review their goals, and		
38. Control activities of individual and groups with special interests.	-0.52	.60
39. Encourage the small farmer to work for personal goals and the community goals.	-5.59*	.00
42. Use informal leaders to promote new ideas, and		
50. Volunteer farmers conduct experiments and demonstrations.	-0.46	.65
43. Spend their time only on activities that benefit the small farmers, and		
44. Select and promote ideas that are relevant to the small farmers.	-0.57	.57
47. Provide subsidies who adopt risky techniques.	-4.45*	.00
45. Use proven ideas which have been tried by local farmers, and		
48. Early in the program the small farmers use only simple ideas and methods.	-2.70*	.01
46. Assist leaders to make sure that funds, materials and advisory services are available to the small farmers on time, and		
53. Local leaders deliver materials and supplies to the small farmers.	-6.00*	.00
49. The small farmers receive a close supervision when they use complex ideas or techniques, and		
54. Field workers conduct follow-up visits to small farmer's farm.	-0.74	.47

Table B-7 (Continued)

Items	z-value	Probability
51. The small farmers use group activities to share their expenses, and 27. The small farmers and local leaders carry out their programs.	-1.73	.08
52. The small farmers promote new ideas and techniques, and 50. Volunteer farmers conduct experiments and demonstrations.	-1.32	.19
53. Local leaders deliver materials and supplies to the small farmers, and 46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time.	-6.00*	.00
55. Field workers use several methods or approaches to achieve each specific objectives, and 21. Use specific objectives to plan their activities.	-5.04*	.00

* Significant at .05 level.

Table B-8. Consistency in Response Related to Analysis of Outcomes as Perceived by Field Workers

Items	z-value	Probability
57. Field workers compare what they accomplish and what they plan to achieve, and	-2.61*	.01
56. Field <u>workers</u> collect information on achievement and methods they use on regular basis.		
58. Field workers identify the strengths and weaknesses of methods they use.	-0.58	.56
59. Supervisors, local leaders and field workers review county programs by identifying the strengths and weaknesses of methods they use, and	-0.02	.99
60. Supervisors, <u>Total</u> leaders and field workers make changes or improvement using information they had collected.		

* Significant at .05 level.

APPENDIX C

LIST OF ADDITIONAL SMALL FARMER
PROGRAMS ANALYZED

Table C-1. Additional Small Farmer Programs Analyzed Using Content Analysis Procedure

Programs	Country
ASAR/ARADO Potato Production and Seed Improvement Projects ^a	Bolivia
Caqueza Project ^a	Colombia
Chilalo Agriculture Development Unit ^b	Ethiopia
Chinese Irrigated Rice Production Project ^a	Gambia
Community Development ^c	India
Confectionary Groundnut Package Deal ^a	Gambia
Denu Shallots Project ^a	Ghana
DESEC, Center for Social and Economic Development ^a	Bolivia
FECOAC Directed Agricultural Production Credit ^a	Ecuador
Ghananian-German Agricultural Project ^a	Ghana
ICA Rural Development Pilot Project for Northern Cauca ^a	Colombia
Intensive Agricultural District Program ^d	India
National Community Development Service ^a	Bolivia
Philippine Rural Reconstruction Program ^c	Philippines
Plan Puebla ^b	Mexico
PPEA Agricultural Enterprise Promotion Program ^a	Ecuador
Taiwan Farmers' Associations ^e	Taiwan

^aSee Morss et al. (1976).

^bSee Whyte (1981).

^cSee Coombs and Ahmad (1974).

^dSee Adams (1972) and Coombs and Ahmad (1974).

^eSee Kwoh (1974).

APPENDIX D

TABLES ON IMPORTANCE OF ITEMS LISTED
IN MAIL QUESTIONNAIRE

Table D-1. Importance of Organizational Processes as Perceived by County Supervisors

Items	Response in Percentages ^a				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
1. Keep an up-to-date record of target farmers	--	2	30	68	3.6
2. Collect data on small farmer interests, problems and what they hope to accomplish	--	4	44	52	3.5
3. Compare information on current achievement and what the small farmers expect to accomplish	2	--	70	28	3.2
4. Discuss with the small farmers about what is to be achieved in the long-run	6	24	48	22	2.9
5. Inform the small farmers clearly about general program objectives	--	4	56	40	3.4
6. Discuss policies, office procedures and responsibilities with field workers	2	--	24	74	3.7
7. Request each field worker to prepare his/her duties and responsibilities	--	14	50	36	3.2
8. Arrange the field workers so that it enables the agency to expand its workload	--	2	52	46	3.4
9. Allocate more funds and manpower to programs with more important long-term objectives	--	14	34	52	3.4
11. Involve the field workers in making decisions and solving problems	--	8	46	46	3.4

Table D-1 (Continued)

Items	Response in Percentages ^a				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
12. Request the front-line workers to plan their own inservice training program	--	12	52	36	3.2
13. Involve the front-line workers in planning the long-range and short-range programs	--	8	52	40	3.3
14. Encourage the front-line workers to plan what they expect to achieve in a given period or during the year	--	6	52	42	3.4
15. Seek help from specialist to develop the guidelines (criteria) for planning and evaluation	2	20	52	26	3.0
16. Discuss the possible ways to reach the target farmers with field workers	--	2	44	54	3.5
17. Prepare a plan which outlines all programs in the county	--	8	54	38	3.3
18. Request all front-line workers to prepare a plan for each program	--	14	56	30	3.2
19. Make sure that each plan indicates long-term objectives and the number of target farmers	--	8	46	46	3.4
20. Develop a number of specific objectives for each program	--	12	46	42	3.3
21. Use the specific objectives to plan their activities	--	10	56	34	3.2

n = 50.

^aScale score: 1 = unimportant; 2 = somewhat important; 3 = important; and 4 = very important.

Table D-2. Importance of Items Related to Organization of RISDA's Programs as Perceived by Field Workers

Items	Response in Percentages ^a				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
1. Keep an up-to-date record of target farmers	1	3	60	36	3.3
2. Collect data on small farmer interests, problems and what they hope to accomplish	1	7	64	29	3.2
3. Compare information on current achievement and what the small farmers expect to accomplish	2	14	65	19	3.0
4. Discuss with the small farmers about what is to be achieved in the long-run	4	14	57	25	3.0
5. Inform the small farmers clearly about general program objectives	1	9	52	38	3.2
6. Discuss policies, office procedures and responsibilities with field workers	2	5	52	41	3.3
7. Request each field worker to prepare his/her duties and responsibilities	5	13	55	27	3.0
8. Arrange the field workers so that it enables the agency to expand its workload	2	11	51	37	3.2
9. Allocate more funds and manpower to programs with more important long-term objectives	2	8	57	33	3.2
11. Involve the field workers in making decisions and solving problems	--	7	64	29	3.2

Table D-2 (Continued)

Items	Response in Percentages ^a				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
12. Request the front-line workers to plan their own inservice training program	1	13	63	23	3.1
13. Involve the front-line workers in planning the long-range and short-range programs	--	13	64	23	3.1
14. Encourage the front-line workers to plan what they expect to achieve in a given period or during the year	1	8	64	27	3.1
15. Seek help from specialist to develop the guidelines (criteria) for planning and evaluation	2	21	50	27	3.0
16. Discuss the possible ways to reach the target farmers with field workers	1	8	58	33	3.2
17. Prepare a plan which outlines all programs in the county	3	17	51	30	3.0
18. Request all front-line workers to prepare a plan for each program	1	24	58	17	2.9
19. Make sure that each plan indicates long-term objectives and the number of target farmers	--	8	64	27	3.1
20. Develop a number of specific objectives for each program	2	12	68	18	3.0
21. Use the specific objectives to plan their activities	3	7	71	19	3.0

n = 202.

^aScale score: 1 = unimportant; 2 = somewhat important; 3 = important; and 4 = very important.

Table D-3. Importance of Program Development Processes as Perceived by County Supervisor

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
22. The small farmers discuss their problems with local leaders frequently	--	4	62	34	3.3
23. The small farmers identify program in order to solve their problems	6	20	56	18	2.9
24. The small farmers develop methods on how to carry out their programs	10	32	48	10	2.6
25. The small farmer and local leaders plan the funds and materials needed by their programs	4	24	50	22	2.9
26. The small farmers arrange local manpower, funds and other materials to carry out their programs	--	14	60	26	3.1
29. The small farmers and local leaders discuss and choose a suitable local organization	2	8	66	24	3.1
30. The small farmers and local leaders develop procedures for their organization	2	18	58	22	3.0
32. The small farmers make local leaders responsible to the success of their organization	10	12	46	32	3.0
36. Guide and train local leaders appropriate to their roles	2	4	44	50	3.4

n = 50.

Table D-4. Importance of Items Related to Program Development as Perceived by County Supervisor

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
22. The small farmers discuss their problems with local leaders frequently	1	3	64	32	3.3
23. The small farmers identify program in order to solve their problems	6	20	54	20	2.9
24. The small farmers develop methods on how to carry out their programs	6	28	54	12	2.7
25. The small farmer and local leaders plan the funds and materials needed by their programs	6	22	56	15	2.8
26. The small farmers arrange local man-power, funds and other materials to carry out their programs	2	20	55	22	3.0
29. The small farmers and local leaders discuss and choose a suitable local organization	--	14	56	29	3.1
30. The small farmers and local leaders develop procedures for their organization	1	15	59	25	3.1
32. The small farmers make local leaders responsible to the success of their organization	1	12	62	25	3.1
36. Guide and train local leaders appropriate to their roles	1	4	53	43	3.4

n = 202.

Table D-5. Importance of Program Implementation Processes as Perceived by County Supervisors

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
10. Inform the front-line workers about how well they are doing at regular intervals	--	2	40	58	3.6
27. The small farmers and local leaders carry out their programs	--	8	48	44	3.4
28. Local leaders coordinate activities of other agencies	2	14	58	26	3.1
31. The small farmers use local organization to discuss their problems with field workers of development agencies	8	6	50	36	3.1
33. Local organization plan self-help activities for its members	6	6	62	26	3.1
34. Local organization maintains expenses for their buildings and equipment	2	16	58	24	3.0
35. Local organization provides farm supplies, credit and marketing services to their members	--	10	56	34	3.2
37. Review the progress of local organization regularly	4	12	52	32	3.1
38. Control activities of individual and groups with special interests	--	6	38	56	3.5
39. Encourage the small farmers to work for personal goals and the community goals	--	2	42	56	3.5
40. Guide the small farmers on how to obtain external help	--	4	66	30	3.3

Table D-5 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
41. Assist the small farmers to regularly review their goals	--	12	54	34	3.2
42. Use informal leaders to promote new ideas	--	10	50	40	3.3
43. Spend their time only on activities that benefit the small farmers	--	16	56	28	3.1
44. Select and promote ideas that are relevant to the small farmers	--	6	66	28	3.2
45. Use proven ideas which have been tried by local farmers	--	4	50	46	3.4
46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time	--	10	48	42	3.3
47. Provide subsidies to small farmers who adopt risky techniques	10	18	58	14	2.8
48. Early in the program the small farmers use only simple ideas and methods	--	--	50	50	3.5
49. The small farmers receive a close supervision when they use complex ideas or techniques	--	--	50	50	3.5
50. Volunteer farmers conduct experiments and demonstrations	--	8	48	44	3.4
51. The small farmers use group activities to share their experience	--	8	48	44	3.4

Table D-5 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
52. The small farmers promote new ideas and techniques	--	6	52	42	3.4
53. Local leaders deliver materials and supplies to the small farmers	22	24	34	20	2.5
54. Field workers conduct follow-up visits to small farmers' farms	--	2	50	48	3.5
55. Field workers use several methods or approaches to achieve each specific objective	--	2	42	56	3.5

n = 50.

Table D-6. Importance of Items Related to Program Implementation as Perceived by Field Workers

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
10. Inform the front-line workers about how well they are doing at regular intervals	2	4	70	25	3.2
27. The small farmers and local leaders carry out their programs	2	11	56	31	3.2
28. Local leaders coordinate activities of other agencies	6	24	54	16	2.8
31. The small farmers use local organization to discuss their problems with field workers of development agencies	2	11	55	31	3.2
33. Local organization plan self-help activities for its members	1	13	55	31	3.2
34. Local organization maintains expenses for their buildings and equipment	5	24	53	18	2.8
35. Local organization provides farm supplies, credit and marketing services to their members	3	16	53	29	3.1
37. Review the progress of local organization regularly	2	9	65	24	3.1
38. Control activities of individual and groups with special interests	4	5	54	38	3.3
39. Encourage the small farmers to work for personal goals and the community goals	1	4	49	47	3.4
40. Guide the small farmers on how to obtain external help	1	9	61	28	3.2

Table D-6 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
41. Assist the small farmers to regularly review their goals	1	13	70	16	3.0
42. Use informal leaders to promote new ideas	1	12	66	21	3.1
43. Spend their time only on activities that benefit the small farmers	1	15	61	23	3.0
44. Select and promote ideas that are relevant to the small farmers	1	9	60	30	3.2
45. Use proven ideas which have been tried by local farmers	--	5	58	37	3.3
46. Assist leaders to make sure that funds, materials and advisory service are available to the small farmers on time	1	10	50	39	3.3
47. Provide subsidies to small farmers who adopt risky techniques	4	7	59	30	3.1
48. Early in the program the small farmers use only simple ideas and methods	1	4	52	44	3.4
49. The small farmers receive a close supervision when they use complex ideas or techniques	1	6	53	41	3.5
50. Volunteer farmers conduct experiments and demonstrations	1	11	61	28	3.2
51. The small farmers use group activities to share their experience	--	11	58	30	3.2

Table D-6 (Continued)

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
52. The small farmers promote new ideas and techniques	2	12	63	23	3.1
53. Local leaders deliver materials and supplies to the small farmers	12	31	40	16	2.6
54. Field workers conduct follow-up visits to small farmers' farms	2	5	46	48	3.4
55. Field workers use several methods or approaches to achieve each specific objective	5	4	52	43	3.9

n = 202.

Table D-7. Importance of Items Related to Program Outcomes as Perceived by Supervisors

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
56. Field workers collect information on achievements and methods they use on regular basis	--	2	42	56	3.5
57. Field workers compare what they accomplish and what they plan to achieve	--	4	46	50	3.5
58. Field workers identify the strengths and weaknesses of methods they use	--	--	50	50	3.5
59. Supervisor, field workers and local leaders review county programs by identifying the strengths and weaknesses of methods they use	--	2	60	38	3.4
60. Field workers, county supervisor and local leaders make changes or improvement using information they had collected	--	4	46	50	3.5

n = 50.

Table D-8. Importance of Items Related to Procedures Used in Analyzing Program Outcomes as Perceived by Field Workers

Items	Response in Percentages				Mean Scale Score
	1 UI	2 SI	3 I	4 VI	
56. Field workers collect information on achievement and methods they use on regular basis	--	9	59	32	3.2
57. Field workers compare what they accomplish and what they plan to achieve	1	10	68	21	3.1
58. Field workers identify the strengths and weaknesses of methods they use	1	7	63	29	3.2
59. Supervisor, field workers and local leaders review county programs by identifying the strengths and weaknesses of methods they use	--	4	66	30	3.3
60. Field workers, county supervisor and local leaders make changes or improvement using information they had collected	--	5	57	38	3.3

n = 202.

APPENDIX E

TABLE OF PROCESSES THAT SHOULD BE USED IN PLANNING AND IMPLEMENTING RISDA'S PROGRAMS

Table E-1. Processes That Should be Used in Planning and Implementing
RISDA's Programs

Categories and Sub-Categories	Average Ratings of Sub-Categories by Respondents ^a							
	Supervisors				Field Workers			
	1 UI	2 SI	3 I	4 VI	1 UI	2 SI	3 I	4 VI
Organization								
Clarify target farmers		0—X				0—X		
Formulate goals	0—X		X		0—X		X	
Field workers develop their roles		0—X				0—X		
Field workers plan inservice training program		0—X				0—X		
Field workers participate in making decisions		0—X				0—X		
Field workers participate in planning	0—X		X		0—X		X	
A Plan-of-Work is prepared for each program	0—X		X		0—X		X	
Program Development								
Small farmers develop local programs	0—X		X		0—X		X	
Small farmers mobilize local resources		0—X				0—X		
Small farmers organize local organizations		0—X				0—X		
Small farmers are given train- ing appropriate to their roles			⊗				⊗	
Implementation								
Small farmers participate in project administration		0—X				0—X		
Field workers utilize the small farmers in implementing the programs			⊗				⊗	

Table E-1 (Continued)

Categories and Sub-Categories	Average Ratings of Sub-Categories by Respondents ^a							
	Supervisors				Field Workers			
	1 UI	2 SI	3 I	4 VI	1 UI	2 SI	3 I	4 VI
Field workers are given feed- back on their progress			⊗				⊗	
Outcomes								
Analyze the progress	0	————	X		0	————	X	
Analyze the means used	0	————	X		0	————	X	

^aScale score: 1 = unimportant; 2 = somewhat important; 3 = important; and 4 = very important.

X refers to importance of the sub-category as perceived by the respondents.

0 refers to the processes used by RISDA in planning and implementing small farmer development programs.

APPENDIX F

LETTER TO THE RESPONDENTS



Pusat Pengembangan dan Pendidikan Lanjutan
UNIVERSITI PERTANIAN MALAYSIA
Serdang, Selangor, Malaysia

Telefon: 355425,356101 Kawat: UNIPERTAMA SUNGAIBESI Teleks: UNIPER MA37454

Rej. ruan:

Rej. kami: UPM/PPPL-PP/11/83

Tarikh: October 31, 1983

Dear Respondent,

Attached is a copy of the mail questionnaire developed to collect data on procedures used in planning and implementing RISDA's programs. Your agency has agreed to participate and is interested in the outcomes of this study. Please complete the questionnaire and return it to your county supervisor.

Your cooperation is greatly appreciated. Thank you.

Yours sincerely,

(Bahari Bin Yatim)

c.c. RISDA Regional Officer



VITA

Bahari Bin Yatim was born in Malacca, Malaysia, in 1946. He had his primary education in Malacca and graduated from the Sekolah Tuanku Abdul Rahman, a public boarding high school, in 1964. He attended a two-year pre-university program and received the Higher School Certificate in 1966. The following year, he entered the University of Malaya, in Kuala Lumpur. After obtaining a Bachelor of Agricultural Science degree, he became the Project Development Officer in Malaysian Agricultural Research and Development Institute for two years.

In Spring 1975, he enrolled at The University of Tennessee, Knoxville, for the Master of Science degree in Agricultural Extension Education. He was appointed as Development Officer of the Malaysian Farmers' Organization Authority in August 1976. In July 1977, he was employed as an assistant professor at the University of Agriculture and still serves in that position. He was granted a scholarship by his employer and the Government of Malaysia to pursue the Doctor of Education degree in Spring 1981. He received that degree with a major in Educational Curriculum and Instruction in 1984.