EVALUATING SMALL-SCALE ENTERPRISE PROMOTION:

STATE-OF-THE-ART

METHODOLOGIES AND FUTURE ALTERNATIVES

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PREFACE

Development Alternatives, Inc. (DAI) has contracted with the Office of Urban Development (DS/UD) of the Agency for International Development (AID) to assist in the development and application of methodologies to evaluate the impact of small-scale enterprise (SSE) projects.

This contract has three major objectives:

- To review the state of the art of SSE project impact evaluation, particularly focusing on methodologies used to assess the projects' effect upon the income and employment of their target populations. Insights gained from this review should contribute to designing field tests which may advance the state of the art of SSE impact evaluations.

- To examine the merits of alternative SSE evaluation methodologies in four different field settings. Field tests will be used to develop and test the appropriateness of cost-effective evaluation methodologies under a variety of local environments and SSE promotion projects. Evaluation field tests will attempt to match contractor interests and capabilities with USAID field mission needs and assistance requests.

- To synthesize the findings and analysis from the SOAP with the lessons from the field tests into a set of pragmatic, operational guidelines that will assist field missions to assess the employment, income, and selected other impacts of SSE assistance projects.

This report has been prepared to fulfill the first objective.

The following text would have suffered considerably without the gracious cooperation of the enterprise and evaluation professionals interviewed who are listed in appendixes A and B. The time spent and insights offered by these people are greatly appreciated.

The authors would also like to thank those individuals who read and commented on an earlier draft of this paper: Donald Mickelwait, Tony Barclay, Craig Olson, George Honadle, Gary Kilmer, Josh Beardsley, and Jeffrey Ashe. A very special note of appreciation is in order for the substantial support of Elliott Morss and George Metcalfe. This paper draws heavily upon an earlier version written by Elliott Morss and Jay Rosengard.

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INTRODUCTION

Study Objectives

This state-of-the-art paper (SOAP) is not an end in itself, but rather a lead-in to subsequent activities. As the first stage of a three-stage contract, its objectives are to:

- Describe and critically assess state-of-the-art methodologies used to evaluate the developmental impact of small-scale enterprise (SSE) promotion;
- Identify evaluation information gaps which merit further investigation; and
- Present a framework and detailed plan of action to close these information gaps through field testing.

The contract's second stage calls for documenting the strengths, weaknesses, and relative cost-effectiveness of the most promising evaluation methodologies presented in the text. The third stage calls for integrating field test findings with the lessons from the SOAP to produce a practical field handbook for subsequent practitioner use in evaluating SSE projects.

The reader should note that the following text is unlike most state-of-the-art papers. It is not a critical review of the effectiveness of different strategies to promote small-scale enterprises; it is an examination of evaluation methodologies. It is not a self-contained, purely theoretical treatise; its conceptual discussions are empirically derived, and address pragmatic field needs. Lastly, it is not devoted exclusively to what has been done to date; it explores potentially promising but yet untested alternatives.

Research Methodology

This SOAP is the synthesis of a comprehensive review of previous and current SSE evaluation efforts, and an extensive series of discussions with persons intimately involved in these evaluations.

More specifically, the authors interviewed all principal practitioners and evaluators of SSE promotion in the United States. This included multilateral and bilateral, public and private, and domestic- and field-based development assistance personnel. The responsibilities of those interviewed were either for budgeting SSE impact evaluations, conducting them, reviewing their findings, or implementing the programs under examination (appendixes A and B list all persons formally interviewed).

These interviews were complemented by a comprehensive literature review of SSE intervention strategies (appendix C), SSE impact evaluation methodologies (appendix D), and actual SSE impact evaluations already conducted (appendix E).

However, the above written sources were limited. SSE impact evaluation is a nascent discipline and thus the universe of completed evaluations is small. Furthermore, the range of evaluation techniques utilized is extremely narrow. This may partially be due to the fact that until recently, attempts to promote small-scale enterprises were traditionally components of larger, multifaceted projects, and thus were not evaluated in their own right.

Although few SSE-specific impact evaluations providing helpful lessons for future field work exist, many of the issues entailed in evaluating the impact of a particular SSE project are generic to evaluating development in general. Moreover, if appropriately adapted, selected evaluation techniques and impact indicators used to assess other types of projects can upgrade the quality, while reducing the cost of SSE evaluations.

Thus, in an effort to increase the methodological range and conceptual depth of the SOAP, while maintaining its impact evaluation focus, the authors reviewed especially provocative non-SSE impact evaluations (studies listed without an asterisk in appendix E).

The most interesting impact evaluations from a pedagogical perspective, regardless of their subject, were abstracted in standardized form for those readers who desire more specific details on each impact evaluation (appendix F).

Consequently, 36 impact evaluations are included for discussion in the SOAP: the 19 SSE-specific evaluations reviewed are supplemented by 17 non-SSE evaluations (appendix E). Moreover, 10 of these impact evaluations are described and analyzed in depth; six of these are SSE-specific, two are mixed, and two are evaluations of other kinds of projects (appendix F). The reader should bear in mind that the total set of 36 evaluations is used as an empirical foundation for the general evaluation issues discussed, while more detailed observations and propositions are drawn from the 10-evaluation subset.

Some evaluations which were reviewed have been omitted because they were either:

- Conceptually redundant;
- Methodologically duplicative;
- Not yet completed; or

- Studied with the understanding that they would remain confidential.

The evaluation sample selection process used while researching this SOAP is depicted schematically in figure i-1.

Reporting Outline

The text of the SOAP progresses from general SSE and evaluation topics to specific evaluation methodologies, techniques, and tools. Chapter one describes the growing interest in SSE promotion and the concomitant donor demands for impact assessment and resource accountability. It presents a general model of SSE assistance, reviews principal intervention strategies, and defines some key terms used throughout the text.

Chapters two, three, and four deal with issues involved in assessing the developmental impact of the SSE promotion efforts described in the first chapter. These chapters integrate a discussion of conceptual issues with a description and analysis of field experience to date.

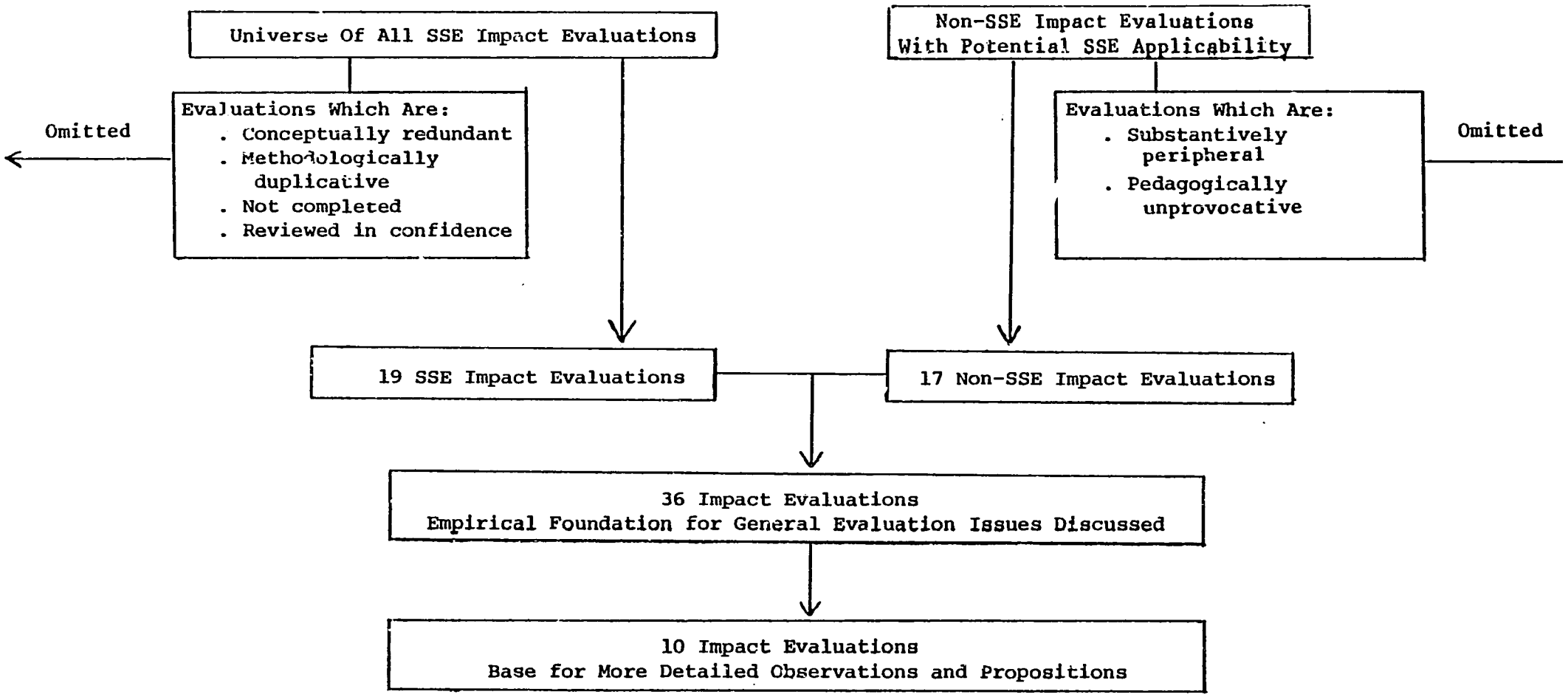
Chapter two examines the main factors governing the choice of an evaluation methodology, giving specific reference to SSE projects and programs. It characterizes each factor conceptually, presents evaluation review findings, and explores the implications for selection of an appropriate evaluation strategy. Given constraints, such as an evaluation's level, user, budget, timing, and data base, often prevent using certain data collection and analysis techniques which are described in a later section of the SOAP.

Chapter three presents an analytic framework for small-scale enterprise assessment. It discusses the underlying development hypotheses which explain the logical link between the SSE promotion efforts and the dimensions of anticipated development impact. In this chapter, an examination of cross-cutting considerations in SSE impact evaluation, types of developmental impact, and the linkages within this impact hierarchy are provided as a general guide of where to begin to look for SSE impact.

Chapter four pursues the theme of developing a cost-effective approach to SSE impact evaluation by examining impact measurement at both the enterprise and community levels. It breaks down SSE evaluation methodology into three component parts: a detailed examination of indicators, data collection techniques, and methods of analysis. This analytic disaggregation of SSE impact evaluation methodologies allows for more innovative recombinations in the future to meet the needs of divergent field conditions and project types.

FIGURE i-1

SELECTION PROCESS FOR IMPACT EVALUATIONS REVIEWED IN SOAP



Chapter five identifies the SSE evaluation information gaps which require further field investigation. It then presents a plan of action describing evaluation techniques to be tested, criteria for field project selection, and proposed timing and execution of these field activities. This concluding chapter links the preceding analyses with the follow-up fieldwork in order to address the SSE impact evaluation deficiencies highlighted within the SOAP.

In sum, the SOAP:

- Opens with an introductory chapter presenting common terms of reference for the authors and their audiences;
- Proceeds to delineate the principal determinants of SSE evaluation methodology selection;
- Presents an analytic framework to better understand the critical dimensions of an SSE evaluation methodology, once selected;
- Examines alternative SSE evaluation methodologies through an extensive appraisal of their functional components (impact indicators, data collection techniques, and methods of data analysis); and
- Concludes with a detailed plan of action for subsequent fieldwork.

CHAPTER ONE

SMALL-SCALE ENTERPRISE PROMOTION

Current Interest in SSE Promotion

In recent years, donor organizations have focused attention on small-scale enterprises as an effective mechanism by which to stimulate socioeconomic development in poorer nations. This increased interest is due both to the size of, and growth in, the small enterprise sector in many developing countries, and to the characteristics of small-scale enterprises.

Small enterprises are usually labor-intensive and create jobs at relatively low capital cost.[1] Such enterprises may therefore provide an alternative source of employment for underemployed labor and stimulate the economic viability of depressed communities, especially in isolated rural areas. Small-scale enterprises will sometimes open employment opportunities for women who previously had no source of independent income. Enterprises involved in food processing or marketing can stimulate farmers to expand agricultural production, thereby increasing their incomes and employment.

Although centrally planned economies have launched some SSE programs, this sector has received more attention in market economies. Recent evidence of such interest is the initiation of new pilot programs and the increased funding of private and governmental agencies that promote small enterprises:

- The Agency for International Development has begun a pilot program, the Program for Investment in the Small Capital Enterprise Sector (PISCES), to explore the potential of assisting the smallest enterprises;

- The World Bank has begun small enterprise promotion pilot programs in Bangladesh, Colombia, Sri Lanka, the Philippines, and Nepal;

- The Inter-American Development Bank has formed a new unit devoted to small-scale projects, including enterprises; and

- American private, non-profit organizations, such as Technoserve, Partnership for Productivity, the Institute for International Development, ACCION International, and the International Executive Service Corps, have been increasing their activities in the enterprise development field during the past decade.

Such widespread attention to the dormant potential of SSEs as vehicles for broad-based development increases the relevance of this SOAP. It is to the practitioners of SSE promotion that the paper is primarily addressed.

Alternative Promotion Strategies

Although some of the problems facing SSEs are also endemic to larger enterprises, SSEs themselves are less capable of solving them, and often more urgently require outside assistance. These problems include lack of access to or high cost of credit and raw materials, poor management, scarcity of technical information, restricted markets, and underdeveloped infrastructure. During the past two decades, institutions, associations, agencies, corporations, companies, professional associations, firms, and distributorships have been mobilized to deal with these constraints. Their sponsors include multilateral and bilateral grant and lending institutions, central and local governments, public corporations, private enterprises, voluntary organizations and individuals.

Many SSE assistance agencies provide a package of complementary goods and services. In practice, these agencies often emphasize one of the following components more heavily than others:

- Financial assistance--grant and credit programs designed for SSEs, and direct investment by an outside agency; foreign agencies may be sources of seed money, venture equity, fixed and/or working capital, with the local owners usually maintaining control.

- Training--managerial, financial, vocational, entrepreneurial, and technical training; design of appropriate accounting systems; inventory and human resource planning; production manual preparation; training in production efficiency and quality control.

- Technology--assistance in identifying and adapting technology appropriate to the SSE's needs; equipment installation and maintenance training.

- Marketing--improving promotion, market penetration, and distribution of SSE products; this may also involve extension services offered to input suppliers and enterprise product users.

- General research services--economic research, including marketing surveys, industry feasibility studies, appropriate technology generation, production process improvement, and information leading to policy formulation.

- Institutional brokering--fostering increased collaboration between private and public sector institutions and the SSE sector (financial, governmental, and exporting agencies).

- Raw material and other inputs/services supply--locating sources of raw materials, organizing purchasing cooperatives, improving and standardizing input quality, and stabilizing input availability.

Before discussing this paper's main theme--SSE impact evaluation methodology--a brief definitional review of the terms "small-scale enterprise" and "impact evaluation" is warranted.

DEFINITIONS

Small-Scale Enterprise

Six years ago, a survey of SSE activities in 75 countries identified more than 50 definitions of small-scale enterprises (Georgia Institute of Technology, 1975). These definitions vary according to the user's needs and the stage of economic development in the country where the definition is to be employed. SSEs are located in both the formal and informal sectors and include the self-employed; family, sole-owner, and partnership businesses; companies; and cooperatives.[2]

Those at the smaller end of the spectrum have been termed "microenterprises;" these are defined as enterprises with a total capitalization of under $10,000, with six or fewer employees.[3] More serious difficulties arise in trying to derive an upper limit at which an enterprise ceases to be small (Neck, 1977). Financial institutions have defined this limit in financial terms such as fixed assets, net worth or sales volume;[4] some economists have used upper limits of capital/labor ratios or total number of persons employed;[5] while others have focused on the style of management characterized by SSEs. This last, more qualitative definition limits SSEs to those businesses whose operational and administrative management responsibilities are conducted by one or two persons.[6]

This SOAP deals with evaluation issues, and it is not within its scope to resolve all of the definitional controversies posed by the term SSE. Nonetheless, readers of this paper must realize that the same term encompasses multiple meanings.

Impact Evaluation

As employed in this paper, "impact evaluation" refers to the assessment of an SSE's effect on its intended population. This involves an analysis of the enterprise's viability as an outcome of external project or program assistance, and of the enterprises' interaction with and influence on the community. Impact evaluations should describe more than financial or managerial changes occurring within the SSE; these changes alone reveal little about the achievement of larger developmental objectives. Impact evaluations similarly should not be limited to observations of change in the community; this alone explains neither the process by which such changes occurred, nor the SSE's ability to act as a catalyst for development.

NOTES TO CHAPTER ONE

1. World Bank reports indicate that the capital requirement for each job in a small enterprise is only one-third of that in larger scale enterprises. For more comprehensive discussions of the benefits of small enterprises see Neck, 1977.

2. The International Labour Organisation has distinguished the informal from the formal sector as enterprises characterized by "ease of entry, reliance on indigenous resources, family ownership, skills acquired mainly outside the formal system of education and training, unregulated and competitive markets." (ILO, 1977: 6).

3. An even smaller subgroup known by its acronym PISCES (Program for Investment in Small Capital Enterprise Sector) is defined as informal sector enterprises with a single owner/manager and generally no more than two employees. Start-up capital ranges from a few dollars to one or two hundred dollars. The definition for microenterprises is drawn from the PISCES project.

4. The maximum level of capital invested ranges from $25,000 to $2 million (Georgia Institute of Technology, 1975).

5. Carl Liedholm's study in Sierra Leone, for example, defines SSEs as "establishments employing less than 50 persons (Liedholm and Chuta, 1976); The World Bank defines SSEs as those employing up to 100 workers; and Samuel Daines defines SSEs as those with a maximum of 20 workers, $50,000 in total assets and maximum capital costs for providing one workplace of $15,000 (Daines, 1979).

6. John Kenneth Galbraith, for instance, argues that "no agreed level of sales divides the millions of small firms making up half of the economy from giant corporations which are the other half. But (there are) sharp conceptual differences between enterprises fully under control of individuals and those not entirely excluding influence of individuals which could not exist without their organization," (Galbraith, 1975: 6).

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CHAPTER TWO

FACTORS INFLUENCING THE SELECTION OF SSE EVALUATION METHODOLOGIES

INTRODUCTION

Every evaluation takes place within given parameters which largely determine the evaluator's choice of methodology. Before proceeding to a discussion of the general analytic framework and actual methodologies used by SSE impact evaluators, covered in chapters three and four respectively, this chapter examines some key factors which determine the methodologies chosen. The desirability of collecting and analyzing certain indicators, through methods discussed later, must be reconciled with these factors since they may act as binding constraints. Discussions with SSE impact evaluators clarified how key factors effected the choice of evaluation methodology; these insights were incorporated into the design of future SSE impact evaluation field tests found in chapter five.

The five critical factors identified are the evaluation's level, user, budget, timing, and data base. This chapter will explore the dimensions of each factor in three steps. The first step, "General Considerations," will discuss the issue in abstract terms; the second step, "Review Findings," will summarize how the factor influenced the 10 abstracted impact evaluations and will comment upon patterns detected; and the third step, "Implications," will discuss the relevance of these findings to future impact evaluations.

LEVEL OF EVALUATION

General Considerations

The decision-making hierarchy of development planning and implementation is divided into three tiers, each with different evaluation needs: the policy, program, and project levels.

Policy makers must decide whether or not SSE activities should be promoted. A policy-level evaluation should suggest whether to expand or contract SSE activities based upon:

- The extent to which SSE activities are meeting policy makers' development objectives; and

The extent, if possible and appropriate, to which benefits accruing from SSE activities compare with similar investments in other development activities.

To fulfill the first decision-making requirement, the chosen methodology must permit an aggregation of comparable data across different SSE programs. To address the second policy issue, comparative impact indicators must be developed across functional activities such as small-scale enterprise, rural infrastructure, agriculture, and health programs (See table II-1). The methodology used to compare the impact and cost-effectiveness of dissimilar development activities must also take into account the unique potentials of the different environments. Standardized comparison of different development activities is an elusive objective. For example, an SSE program may be an appropriate development vehicle in one area, but fail in another region because of highly specific features of the project environment. Thus, a policy-level evaluation should seek to identify the key environmental factors that influence the probability of implementing a successful SSE program.

Program analysts must decide which specific components of an SSE assistance strategy should be promoted. A program-level evaluation should help to identify which strategies--credit provision, technical assistance, and other strategies cited in chapter one--have most effectively achieved the overall objective of increasing income and employment within the SSE sector. The evaluation methodology must therefore allow a comparison of the impact of alternative SSE promotion strategies. Program- and policy-level evaluations need not be limited to projects the evaluation funder is supporting. Indeed, comprehensive program evaluations should examine the comparative merits of all interesting SSE project strategies, irrespective of the funding source.

Project-level decision makers need to know if their intervention is expanding SSE activities and achieving positive development impact relative to project costs. A project evaluation methodology can be carefully tailored to the project's specific conditions and involve an in-depth investigation of many variables. Ideally, a wealth of good project-level evaluations should serve as the foundation upon which program and policy-level evaluations are later made. This integration of project, program, and policy evaluations should be an important objective.

Review Findings

Approximately 80 percent of the 36 evaluations reviewed for this SOAP were assessments of specific projects. The same proportion holds for the impact evaluations abstracted and studied

TABLE II-1

INFORMATION NEEDS AT DIFFERENT EVALUATION LEVELS

Level	Decision	Evaluation Considerations
Policy	Continue or expand the promotion of SSEs in order to increase income, employment, and production.	Data must be aggregated and comparable across projects.
Program	Select specific components of SSE that will be promoted.	Data must be collected on alternative strategies and permit a comparative analysis.
Project	Assist the expansion/ turnaround/establishment of specific SSEs or SSE institutions.	Data must reflect specific project characteristics and unusual features.

in depth (appendix E); Dimond/AID is the only program evaluation, and Barclay/DAI is the sole policy review (table II-2). Moreover, with the exception of the Barclay/DAI evaluation, none of the program- or policy-level evaluations attempted to standardize socioeconomic impact indicators across projects; the Project Performance/UNCDF and Dimond/AID evaluations did, however, use somewhat standardized operational implementation indicators.

Implications

Policy, program, and project distinctions have two critical implications for future impact evaluations. First, a considerable amount of field-testing of alternative methods is needed to standardize impact indicators for program and policy-level evaluations. Data from even the most rigorous and revealing project evaluations, because they are neither comparable nor amenable to aggregate analysis, are less useful in decision making above the project level. Not only are microevaluations unable to feed into macroevaluations, but their methodologies are not easily replicable for like, but distinct, evaluations. Thus economies of scale in evaluation are unlikely. Program and policy decisions entail tradeoffs between project resources and development strategy components; a common language and framework are thus required to facilitate these internal comparisons.

The second main implication of the review findings is the need to improve project evaluation utilization through designs that are more responsive to field management concerns. Most project evaluations reviewed are not addressed to a specific audience, and fail to present findings and analyses in terms easily assimilated by project-level personnel. Consequently, the feedback loop of these evaluations is often effectively, if unintentionally, severed.

USERS OF EVALUATIONS

General Considerations

The policy-level, program-level, and project-level tiers can be further divided by identifying more specific evaluation users and their different needs and expectations. Constraints facing policy makers in donor organizations (multilateral, bilateral, and private) are different from those in host country governments. This distinction is especially important for SSE programs, since national economic policies have an enormous influence on this sector's growth. A policy-level evaluation designed for a host country government might focus on the macroeconomic policies

TABLE II-2

EVALUATION LEVELS OBSERVED

EVALUATION	POLICY	PROGRAM	PROJECT
BOYLE/World Bank			Rural Industrialization Technical Assistance (RITA) Project
BANGLADESH/ World Bank			Bangladesh - First Small-Scale Industry Project
DIMOND/AID		Farmer Association and Agribusiness Development (FAAD)	
HAWBAKER/AID			Indigenous Industrial Development Project
SIERRA LEONE/ AID			CARE/Sierra Leone Rural Penetration Roads Projects
SCHREIBER/ACCION			União Nordestina de Assistancia a Pequenas Organizações (UNO) (Northeast Union for Assistance to Small Organizations)
LEWYCKY/UBS			Lentswe la Oodi Weavers (Proprietary) Limited
GOLDMARK/ Technoserve			Santa Maria Cooperative Enterprise
DAINES/PCI			Haiti Small Farmer Improvement Project
BARCLAY/DAI	The Development Impact of Private & Voluntary Organizations (17 Projects in Kenya and Niger)		

necessary to spur SSE growth; whereas a small private donor organization would need to know the economic environment, and evaluate the extent to which it was achieving its developmental goals within that context. The former type of evaluation may rely primarily upon standard industrial census statistics, while the latter would probably entail the collection of additional information.

Program-level evaluations, similar to those at the policy level, increase in complexity and scale according to the user's decision-making parameters. Program officers located in different organizations and locations do not have the same SSE evaluation needs. For example, program officers in a bilateral donor agency require information to assess which SSE strategies are most appropriate for particular countries; to meet their needs an evaluation would have to analyze the impact of different environments upon such strategies. A program officer within a Ministry of Industries would seek more specific information on which strategies are most appropriate for that country's environment.

Project-level evaluations may be designed to serve the needs of project implementors, enterprise owners and managers, the local community, or the target population. The extent to which the evaluation findings are used often depends upon the degree to which the user has been integrated into the evaluation process. This participation is more feasible and important at the project than at the program and policy evaluation levels.

Unlike policy or program staff, project-level evaluation users are often located at the evaluation site and are familiar with the specific SSE activities being examined; therefore they are sources of useful specific information. Since the use of the evaluation's results depends on a fairly prompt response by project managers to the specific recommendations, it is essential that they be involved in the process that produces these recommendations.

Project-level evaluations, besides providing information about the project's impact, may serve as a mechanism to involve the target population in the project. Evaluations which are intended for the target population's use should be designed, executed, and analyzed with their active participation.

Review Findings

Although most of the evaluations reviewed state their purposes in some form, they fail to identify a particular audience to whom the evaluation is directed. The few evaluations that do describe target readers and expected users, such as the

Goldmark/Technoserve study, enumerate multiple parties. Moreover, the evaluators interviewed reveal a universal uncertainty as to the ultimate readership and utility of their evaluations. Consequently, it is not possible to describe or summarize characteristics of actual evaluation audiences. Instead, a list of potential evaluation audiences can be compiled from these characteristics identified in the evaluation sample:

- Usually part of a joint funding arrangement;
- Heavily dependent on public sector involvement;
- Widely dispersed geographically;
- Highly diverse functionally; and
- Typically, a mix of expatriate and indigenous personnel.

Thus, such a representative list would include: (1) some combination of predominantly public, national, bilateral, and multilateral donor agencies; (2) local, regional, and national host government civil servants; (3) on-site host government/expatriate implementation teams; (4) overseas expatriate implementation team supervisors; (5) target entrepreneurs; and (6) target communities. Potential users of the 10 abstracted evaluations are shown in table II-3.

Implications

The diversity of the actors shown in table II-3 clearly indicates the need to identify an evaluation's audience. If the evaluation is to transcend ambiguous development generalities, without counterproductively alienating its audience, differences among project participants must be accommodated in evaluation design, implementation, and presentation. Development personnel may have incompatible and contradictory development agendas, operational timetables, terms of accountability, line loyalties, and professional and personal incentives. The evaluator must be sensitive to all of these throughout the evaluation process.

Specific adjustments reflecting audience needs and temperaments should include:

- Format (length, language, and presentation);
- Collaboration (user participation);
- Timing (place in project cycle versus place in planning, program, or budget cycle);
- Institutional location (internal bureaucratic leverage);

TABLE II-3

EVALUATION USERS OBSERVED

EVALUATION	PROJECT SPONSOR / EVALUATION SPONSOR	PROJECT HOST	PROJECT IMPLEMENTOR	PROJECT BENEFICIARIES	EVALUATOR'S ORGANIZATION
BOYLE/World Bank	USAID; Government of Brazil / Office of S&T World Bank	Government of Brazil	USAID; Government of Brazil	Residents of Six States in N.E.	Consultant/ Former Chief of Subproject Party
BANGLADESH/ World Bank	International Development Association, World Bank / Operations Eval. Dept., World Bank	Government of Bangladesh	IDA; Bangladesh Small Industries Corp., Comm. Banks	Residents of Dacca, Chittagong	Operations Evaluation Department, World Bank
DIMOND/AID	USAID/Ghana / USAID/Ghana	Government of Ghana	Eight Private Voluntary Organizations	Residents of Selected Rural Areas in Ghana	AID/AFR/DP Two Consultants
HAWBAKER/AID	USAID; Ford Fnd.; Govt. of Nigeria / AID/PPC/E	Government of Nigeria	USAID; Government of Nigeria	Residents of Owerri, Zaria, and Western Nigeria	USAID/Nigeria
SIERRA LEONE/ AID	USAID;CARE; Peace Corps; VSO; World Bank; Govt. of Sierra Leone / AID/PPC/E	Government of Sierra Leone	CARE	Residents of Sierra Leone's Eastern, Southern Northern Provinces	AID/PPC/E
SCHREIBER/ ACCION	ACCION/AITEC; Oxfam; local banks / ACCION/AITEC	Government of Brazil	Northeast Union for Assistance to Small Organizations (UNO)	Residents of Recife, Brazil	Consultant
LEWYCKY/UBS	CUSO; Botswana Christian Council; Botswana Dev. Corp. / Univ. College of Bostwana	Government of Botswana	Company Board of Directors	Residents of Kgatleng District, Bostwana	Univ. of Botswana and Swaziland
GOLDMARK/ Technoserve	Santa Maria Coop; Technoserve; AID; Banco de Fomento Agropecuario / Technoserve	Government of El Salvador	Santa Maria Coop; Technoserve	Residents of Santa Maria	Technoserve
DAINES/PCI	USAID/Haiti / USAID/Haiti	Government of Haiti	Natl. Coffee Institute; Agriculture Credit Office	Haitian coffee farmers	Practical Concepts, Inc.
BARCLAY/DAI	USAID; Govts. of Niger and Kenya; various PVOs / AID/PDC	Governments of Niger and Kenya	Various PVOs	Residents throughout Niger and Kenya	Development Alternatives, Inc.

- Technical sophistication;
- Level of generality;
- Area of focus; and
- Nature of evaluation recommendations.

Evaluations are more likely to be effective if an institutional mechanism exists to incorporate user feedback into the design and execution of future development projects. Evaluations not designed and budgeted for the follow-up of user suggestions entail tremendous foregone opportunities; evaluations addressed to the wind do little more than stir dust on evaluators' bookshelves.

BUDGETARY PARAMETERS

General Considerations

Budgetary considerations play an important role in the selection of an evaluation methodology. It is possible to prescribe an unassailable methodology to evaluate SSE impact, but the real challenge is to compromise this ideal to suit particular circumstances and budget constraints. An unassailable strategy would entail the development of a representative sample from the participants of an SSE promotion program and a control group of nonparticipants. The two groups would be similar in every way except that one would receive a "treatment" while the other would not. This classical evaluation design allows inferences to be drawn about the effects of a treatment over time with a high degree of certainty. While tremendous sums can be devoted to approximating such a laboratory ideal in field circumstances, some compromises are always necessary.

Evaluation costs should bear some relation to the costs of the activity that is to be influenced. If an evaluation is being made solely to influence the direction of that project, the evaluation budget should not be more than a small fraction of project costs. If the evaluation is intended to influence the development of an SSE program, however, then the evaluation's budget should bear some relationship to the anticipated program cost. A policy-level evaluation would justify an even greater budget.

However, the evaluation's value cannot be usefully assessed by simply comparing it to the costs of the examined project, program, or policy. The evaluation's cost must also be compared to its impact. If budget constraints virtually assure that users will not take its findings seriously, then there is no point in conducting the evaluation.

Review Findings

Most of the evaluations examined contained little or no information regarding evaluation costs; the information relating evaluation costs to project costs presented in table II-4 was compiled primarily through personal interviews. The evaluation review conducted for this report reveals no discernible pattern of evaluation cost by evaluation type or project nature.

In contrast, evaluator interviews have revealed a fairly consistent ratio within each organization of total evaluation costs to total program expenditures of one percent or less. For example, AID spends approximately $17 million per year on evaluation, compared to a program budget of roughly $2.7 billion; in the last ten years, Technoserve has spent approximately $50,000 on evaluation, compared to a program budget of about $5 million.

Implications

The dearth of information on evaluation costs, and the variation in the budget figures that do exist have several implications for future evaluations. These implications fall into two groups:

- The determination of a budget for evaluation; and
- The selection of an appropriate evaluation for a given budget.

No specific standards currently exist for determining an evaluation budget; an evaluator is left with the mixed blessing of extreme flexibility and little precedence to defend an evaluation proposal. For example, most decision makers would accept the tenet that evaluation costs should be proportional to activity costs. So, given the evaluation cost compared with the project cost (table II-4), the Goldmark/Technoserve study would probably not have been approved if the basic justification was solely to improve the implementation or impact assessment of one particular feed mill. However, the evaluation was considered a program review designed to assess Technoserve's Salvadoran feed concentrate enterprise program, as Santa Maria was one of six similar mills receiving Technoserve assistance with nine new mills under consideration. Viewed in this light, the evaluation to program cost ratio decreases from 11.9 percent to 2.4 percent. The difficulty with such nebulous guidelines is that currently few people agree on what proportion of activity costs is reasonable or appropriate for evaluation purposes.

TABLE II-4

EVALUATION BUDGETS OBSERVED

EVALUATION	APPROXIMATE COST	APPROXIMATE TOTAL PROJECT COSTS	EVALUATION COST AS % OF PROJECT COST
BOYLE/World Bank	$20,000	$ 3.75 million	0.53%
BANGLADESH/World Bank	$30,000	$ 3.00 million	1.00%
DIMOND/AID	$30,000	$ 3.40 million	0.88%
HAWBAKER/AID	$ 7,000	$ 1 million plus	0.70%
SIERRA LEONE/ AID	$20,000	$11.70 million	0.17%
SCHREIBER/ACCION	Not Available	$ 1.21 million	---
ZWYCKY/UBS	Not Available	$ 97,000	---
GOLDMARK/ Technoserve	$15,000	$126,000	11.90%*
DAINES/PCI	$50,000	$ 2.00 million	2.50%
BARCLAY/DAI	$64,000	$ 8.43 million	0.75%

* See Text, page 22

This leads to a second major implication of ambiguity in evaluation budget rationale: no criteria presently exist with which to reconcile the ideal evaluation opportunities with the feasible opportunities. Consequently, it is exceedingly difficult to design an evaluation plan to fit a given budget; that is, to apply limited funds with optimal cost-effectiveness. Without previously agreed upon evaluation selection criteria, the methodological tradeoffs necessitated by budget constraints cannot be made in a consistent, rational manner.

A third implication is the continual conflict between project donors and field implementors over evaluation funding. Issues such as the scope and timing of evaluations, which should be confronted during project planning and budgeting and appear as a line item project cost, often do not surface until the donor's desire for accountability, or an implementor's hope for improved project impact, spur an evaluation request. Then everyone espouses the merits of evaluation but no one is willing to foot the bill. This mutual reticence is compounded by a lack of awareness regarding the methodological options compatible with budgetary choices (Development Alternatives, Inc., 1978).

However, proof of the cost-effectiveness of previously commissioned evaluations will help set the budget for future evaluations. Evaluations that are well-executed and meet users' needs should foster more positive attitudes toward funding such work.

TIMING PARAMETERS

General Considerations

How long after SSE project start-up is it appropriate to conduct an impact evaluation? The time at which an evaluation of an SSE project is performed will affect how the project appears to be working. For example, several institutions may need to be strengthened before the ultimate target population will benefit. Outside assistance may first attempt to improve the capability of a local SSE promotion agency, which would then provide assistance to individual enterprises. In such circumstances, it would be premature to examine SSE impact on community groups until many months after the enterprise had begun actual operations. Since these benefits are only likely to continue if the enterprise remains self-sustaining, an evaluation solely concerned with deriving impact information should be conducted several years after outside assistance is withdrawn.

Although this is a laudable goal, many funders do not regard post-project evaluations to be a practical alternative. Most donors can more easily justify evaluations which provide project impact data that can be used to improve project performance, promote additional funding, or both. Also, outside agencies do not have the same access to project information, such as accounting books, after their assistance has ended. Furthermore, recipients often view the reentry of former donors as unwarranted intrusions. Thus, most donors' are interested in fulfilling immediate needs rather than pausing to consider the long-range impact of their work.

Review Findings

Table II-5 displays the timing dimensions of a sample of 15 reviewed evaluations. The vertical axis depicts each project's total duration. The horizontal axis is bisected by a dark line signifying project completion. The area to the left of the axis marks off years remaining until project completion; to the right, years since project completion are delineated. Thus, for each project, the figure illustrates evaluation timing in relation to the termination of funding and total project length. (For example, the Lewycky/UBS study was conducted one year prior to the completion of a five-year project.)

With the exception of three studies, all evaluations in table II-5 are either on, or to the left of, the central vertical line. Regardless of the project's duration, external funds were still being applied while the evaluator was attempting to gauge the project's socioeconomic impact. Moreover, no donors with evaluations to the left of the project completion line provided budgetary allocations to conduct an impact evaluation several years after their involvement was discontinued.

An additional significant review finding is that the effects of differing time frames for evaluations of similar projects (or a single time frame for dissimilar projects) on project benefit gestation periods are rarely mentioned.

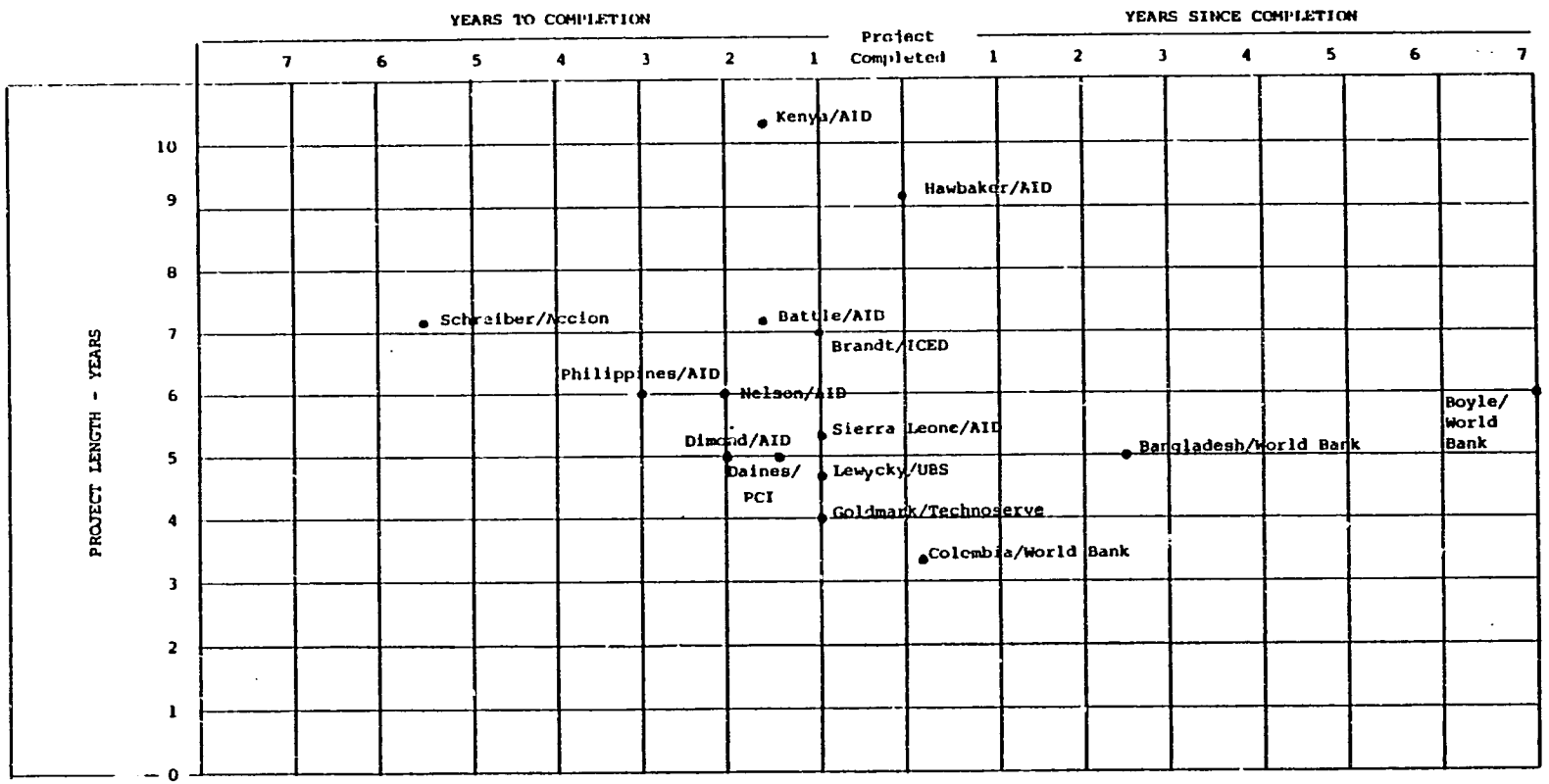
Implications

Two principal implications emerge from the research findings: (1) present evaluation methodologies do not distinguish resource transfer effects from sustained development impact; and (2) benefit profiles, that is, the level of project benefits over time, have yet to be specified by project type.

Many of the evaluations examined state that the nurturing of a self-sustaining development process is a major project goal, and thus they implicitly recognize that a resource injection by itself

TABLE II-5

TIMING OF SPECIFIC EVALUATIONS



• = when evaluation took place.

is merely a short-term fix rather than a long-term solution. However, with the exception of the Boyle/World Bank study and perhaps the Bangladesh/World Bank report, none of the evaluations reviewed were conducted long enough after project completion to separate the effects of resource transfers from those of self-induced development.

Even evaluations conducted during project implementation, unless the particular project's benefit profile is noted and accommodated, reveal little about project benefits to date. Evaluators must not only know a project's normal elapsed time from initial input delivery to the registering of measurable developmental impact, they must also know the seasonal or cyclical variations in the project's benefit profile.

These two evaluation review implications are the principal untested timing variables in assessing the credibility and comparability of an impact evaluation.

DATA BASES FOR EVALUATION

General Considerations

The choice of data collection techniques for impact evaluation is largely determined by the amount and quality of existing data on the assisted SSEs and their environment. An SSE's project management information system, for example, can be a source of much impact data. Accounting books should provide an indication of the effect of outside assistance on the firm's financial viability, as well as the direct employment and income it generates.

Larger SSEs are more likely to keep accounting books while microenterprises rarely keep written records of their business transactions. Since it often is not cost-effective to train microentrepreneurs to keep such records,[1] evaluations of microenterprise assistance projects will have to generate their own data, usually through interviews with owners. Also, even if a small enterprise keeps accounting books, the evaluator may not be able to gain access to such confidential information and may have to rely, instead, on direct observation to determine the firm's well-being.

Enterprise feasibility studies sometimes include community studies to judge the potential market for the enterprise's goods or services and the potential sources of raw materials. If

properly structured, such surveys could also be used as baseline data for a later impact evaluation. Often, however, such information is of little use for impact evaluation purposes because:

- The wrong baseline data are collected;
- The data are not in a form that is easily accessible;
- The data are not systematically collected to enable comparisons; and
- The data are too general to be of use.

Review Findings

Table II-6 presents the data base of the 10 impact evaluations studied in depth. Both primary and secondary project, enterprise, community, and miscellaneous sources are listed for each of these projects; the unavailability and unreliability of information prevent the inclusion of all evaluations reviewed.

Most evaluations are able to make use of some primary and secondary project information, although the quantity and quality of these data range from sporadic field communications, to extensive project files. This information is coupled with a series of in-depth field interviews and detailed field observations.

Few of the evaluations had detailed enterprise data, such as production logs or financial books, with which to work. Instead, they relied on a combination of project records and personal observations.

With the exception of the Goldmark/Technoserve and the Daines/PCI evaluations, none of the studies employed a systematic sampling of community project participants and nonparticipants. Rather, the studies tended to rely on a combination of interviews and evaluator observations. Other sources consulted include government officials, bank officers, technical assistance personnel, intermediary organization staff, and academicians.

Implications

The principal methodological implications of the evaluation data bases examined are:

- The need to examine existing data rigorously; and

TABLE II-6

EVALUATION DATA BASES OBSERVED

EVALUATION	DATA SOURCES	PROJECT	ENTERPRISE	COMMUNITY	OTHER
BOYLE/ World Bank	PRIMARY	Former personnel interviews; site observation, research	Owner/manager interviews; plant observation	Personal observations	Consultations with government officials, technical assistance groups
	SECONDARY		Documents, books		
BANGLADESH/ World Bank	PRIMARY	Current personnel interviews			Government, central and commercial bank interviews
	SECONDARY	<---Project Completion Report ---->			
DIMOND/AID	PRIMARY	Current personnel interviews; site observation		Interviews of beneficiary representatives	
	SECONDARY	<------ Project documents ---------->		Baseline, annual field surveys	
HAWBAKER/ AID	PRIMARY				Personal familiarity and recollections
	SECONDARY				
SIERRA LEONE/ AID	PRIMARY	Current personnel interviews; site observation			Interviews of government officials, research
	SECONDARY	Annual reports		Series of socio-economic surveys	
SCHREIBER/ ACCION	PRIMARY				
	SECONDARY	<------ Project documents ---------->			Bank records
LEWYCKY/ UBS	PRIMARY	Project manager interviews; personal familiarity	Worker meetings; personal observation	Residence in community; in-depth interviews	
	SECONDARY	<----- Auditor's Report ---------->		Socioeconomic survey	
GOLDMARK/ Technoserve	PRIMARY	Current personnel & coop staff contributions	Personal observation and interviews	In-depth interviews; survey of users & non-users	
	SECONDARY	<------ Project documents ---------->		1971 Census; previous El Salvador anthro. studies	
DAINES/ PCI	PRIMARY			Field survey	
	SECONDARY	Project documents		Fiches d'information	
BARCLAY/ DAI	PRIMARY	Discussions with participants, staff; personal observation		Personal observation and interviews	Visits to PVO home offices
	SECONDARY	Project documents			

- The dependency of the methodologies and indicators of impact evaluations upon the nature of existing data.

Data sources are infinite. Evaluation budgets are finite. Evaluation data selection is therefore both necessary and inevitable--and cost-effectiveness should be the primary consideration. In deciding which information is both feasible to gather and appropriate for meeting impact evaluation objectives, the evaluator must:

- Articulate these objectives;
- Know the relative costs of alternative data collection techniques;
- Realize existing data options and their respective strengths and weaknesses; and
- Be aware of limits of accessibility to sensitive or confidential data.

The above considerations all involve methodological tradeoffs between evaluation cost and evaluation depth, breadth, and rigor. Unfortunately, neither the specific costs, alternative data collection techniques, nor the analytic value of different impact indicators are yet known with any degree of certainty.

In the most fortunate circumstances, the data collection demands are eased by either a highly developed management information system, or an extensive base of local socioeconomic data. Field time can then be devoted to examining qualitative and quantitative <u>changes</u>. Far more frequently, however, the evaluator has to generate original data on an <u>ex post</u> basis; this allows inferences regarding change and causality, but leaves the conclusions open to challenge.

SUMMARY

Although experienced evaluators acknowledge the significance of the five factors discussed in this chapter, the degree to which they individually and cumulatively shape an evaluation strategy is almost never made explicit in published reports. The analysis in this chapter underscores the need for a systematic treatment of these factors in the field-testing of alternative SSE evaluation methodologies. This means that the tradeoffs dealt with in each section, for example, audience expectations versus budget limitations and data gaps, should be critically examined in the design and execution of the SSE evaluation field tests.

NOTES TO CHAPTER TWO

1. Partnership for Productivity staff, for example, found that microentrepreneurs who had been trained to keep accounting books were not more successful than those who had not received training.

CHAPTER THREE

SMALL-SCALE ENTERPRISE IMPACT ASSESSMENT ANALYTIC FRAMEWORK

DEVELOPMENT HYPOTHESES

Evaluations of SSE impact use the development hypotheses of those funding such programs as their foundation. These hypotheses are usually stated in a simple, pure form to focus evaluation inquiry. The SSE evaluators then seek to prove or disprove the validity of these hypotheses, or more often, clarify what additional inputs were supplied or are necessary to achieve the goals of these development hypotheses.

Policy makers in outside donor organizations assume that their assistance, flowing through local organizations, can help promote self-sustaining small enterprises. Thus, the first hypothesis governs the policy maker's logic for assistance:

- Hypothesis one: Donor agency intervention will increase the local organization's capability to assist small-scale enterprises.

The second hypothesis, simply stated, is the following:

- Hypothesis two: Assistance provided by these local organizations will promote the development of self-sustaining small enterprises.

The third hypothesis often justifies outside as well as local assistance:

- Hypothesis three: The promotion of self-sustaining enterprises will improve the standard of living of the target population.

Each hypothesis can be a separate focus for evaluation; however, all three need to be assessed in order to understand the process by which donors may use SSEs to promote developmental goals.

A simplified general model for small-scale enterprise assistance, conforming to these hypotheses, is shown in figure III-1. The first link in the chain of SSE assistance is the effect of outside assistance on local organizations. The high administrative costs of dealing directly with small enterprises cause most large donors to channel funds through public and private groups operating within the host country.

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An evaluation of this first link should assess the efficiency of the outside agencies delivering resources, and the effectiveness of the agencies receiving such injections. The second link depicts the effect of such assistance upon individual SSEs. The third link depicts the impact of SSEs upon local communities.

FIGURE III-1

GENERAL MODEL OF SMALL-SCALE ENTERPRISE ASSISTANCE

```
                                        _
Outside assistance organization ----N---------->Local organization
                                    V    M
Local organization ----------------I----E---->Specific enterprise
                                    R    N
Specific enterprise ----------------O----T---->Local community
                                    N
```

Changes in the capability and financial viability of institutions comprising the first two links--outside assistance agencies, local organizations, and SSEs--should be monitored on an ongoing basis, since these are a direct management concern. However, few local organizations or individual enterprises will collect data on changes in the community (the third impact stage), as part of their ongoing monitoring system. Although some evidence of impact may be picked up by an SSE's formal or informal management information system, only a small part of its developmental impact will usually be found in this manner. It is with this third link that impact evaluations, and this SOAP are primarily concerned.

Many evaluations stop short of examining the enterprise's impact on the community. Some assume that the establishment of an economically-viable enterprise automatically ensures an improvement in the community's standard of living. Also, many SSE assistance personnel privately question using resources to conduct larger impact evaluations rather than using these resources to implement additional projects. Ultimately, however, enterprise performance will be affected by its interaction with community development. Therefore, evaluations that document an SSE's impact on the community, in addition to projecting market trends in the local economy, can provide economic data useful in projecting the long-term viability of the enterprise.

Another issue suggested by figure III-1 is that changes in local institutions, SSEs, and communities may not be due exclusively to the SSE assistance intervention. In order to distinguish project impact from project activities that coincide with but do not cause change, it is important to differentiate changes caused by SSE assistance from those caused by other environmental factors.

Key local environmental factors include ecological characteristics and the economic system, the target community's previous development experience, community leadership and dynamism, the degree of community homogeneity, and community stability. Critical regional and national factors include fiscal and monetary policies, the market system, the political system, social and cultural characteristics, administrative structure, supportive infrastructure, host country project collaboration, and unusual destabilizing conditions.

Determining the causality of change is a problem endemic to all impact evaluations. It is particularly difficult in SSE promotion programs because of the multiplicity of interdependent factors and variables, and the finite and measurable intervention objectives.

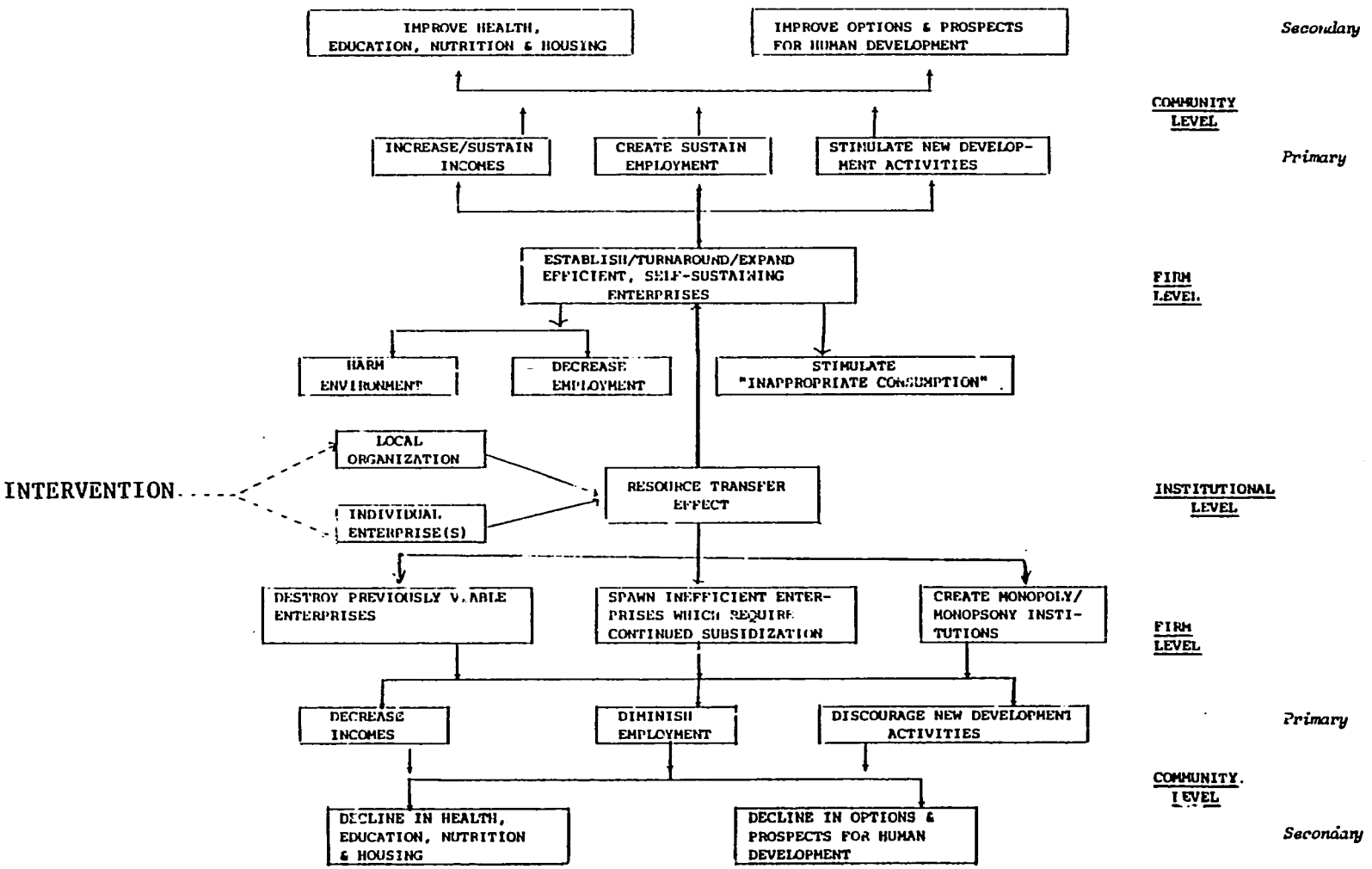
A HIERARCHY OF IMPACT DIMENSIONS

The effect of outside assistance on SSEs and their subsequent impact on the surrounding community may be varied and complex. Potential impacts have been simplified into a hierarchy shown in figure III-2. This chart depicts potential changes caused by a planned intervention, and assumes an unchanging external environment. The hierarchy encompasses types of impact occurring at different levels of SSE promotion (institution, firm, and community) and time sequences. Lower-level, immediate impacts on the firm influence the nature of the more indirect impacts that occur later at the community level. The model does not include the possibility that outside resources have no effect at all on enterprises; in that case, the assistance would not cause the enterprise to have any new impact on the surrounding community.

Graphically, the assistance process begins at the center of the chart's left margin labelled "Intervention," a short-hand term for the different SSE promotion strategies discussed earlier. Moving across the chart horizontally, the next box, "Local Organization," represents intermediate SSE promotion institutions (such as private voluntary organizations and SSE development credit organizations). This is not an impact level, but rather an intervening factor in the effective application of outside developmental resources. The dotted lines indicate alternative methods of intervention: either through an intermediary organization, or directly through selected enterprises.

FIGURE III-2

SSE IMPACT HIERARCHY



KEY : ↑ POSITIVE EFFECT
↓ NEGATIVE EFFECT
- - → ALTERNATIVE ASSISTANCE STRATEGIES

The inflow of financial and technical assistance will often generate a temporary momentum that may be mistaken for self-sustaining impact. This resource transfer effect has been distinguished on the chart to indicate that it is necessary to separate the short-term effect of outside assistance on the firm from the longer-term impact.

Direct Benefits to the Enterprise

The first level of evaluation inquiry, as reflected in figure III-2, is to examine the impact of outside assistance on the enterprise. After this impact has been determined, the evaluation can then examine the linkage between changes in firm performance and community-level impact. Upward pointing arrows in figure III-2 represent positive impact while downward pointing arrows indicate negative impact.

The desired effect of outside assistance is the establishment, turnaround, or expansion of efficient, self-sustaining enterprises. Criteria for success--enterprise profitability and sustainability--are discussed in depth in chapter four.

The transfer of resources, however, does not by any means assure that the assisted SSEs will become self-sustaining. Inappropriate outside assistance can easily destroy an SSE. The sudden availability of credit on attractive terms, for example, may cause the SSE to expand its operations in excess of demand and then fail.

Another potentially negative impact shown in figure II-2 is that the enterprise may become dependent on outside assistance to remain viable. Small enterprises which are nurtured in an environment of subsidized credit and management assistance may not be able to survive without continued subsidization. Such enterprises, therefore, are not truly self-sustaining.

A third possible outcome is that outside assistance strengthens certain SSEs so much that they destroy their competition and become monopolies. In isolated rural areas, SSEs may become the only buyers of local inputs and force prices downward.

Direct Benefits to the Community

Self-sustaining enterprises have the potential for effecting both positive and negative impacts on the community. The potentially positive impacts of self-sustaining enterprises have

been grouped into broad categories: the quantitative impacts of income and employment, and the more qualitative impacts described as the stimulation of new development activities. This stimulation includes social and economic enterprise spin-off activities, improvements in infrastructure drawn in by the SSE, and the growth of complementary socioeconomic activities. A successful enterprise may generate a sense of pride, and especially if it has broad-based ownership, strengthen groups to organize activities for community benefit. These groups may increase demand for outside resources, and, if these are obtained, reduce the community's isolation and neglect.

These improvements in income, employment, and new development activities may then lead to improvements of health, education, nutrition, and housing levels, often categorized as "quality of life" indicators. The may also lead to less tangible evidence of development impact indicated by an improvement in options and prospects for human development.[1]

The establishment of self-sustaining enterprises may also have short-term negative effects. Evaluations should seek to analyze any socioeconomic costs as well as any benefits derived from financially successful enterprises. For example, the process of turning around enterprises with poor financial performance may entail firing staff to improve efficiency. This practice may not be usual among microenterprises with few wage earners whose productivity is high, but may be more common among the larger small enterprises. In the short run, this may be seen as a negative impact, especially in developing nations with high unemployment levels. In theory, though, the increased demand generated by the now-efficient SSEs should create jobs in the long run.

Another potentially negative impact of a financially successful SSE is environmental damage caused by the pollution or exploitation of non-renewable natural resources. Small enterprises may also stimulate inappropriate consumption--of course, what is "inappropriate" can be open to interpretation. For example, SSEs that operate a thriving business by processing grain into readily consumed alcohol may have a greater long-run negative rather than positive impact.

The unsuccessful application of outside assistance which causes negative impacts at the firm level may lead to negative effects at the community level. Again, these have been grouped under the categories of income, employment, and new development activities. The decline of competing enterprises may, for instance, cause a net decrease in incomes and employment; monopolists may gain the power to force the price of local inputs down; and owners of inefficient enterprises may lose income because they are not using their resources to the fullest

potential. At the second level, longer-term impact on the community would then be a decline in health, education, nutrition, housing, and options and prospects for human development. Impact evaluations should document the potentially destructive effects of outside resources to increase the caution with which these resources are applied.

Unsuccessful outside assistance attempts may, of course, unintentionally produce positive impact not depicted in figure III-2. For example, inefficient enterprises which require continued subsidization may sustain or increase employment possibilities. The destruction of certain enterprises may improve a community's physical environment. These positive implications are not shown in figure III-2 because, although important, they are not often used as justification to provide outside assistance to small-scale enterprises.

Benefit and Cost Distribution

A major issue that permeates this impact hierarchy, though it has not yet been mentioned, is the importance of attributing to whom these benefits or losses accrue. First, the evaluator must know how the target population is defined. Often sufficiently precise definitions of the target population are not included in initial project plans. In such circumstances, one of the first evaluation issues is to define the characteristics of the target population.[2]

It is insufficient for an impact evaluation to report that incomes in general have risen, since this does not specifically address whether the target population's income rose. It is therefore necessary to analyze whose income rose. Did education and housing benefits accrue to the target population, or did income and standard of life disparities widen?

This issue is particularly intriguing and important in the SSE evaluation field, since some still question whether working with persons who have relatively minimal assets and some entrepreneurial ability is an effective means to reach those in the lower ranks of the target population. Others question whether working with SSEs whose owners do not fall into the target population category can generate significant benefits for the latter group. Rather than simplifying the issue into whether small-scale enterprises are an effective means to reaching the poor, it is more realistic and useful for impact evaluations to attempt to determine which types of SSEs, under what conditions, have the greatest potential to achieve this objective. Impact evaluations should also attempt to determine which specific enterprise assistance strategies result in the most positive effects on the community.

The preceding discussion provides an overview of distinct impact levels following from SSE promotion interventions. However, the linkages between the interdependencies within this impact hierarchy are also critical in conceptualizing the impact of SSE programs. The next section describes various linkages that SSEs may have with their communities, and how these linkages may affect the measurement of employment and income indicators.

BENEFIT GROWTH: INCOME AND EMPLOYMENT LINKAGES

A more in-depth examination of two primary, community-level impact indicators--income and employment--reveals the complexity in determining SSE impact. Income and employment generated by a self-sustaining enterprise may be divided into two categories: direct and indirect. Direct income and employment are used and distributed by the enterprise. Direct income may include wages paid to staff, enterprise profits, bonuses, and income to suppliers; direct employment is the employment created or sustained by the enterprise production process.

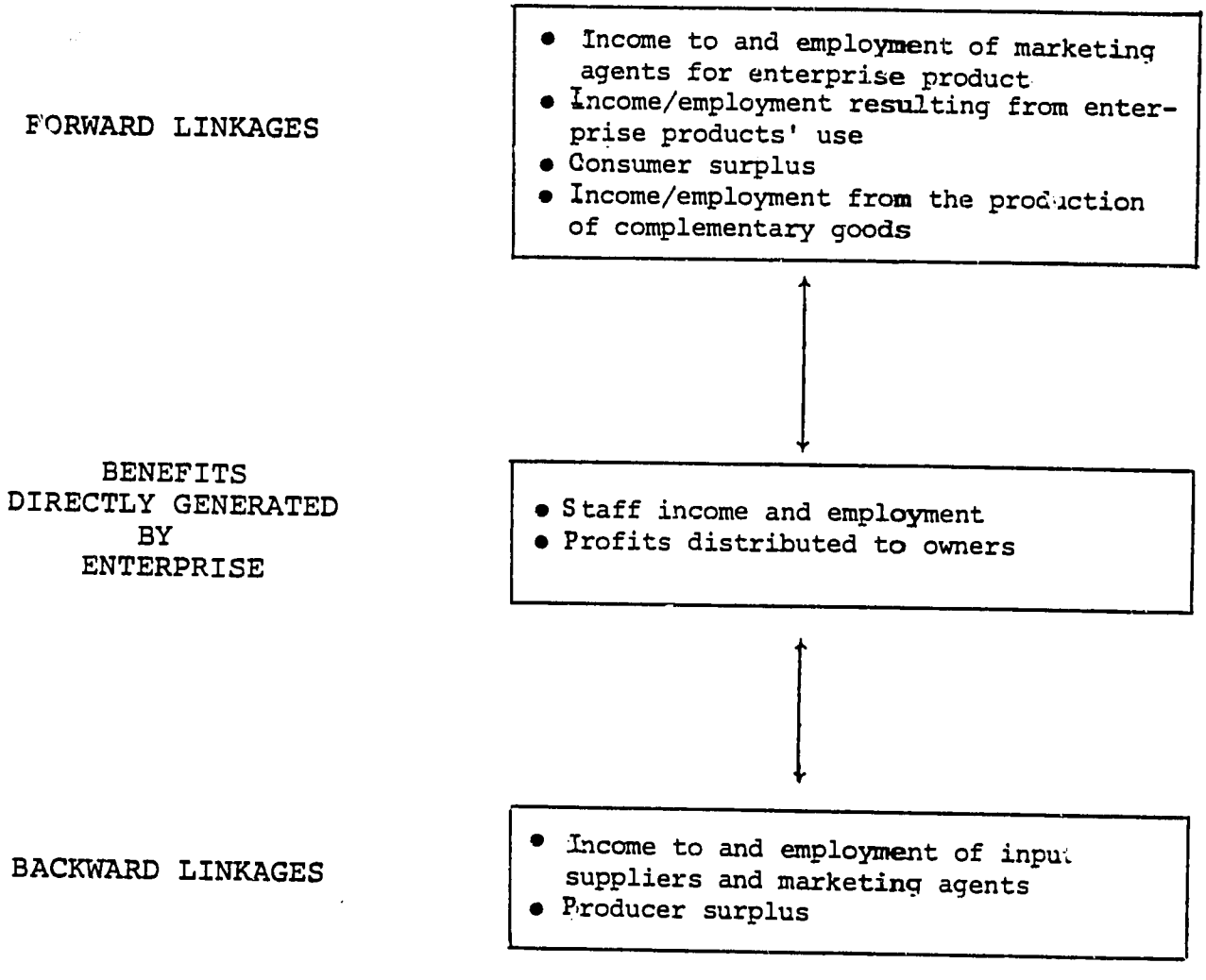
The indirect income and employment generated by a successful enterprise may be an endless chain. Income paid to laborers employed by the enterprise, for example, is spent for the goods and services of others, which in turn stimulates additional income and employment. The principle that a net increase in private investment will cause national income to expand by an amount greater than the initial increase is well-established in modern economics. Multipliers have been developed for many industries in developing countries and can be used to estimate how changes in investment will affect income. However, these extrapolations do not reveal whether the target group benefited, nor do they explain the specific process that may have made these linkages stronger for certain enterprises in a given sector than others.

The evaluator must decide how far to look for signs of indirect impact. In figure III-3, indirect income and employment are limited to first-level, backward and forward linkages. SSE expansion may encourage investments in earlier stages of production as backward linkages, and in subsequent stages of production as forward linkages.

One form of backward linkage is the income paid to input suppliers and marketing agents. For example, an agro-processing enterprise may generate new or increased demand for raw agricultural products which causes increased production, income and employment to enterprise suppliers. Moreover, part of this increase in incomes may be hidden in the form of producer's surplus; that is, the difference between the minimum price at which input suppliers would be willing to supply their product, and the price they actually receive.

FIGURE III-3

INCOME AND EMPLOYMENT LINKAGES



Forward linkages, as shown in figure III-3, include income and employment:

- Generated to independent marketing agents for the enterprises' product;
- Generated by the enterprise products' use; and
- Created by the production of complementary goods.

For example, the enterprise may cause new marketing jobs to be created, or increase the productivity of marketing agents. Income resulting from the enterprise product's use may have two sources. The first source stems from increasing the availability of production inputs: sales of agricultural inputs such as animal feeds, fertilizers, and previously unavailable tools, for example, may lead to increased agricultural yields. This linkage is strengthened especially if the enterprise provides extension services to consumers ensuring that the enterprise's product is properly used, thereby increasing consumer demand. The second, less tangible source is the effective increase in incomes that would result if the enterprise lowered the price of a previously available product. This difference between the maximum that consumers would pay for the product and the amount they actually pay is called consumer surplus.

NOTES TO CHAPTER THREE

1. The AID Congressional Mandate, for example, defines the poor majority as those with a per capita income below $150 per year, a daily diet of less than 2,160 to 2,670 calories, life expectancy at birth of below 55 years, infant mortality of over 33 per 1,000 or access to broadly-defined health services for under 40 percent of the population.

2. For an in-depth discussion of this concept, see Denis Goulet, The Cruel Choice, New York: Atheneum, 1971.

CHAPTER FOUR
METHODOLOGIES FOR SSE IMPACT EVALUATION

SSE IMPACT INDICATORS

Review Findings

The types of socioeconomic impact observed in the 10 evaluations studied in depth are summarized in table IV-I. Findings are divided both by project (headings down left margin) and impact (headings across top of table). Seven categories of impact are presented: monetary, standard of living/quality of life, employment, production, activity level, participation and use of project services, and externalities. For each category of impact, proxies used by evaluators to indicate the degree of impact are listed, but the lists are descriptive rather than interpretive. Thus, (1) no attempt is made to impose definitional consistency of terms across projects, and (2) only proxies articulated or implied by the evaluator as impact indicators are included for each project. An impact indicator for one project that is also used as a neutral descriptor in another evaluation has not been listed for the latter case. An indicator is a neutral descriptor if it is used as a means to provide contextual information; if the evaluator links project activities to observed changes it becomes an impact indicator. The following section, then, rationalizes types of impact, indicators, and data collection techniques.

Indicators By Impact Dimension

Table IV-1 presents impact indicators used in evaluations reviewed for the SOAP exactly as they were employed. This section combines these indicators with alternative, yet unmentioned indicators, and discusses their strengths and weaknesses in terms of the impact dimension they are designed to assess. SSE impact evaluations include three dimensions of developmental impact:

- The effects of SSE promotion programs on target enterprise establishment and performance;
- The catalytic effects of the target enterprise on the development of surrounding communities and linked enterprises; and

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TABLE IV-1

IMPACT INDICATORS USED IN EVALUATION SAMPLE

EVALUATION	MONETARY	STANDARD OF LIVING/QUALITY OF LIFE	EMPLOYMENT	PRODUCTION	ACTIVITIES	PARTICIPATION/ USE OF SERVICES	EXTERNALITIES
Boyle/World Bank	• Dividends • Capital Gains • Recovery of Promotional and Development Costs • Cost & Labor-Income Benefit Streams • Net Profits/Sales • Profit Margin • Return on Investment • Asset Turnover	• Community Changes	• Worker Turnover • Worker Welfare	• Product Quality			
Bangladesh/ World Bank	• Total Fixed Costs • Costs/Job • Loan to Equity • Sales • Gross Profits • Loans Sanctioned, Disbursed, Realized • Amount overdue, fell due, and ratio		• Number of Employees	• Output • Capacity Utilization			
Dimond/AID				• New Crops Grown	• Number of Extension Visits • Number, Type of New Farming Techniques Adopted • Number of Demonstration Plots • Number of Self-Help Projects Begun and Completed • Number of Associations Formed	• Number of New Association Members	

TABLE IV-1 (Continued)

EVALUATION	MONETARY	STANDARD OF LIVING/QUALITY OF LIFE	EMPLOYMENT	PRODUCTION	ACTIVITIES	PARTICIPATION/ USE OF SERVICES	EXTERNALITIES
Hawbaker/AID	• Gross Sales • New Investments • Number and Size of Approved Loans		• Number of New Employees	• Number and Type of New Products Developed	• Number of Visits by Outsiders • Number of Seminars Held • Number of Consultations Held • Number of Feasibility Studies		
Sierra Leone/ AID	• Cash Value of Marketed Crops	• Vehicle Ownership • Level of Village Construction and Commercial Activities		• Amount and Variety of Marketed Crops • Length of Fallow Periods • Extent of Swamp Rice Cultivation	• Extension Agent Visits • Fertilizer Use	• Traffic Level, Composition, Origin, and Destination	• Environmental Degradation • Rural-Urban Migration
Schreiber/ ACCION	• Social Internal Rate of Return (SIRR) • SIRR Frequency Distribution • SIRR Sensitivity						
Lewycky/UDS	• Sales and Profits Growth • Secondary Income Transfers • Amount Loaned By Factory for Village Development	• Village Consumerism • Housing Quality	• Number of Employees • Employee Benefits • Secondary Employment Creation • Worker Socio-economic Status, Sex and Tribe		• Expatriate Visitors to Factory	• Factory Worker Ownership	• Project Spinoffs
Goldmark/ Technoserve	• Farmer Return on Investment • Crop Sales, Profitability, Owner Equity, Fixed and Working Capital Investment, Wages, and Purchase of Raw Materials	• Participant's Own Assessment of Quality of Life • Organization of Social Events • Community Organization Committees		• Average Milk Production/Cow • Average Milk Production/Cow/ Type and Amount of Feed Intake • Milk Production/ Breed of Cow	• Description of Technoserve's Assistance	• Co-op Size • Co-op Membership Participation	• Target Population Access to Electricity

TABLE IV-1 (Continued)

EVALUATION	MONETARY	STANDARD OF LIVING/QUALITY OF LIFE	EMPLOYMENT	PRODUCTION	ACTIVITIES	PARTICIPATION/ USE OF SERVICES	EXTERNALITIES
Haines/PCI	• Net Farm Income • Per Capita Income • Off-Farm Income • Net Income/ Arable Hectare • Credit Distribution, Availability, Demand, Uses, Burden and Delinquency • Internal Rate of Return on Cash Crops • Gross Value of Output/Farm	• Housing Value, Roof Quality, Number of Rooms • Number of Livestock	• Labor Share Indices	• Cereal Yield Patterns • Sources of Increased Production • Land Use Intensity and Productivity • Coffee Production Yield, Technology, Marketing, and Prices	• Number of Extension Visits	• Land Tenure	• Farmer Opinions on Ways to Improve Coffee Income
Barclay/DAI	• Monetized Benefits • Value of Benefits/ Participant/Year • Recurring Cost/ Participant/ Year • Net Benefits/ Cost	• In-Kind Benefits • Individual Farm or Household Modernizing Improvements				• Number of Beneficiaries • Participation, Use of Project Services • Local Decision-making • Participant Contributions • Project-Mobilized Resources • Adoption of Recommended Practices	• New Activities Beyond Project

- The process by which these changes occurred.

SSE impact indicators for each of these dimensions will now be evaluated.

Measurement at the Enterprise Level

The first effect of SSE promotion programs on a target enterprise should be to increase the firm's profitability and sustainability. Positive community impact, the ultimate goal of SSE programs, depends on the firm's viability. Thus, profitability and sustainability are the two features of enterprise performance most closely examined by impact evaluators. As indicated in table IV-2, enterprise profitability can be measured in a variety of ways: gross sales, net sales, gross profit, net profit, profit margin, net profit to sales ratio, return on investment, social internal rate of return, expenditure stream to income stream ratio, recovery of promotional and development costs, dividends, capital gains, capacity utilization, product quality, product output, and product value added. The strengths and weaknesses of each indicator of profitability are listed in table IV-2, as are data sources for these figures.

Enterprise sustainability is a predictive assessment, thus signs assumed to indicate enterprise stability and probable longevity are necessarily open to subjective interpretation. Moreover, there is considerable overlap between profitability indicators and measures of enterprise sustainability. Indicators most often used to assess sustainability include: total fixed costs, ratio of recurrent costs to investment expenditures, asset turnover, ratio of indebtedness to equity, incremental additions to initial investments, incremental sales growth, profitability over time, new firm products, worker turnover, and market share. The above indicators, and their strengths and limitations, are listed in table IV-3.

Measurement at the Community Level

The promotion of small-scale enterprises is not generally considered a developmental end, but rather a means of furthering benefits to the community. Enterprises are perceived as catalysts spurring community development through the provision of increased income, employment, and human welfare opportunities.

Community income figures are often gathered on a household basis, and can be assembled in a variety of ways: an aggregated conglomeration of household wages, cash revenue, in-kind receipts, and market value of household production for internal consumption;

TABLE IV-2

IMPACT MEASUREMENT: ENTERPRISE PROFITABILITY

INDICATOR	ADVANTAGES	DISADVANTAGES	DATA COLLECTION TECHNIQUES
Gross Sales Product Volume	Purchasing Power Adjustments Unnecessary	Only Comparable With Like Firms	Enterprise Records Review; Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census)
Cash Value	Common Unit	In Nominal, Not Real Terms	
Net Sales (Cash)	Comparable Across Firms	In Nominal, Not Real Terms, Not Indicative of Profitability	
Gross Profit	Easier To Define Than Net Profits	Misleading Profitability Indicator	
Net Profit	Clear Indication of Firm Health	Definitional Ambiguities	
Profit Margin	Indirect Sensitivity Indicator		
Net Profit/Sales	Indirect Sensitivity Indicator		
Return On Investment	Easily Understood Traditional Indicator		
Social Internal Rate Of Return	Accounts For Opportunity Costs Of Inputs, Value of Outputs	Highly Subjective, Seldom Consistent from Project to Project	
Expenditure Stream/ Income Stream	Describes Firm Liquidity		
Recovery of Promotional. Development Costs	Accounts For Hidden Subsidies		
Dividends		Indirect Indicator of Profitability	
Capital Gains		Indirect Indicator of Profitability	
Capacity Utilization	Helps Determine Profitability Ceiling		Enterprise Records Review; Entrepreneur Interview; Competitor Comparison
Product Quality*	Helps Determine Growth Potential	Subjective	Observation; Competitor Comparison
Production Output	When Coupled With Sales, Highlights Possible Technical Assistance Needs	No Provision For Inventory Indirect Link to Profitability	Enterprise Records Review, Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census)
Product Value Added	Highlights Net Contribution To Economy		Enterprise Records Review; Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census)

* Not an indicator in itself, but rather, a category under which indicators for specific products would be employed.

TABLE IV-3

IMPACT MEASUREMENT: ENTERPRISE SUSTAINABILITY

INDICATOR	ADVANTAGES	DISADVANTAGES	DATA COLLECTION TECHNIQUES
Total Fixed Costs	Indicates Minimum Revenue Requirements	Interpretation Regarding Sustainability is Conjecture	Enterprise Records Review; Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census)
Recurrent Costs/Investment	Reflects Dependence on Sales Revenue		
Asset Turnover	Reflects Firm's Dynamism		
Indebtedness/Equity	Can Compare with Records of "Safe Ratios"		
Incremental Investment	Indicates Firm's External Attractiveness		
Incremental Sales Growth	Accounts For Cyclical Variations		
Profitability Over Time			
New Products	Non-Monetary Long-Range Implications		
Worker Turnover	Non-Monetary, Subtle		
Market Share	Reflects Firm's Marketing Ability	Not Applicable to a single SSE, But Rather to SSEs As A Sector	

the preceding aggregation minus taxes and transfer payments; cash income only; disposable income (income spent on household purchases and household investments); and additional total, disposable, consumption, or investment income. Moreover, distributional aspects of community income can be studied by disaggregating the above figures by class, caste, tribe, ethnic group, sex, age, and similar groupings. Income indicators, and their strengths and weaknesses, are presented in table IV-4.

Community employment figures, like community income data, can be defined in a wide variety of ways. These alternative measures, include:

- An aggregation of total enterprise-related employment, measured either by the number of jobs or number of person-days, less job losses and job transfers;
- Sustained increases in jobs (the stabilization of seasonal, erratic, or precarious employment due to an enterprise's development), measured either by total jobs regularized, or by net person-day increase, excluding those due to the creation of the new job positions;
- Worker welfare, measured in wages and benefits accrued to workers, the ratio of wages or benefits to enterprise profits, percentage of employee ownership, degree of employee management participation, worker turnover, and work stoppages;
- Workforce composition (workforce figures disaggregated by worker economic or social class, race, sex, and similar classifications); and
- The direct cost of employment creation, measured by the ratio of capital investment per job created, or the ratio of investment to additional person-days realized.

Employment indicators, and the advantages and disadvantages of each, are listed in table IV-5.

Although enterprise-related income and employment impact are of paramount concern to those promoting small-scale enterprise development, wide and often less quantifiable community effects are also necessary for a balanced picture of an intervention's total socioeconomic impact. Other impact categories include: secondary employment and income generation; spin-off activities; externalities; improved standard of living/quality of life; and altered rural-urban migration patterns. Impact indicators to measure these effects, as well as the advantages and disadvantages of each indicator, are presented in table IV-6.

TABLE IV-4

IMPACT MEASUREMENT: COMMUNITY INCOME

IMPACT DIMENSIONS	INDICATOR	ADVANTAGES	DISADVANTAGES	DATA COLLECTION TECHNIQUES
Total Income	Sum of Household Wages + Cash Revenue + In Kind Receipts + Value of Production for Consumption	Comprehensive	High in Cost and Time Requirement; Difficult to Establish	In-Depth Household Surveys and/or Interviews
Net Income	Above Less Taxes And Transfers	Assumes Household Perspective		In-Depth Household Surveys and/or Interviews + Official Records Review
Cash Income	Household Wages + Cash Revenue	Common Unit and Definition	Assumes Monetized, Competitive Market Economy	Household Surveys; Enterprise Records
Changes in Total Income	Annual Changes in Sum of Household Wages + Cash Revenue + In Kind Receipts + Value of Production for Consumption	Deals Directly with Impact	High in Cost and Time Requirement; Difficult to Establish	In-Depth Household Surveys and/or Interviews
Disposable Income	Household Purchases + Household Investments	Common Unit and Definition; Deals Directly with Impact	High Cost; Time Consuming Difficult to Establish; Assumes Market Economy	Household Surveys; Enterprise Records Observation
Changes in Disposable Income	Changes in Household Purchases + Household Investments	Deals Directly With Impact		Household Surveys; Enterprise Records; Observation
Additional Consumption	Community Sales	Allows for Contextual Values, Unobtrusive Measurement, Deals Directly With Impact	Difficult to Quantify Cheaply	Observation; Interviews; Surveys; Public Sources
Additional Investment	Standard Of Living Proxies, i.e., Housing			Observation; Interviews; Surveys; Public Sources
Distribution	Any of the Above Disaggregated Class, Caste, Tribe, Ethnic Group, etc.	Deals With Equity Considerations	High in Cost and Time Requirement; Difficult to Establish	Observation; Interviews; Surveys; Public Sources

TABLE IV-5

IMPACT MEASUREMENT: COMMUNITY EMPLOYMENT

IMPACT DIMENSIONS	INDICATOR	ADVANTAGES	DISADVANTAGES	DATA COLLECTION TECHNIQUES
Total Employment	Number of Jobs; Number of Person-Days Worked	Easy to Collect	Does not Account for Worker Source, Quality of Job	Enterprise Records Review; Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census)
Net Increase in Employment	Change in Number of Jobs; Change in Number of Person-Days (Less Job Losses, Transfers)	Specifies Enterprise Net Employment Impact	Does not Account for Quality of Job	
Total Sustained Increase in Employment	Number of Jobs with Previously Highly Seasonal, Erratic, or Precarious Characteristics Now Stabilized; Net Increase in Person-Days Excluding Those due to the Creation of New Job Positions	Complements Otherwise Misleading Simple Job or Person-Day Tabulations; Reflects Job Stability as Benefit Distinct from Job Creation	Difficult to Assess; Relatively High Degree of Personal Judgment Required	
Worker Welfare	Wages and Benefits; Wages/Profits; Benefits/Profits; Employee Ownership; Employee Management Participation; Worker Turnover; Work Stoppages	Enhances, Personalizes Statistics on Job Creation	Benefits Difficult to Quantify; Discounts Non-Monetary Gains; Sometimes Inappropriate for a Small Enterprise	Enterprise Records Review; Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census) + Worker Surveys or Interviews + Observations
Composition	Disaggregated Work Force Figures by Economic or Social Class, Race, Sex, Etc.	Indicates Job Sustainability; Indicates Underlying Dissatisfaction, Deals with Equity Issues, Targeting Success or Failure	Difficult to Establish	Enterprise Records Review; Entrepreneur Interview; Enterprise Survey; Public Source (Survey, Census)
Cost	Investment/Job Created; Investment/Additional Person-Days	Indicates Implications For Replication	Does not Include Non-Employment Investment Benefits	

TABLE IV-6

IMPACT MEASUREMENT: COMMUNITY-LEVEL SOCIOECONOMIC CHANGE

IMPACT DIMENSIONS	INDICATOR	ADVANTAGES	DISADVANTAGES	DATA COLLECTION TECHNIQUES
Secondary Employment and Income	Same as Employment and Income Indicators, but for Larger Populations (Input Suppliers, Users of Output for Further Production, Complementary Producers, etc; See Figure 5 Linkages, And Figure 4: Impact Hierarchy)	Same as for Employment and Income Indicators; Causality Especially Difficult to Determine, but Costs Easier to Justify if Secondary Benefits Included		Same as for Employment and Income Indicators
Spin-Off Activities	Enterprise Community Investments; New Community Enterprises; New Community Organizations	Compatible with View of SSE as Catalyst for Development	Causality Difficult to Establish	Observation; Surveys; Public Sources; Interviews
Externalities	Environmental Degradation; Inappropriate Consumption Shifts	Accounts for Unintended Effects	Causality Difficult to Establish, Judgment Subjective	
Quality of Life	Improved Diets; Declining Infant Mortality; Increased School Attendance	Compatible with View of SSE as Catalystfor Development	Highly Subjective, Expensive to Quantify	
Migration Patterns	Net Rural-Urban Population Flow		Difficult and Expensive to Quantify	

Determinants of SSE Impact

The preceding impact indicators, if collected using formal techniques to control for change caused by environmental factors, can reveal if change has occurred due to SSE promotion activities. However, they do not sufficiently explain why change has occurred, although it is as important to understand the process of change as it is to document whether change occurred.

Quantifiable indicators that help to explain why assistance was useful/useless include the number and frequency of:

- Visits made by outside agencies' personnel;
- Meetings held with project managers, owners, suppliers, and distributors; and
- Joint decisions taken.

Non-quantifiable factors to be examined within the SSE assistance process include:

- The enterprise staff reactions to recommendations offered by outside agencies;
- The sense of collaboration or conflict between enterprise and outside agency staff; and
- The appropriateness and quality of training offered to enterprise staff.

Similarly, the evaluation should try to explain the process by which the enterprise affected the community. Quantifiable indicators of enterprise-community interaction include:

- The number of extension service requests, and the number of visits made;
- The number of community group meetings with entrepreneurs;
- The socioeconomic status of enterprise owners; and
- The formation of community groups by enterprise owners.

Qualitative indicators of enterprise-community interaction include:

- The beneficiary response to threatened or actual service withdrawal;
- The owner participation in decision making; and

- The beneficiary perception of changes occurring within the firm, community, and family.

Most indicators explaining why change occurred can only be developed with the participation of people involved in the process. Outside evaluators can contribute a different perspective to help interpret this information.

DATA COLLECTION TECHNIQUES

The data collection techniques most appropriate for a specific SSE impact evaluation are those that best reconcile the tradeoffs between methodological rigor and budgetary cost-effectiveness. These techniques, however, can only be selected after the evaluator has established parameters for the choices discussed earlier: evaluation level, user, budget, timing, and data base.

How to collect which data depends on what impacts are of greatest interest. Data analysis techniques must also be anticipated: Are longitudinal (time-series) or cross-sectional (target and control populations) data most appropriate? What mix of qualitative and quantitative data is most useful for expected data analysis? Only after the above issues have been addressed can data collection techniques be rationally selected.

Until recently, the most likely way to avoid criticism from evaluation methodologists was to collect information on random samples drawn from target and control populations over time in developing country settings. However, there are many instances where such an approach to data collection is neither feasible nor cost-effective. SSE programs often deal with multiple, very small, and highly inaccessible units with little existing written data. The effort and expense such a comprehensive sampling procedure would involve may not be justifiable in relation to program expenditures. Indeed, even when the time and resources have gone into implementing such approaches, little use has been made of the resulting data.[1]

Complete reliance on the intuitive judgment of an outside expert following a whirlwind tour through a project site constitutes the other extreme of data collection methodology. Although much less time-consuming and expensive than the first method discussed, it can easily degenerate into a quick and dirty "tourist trek."[2]

As a consequence, increased attention has been devoted to the development of alternative data collection strategies; that is, methodologies which retain much of the vigor and objectivity of the scientific experiment, but also incorporate the exigencies of field work in developing countries. These alternative data collection techniques seek to maximize accuracy, minimize cost, and enhance data utility and accessibility.

Although small-scale enterprise impact measurement has much in common with non-SSE impact asessment in a developing country context, an evaluator encounters unique problems in trying to gather enterprise-specific data. Consequently, special data collection techniques are required; these techniques, and the advantages and disadvantages of each, are presented in table IV-7.

Alternative data collection techniques at the community level fall into two main groups: formal and informal.[3] Formal techniques include comprehensive surveys and random or purposive sampling using repertory grids, transects, and similar methods.[4] Informal techniques include personal observation; group interviews, meetings, and panels; participation/observation; informal chats, games, and exercises; and in-depth personal interviews and profiles, often over extended periods of time.[5] Characteristics of formal and informal data collection techniques, and the principal advantages and disadvantages of each type, are presented in table IV-8.

In practice, many SSE evaluation assignments do not pose an either/or choice between formal and informal methods. Formal collection techniques are necessary if extrapolations are to be made from a smaller to a larger population. If properly conducted, they may yield a fairly exact indication of how much change has occurred. On the other hand, informal data collection techniques may be essential to understand the process by which change occurs. Such illumination depends upon a sequence of questions that further refines the causality of change. The informal techniques cited previously must be carefully adapted to fit specific local circumstances.

Several suggestions have been offered to improve both formal and informal data collection techniques. Regarding formal methods, Samuel Daines writes that an inexpensive approximation of the classical laboratory experiment is feasible in the field, if proper care is given to data needs from the time of the project's inception. His methodology for impact measurement is based on two types of comparison:

- A comparison between the same population before and after project participation; and

TABLE IV-7

SPECIAL TECHNIQUES FOR COLLECTING SMALL ENTERPRISE DATA

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Enterprise records review	Source of: • Profitability indicators • Supplier income indicators • Consumer usage indicators • Community employment and income indicators • Enterprise sustainability indicators • Indirect indication of management and skills • Monetized and physical product figures (comparable and real terms) • Relatively neutral measures	• Often either incomplete, unsystematic, unreliable, or unfamiliar bookkeeping system • Often nominal terms which do not account for inflation or terms of trade changes • Assumes enterprise has Western goals of profit maximization and cost minimization • Sometimes multiple set of books for different purposes (for example, enterprise management versus tax liabilities)
Enterprise records reconstruction	• Standardizes, completes existing data • Formalizes available information for analysis	• Subject to high decree of uncertainty • Liable to be affected by evaluator perspectives and biases
Entrepreneur, employee interview	• Personal perspective(s) • Accounts for nonquantifiable aspects of firm • Often rather quick and inexpensive	• Highly subjective and quite dependent on individual biases • Incomplete, and relatively unsystematic and uncontrolled
Personal observation (inventory, production system, management-labor relations, marketing activities, etc.)	• Individual, qualitative perspective • Quick, inexpensive, and open to creative experimentation	• Highly subjective and liable to be affected by personal biases and selective observation
Enterprise survey, public surveys and censuses	• Large, comparable data base • Systematic • Relatively controlled • Comprehensive	• Expensive and time consuming • Difficult to conduct with wide variety of bookkeeping techniques, and individual enterprise idiosyncrasies • Often biased by status of enterprise data base, and access to this information • Sometimes too aggregated to be useful • Not explanatory
Competitor comparison	• Indicators of product quality • Indicators of plant capacity utilization • Can sometimes provide either baseline for comparison or enterprise development goal	• Often results in inappropriate or misleading comparisons • Implies generalizable assumptions and observations

TABLE IV-8

DATA COLLECTION TECHNIQUES AT THE COMMUNITY LEVEL

TYPE	CHARACTERISTICS[1]	EXAMPLES	ADVANTAGES	DISADVANTAGES
Formal	• Quantitative orientation • Logical-positivist perspective • Obtrusive and controlled measurement • Depersonalized data • Static reality assumption • Particularistic • Generalizable • Reliability due to hard and replicable data • Outcome oriented • Ungrounded, verification-oriented, confirmatory, reductionist, inferential, and hypothetico-deductive	• Comprehensive survey • Random or purposive, sampling, using repertory grids, transects, and the like • High technology reconnaissance	• Standardized • Comparable • Relatively neutral • Controlled if classically designed	• Expensive and time consuming • Simplified version of complex field realities • Limited perspective • Does not explain the change process
Informal	• Qualitative orientation • Phenomenological and verstehen perspective • Naturalistic, gestalt observation • Subjective, personalized data • Dynamic reality assumption • Holistic • Ungeneralizable • Validity due to "real," "rich" data • Process oriented • Grounded, discovery-oriented, exploratory, expansionist, descriptive and inductive	• Personal observation • Group interviews, meetings, and panels • In-depth personal interviews, profiles • Participation/observation • Informal chats, games, exercises	• Accounts for project-specific characteristics • Incorporates nonquantifiable featurer • Utilizes evaluator's accumulated experiencas, observations • Multiple perspectives • Relatively inexpensive and quick	• Difficult to standardize • Usually not comparable • Highly subjective • Often uneven and highly selective

[1] Draws heavily from Thomas D. Cook and Charles S. Reichardt, Qualitative and Quantitative Methods in Evaluation Research, Beverly Hills: Sage Publications, 1979.

- A comparison between a participating population after project involvement and a control group that did not participate in the project.

Daines' principal means of economizing is through sample surveys; that is, carefully selected subgroups of target beneficiaries whose resemblance to the total population "can be predicted with standard and well practiced statistical techniques." Three sample selection techniques proposed by Daines are list basis, area frame, and clusters (Practical Concepts, Inc., 1979 and Daines, 1979).

Suggestions for improving informal data collection techniques revolve around the following issues:[6]

- Selectivity--clearly defining the evaluation's purpose, scope, audience, perspective, and information needs;

- Conflict of interest--establishing and accounting for the interests, allegiances, and motivations of both evaluation team members and those participating in the evaluation;

- Planning and preparation--learning about an area's history, politics, social, economic and institutional structure, cultural values, and physical attributes; making flexible logistic arrangements; utilizing preestablished connections by securing names of knowledgeable local sources, and introduction, if appropriate; allowing project workers to provide hard, documented data for submitted questions through advance communication with the field; allowing for evaluator/host language, calendar, and agenda differences; assuring evaluation team diversity and compatibility;

- Mechanics of field visits--locating sources, settings, and methodologies that will yield the most diverse and revealing information; specifically, conducting long individual or group interviews with the international community and host country nationals familar with the project, site, and nonproject and antiproject people as well as project beneficiaries;

- Host reception--making conscious efforts to minimize power inequalities between evaluator and host by presenting an evaluation trip as an opportunity for field staff to make others aware of project progress and problems; allowing for modification of evaluation terms of reference as local

concerns and orientations become known; arriving simply, and maintaining a low profile while conducting an evaluation;

- Rural considerations--making special allowances for upcountry evaluations, such as traveling further afield, straying from roads and project sites; and

- Feedback and follow-up--recognizing that since most follow-up activity is beyond the evaluator's domain, special efforts must be made to prepare an evaluation which is well-supported, judiciously presented, and offers constructive, practical recommendations for subsequent action and further study.

The above sampling of suggestions for improving informal data collection techniques vividly exemplifies the considerable scope for developing rapid, cost-effective means of gathering impact evaluation data. Plans to test and further develop both formal and informal data collection tools, as well as alternative impact evaluation methodologies, are presented in the following chapter.

METHODS OF DATA ANALYSIS

Preliminary Data Adjustments

Once data have been collected, they must usually pass through a stage of preliminary adjustments before they can be legitimately analyzed. Information gaps should be filled where possible, and figures emended to insure consistency and comparability. As described below, these preliminary data adjustments should be performed for both enterprise- and community-specific data.

The first adjustment of data should take place in the field, immediately after these data have been collected. If this elementary but essential stage of analysis is omitted, and collected data are not checked for obvious errors, gaps, irregularities, and inconsistencies, then all subsequent analysis, regardless of its degree of sophistication, is groundless. This point is made clear in both the Goldmark/Technoserve and Daines/PCI evaluations. In these evaluations questionnaires were checked by the field supervisor for inconsistencies, missing information, and highly suspect responses so that reinterviews could be conducted if necessary.

Once most data have been collected and screened in the field, the most common way of filling information gaps is by reconstructing, rearranging, supplementing, or extrapolating from

the information collected. These data are then standardized for subsequent analysis by such methods as data transformation and data indexing.

The Boyle/World Bank evaluation is a good example of filling substantial data gaps at the firm level, and then standardizing this more complete and usefully arranged data base. This evaluation was undertaken seven years after project completion, and enterprise records were disparate, incomplete, and usually out-of-date. Consequently, fragmented records, however poor, were pieced together and logically arranged. Moreover, they were supplemented by efforts to utilize indirect methods of data collection to fill-in gaps, such as interviews of owner/managers, and observation of plant facilities and operations. These data were then reassembled into a common format of standard balance sheets and income statements, and transformed into current costs and prices, as well as dollar figures.

The Daines/PCI evaluation is a good example of filling in data gaps at the community level, and then standardizing these data for later analysis. In applying his selected method of analysis Daines' principal goal is to compensate for extremely limited baseline data of an ongoing project, while evaluating performance over time of both project participants, and matched nonparticipants. Daines' principal means for gauging community impact is through the extrapolation of data collected from three carefully selected, checked, and adjusted sample populations: group A is made up of project participants with loans starting before 1978; group B is composed of new borrowers in 1978; and group C is the control (non-borrower) group. Using a cross-sectional comparison of population groups, which is checked and modified by the use of two separate longitudinal samples, Daines is able to estimate the project's impact on its total target population (see diagram on page 30 of appendix F for a schematic depiction of Daines' survey design to measure project impact).

In short, before collected data can be effectively analyzed, preliminary data adjustments should be made to optimize imperfect information. Common adjustment methods for filling in data gaps include reconstructing, rearranging, extrapolating, and supplementing data. Common methods of standardizing data into a form amenable to evaluation over time and across projects, include transforming them into terms with a common denominator; aggregating, averaging, and indexing data (to control for changes in population size or composition, seasonal or cyclical variations, inflation, or multiple component impacts).

Data Analysis

A variety of techniques can be used to analyze a project's effect on an enterprise or community; an SSE impact evaluation typically combines several of these analytic methods.

At the firm level, the most common type of analysis is an assessment of an enterprise's financial viability, as in the Bangladesh/World Bank evaluation. The purpose of this analysis is to characterize a firm's cash flow status, and thus, liquidity; it includes sales figures, production and financing costs, product characteristics, and other indicators of an enterprise's market strength. Often, these figures are aggregated and reported by industry subsector, geographic region, or type of firm ownership.

Studies such as the Schreiber/ACCION Evaluation add an economic cost-benefit analysis to such a financial assessment. That is, they try to value a firm's expenditures and revenues in terms of national resource opportunity costs, rather than through market prices. In both financial and economic analyses, a common shorthand term for the evaluation's overall assessment of a firm is usually employed, be it the firm's internal rate of return (IRR), net present value (NPV), or return on investment (ROI).

However, the two analytic methods described above have attributes which can make their results misleading or incomplete. A financial analysis is dependent on prices derived from often fragmented, distorted, and highly fluctuating markets, but does not reveal either the sources or the reliability of such figures. An economic analysis, on the other hand, by trying to compensate for these deficiencies, is quite dependent on personal judgments and imputed values.

Thus, these two methods are often supplemented by a nontraditional tracking of critical figures used in calculating a firm's financial viability or economic worth, as well as the inclusion of noneconomic enterprise features. Moreover, these figures are often combined in a number of innovative ways to produce an increased understanding of the nature and functioning of an enterprise.

For example, the Boyle/World Bank evaluation includes firm characteristics such as credit sources and repayment rates, local equity and leverage, capital to output ratio, capital to job ratio, market reach, degree of subsidization, type of technology employed, recovery of promotional and development costs, worker turnover, cost and labor-income benefit streams, profit margin, and asset turnover.

Another way of analyzing a firm is through an assessment of its institutional capabilities, as in the Goldmark/Technoserve evaluation. The reasoning behind such an analysis is that it is

essential to ascertain the management skills of a firm's owners and staff in order to determine existing or potential underlying structural problems. The quality of a firm's management is viewed as a critical determinant in that enterprise's ability both to grow, and to adapt to a dynamic environment.

At the community level, the small scale and diffuse nature of SSE projects require maximum use of existing data sources and a very selective generation of new, project-specific data. Systematic analyses, such as production function appraisal, linear programming, and simulation are usually not feasible within the budget, time, and technical constraints of SSE projects.

The usual procedure to assess the community impact of an SSE project is to extrapolate findings from carefully selected project populations, to the project's entire target population, as in the Daines/PCI evaluation. In addition, national census figures are often compared with a sampling of project population characteristics, as in the Goldmark/Technoserve evaluation.

In most evaluations reviewed, though, the evaluator simply talks in an unstructured manner with an ad hoc assemblage of project staff and participants, and notes haphazardly collected observations. From this information, the evaluator then extrapolates selectively perceived changes to conclusions regarding comprehensive community impact. Moreover, national census figures are frequently underutilized. The opportunity to incorporate forward and backward linkages, as well as multiplier effects, is thus commonly foregone. Instead, an evaluator might make better use of these national statistics by adjusting project-generated figures to the national norms of similar contexts, and then extrapolate project impacts.

However, quantifiable figures are seldom sufficient to describe a a project's impact on its target population. Consequently, selective descriptions of community change, as articulated by both the evaluator and community residents, are often included. A good example of the inclusion of several qualitative descriptions of community change is the Lewycky/UBS evaluation. In this evaluation a narrative of project and village background and specifics are drawn from a quantified socioeconomic survey of factory workers, as well as observations drawn from the evaluator's five months' residency in Odi; a workers' evaluation is drawn from two days of open discussions with factory workers; and an "oral history" is drawn from five months of extensive interviews with area residents.

Table IV-9 summarizes the methods of preliminary data adjustment to optimize imperfect information described above and subsequent modes of data analysis at both the firm and community level.

TABLE IV-9

TECHNIQUES FOR PRELIMINARY DATA ADJUSTMENT
AND SUBSEQUENT DATA ANALYSIS

Technique	Objective	Example
Preliminary Data Adjustment		
Field Screening	Correct for obvious errors, gaps, irregularities, and inconsistencies	Immediate review by field supervisor, followed-up by re-interview if appropriate
Office revision	Fill information gaps, standardize data	Data reconstruction, rearrangement, extrapolation
Subsequent Data Analysis		
Firm level		
Financial analysis	Characterize a firm's cash flow status, liquidity	Assemble and assess sales figures, production and financing costs, product characteristics, and other indicators of enterprise market strength
Economic analysis	Value a firm's expenditures and revenues in terms of national resource opportunity	Cost-benefit calculations using shadow prices and a social discount rate
Nontraditional tracking of critical figures (both economic and noneconomic)	Compensate for market distortions, imputed values, and misleading or incomplete findings	Inclusion of firm characteristics such as credit sources, repayment rates, local equity and leverage, capital/output, capital/job, market reach, degree of subsidization, type of technology, etc.

TABLE IV-9 (Continued)

Technique	Objective	Example
Institutional analysis	Determine firm's ability to grow and adapt to operating environment	Assessment of management skills of firm's owners and staff
<u>Community level</u>		
Population sample extrapolation	Determine project's developmental impact on target population	Cross-sectional and longitudinal analysis
Use of externally generated (non-project) data base		Comparison of national census figures with characteristics of project population samples
Qualitative description		Evaluator narrative, project participant oral history

Caveats for Data Analysis

Data analysis should include internal and external data validation if its conclusions are to be accepted as conceptually legitimate and methodologically sound. Moreover, the development model assumed and accompanying perceptual biases, should be clearly articulated and tested in the course of data analysis.

Internal validation, that is, consistency and accuracy within an evaluation's data base, is essential because of the multitude of both evaluator and respondent irregularities. Evaluators often give subconscious cues to expected responses, have unarticulated biases, change the level of sophistication in the course of an evaluation, and make sampling errors. Respondents often alter their answers simply because they are being observed or asked (the "Hawthorne effect"), because they have inaccurate information, are uninformed, imprecise, defensive, dishonest, confused, are role playing, or are misunderstood. Moreover, business figures are especially susceptible to manipulation, as in the burying of profits in the category of reinvested capital, or the utilization of prejudicial or inconsistent definitions of costs.

Internal data validation is usually achieved through the attainment of multiple perspectives, as in the Lewycky/UBS and the Goldmark/Technoserve evaluations, or through carefully designed and executed sampling techniques, as in the Daines/PCI study.

External validation, that is, consistency and accuracy between an evaluation's data base and a data base derived from similar circumstances, is necessary to account for extenuating phenomena, project or evaluation restrictions, and larger environmental conditions and externalities. These factors are often not picked up in the course of an SSE impact evaluation, yet they might be the principal cause of observed results.

External data validation is usually achieved through the use of longitudinal and cross-sectional checks, as in the Daines/PCI evaluation; through cross-project checks, as in the Barclay/DAI study; or through cross-regional or cross-sectoral checks, as in the Goldmark/Technoserve evaluation.

Finally, evaluator biases can best be tested through the clear articulation of critical development assumptions, the serious consideration of alternative plausible hypotheses, and creative "data massaging" to invite fresh perspectives. Appendix E illustrates the importance of testing development preconceptions by detailing the variables responsible for evaluation findings of each evaluator's initial assumptions, as well as concluding hypotheses. Conceptual clarity and methodological rigor are essential means of preventing an SSE impact evaluation from becoming little more than a self-fulfilling prophesy.

NOTES TO CHAPTER FOUR

1. For examples of this phenomenon, see "Information for Decisionmaking in Rural Development." Washington, D. C.: Development Alternatives, Inc. May 1978. Volume one.

2. An interesting discussion of the abuses of this method can be found in Robert Chambers, "Rural Poverty Unperceived," World Bank Staff Working Paper No. 400. Washington, D.C.: The World Bank, 1980.

3. The often used distinction of "quantitative" versus "qualitative" techniques is not employed in this paper since qualitative techniques can yield quantitative data and vice versa.

4. An illuminating discussion of formal data collection techniques can be found in two recent publications: "Impact Evaluation of the Haiti Small Farmer Improvement Project," January 1979; and Agribusiness and Rural Enterprise Project Analysis Manual, March 1979. Both studies were published for Practical Concepts, Inc., for the Agency for International Development.

5. For interesting discussions of informal data collection techniques see: Donald Mickelwait and others, New Directions in Development: A Study of U.S. AID, Boulder, Colo.: Westview Press, 1979, chapter 7; papers delivered at the conference on Rapid Rural Appraisal, Institute of Development Studies, University of Sussex, 4-7 December 1979; and Eugene J. Webb and others, Unobtrusive Measures: Noncreative Research in the Social Sciences, Chicago: Rand Mcnally, 1966.

6. See, for example, the following papers delivered at the conference on Rapid Rural Appraisal, Institute of Development Studies, University of Sussex, 4-7 December 1979: Abel and Stocking, "Rapid Aerial Survey Techniques for Rural Areas;" Belshaw, "Theoretical Foundations of Data-Economising Appraisal Procedures, with Applications to Rural Development Planning;" Boxall, "The Use of Rapid Appraisal Methods in the Assessment of Post-Harvest Losses;" Ellman, "Cost-Effectiveness of Rapid Appraisal for Rural Project Preparation;" and Honadle, "Rapid Reconnaissance Approaches to Organizational Analysis for Development Administration."

CHAPTER 5
FIELD RESEARCH FRAMEWORK

INTRODUCTION

The preceding chapters presented and analyzed the current state of the art of small enterprise impact evaluation. Because relatively few impact evaluations of small-scale enterprises have been conducted, the most cost-effective methodologies for assessing SSE impact cannot yet be identified with any certainty. The second stage of this contract will explore this issue through field tests documenting the strengths and weaknesses of the most promising methodologies and indicators to assess SSE impact.

The chief issues emerging from the review of the literature and from discussions with SSE impact evaluators are that:

- The evaluation's level, user, budget, timing, and data base heavily determine the methodology chosen;
- The diverse nature of SSE projects (different scales, sectors, assistance strategies, time frames, and so forth), and the lack of standardized impact indicators impede legitimate comparison of SSE projects;
- The attribution of impact to SSE development assistance is the most difficult methodological issue in SSE impact evaluation;
- The cost-effectiveness of tracking various development indicators over the life of an SSE project which feed into an impact evaluation has not been documented;
- The direct and indirect income and employment generated by SSE projects are the two most difficult and costly impact effects to quantify; and
- The trade-offs between cost, accuracy, and utility of alternative SSE impact indicators and data collection techniques have not been explored.

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AIM OF FIELDWORK

The aim of fieldwork conducted under this contract will be to identify pragmatic, cost-effective methodologies which AID missions can use to assess income, employment, and other effects of SSE projects. Specifically, the fieldwork will involve testing and carefully examining evaluation methodologies which advance the state of knowledge on the issues just listed. Irrefutable, all-encompassing answers or methodological blueprints cannot be expected from this relatively modest effort. Instead, the fieldwork will build upon the experiences of previous impact evaluations and attempt to take them one step forward.

The field tests, then, will focus on the questions arising from the issues cited above:

- What are the most appropriate SSE evaluation methodologies for different evaluation levels, users, budgets, timing and data bases?

- Is it possible or useful to employ a standardized set of indicators across all SSE projects to assess impact, or must indicators be carefully tailored to each project's specific characteristics?

- What minimum data should be collected at the beginning of a project to assist in the evaluation of subsequent impact? In cases where no preproject impact data exist, is there a cost-effective methodology to be used after impact has occurred which separates and measures changes caused by the SSE project from those caused by environmental factors?

- What minimum data should be gathered to monitor an SSE project? How can these data affect the reliability of information and the costs associated with conducting an impact evaluation?

- What is the variance in accuracy and cost of income and employment data collected through:

  - examination of centrally located secondary sources (donor institution records, census statistics, sector studies, and so forth);

  - questionnaires administered to a randomly selected sample of assisted SSE managers or owners; and

- in-depth interviews with project beneficiaries (SSE staff, input suppliers, community leaders, and other key informants).

- What are the most cost-effective SSE impact indicators, including income and employment proxies? What are the average costs associated with different data collection and analysis methods for these indicators?

Additional important questions will surface during the fieldwork and will be researched. However, premature dissipation of energy and budget frequently occurs with an unfocused approach to field research. Thus we intend to structure the fieldwork rigorously enough to provide answers to the questions already raised. We will disaggregate these broad questions into more manageable, specific concerns and investigate them according to the design plan and guidelines discussed in the following sections.

FIELDWORK DESIGN AND GUIDELINES

Field tests will be conducted in four countries; two countries where SSE programs/projects are just beginning, and two countries where SSE projects have been functioning long enough to justify an impact evaluation. The four SSE development projects will be chosen to provide the most representative sample possible. SSE projects with diverse characteristics will be sought in order to test the applicability of indicators and evaluation methodologies under different situations. Key variables will include:

- Enterprise scale (micro or small);

- Intervention strategy (credit, management training, input supply, and so forth); and

- Project location (rural or urban; Asia, Africa, Middle East, or Latin America).

The fieldwork has been designed to address two needs commonly felt by SSE promoters:

- What minimum information should be collected, with what frequency and approximate cost, to monitor and evaluate the project on an ongoing basis?

- How might impact information be collected and analyzed for a project with a minimal amount of preproject or monitoring data?

To serve these needs, DAI hopes to examine two SSE promotion projects before and after impact has occurred (type A), and two SSE projects only after impact can be expected to have occurred (type B). As table V-1 indicates, the DAI team would be available to help design or improve the monitoring and evaluation system for the two type A projects. This work would be expected to occur soon after project initiation.

The DAI team would design the monitoring and evaluation system of type A projects with the active participation of both those providing information (assisted SSE management and owners, intermediary institution field staff, and others), and those desiring information (an intermediary institution headquarter staff, donor institution staff, and others). The team would first review the current monitoring and evaluation system and then determine the minimum information needs required by donor and intermediary institutions. The monitoring and evaluation system's design will be based upon:

- The information that management needs;
- The information that staff have an incentive to collect;
- The information that beneficiaries are willing to provide; and
- The information costs.

The monitoring system is expected to concentrate upon enterprise profitability and sustainability indicators (see pages 50 and 51 for examples) and provide management with information needed for decision making. The evaluation system will provide a more in-depth analysis of those indicators and include impact information on beneficiaries.

After the system is designed, the two-person DAI team will train project staff on how to use it. If time permits, the system will be pretested prior to actual implementation. The DAI team will also work with the project's evaluation staff to determine the baseline data to be collected and the data collection technique to be used. Budgetary constraints prevent the DAI team from actually supervising or collecting this information themselves. Two person-months is the estimated requirement to accomplish the above tasks.

Approximately one year after the monitoring and evaluation system for each type A project has been designed, a DAI team will return to the project sites. The cost-effectiveness of the data

TABLE V-1

SUMMARY OF FIELDWORK DESIGN

Project type	Evaluation Timing: Before impact (project initiation)	Evaluation Timing: After impact (mid-project or project termination)
A (two projects)	Design monitoring and evaluation system.	Evaluate cost-effectiveness of monitoring and evaluation system.
	Train evaluation staff.	
	Identify possible baseline indicators and collection methods.	Conduct impact evaluation.
B (two projects)		Conduct impact evaluation.

collected through the monitoring and evaluation system will be analyzed and, if necessary, revisions will be suggested. However, the major effort during this second trip will be to conduct an impact evaluation of the project. Information generated through the monitoring and evaluation system will be complemented by and compared with the information derived through field investigation. Further details on fieldwork methodology will be found in the following section on data collection and analysis.

Two projects will be visited only once--after impact is expected to occur (type B). These impact evaluations could occur either during or after project implementation. It is expected that type B projects will have a minimal amount of baseline data or information which can be derived from their monitoring and evaluation written reports. Thus, the DAI team would be able to compare the costs and benefits associated with conducting impact evaluations of projects both with and without formally established monitoring and evaluations systems. The cost of establishing and implementing a monitoring and evaluation system will be carefully tracked and attempts will be made to assess the marginal cost and utility of analyzing different kinds of impact data in ongoing project evaluations. The DAI teams conducting impact evaluations in each of the four countries visited will examine how the monitoring and evaluation system affects the quality of impact information and the time required to collect it.

Lessons learned in each evaluation would be applied to improve the design and implementation of later impact evaluations. Ideally, as shown in figure V-2, the DAI team would first conduct an impact evaluation on a project with a minimal monitoring and evaluation system (type B). The team would then suggest what monitoring and evaluation information would have helped project management as well as facilitated the impact evaluation. These lessons of hindsight would then be incorporated, after being appropriately modified, into the design of a monitoring and evaluation system for the next reviewed SSE project (type A). The third evaluation effort would then test the applicability of this monitoring and evaluation system on a project which differs either in scale or assistance strategy and in geographic location.

The three subsequent impact evaluations would use the basic data collection and analysis techniques presented in this chapter. Each impact evaluation would build upon previous experiences. Budget and time constraints, as well as differing project environments, may cause some evaluations to be more rigorous than others. We anticipate that the four impact evaluations will range from relatively comprehensive evaluations to those using the same general data collection and analysis techniques but with substantially less effort. Given the small number of cases examined, findings on the applicability of these methodologies will necessarily be impressionistic rather than conclusive. They will, however, advance hypotheses for future examination.

FIGURE V-1

HYPOTHETICAL TIMETABLE FOR FIELDWORK

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Project 1 (Type B)																				
Conduct and write-up impact evaluation	XXXX																			
Project 2 (Type A)																				
Design M&E system			XXXX																	
Conduct and write-up impact evaluation															XXXX					
Project 3 (Type A)																				
Design M&E System					XXXX															
Conduct and write-up impact evaluation																		XXXX		
Project 4 (Type B)																				
Conduct and write-up impact evaluation								XXXX												

This effort is different from past SSE impact evaluations because the evaluation process itself will be the main focus. Most SSE impact evaluations have been concerned solely with providing information to meet donor or management needs; these evaluations will be carefully planned, documented, and analyzed. Impact indicators and methodologies used by past SSE impact evaluations will be adapted, tested, and evaluated according to their costs and the degree to which they add to the understanding of SSE impact.

Nevertheless, the evaluation needs of cooperating field practitioners must be the basis from which this evaluation fieldwork is undertaken. The evaluation's design, discussed later in this chapter, will be modified, if necessary, to provide information which responds to the needs of the organization requesting the evaluation. Thus, we anticipate at least two products from each evaluation; one written document to serve the evaluation requestor's needs, and another to focus on the methodological questions previously cited in this chapter. These latter documents will form the basis for the development of a manual which comprises the third phase of this contract.

CONCEPTUAL FRAMEWORK FOR FIELDWORK

Development Hypotheses

Two development hypotheses govern the fieldwork:

- That outside assistance can promote self-sustaining enterprises; and
- That self-sustaining enterprises can promote an increase in income and employment, as well as other positive spinoffs for the communities in which they are located.

The field evaluations will, therefore, focus upon the assisted SSEs and the communities in which they are located as the units of analysis.

As discussed on page 35, development impact is a function of both SSE promotion efforts and environmental factors. The effectiveness of the SSE development project may be a necessary but insufficient condition to achieve development impact. The project may accomplish most of its objectives (for example, the establishment of a self-sustaining enterprise) without achieving the desired development impact, or if other variables are

favorable (weather, government policies, and so forth), development may occur in the region or among the target population irrespective of the success of the project. Thus, the fieldwork will test methodologies to assess:

- The impact of outside assistance on the SSE;
- The impact of the SSE on the community; and
- The process by which these changes occurred.

Particular attention will be paid to attributing and explaining how the enterprise has been changed by outside assistance and how the enterprise has affected the community. But, although attempts will be made to isolate net changes caused by the SSE promotion program, lack of baseline data may greatly affect the reliability of this information. A control group of unassisted enterprises will not be analyzed rigorously because of the cost involved in finding such a control group, and the difficulty involved in getting financial information from nonparticipants. However, information on how assisted enterprises and communities have developed in comparison to unassisted enterprises will be gleaned through interviews with intermediary organization field staff, enterprise managers, and other key informants.

Measures of Development Impact

During the fieldwork, development impact will be measured in the following ways:

- Direct benefits to the enterprise. What are the actual benefits which have accrued to the enterprise? Direct benefits to the enterprise can be divided into two categories:
  - enterprise profitability; and
  - enterprise sustainability.
- Direct benefits to the community. What are the benefits which have accrued to the project area? These direct, community-level benefits can be divided into three categories:
  - income;
  - employment; and
  - socioeconomic change.

- Benefit distribution. Who is receiving the benefits of the project? This variable can be broken down by geography, ethnicity, sex, age, and socioeconomic status. Attempts will be made to determine the distribution of benefits both at the enterprise and community levels.

- Benefit growth. What are the forward and backward linkages of the project? What are the spread effects which can be observed or expected? (See pages 40-42 for further discussion).

IMPACT INDICATORS, DATA COLLECTION, AND DATA ANALYSIS

Indicators

The data collection and analysis methods outlined in this section will focus on testing indicators of SSE impact for the following characteristics:

- Validity (the extent to which the indicator actually represents the phenomenon being examined);

- Collectibility (the feasibility of actually getting the information);

- Comparability (the extent to which the information is comparable across projects); and

- Cost (the number of person-days and the skills required to collect the information).

Examples of indicators which will be tested were listed in chapter four of this report. These indicators can be found as follows:

- Enterprise profitability (table IV-2, page 50);

- Enterprise sustainability (table IV-3, page 51);

- Community income (table IV-4, page 53);

- Community employment (table IV-5, page 54); and

- Community-level socioeconomic change (table IV-6, page 55).

Data Collection

Three different methods of data collection will be attempted in every impact evaluation field test to:

- Check the accuracy of the data gathered through each method;
- Ascertain the applicability of these data collection methods under diverse project circumstances; and
- Compare the costs associated with each method.

The three data collection methods used in each impact evaluation will involve:

- Examining central records;
- Administering questionnaires to a sample of assisted SSE managers or owners, and, when possible, the examination of their business records; and
- Conducting in-depth, open-ended interviews with project beneficiaries, such as firm employees, input suppliers, community leaders, SSE product consumers, and other key informants.

As previously indicated, depending on project circumstances, some impact evaluations will be more comprehensive than others. For example, logistical constraints may prevent a random selection of assisted SSEs to be made, reduce the number of SSE managers who can be interviewed, or both. Thus, the following descriptions of the three data collection methods should be considered as ideal types.

Examination of Central Records (one person-month).

This method would entail the examination of all relevant secondary source material relating to the small-scale enterprise project. The two chief sources of information are expected to be national census statistics and project records kept by the donor, intermediary assistance agency, or both. The national census statistics may provide ratios (for example, labor intensity of different types of SSEs, average fixed investment per SSE worker, average sales revenues of SSEs, and so forth) which can be used to estimate potential SSE impact. Donor and intermediary institution records will be examined, particularly for information on project assistance by location, type, amount, and firm characteristics (subsector, assets, type of ownership, number of employees, financial performance, and so forth). Project expenditures, including the costs of implementing the monitoring and evaluation

system and repayment ratios, when applicable, will also be collected. Employment, income, and other impact information generated through the monitoring and evalution system will be validated through the second method of data collection--a survey of enterprise owners or managers. The monitoring and evaluation system designed for type A projects will be carefully evaluated for its cost-effectiveness and revised, if necessary.

Survey of Assisted Enterprises (one person-month).

Information derived through questionnaires administered to assisted enterprises is expected to validate and supplement data being collected simultaneously through the two other methods. Ideally, an estimated 40-50 enterprises will be randomly chosen and enterprise owners or managers will be interviewed by the assistance agency's field staff. Budgetary limitations preclude hiring impartial interviewers with sufficient business skills to administer the questionnaire. Such limitations, compounded by the geographical dispersion of assisted enterprises, will probably necessitate limiting the survey to include only the most accessible enterprises.

When possible, interviewers will also review financial records of the assisted enterprises, particularly to derive information on their preproject status. When financial records are not available enterprise owners will be asked to recall their firm's preproject and current financial status. A member of the DAI team will design the questionnaire, train interviewers, pretest and revise the questionnaire, and supervise data collection and analysis.

In-Depth Interviews

One member of the DAI evaluation team would spend four weeks living in four communities affected by SSEs assisted by the project. These four communities would be chosen from among those containing SSEs surveyed under the DAI evaluation. The DAI team member would be expected to conduct long, informal, fairly unstructured interviews with enterprise staff, community leaders, SSE suppliers and product consumers, those not affected by the project, and others able to provide information about project impact. Much of the information collected through these interviews can be expected to be of a qualitative rather than a quantitative nature.

Whereas the two previous data collection methods focus on the impact of outside assistance upon the enterprise, this effort will concentrate upon the enterprise's impact on the community. It will check the validity of extrapolations about community impact which will be based upon the data collected from central records and interviews with project managers. This anthropological approach will also seek to explain the process by which community change is occurring.

Data Analysis

After data have been collected through the three methods outlined, they must be standardized to ensure comparability. This would include transforming monetary amounts into their present value, deriving ratios with common denominators, and adjusting data to control for economic fluctuations. Standard financial and economic analysis techniques will be employed by the DAI team members involved in collecting data through the examination of central records and the survey of enterprises. Information gathered through in-depth interviews may be used to index projects according to the degree that they:

- Distributed benefits to whom they were intended; and
- Led to spin-off activities, spread effects, and other examples of benefit growth.

Indexing will be attempted to enhance the comparability of projects and quantify subjective assessments. If successfully executed, this method may advance the state of the art of SSE impact evaluation. However, the many conceptual and operational problems involved in using this technique will require the DAI team to examine its strengths and weaknesses very carefully.

Financial Analysis

Many indicators listed in tables IV-2 and IV-3 (return on investment, net profit/sales, debt/equity, and so forth) are already the product of financial analysis. The DAI team will focus on the amount of change in the assisted enterprise's profitability and sustainability after the assistance was provided. For example, income directly generated by the enterprise (profits, wages and salaries, income to suppliers and so forth) and direct employment levels prior to assistance will be divided into current levels.

Attempts will be made to develop a self-sustaining enterprise index based upon financial indicators and management capability. This index will indicate the probability that economic gains enjoyed by enterprises will continue after outside assistance is withdrawn.

Economic Analysis

SSE promotion projects will be analyzed using benefit-cost analysis and cost-effective analysis methods. The direct and indirect benefits of the project which can be monetized will be

expressed in terms of cost per unit of output. Examples would include cost per job sustained or created, cost per recipient assisted, cost per loan made, and cost per increase in projects.

Benefit Distribution Index

DAI team members involved in data collection through the examination of central records and the survey of enterprises will rate the project on a scale of 1 to 5, depending on the amount of benefits received by the enterprise type for whom they were intended:

- 5 = All benefits were received;
- 4 = Most benefits were received;
- 3 = About half the benefits were received;
- 2 = Relatively few benefits were received; or
- 1 = Almost no benefits were received.

The DAI team member conducting in-depth interviews will use the same scale to rate the extent to which SSE enterprise benefits were received by the project's target population.

Benefit Growth Index

Growth in direct benefits through forward and backward linkages, spread effects, replications, and spin-offs will be listed, quantified, aggregated, weighed, and combined to form this index.

Comparison of Indicators Derived Through Data Collection Methods

After members of the DAI team have completed the individual analysis of the collected data, impact indicators will be compared. Major differences in findings will be documented and further attempts will be made to determine the causes for such discrepancies. Team members will discuss and prepare written reports on the strengths and weaknesses of the data collection methods and indicators used in assessing SSE impact.

These written reports will be used to develop a set of pragmatic, operational guidelines to assist SSE promotion agencies in assessing employment, income, and selected other impacts of SSE projects. This will be the product of the third stage of this contract.

WORK PLAN

This section presents an estimate of the personnel anticipated to carry-out the proposed fieldwork.

To maximize objectivity and comparability of data across projects, the project's director will participate in all field activities. The director of fieldwork will be Susan Goldmark, senior development analyst specializing in enterprise evaluations at Development Alternatives, Inc. Ms. Goldmark will have overall responsibility for all aspects of the study, both substantive and administrative.

Monitoring and evaluation systems for the two type A projects will be designed by a two-person team which includes the project director. The other member of this team will be selected from DAI's development staff and will possess considerable experience in the design of SSE information systems.

Impact evaluations will be conducted by a three-person team. The project director will work with a member of DAI's development or associate staff and a host country national selected for specialized knowledge; business, anthropological experience or both; and language ability. Each member of the team will fulfill one of the three tasks of the impact evaluation:

- The examination of central records will be conducted by a DAI evaluation expert with specific skills in economic analysis and enterprise development;
- The survey of SSEs will be conducted by an expert in business analysis, with knowledge of the appropriate language and statistical skills; and
- The in-depth interviews will be conducted by someone possessing an expert knowledge of the project site, fluency in the local language, and anthropological skills.

For type A projects, the team member charged with examining central records will also evaluate the cost-effectiveness of the monitoring and evaluation system and suggest appropriate revisions.

Approximately one calendar month or 72 person-days will be required for each impact evaluation.

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APPENDIX A

NON-AID ORGANIZATIONS CONTACTED
(MAY-SEPTEMBER 1980)

APPENDIX A

NON-AID ORGANIZATIONS CONTACTED

Accion International/AITEC
Cambridge, Mass.
  Jeffrey Ashe, Executive Director, AITEC

Appropriate Technology International (ATI)
Washington, D.C.
  Marshall Bear, Evaluation Consultant

Center on Technology and Society
Cambridge, Mass.
  John Beardsley, Alternative Marketing Organizations
  Project Director

Coordination in Development (Codel)
New York, N.Y.
  Boyd Lowry, President

Control Data Corporation
Minneapolis, Minn.
  Ben Kilgore, Vice President, Small Businesses Division

Developing World Industry and Technology, Inc. (DWIT)
Washington, D.C.
  Neil Boyle, Consultant

The Development Group for Alternative Policies (Development Gap)
Washington, D.C.
  Steve Hellinger, Co-director

Ford Foundation
New York, N.Y.
  Francis Sutton, Deputy Vice President, International Division

Georgia Institute of Technology
Atlanta, Georgia
  Ross Hammond, Director, Asia Regional Office

Harvard Business School
Cambridge, Mass.
  James Austin, Associate Professor

IDEAS, Center for Rural Development
Fort Collins, Colorado
  Simon Williams, Director

Industry Council for Development (ICD)
New York, N.Y.
Walter Simon, Executive Director

Institute for International Development, Inc. (IIDI)
Vienna, Virginia
Barry Harper, Executive Director

Inter-American Development Bank (IDB)
Washington, D.C.
Ken Cole, Director, Small Projects Program

Inter-American Foundation (IAF)
Arlington, Virginia
Peter Hakim, Director of Evaluation

International Executive Service Corps (IESC)
New York, N.Y.
Frank Pace, Jr., President

International Labor Organization (ILO)
Geneva, Switzerland
Enyinna Chuta, Technology and Employment Branch

Meals for Millions/Freedom from Hunger Foundation
New York, N.Y.
Peter Davies, President

Mennonite Central Committee (MCC)
Akron, Penn.
Edgar Stoesz, Associate Executive Secretary for Overseas Services

New Transcentury Foundation
Washington, D.C.
Brenda Eddy, Vice President

Opportunities Industrialization Centers, International (OICI)
Philadelphia, Penn.
Quy Nguyen, Evaluation Officer

Partnership for Productivity (PfP)
Washington, D.C.
Andrew Oerke, President

Population Council
New York, N.Y.
Sondra Zeidenstein, Consultant

Private Agencies Collaborating Together (PACT)
New York, N.Y.
Robert O'Brien, Executive Director

"The Resource"
Larchmont, N.Y.
Loren Finnell

Rockefeller Brothers Fund
New York, N.Y.
Bill Moody, Staff Associate in Charge of International Program

Rockefeller Foundation
New York, N.Y.
Sterling Wortman, Acting President

Save the Children
Westport, Conn.
James MacCracken, Vice President of Programs

Technical Assistance Information Clearing House (TAICH)
New York, N.Y.
Publications Division

Technoserve, Inc.
Norwalk, Conn.
Susan Goldmark, Director of Evaluation

United Nations Capital Development Fund (UNCDF)
New York, N.Y.
Anton Deiters, Senior Investment Officer

United Nations Development Program (UNDP)
New York, N.Y.
Gordon Havord, Director, Program Development Support and Evaluation

United Nations Industrial Development Organization (UNIDO)
New York, N.Y.
Adly Abdel-Meguid, Director, Industrial Investment Promotion Service, North America (IIPS-NA)

Volunteers in Technical Assistance, Inc. (VITA)
Mt. Ranier, Maryland
Steve Hirsch, Director, Training and Program Operations

World Bank
Washington, D.C.
Phiroze Medhora, Senior Evaluation Officer, Industry and Development Finance Companies Division, Operations Evaluation Department

World Council of Credit Unions, Inc.
Washington, D.C.
Thomas Carter, Director of Programs

World Education
New York, N.Y.
Catherine Crone, Director of Technical Services

Y.M.C.A., International
New York, N.Y.
Moses Perry, Director, Intermovement Support and Development Assistance

APPENDIX B

AID BUREAUS CONTACTED
(MAY-SEPTEMBER 1980)

APPENDIX B

AID BUREAUS CONTACTED

Bureau for Program and Policy Coordination
Richard Blue, G. William Anderson, Robert Berg

Bureau for Development Support
Frank Campbell, Bryant Smith, Cliff Barton

Bureau for Private and Development Cooperation
Judy Gilmore

Bureau for Asia
Barbara Pillsbury, Gail Heston, Peter Thormann

Bureau for Africa
Henry Miles, Frank Dimond

Bureau for Near East
Richard Rhoda

Bureau for Latin America and the Caribbean
Buster Brown, Bernice Goldstein, Tony Velasquez

APPENDIX C

SELECTED SMALL-SCALE ENTERPRISE BACKGROUND LITERATURE

(REVIEWED MAY-SEPTEMBER 1980)

APPENDIX C

SELECTED SMALL-SCALE ENTERPRISE BACKGROUND LITERATURE

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APPENDIX D

SELECTED LITERATURE ON SMALL-SCALE ENTERPRISE EVALUATION METHODOLOGY

(REVIEWED MAY-SEPTEMBER 1980)

APPENDIX D

SELECTED LITERATURE ON SMALL-SCALE ENTERPRISE EVALUATION METHODOLOGY

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APPENDIX E

IMPACT EVALUATIONS REVIEWED DURING SOAP PREPARATION (MAY-SEPTEMBER 1980)

APPENDIX E

IMPACT EVALUATIONS REVIEWED DURING SOAP PREPARATION

Note: "*" signifies evaluation is devoted to small-scale enterprise.

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- No. 5 - Kenya Rural Water Supply: Program, Progress, Prospects (May 1980). (Kenya/AID)
- No. 6 - Liberia: Rural Roads (June 1980). (Liberia/AID)
- No. 7 - Effectiveness and Impact of the CARE/Sierra Leone Rural Penetration Roads Projects (June 1980). (Sierra Leone/AID).

1/ Each impact evaluation is referenced throughout the text by the short-hand term in parentheses following the full citation in this appendix.

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APPENDIX F

IMPACT EVALUATION ABSTRACTS
(PREPARED MAY-SEPTEMBER 1980)

APPENDIX F

IMPACT EVALUATION ABSTRACTS

The following evaluations were examined in detail and abstracted in this Appendix:

(1) Boyle/World Bank

(2) Bangladesh/World Bank

(3) Dimond/AID

(4) Hawbaker/AID

(5) Sierra Leone/AID

(6) Schreiber/Accion

(7) Lewycky/UBS

(8) Goldmark/Technoserve

(9) Daines/PCI

(10) Barclay/DAI

(1) Boyle/World Bank

TITLE: Rural Industrialization Technical Assistance (RITA) Program.

DESCRIPTION: The RITA project was a demonstration pilot effort to test one model of rural/urban (commercial centers and intermediate towns in rural areas) grassroots industry development in the Northeast of Brazil. The project's primary thrust was rural investment promotion through the matching of U.S. university teams of professors and graduate students in business administration, engineering and economics with counterpart teams from local Brazilian universities to work in designated rural areas to: 1) identify small and medium industrial opportunities; 2) organize local companies to exploit these possibilities; 3) assist across-the-board in getting the new companies into sustained operation; 4) provide technical assistance to counterpart university faculty and students in development entrepreneurship, promotion, and related areas; and 5) involve local citizens in the process of industry formation, ownership, and management.

LOCATION: Six states in the Northeast of Brazil: Ceara, Rio Grande do Norte, Paraiba, Pernambuco, Alagoas, and Bahia.

SPONSOR: U.S. Agency for International Development; Government of Brazil.

IMPLEMENTOR: U.S. Agency for International Development; Government of Brazil.

COST: $3.75 million (1965 dollars).

DURATION: 1962 to 1968.

FUNDS SPENT AT TIME OF EVALUATION: All.

ELAPSED TIME: Project completed seven years prior to evaluation.

Evaluation Specifics

TITLE: An Evaluation of the Rural Industrialization Technical Assistance (RITA) Program, Northeast Brazil, 1962 to 1968; World Bank Science and Technology Report No. 15.

(Boyle/World Bank - 2)

SPONSOR: Office of Science and Technology, World Bank.

EVALUATOR: Neil Boyle, Consultant to World Bank and former Chief of Party/RITA Project, Alagoas.

DATE: 3 March 1976.

LENGTH: 55-page text, 8-page annex.

COST: Approximately $20,000.

DURATION: Three months (two in Brazil and one in the United States).

PURPOSE: Assess the RITA program model of rural/urban industry development in northeastern Brazil and recommend elements which might go into a new rural/urban industry development program in this region.

METHODOLOGY:

Data Collection - The evaluation is based primarily upon a field mission to the Northeast of Brazil in August and September of 1975, during which: 1) consultations were held with government officials and technical assistance groups and with former American and Brazilian members of the RITA program; 2) the evaluator visited four of the six field sites and collected data on nine of the nineteen known and twenty-five reported RITA firms; and 3) a data base for these firms was developed through interviews with owners/managers, observations of plant facilities and operations, analysis of documents, and the restructuring of balance sheet and income statements based on current costs and prices. These nine firms were chosen because they were the only firms of the thirteen surveyed which had sufficient data on which to base an analysis, they were located in an area which did not require doubling back on travel plans, and they were located in an area which contained most of the firms. The USAID Final Report (1969) listed fifteen plants in operation in 1969; two had closed by the end of 1975 (although one of these was scheduled to reopen shortly), and five new RITA or RITA spin-off firms had been established. The evaluator's sample does not appear to be biased by the nature of the selected firms, i.e., size, location, product line, and the like.

Data Analysis - Analysis of the program employs a mixture of financial capital budgeting techniques and socio-economic investigation. Firm-specific data on performance and impact indicators, and postulated critical variables

of success, are compiled in charts utilizing a cross-firm format and accompanied by succinct narratives outlining the author's main assumptions, data derivation methodologies, and findings. Brief case descriptions of sample firms are included in an annex.

Key assumptions are: 1) viable combinations of the factors of production, including untapped resources of local capital, exist in underindustrialized rural communities of northeastern Brazil that can be organized into sustained and profitable local industrial firms; 2) universities can play a catalytic role in motivating the human and material resources of rural communities for the purpose of industrial development; and 3) local community citizens can be motivated by outside intervention, and with experiences in capital formation, entrepreneurship, resource institutions and technology into owning and managing these industrial firms. Program performance and impact are perceived in light of the above premises, and other contextual factors which might provide alternative explanations for the evaluator's findings are not articulated. Key neutral descriptors are, on a firm-specific basis: product, output (metric tons and U.S. dollars), total investment, debt per total investment, sales per total investment, credit sources and repayment, local equity and leverage, capital to output ratio, capital to job ratio, number of employees, ownership, number of stockholders, market reach, linkages, multiplier effects, degree of subsidization, type of technology, training and university participation, and socioeconomic background of beneficiaries.

Key success indicators are, on a firm-specific basis: product quality, dividends and capital gains, recovery of promotional and development costs, worker turnover, worker welfare, community changes, cost and labor-income benefit streams, net profits to sales ratio, and profitability estimates (profit margins, return on investment, asset turnover). Key variables hypothesized to affect the above two groups are, on a firm-specific basis: size (investment and employees), location, type of product, capital to labor ratio, market reach, source and class of entrepreneur/manager, business training of entrepreneur/manager, source of critical inputs, enterprise management style, and community development strategies and applied behavioral science skills.

CONCLUSIONS: The RITA project has benefited the development of the Northeast of Brazil; the expenditure of 16% over capital costs for technical assistance and promotion is indispensable to successful grassroots rural industry development, given the low risk and innovation profiles entrepreneurs are likely to have in rural communities of the Northeast;

(Boyle/World Bank - 4)

promotion costs are not excessively high when related to the labor-income stream measured over a ten-year period; capital costs per job created for the smaller RITA firms have not significantly increased over the ten-year period since production began; rural/urban industry in the Northeast can be labor-intensive and competitive; industrial plant size for rural/urban areas should not exceed U.S. $425,000 in total investment when based entirely on local factors of production; the most profitable RITA firms are those which are small, produce for local markets, produce basic necessity products, depend on local inputs, have a personalized relationship with their factor and product markets and which use a team approach to management; limited amounts of equity capital for new rural/urban industry development exist in towns which are already commercial centers in the Northeast; and equity investments by the local community are probably a key factor in motivating local entrepreneurs.

(2) Bangladesh/World Bank

Project Synopsis

TITLE: Bangladesh - First Small-Scale Industry Project (Credit 353-BD).

DESCRIPTION: International Development Association (IDA) loan to the Government of Bangladesh, essentially the transfer of an earlier credit of a like amount to East Pakistan following the war of independence. The credit was designed to operate through the medium of commercial banks to provide foreign exchange and technical assistance to small-scale enterprises. The Bangladesh Small Industries Corporation (BSIC) was responsible for screening subloan applications, appraising the technical, financial, and economic viability of subprojects, approving them for finance by the commercial banks, and supervising subproject implementation and operations; a consortium of the six nationalized commercial banks was to assess the creditworthiness of clients once subprojects were approved by the BSIC, disburse funds, and collect repayments; risks were split 50:50 between BSIC and the commercial banks. Small-scale industries were defined as units with fixed assets not exceeding Tk 1.5 million (about U.S.$210,000), although the limit was raised to Tk 2.5 million (about U.S.$330,000) in October 1973.

LOCATION: Subprojects located primarily in and around Dacca and Chittagong, Bangladesh.

SPONSOR: International Development Association, World Bank.

IMPLEMENTOR: Bangladesh Small Industries Corporation, consortium of nationalized commercial banks, and the International Development Association.

COST: U.S.$3 million.

DURATION: Approved, December 1972; effective May 1973; closed, December 1977.

FUNDS SPENT AT TIME OF EVALUATION: All but U.S.$8,945 (cancelled).

ELAPSED TIME: 2½ years.

Evaluation Specifics

TITLE: Project Performance Audit Report: Bangladesh - First Small-Scale Industry Project (Credit 353-BD).

SPONSOR: Operations Evaluation Department, World Bank.

EVALUATOR: Phiroze Medhora, Senior Evaluation Officer, Industry and Development Finance Companies Division, Operations Evaluation Department, World Bank.

DATE: 14 May 1980.

(Bangladesh/World Bank-2)

LENGTH: 26-page text, ten pages of tables.

COST: Approximately $30,000

DURATION: Evaluator - 6-8 weeks;
Local university research team (6-8 people) - 2 3 months;
Home-office support - 4-6 weeks.

PURPOSE: Standard operating procedure to evaluate every Bank loan at project's completion to assess project design, implementation, and impact, and to draw lessons for future Bank projects.

METHODOLOGY:

Data Collection - The data for this evaluation is derived from two sources: 1) a trip by the evaluator to Bangladesh in February 1979, during which time he had discussions with Government and central bank officials, project personnel, and representatives of the commercial banks; and 2) the Project Completion Report (PCR) prepared by the South Asia Regional Office, based on two Bank missions, and a specially commissioned study by Dacca University's Institute of Business Administration.

Data Analysis - The data are analyzed in two forums, a 6-page Project Performance Audit Memorandum and a 28-page attachment, the Project Completion Report. The Memorandum is essentially a summary of the Attachment, which discusses in paragraph outline form: the project's sector, policy, and institutional contexts; the project's objectives, components, and design; the ex-post experience of subprojects financed, and the performance of their implementing agencies; and lessons learned. Key assumptions underlying the above analysis are that the principal reason for small industry's slow growth in Bangladesh is limited access to foreign exchange to import equipment and machinery, as well as the paucity of entrepreneurs with technical expertise, and the lack of outside technical assistance to help improve the efficiency of small industry. The explicit objectives of the project were thus to develop management capabilities, broaden industry ownership, and provide foreign exchange to small enterprises. Key neutral descriptors in the evaluation are, by subsector: location, amount sanctioned (and percent of total subsector), number of projects, cost distribution of projects, type of activity, total fixed cost, total fixed cost excluding land, equipment cost, foreign equipment cost and source, percent of foreign equipment over total equipment cost, and percent of imported raw material consumption over total raw material consumption. By division (region): number of projects, sanctioned amount, equity contribution, total fixed cost, and employment.

(Bangladesh/World Bank-3)

Key success indicators are, by subproject, and presented as actual against planned: total fixed costs, number of employees, costs per job, loan amount in relation to equity (actual only), production output, sales, profits before tax, capacity utilization, and problems encountered (actual only). By bank: number of projects, amount sanctioned, amount disbursed, amount realized, amount overdue, amount fell due, and amount overdue as a percent of amount fell due. Key variables hypothesized to affect the above two groups are: 1) environment - the considerable social, political, and economic turmoil which followed the war of independence; 2) project design - inefficiencies, conflicts, and ambiguities resulting from the division of appraisal and financing responsibilities between BSIC and the commercial banks; unclear objectives and subproject eligibility criteria; and 3) project implementation - BSIC's weak appraisal and follow-up capabilities.

CONCLUSIONS: The project was inadequately designed, and as a result, particularly given the difficult environment in which it was implemented, ran into delays and difficulties in the implementation period. The number of subprojects covered was smaller and the average financing larger than originally envisaged, and the number of jobs created smaller than projected. Also, procurement did not always conform to the credit agreement requirements, and the subprojects ran into repayment problems. However, the evaluators point out that Credit 353-BD was the first SSE project for both Bangladesh and the Bank, and the lessons it offers will aid the design of future small-scale industry projects.

RECOMMENDATIONS: Appraisal/financing responsibilities should not be split between BSIC and commercial banks; appraisal and follow-up skills should be built into the banks; clear subproject priorities and loan eligibility requirements need be established; the IDA should provide a clear project design and regular, direct technical assistance and encouragement to implementing agencies; IDA financing and disbursement should include local as well as foreign exchange costs since this would reduce bias toward subprojects intensive in imported equipment; credit and technical assistance to existing enterprises should receive at least as much attention as new enterprises; institutions responsible for project identification and appraisal should develop their capabilities in assessing alternative technologies; location on industrial estates should be optional for industries manufacturing products with regular marketing channels, and should be discouraged for most agro-processing and service industries; SSE projects should include cottage/informal enterprises to help achieve employment generation at low costs; and follow-up and collection procedures should receive major attention.

EVALUATION USE: Many of the above recommendations were incorporated into the design of the Second Small Industry Project for Bangladesh (Credit 825-BD), approved in June 1978.

(3) Dimond/AID

Project Synopsis

TITLE: Farmer Association and Agribusiness Development (FAAD).

DESCRIPTION: The project's primary objective is to achieve wide-scale improvements in the quality of life in selected rural areas of Ghana by developing farmers associations and rural-based business enterprises. The project is designed to implement AID's "New Directions" mandate by working through private voluntary organizations, and thus consists of seven subprojects: 1) integrated rural development in four regions of southern Ghana; 2) building and stocking of a centralized Farm Service Center in Tamale to provide scarce farm inputs to agricultural stations and training centers in northern Ghana; 3) building and stocking of an Agricultural Service Center in Tamale to serve as a wholesale store to provide scarce commodities and services to nine agricultural stations in northern Ghana; 4) provision of managerial and technical skills for members of cooperatives and farmers associations country-wide; 5) establishment of a training/consultancy facility in Atebubu District to assist village leaders and organizations in identifying local development projects; 6) development of self-help sugar agribusinesses; and 7) provision of management training for members of indigenous craft associations.

Note: The above subprojects henceforth will be referred to by the shorthand titles "Integrated Rural Development," "Farm Service Center," "Agricultural Service Center," "Cooperatives," "Local Development Projects," "Sugar Agribusiness," and "Craft Associations."

LOCATION: Ghana.

SPONSOR: U.S. Agency for International Development Mission to Ghana.

IMPLEMENTOR:
1) Integrated Rural Development - Ghana Organization of Voluntary Assistance (GOVA);
2) Farm Service Center - Catholic Relief Services (CRS);
3) Agricultural Service Center - Christian Service Committee (CSC);
4) Cooperatives - Ghana Rural Reconstruction Movement (GhRRM);
5) Local Development Projects - Association of People for Practical Life Education (APPLE);
6) Sugar Agribusiness - Technoserve, Inc.; and
7) Craft Associations - Young Men's Christian Association (YMCA) and Rural Enterprise Guidance Association (REGA).

(Dimond/AID-2)

COST: $3.4 million.

DURATION: August 1977 thru June 1982.

FUNDS SPENT AT TIME OF EVALUATION: $1.67 million.

ELAPSED TIME: 2 years, 8 months.

Evaluation Specifics

TITLE: FAAD (Farmer Association and Agribusiness Development) Mid-Project External Evaluation.

SPONSOR: U.S. Agency for International Development Mission to Ghana.

EVALUATOR: Frank Dimond, Office of Development Planning, Bureau for Africa, USAID; Marian Fuchs-Carsch, PVO Expert, New TransCentury Foundation; and D.M. Warren, Anthropologist, Iowa State University.

DATE: May 1980.

LENGTH: 87 pages of draft manuscript.

COST: $30,000.

DURATION: 2½ weeks.

PURPOSE: To determine the benefits and limitations of working through PVOs, as opposed to working directly through Government of Shana units, to reach the small-scale farmer and the rural poor; to examine the advantages and disadvantages of extending the FAAD project into a second phase; and to evaluate the FAAD project's suitability as a model for replication by other USAID missions.

METHODOLOGY:

Data Collection - The evaluation team spent seven days visiting one or more project sites for each of the seven PVOs involved in the FAAD project. During these visits, the team met with PVO field staff and representatives of various beneficiary groups, and observed project activities and achievements, as well as PVO-beneficiary field relationships. In addition, data were collected from baseline and annual field surveys required by contract of each PVO.

Data Analysis - The authors first isolate factors extrinsic and intrinsic to the project by describing the Shanaian, AID, and PVO contexts (extrinsic) and a dual logical

(Dimond/AID-3)

framework model (intrinsic) paralleling FAAD and PVO operational processes. A brief review of project background and financial status follows, as well as summary profiles of the PVOs' inputs, outputs, purposes, and goals. The analysis concludes with a description, by subproject, of subproject goals, indicators of progress toward objectives, strategies for improved efficiency, and recommendations. The evaluators' assumptions are that if project goals are well articulated and project tasks properly designed to meet these ends, then indications of these project activities are sufficient measure of project impact and adequate criteria for evaluating project success. Hence, the analysis is essentially a performance appraisal comparing initial project goals with field achievements to date. The evaluation does not deal with individual or aggregate community income effects, does not mention social impact and benefit distributional effects, does not compare the subprojects with each other, does not present the data in a standardized or comprehensive format, and does not detail the source of its data nor does it predict the reliability of these data. The evaluation contains no neutral descriptors of subproject nature or activity, but rather, background characteristics of each PVO, such as organizational structure, operating style, methodology of intervention, purposes, and goals. Success indicators, matched against project objectives, revolve around degree of project activity, i.e., number of extension visits, number and types of new farming techniques adopted, new crops grown, number of demonstration plots, number of self-help projects begun and completed, number of associations formed and number of new association members, and the like. The evaluators do not hypothesize as to key variables responsible for the above effects, other than the inclusion of a section listing the advantages and disadvantages of working through PVOs.

CONCLUSIONS: The evaluators arrive at two principal conclusions: 1) PVOs have varied widely to date in delivery of outputs, in part due to different starting dates and different degree of severity of obstacles, and no conclusion is yet possible; and 2) PVOs are an effective and efficient vehicle for implementing rural outreach programs.

RECOMMENDATIONS: The evaluation team is unanimous in recommending there be a Phase II of the FAAD project and the FAAD model be considered for replication at other AID missions. Some minor recommendations are also presented for the improved implementation of Phase I and the greater utilization of PVO expertise.

EVALUATION USE: The evaluation is currently under review within AID.

(4) Hawbaker/AID

Project Synopsis

TITLE: Indigenous Industrial Development Project (#620-15-910-714).

DESCRIPTION: A project to develop and strengthen Nigerian private enterprise in the small industry sector by helping Nigerian businessmen to start, expand, or improve their businesses. This was to be accomplished through three institutions called Industrial Development Centers (IDCs), located in three different areas of the country. Five small-scale industries were selected for primary attention: woodworking, metalworking, leatherworking, auto repair, and textiles. Assistance was in the form of technical, managerial, and accounting instruction initially, but later included financing after the program was integrated with the Ford Foundation's Small Industry Credit Project.

LOCATION: Eastern (Owerri), northern (Zaria), and western (specific site not yet choosen) Nigeria.

SPONSOR: U.S. Agency for International Development; Government of Nigeria; the Ford Foundation.

IMPLEMENTOR: U.S. Agency for International Development; Government of Nigeria.

COST: Credit - Approximately $1 million; Operations - Not available.

DURATION: 1962 - 1971.

FUNDS SPENT AT TIME OF EVALUATION: All appropriated U.S. assistance.

ELAPSED TIME: 9 years (evaluation undertaken at conclusion of U.S. involvement in project).

Evaluation Specifics

TITLE: Developing Small Industries: A Case Study of A.I.D. Assistance to Nigeria, 1962-1971.

SPONSOR: Program Evaluation Office, Bureau for Program and Policy Coordination, Agency for International Development.

EVALUATOR: George D. Hawbaker, Private Enterprise Officer, USAID/Nigeria; H. Howard Turner, Private Enterprise Advisor, USAID/Nigeria.

DATE: 1971.

LENGTH: 39-page text; 11 pages of appendixes.

(Hawbaker/AID-2

COST: Approximately $7,000.

DURATION: 6 weeks in Washington, D.C.

PURPOSE: The evaluation has two main purposes: 1) to assess the design, implementation, and effects of AID's small industry project in Nigeria; and 2) to describe the policies, programs, and procedures which evolved through the field implementation of this project, to offer instruction for similar projects elsewhere.

METHODOLOGY:

Data Collection - As the principal evaluator was intimately involved with the project for several years, most of the report's findings are derived from the evaluator's personal recollections and familiarity with the project. It should be noted that most early project papers were destroyed during the Nigerian civil war which transpired during the course of the project's implementation.

Data Analysis - The evaluation is essentially a case history written in a narrative, historical format. It describes the project's theoretical underpinnings, implementation process, and results, all in general, aggregated terms occasionally supported by specific figures.

Key project assumptions center on the tapping of underutilized entrepreneurial potential through the application of "essential elements" of SSE development: 1) an introduction to machine-type operations; 2) the development of prototypes on which improved design and quality can be based; 3) access to loan financing; 4) preparation of feasibility studies; and 5) assistance with project implementation.

The only neutral descriptors used in the evaluation are qualitative backround descriptions.

Success indicators employed include: number of outsider visits to entrepreneurs, number of seminars held, number and type of new products developed, number of consultations held, gross sales generated, new investments induced, number of feasibility studies undertaken, number and size of approved loans, and new employment induced by the project. It should be noted that only these categories of indicators are recounted, not specific project data.

Variables hypothesized to affect the project's success are: time lags from the request for to the delivery of project assistance, degree of industry and geographical diversification of selected projects, size and complexity of assisted businesses, tailoring of assistance to local environment, Nigeria's concurrent overall economic boom, and the caliber of project staff.

(Hawbaker/AID-3)

CONCLUSIONS: The project results demonstrate that AID advisors and their colleagues have learned enough about development principles to apply them effectively to the promotion of indigenous small industry. The Nigerian project has produced a successful approach to small industry development, and a project design has emerged from this experience which can be replicated at other AID missions.

RECOMMENDATIONS: The evaluator's recommendations are contained in the report's closing chapter, "Guidelines for Undertaking a Similar Project Elsewhere," and in the appendix titled "Self-Help Management Techniques." No major changes are proposed in the implementation of the project under review.

EVALUATION USE: General circulation within AID.

(5) Sierra Leone/AID

Project Synopsis

TITLE: CARE/Sierra Leone Rural Penetration Roads Projects (AID Projects 636-0101, 636-0111, 636-0126).

DESCRIPTION: An AID-designed project to support Integrated Agricultural Development Projects (IADPs) funded by the World Bank. Implemented in two phases, the project was designed to construct a projected 1,300 miles of feeder roads in Sierra Leone to increase small farmer access to IADP services, namely improved crop varieties, fertilizer, extension advice, and better marketing outlets.

LOCATION: Sierra Leone's Eastern, Southern, and Northern Provinces.

SPONSOR: Agency for International Development (AID), Cooperative for American Relief Everywhere (CARE), Government of Sierra Leone (GOSL), Peace Corps, U.K. Voluntary Services Organization (VSO), and the World Bank.

IMPLEMENTOR: Cooperative for American Relief Everywhere (CARE).

COST: $11.7 million.

DURATION: FY 1975 to FY 1980.

FUNDS SPENT AT TIME OF EVALUATION: Approximately $8.7 million.

ELAPSED TIME: Approximately four years.

Evaluation Specifics

TITLE: Effectiveness and Impact of the CARE/Sierra Leone Rural Penetration Roads Projects (AID Projects 636-0101, 636-0111, 636-0126): Project Impact Evaluation No. 7.

SPONSOR: Office of Evaluation, Bureau for Program and Policy Coordination, Agency for International Development.

EVALUATOR: G. William Anderson, Economist, Office of Evaluation, Bureau for Program and Policy Coordination, Agency for International Development.

DATE: June 1980.

LENGTH: 15-page summary; 79-page detailed report.

COST: Approximately $20,000.

DURATION: Sierra Leone field work - 12 days; Washington - 6 weeks.

(Sierra Leone/AID-2)

PURPOSE: This evaluation is one of a series of approximately thirty impact evaluations in six sectors now in various stages of completion. These evaluations, when finished, will result in sector summary papers, and will contribute to an overall AID internal program and policy review. Thus, the evaluation was undertaken as a preliminary part of AID's assessment of the impact of its rural roads program. Also, being one of AID's first project impact evaluations, it was to offer lessons on carrying out future evaluations of this nature.

METHODOLOGY:

Data Collection - The data for this evaluation is derived from two principal sources: 1) socioeconomic surveys carried out in 1977 and 1978, and being conducted in 1979 while the evaluator was in-country, as part of AID's annual project evaluations;* and 2) a two-week field trip to Sierra Leone by the evaluator as part of the annual evaluation team, during which time he met with CARE staff, officials of the Ministry of Development and Economic Planning, the Ministry of Works, and the Ministry of Agriculture (all in Freetown), as well as travelled up-country (to Makeni, Bo, and Kenema) to inspect roads, visit equipment maintenance workshops, confer with Anthony Airey (the social scientist carrying out the socioeconomic surveys on the roads' impact), and interview officials of the IADPs.

*Over the three years, Airey used local university students of the same tribal group as the interviewees to interview more than 400 individuals. In the 1977 survey, a pretested questionnaire was administered to 47 village headmen in randomly selected villages that were both affected and unaffected by CARE road construction. In 1978 and 1979, Airey continued in this mode, but shifted to interviewing randomly selected individual households in preselected villages. The 1979 survey was also the first examination of the CARE roads over time, for the Daru area covered was the same area Airey surveyed in 1977.

Data Analysis - Impact analysis relies entirely upon an attempted interpretation of the socioeconomic survey data generated by Airey, and is supplemented by an evaluation of project implementation performance (derived from project annual reports) and shortcomings of the impact evaluation in question. Project assumptions are that as Sierra Leone mineral exports continued to decline throughout the 1970s, agricultural production needed to expand and diversify. This was to be achieved as IADPs provided farmers with increased and continued access to agricultural inputs and market outlets, the provision of which was to be facilitated by the construction of all-weather penetration or feeder roads in the areas to be served.

(Sierra Leone/AID-3)

The evaluation contains no neutral descriptors. Success indicators are used to gauge: 1) CARE's project implementation performance; and 2) the benefits of the project itself. Indicators of CARE's performance are comparisons between projected and actual project funding, miles constructed, and cost per mile, as well as less quantitative indicators of field experimentation and innovation, such as machinery used, road structures built, involvement of local chiefs and villagers, and criteria for feeder road alignment selection. Indicators of project impact are extension agent visits, fertilizer use, cash value, amount and variety of marketed crops, signs of environmental degradation, length of fallow periods, extent of swamp rice cultivation, rice availability, traffic level, composition, origin and destination, vehicle ownership, degree of roadside commercial activity, level of village construction and community services, rural-urban migration, and ownership of consumer goods.
Variables hypothesized to affect CARE's project performance are unrealistic project goals and timetables, uneconomical use of rehabilitated construction equipment, use of Peace Corps and VSO volunteer engineers and technicians, the GOSL's insistence that the CARE feeder roads be built to Class IV standards, delays in AID funding and GOSL selection of sites, and degree of field innovation. The only variable believed to account for project impact (or lack thereof) is road construction.

CONCLUSIONS: Regarding CARE's performance, the evaluator concludes that in spite of delays, faulty assumptions, and poor planning, CARE has coped about as well as could be expected in organizing and carrying out the project, and has been successful in constructing feeder roads complementing rural development schemes in Sierra Leone. Regarding project impact, the evaluator concludes that villages served by CARE roads receive more frequent visits by extension agents than those not served, the roads have led to substantially increased traffic (some diverted from poorer roads), and CARE-serviced villages have higher vehicle ownership rates, cement use in construction, proportion of income spent on basic consumer goods, and degree of government and private health services than non-CARE villages. Also, CARE-affected communities have a shorter range of fallow periods of upland rice fields, more shortage of rice, and greater swamp rice cultivation than farmers not served by CARE roads. Indications of other possible positive and negative project effects do not lead to clear conclusions.

RECOMMENDATIONS: The evaluator recommends utilizing Phase III of the CARE Rural Roads Project to institutionalize feeder road maintenance and construction, continue investigating the impacts of CARE roads and future new interventions which future impact studies may suggest, and further study labor intensive construction in Africa. The evaluator also makes several recommendations

(Sierra Leone/AID-4)

regarding the design of future AID road projects, and future AID impact evaluations: send a team with a single purpose, independent ability to question beneficiaries and collect information, and necessary mix of expertise; allow sufficient time for preparation, field work, and report write-up; and develop quick, simple indicators of project impact..

EVALUATION USE: Many of the evaluator's suggestions were incorporated into a follow-on Sierra Leone road project, and into the design of subsequent AID impact evaluations.

(6) Schreiber/Accion

Project Synopsis

TITLE: UNO (União Nordestina de Assistência a Pequenas Organizações, Northeast Union for Assistance to Small Organizations).

DESCRIPTION: An experimental program aimed at providing the urban micro-entrepreneur with credit and technical assistance. To achieve this objective, UNO sends its technicians to the field to establish individual credit and technical assistance needs, a plan is drawn up and submitted to one of the program's participating banks, the bank analyzes the project and either grants or denies the loan, if the loan is approved UNO guarantees it, and UNO provides technical assistance throughout loan utilization. The program's goals are to: 1) increase the number of jobs in different sectors of the economy, particularly in the low-income populations; 2) increase the access of low-income groups to the means of production and thereby encourage a more equitable distribution of income; 3) increase the management/technical capacity of small businessmen and stimulate the development of small organizations in non-traditional sectors of the economy; 4) open new sources of credit for small enterprises; 5) develop methodologies and models which, once tested, may be applied by other organizations on a larger scale and in other areas; 6) document all aspects of the undertaking; 7) familiarize participating organizations with technical consulting services; 8) modify the fatalistic attitude of the micro-businessman; 9) obtain a greater participation of small businessmen in community activities; and 10) contribute to making the families of the businessman and his employees more stable.

LOCATION: Metropolitan Recife, northeastern Brazil.

SPONSOR: ACCION International/AITEC; Oxfam; local banks.

IMPLEMENTOR: UNO.

COST: Credit - $871,000;
UNO - $340,000.

Note - Both figures approximate as of March 1976.

DURATION: July 1973 - Present.

FUNDS SPENT AT TIME OF EVALUATION: Credit - $312,000;
UNO - $125,000.

Note - Both figures approximate; Cr$6.22 = U.S.$1 (1974).

ELAPSED TIME: 1½ years.

Evaluation Specifics

TITLE: Small Business Development in Brazil: A Study of the UNO Program.

SPONSOR: ACCION International/AITEC.

(Schreiber/Accion-2)

EVALUATOR: José Gentil Schreiber.

DATE: Spring 1975.

LENGTH: 49-page text; 6 pages of appendixes.

COST: Not available.

DURATION: Not available.

PURPOSE: Assess the social and economic benefits generated by the project, and weigh these gains against project costs.

METHODOLOGY:

Data Collection - The data for this evaluation are derived entirely from project files and bank financial records.

Data Analysis - The evaluation is essentially a socioeconomic cost-benefit analysis, and non-pecuniary data and discussions are omitted entirely.
The project's key assumption is that the channeling of credit to small enterprises, combined with technical assistance and training, is an efficient way to improve the economic and social conditions of low-income populations in urban areas, and subsequently in the interior communities of the Brazilian Northeast. Evaluation assumptions include an imperfect market, no full employment, the need to correct market prices on the basis of empirical observation, a social cost of labor of 60% of the minimum regional salary plus welfare taxes, market price value of inputs and outputs, direct taxes as transfers, a 20% opportunity cost of capital, and the inclusion of all indirect taxes and benefits.
Key neutral descriptors are 1974 adjusted operational costs, aggregate cash flows, approved projects by sector and value (number and percentage), and loans (value and percentage).
Key success indicators are the social internal rate of return (SIRR a SIRR frequency distribution, and SIRR sensitivity analyses.
No hypotheses are formulated as to the variables responsible for the above results.

CONCLUSIONS: The program, with an internal rate of return of 143%, is a success; the time horizon sensitivity analyses confirm the validity of the choosen time period of five years; and the solvency of the UNO beneficiaries is normal and acceptable in terms of credit risk.

RECOMMENDATIONS: No recommendations are offered, other than on fine methodological points in calculating internal rates of return.

EVALUATION USE: Unknown.

(7) Lewycky/UBS

Project Synopsis

TITLE: Lentswe la Oodi Weavers (Proprietary) Limited.

DESCRIPTION: A project to: 1) train and give employment to about 50 people in a small weaving factory; 2) subsequently give employment to at least another 150 people at this factory and in various smaller production units; 3) improve and increase the agricultural production of the factory's village site and raise the village's standard of living; and 4) use this experience as a model for replication in other villages.

LOCATION: Lentswe la Oodi Weavers draws workers from the villages of Odi, Modipane and Matebele, but the factory itself is located in Odi, Kgatleng District, southeastern Botswana.

SPONSOR: Botswana Christian Council (BCC); Botswana Development Corporation (BDC); and the Canadian University Services Overseas (CUSO).

IMPLEMENTOR: Company Board of Directors, composed of representatives from BCC, BDC, and CUSO, Kgatleng District, and the factory workers, as well as the project manager, Peder Gowenius, a Swedish consultant.

COST: BCC - R10,000 grant;
CUSO - R34,300 grant;
BDC - R30,000 loan.

Note - 1 South African Rand = U.S.$1.31

DURATION: 1973 - 1978.

FUNDS SPENT AT TIME OF EVALUATION: Factory self-sustaining.

ELAPSED TIME: Four years.

Evaluation Specifics

TITLE: Tapestry - Report from Oodi Weavers, National Institute for Research in Development and African Studies - Documentation Unit Working Paper No. 11.

SPONSOR: University College of Botswana, University of Botswana and Swaziland.

EVALUATOR: Dennis Lewycky.

DATE: August 1977 (reprinted December 1978).

(Lewycky/UBS-2)

LENGTH: 258-page text; 36 pages of appendixés (all typed manuscript).

COST: Not available.

DURATION: Not available.

PURPOSE: Describe and evaluate the design, implèmentation, and socioeconomic impact of one rural small-scale enterprise primarily from the perspective of the people directly affected by this development project, namely the factory workers and the inhabitants of Odi, Matebele and Modipane.

METHODOLOGY:

Data Collection - Village and project details, as well as project participants' perspectives, are collected from the following sources: 1) a quantified socioeconomic survey of factory workers; 2) five months' residency in Odi by the evaluator; 3) two days of discussions by the factory workers, first in small groups, later en masse; and 4) five months of open-ended interviews of seventy area residents (forty of these extensive interviews) by the evaluator, using a translator and a tape recorder - each interviewee was visited at least three times, and the interviews usually took place at the respondent's home or lands.

Data Analysis - The survey data, coupled with the evaluator's knowledge and impressions of the area, are used to provide a narrative of project and village backround and specifics, and the survey questionnaire is presented in an appendix along with percentage tabulated responses. The workers' evaluation is summarized in a thematic narrative with the same name. Fifteen of the extensive interviews are published; interviews which seemed most articulate or ornate in description and provided the most information were selected. These narratives were edited slightly to accomodate differences in language style and enhance readability, the questions were removed, and occassional inserts of backround information were added, but attempts were made to maintain the Setswana character of speech, and no efforts were made to correct misrepresentations of events or apparent contradictions. Two additional segments of the report are an interview with the project manager, and a concluding summary evaluation. Most of the evaluation's financial data are included in an appendix titled "Auditor's Report."

This project's key <u>assumptions</u> are that the injection of external expertise and financial resources, combined with active recipient participation in all subsequent activities and evaluations, can lead to increased incomes and improved quality of life if the development project is an economically viable, income generating, worker owned and operated enterprise.

(Lewycky/UBS-3)

Neutral descriptors used are village socioeconomic characteristics and factory specifics, such as number of employees, number of sales market breakdown, factory visitors, and the like.
Success indicators include number of employees, employee benefits, factory worker ownership, sales and profits growth, number of expatriate visitors to the factory, project spin-off activities, amount of money loaned by the factory for village development projects, village consumerism (size and proportion of local purchases), secondary employment creation and income transfers, housing quality, and worker socioeconomic status, sex, and tribe.
Variables hypothesized to affect the outcome of the above are market access, factory personnel problems, external pressures and animosities, time lag, available amount and quality of information, local social values, and degree of government support.

CONCLUSIONS: The evaluator concludes that after three years of full production, the Lentswe la Oodi Weavers project has clearly achieved its first intended objective of establishing a small factory and employing over fifty people. However, he also concludes that the project's record so far in stimulating broad village development via village production units and spreading the project to other Batswana villages has not been as good.

RECOMMENDATIONS: The evaluator makes no specific recommendations.

EVALUATION USE: This evaluation, intended primarily for those currently promoting small-scale enterprise programs and for the development community in general, has stimulated substantial discussion regarding both enterprise development and participatory research, and has led to a reprinting of the evaluation.

(8) Goldmark/Technoserve

Project Synopsis

TITLE: Santa Maria Cooperative*

DESCRIPTION: Provision of integrated technical assistance to a small group of relatively isolated farmers to: 1) establish and manage a cooperative for the leveraging of outside resources (credit, agricultural inputs, and further technical assistance) into the area; 2) found and run the town's first industry, a mill producing cattle feed concentrate; and 3) expand co-op services, and develop co-op capacity for self-sustained operation and growth.

LOCATION: Santa Maria/El Salvador (northeastern region of the country).

SPONSOR: Technical assistance was provided by Technoserve, Inc. in the form of a heavily subsidized service contract with the co-op; the feed mill was financed through equity contributions by the co-op, a grant from the U.S. Agency for International Development (El Salvador Mission), and a loan from the Banco de Fomento Agropecuario.

IMPLEMENTOR: Santa Maria Cooperative, with assistance from Technoserve, Inc.

COST: Technoserve's project assistance (actual) - $96,000; Feed mill - $30,000.

DURATION: Co-op legally constituted in February 1976; Co-op-Technoserve letter of understanding signed in May 1978; Technoserve to withdraw its ongoing management and livestock extension services in May 1980.

FUNDS SPENT AT TIME OF EVALUATION: Technoserve's project assistance (actual) - $81,000; feed mill constructed and operating.

ELAPSED TIME: Technoserve's involvement - approximately two years; Total - approximately four years.

Evaluation Specifics

TITLE: Taking Stock: "A Case Study of a Cattle Project in Rural El Salvador."

SPONSOR: Technoserve, Inc.

EVALUATOR: Susan Goldmark, Program Officer - Evaluations, Technoserve, Inc., with assistance from Technoserve field and home office staff.

* Community name changed to insure confidentiality.

(Goldmark/Technoserve-2)

DATE: 1980.

LENGTH: 148-page text; 21 pages of appendixes.

COST: Approximately $15,000.

DURATION: Field history data collection - 10 days; Field survey - 1 month; Field profile interviews - 2 months; Home office write-up - 1 month.

PURPOSE: To evaluate the role, effect, strengths and weaknesses of Technoserve's assistance to one rural Salvadoran enterprise, and that enterprise's impact upon the surrounding community. The evaluation, Technoserve's first attempt to an in-depth study of one of its projects, was to serve both internal needs and external demands: internally, it was to assist future organizational programming and project management by beginning to assess, after ten years of operations, the impact of Technoserve's interventions and the validity of its development hypotheses; externally, it was to begin to meet donor demands for a systematic evaluation of the socioeconomic impact of Technoserve's projects, as well as test the degree to which private voluntary agencies like Technoserve can empirically evaluate their projects in an objective, cost-effective manner.

METHODOLOGY:

Data Collection - The co-operative's history was written in Technoserve's home office, with major input from Technoserve's El Salvador staff; the history was drawn from the personal recollections of Technoserve and co-op staff members, and project files. The survey, designed to assess empirically the impact of the co-op's feed concentrate on milk production, was conducted in May 1979, four months after feed concentrate sales began, and lasted for one month. At that time, only 34 families living within 10 kilometers of Santa Maria used the concentrate, and each of these families was matched with a family not using the concentrate; after finishing an interview with a feed non-concentrate user with approximately the same (plus or minus 50%) amount of land and cattle. The same questionnaire was administered to test and control group members: each respondent was asked to recall what the total milk production of all milking cows had been on a normal day in December (prior to concentrate sales) and on the day prior to the interview. Anonymity was assured the farmer, and the interviewers were drawn from the Santa Maria region. The detailed family profiles, although written by the evaluator, were derived from two months of field interviews by Technoserve's project advisor to the co-op.

(Goldmark/Technoserve-3)

Data Analysis - The evaluation employs a multidisciplinary approach: 1) the first section is a historical recounting of the process by which the cooperative was established and developed, to highlight the key ingredients and constraints of project implementation - it is presented in the form of a chronological narrative with background area information and project details periodically interlaced with this narrative; 2) the second section is devoted to a classical survey of feed concentrate users and non-users, to examine a single variable (the effect of feed concentrate use on milk production) and to gather socioeconomic information about project-participants - it explains the survey's design, qualifies survey findings, and then presents and discusses these findings; 3) the last section is composed of a series of in-depth family profiles, to present human insights into residents' thoughts, concerns, perceptions, and overall mentality - it is presented in paraphrased monologues and neutral background portraits. Key assumptions of this project and subsequent evaluation are that self-help enterprises are an effective means of improving the economic and social well-being of low-income people, and that properly introduced and appropriately applied injections of external technical assistance and fiscal resources can lead to increased standards of living and initiate the momentum of self-sustaining community development. Key neutral descriptors are: national statistics (income and land distribution, land use characteristics, employment figures); Santa Maria background information (history, terrain, population, land use, economic activities); project specifics (chronology, cooperative details, financial data, spin-off activities); and socioeconomic characteristics of project participants (cattle and land ownership, income, family size, features of home). Key success indicators are, when seasonally adjusted and compared between test and control groups: average milk production per cow according to type and amount of feed intake, milk production per breed of cow, farmer return on investment, return on investment for total project costs (net present value computed over twenty years), spin-off activities; co-op size; and co-op membership participation. Key variables hypothesized to affect the project's outcomes are: quality and amount of feed concentrate used; cow's diet balance; cattle management practices; breed of cow; general health of cow; access to water; Technoserve's responding to local initiative, and subsequent establishing of professional relationship with co-op; and socioeconomic composition of co-op's membership.

(Goldmark/Technoserve-4)

CONCLUSIONS: Generally, the evaluation concludes that although the project has been quite successful in many dimensions, the sustainability of this success is uncertain. Specifically, the project has: increased milk production among cows fed the concentrate; increased the income of concentrate users; strengthened the co-op both socially and financially and provided the momentum and means for spin-off activities in Santa Maria. Projected long-run benefits also include: a return on Technoserve's project costs, over a twenty-year period at an annual discount rate of 20%, of five times these expenses; higher milk production in the rainy seasons; healthier cows and higher quality milk; longer lactation periods; increased calving rates; and healthier calves. Projected long-run difficulties include: shortages of critical inputs if El Salvador's current political crises deepens; internal management difficulties caused by Technoserve's planned withdrawal and high employee turnover within the co-op; and farmer misuse of the feed concentrate through lack of technical understanding.

RECOMMENDATIONS: The evaluation suggests that Technoserve should maintain a consultancy relationship with the co-op for the next couple of years, the co-op should make extension services an integral part of its activities, the mill might experiment with different concentrate formulas, guidelines for the training of new co-op staff should be prepared, and the project should be re-evaluated several years after Technoserve's withdrawal.

EVALUATION USE: An extension of Technoserve's service contract with the cooperative has been signed, a stronger emphasis is now placed on providing livestock extension services as well as management assistance to feed mill enterprises, and Technoserve project managers have begun to report upon "social outreach" activities on a bi-weekly basis. Also, a second such detailed case study is now near completion.

(9) Daines/PCI

Project Synopsis

TITLE: Haiti Small Farmer Improvement Project.

DESCRIPTION: A project to provide credit and technical assistance to small Haitian coffee farmers through regional credit and technical assistance centers. The objectives of the project are to: 1) increase small farmer income and standard of living through increased production; 2) increase the quality and quantity of coffee produced in Haiti; 3) improve the Government of Haiti (GOH) balance of payments through increased exports; 4) increase GOH revenues generally; 5) capitalize and support an agricultural credit system; 6) seek to establish a network of coffee producer organizations; and 7) seek to increase GOH investment in agricultural development activities.

LOCATION: Haiti.

SPONSOR: Agency for International Development.

IMPLEMENTOR: National Coffee Institute (IHPCADE); Agriculture Credit Office (BCA).

COST: Approximately $2 million.

DURATION: 1974 - 1979.

FUNDS SPENT AT TIME OF EVALUATION: Not available.

ELAPSED TIME: 3½ years.

Evaluation Specifics

TITLE: Impact Evaluation of the Haiti Small Farmer Improvement Project

SPONSOR: Agency for International Development Mission to Haiti.

EVALUATOR: Samuel R. Daines, Senior Economist, Practical Concepts Inc.

DATE: 1978.

LENGTH: 54-page text; 36 pages of appendixes.

COST: Approximately $50,000.

DURATION: 6 person-months.

PURPOSE: To estimate final income, production, and standard of living impact of the project on its participant farms and families.

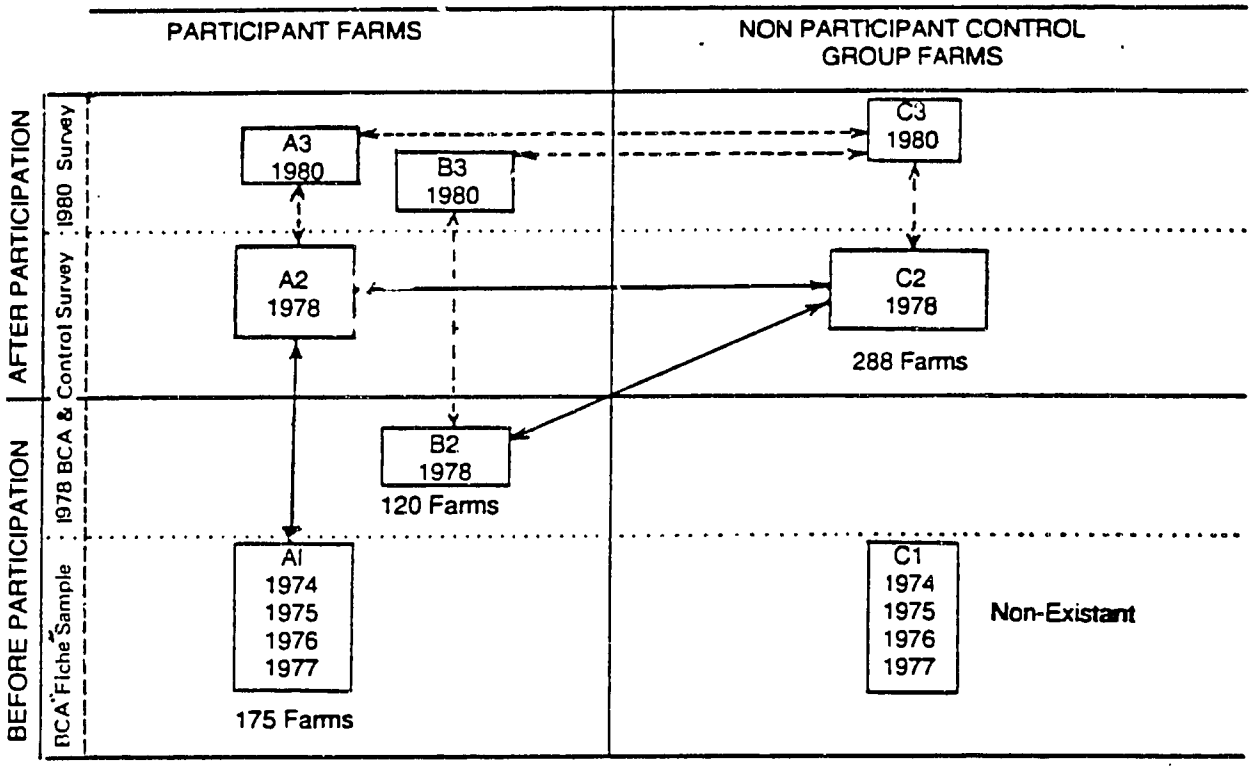
(Daines/PCI-2)

METHODOLOGY:

Data Collection - Data for the evaluation are derived from two sources, "Fiches d'Information" and a field survey, for three groups, Group A, Group B, and Group C. Fiches d'Information are BCA forms which elicit limited baseline information from borrowers, such as borrower's age, number of dependents, area farmed, crops grown, tenure status, value of assets, and amount of debt. These forms are supposed to be filled out prior to every BCA loan, but in practice are usually completed after the first loan only, and often incorrectly. The survey used a Creole questionnaire, and was administered by enumerators who had completed secondary school, were familiar with rural areas, and had previous survey experience in rural Haiti. A sample of 40 borrowers was selected from each of ten regions; the sample in each consisted of an equal number of borrowers from each of 4 categories: 1) new 1978 borrowers; 2) first loan borrowers in 1977; 3) second loan borrowers in 1977; and 4) third loan borrowers in 1977. The 40 borrowers per region, selected randomly when possible, were matched in the field with 40 producers not participating in the project as the enumerator moved in a clockwise spiral pattern from the interviewee's home until finding a non-participant producer operating approximately (50%) the same quantity of land planted in coffee. A total of 2,694 households were contacted in this manner, interviews were completed with 372 of the 400 participants selected from project files, 2,322 households were contacted in attempted matchings, and 364 successful matches were made; thus, a grand total of 736 interviews were completed. Questionnaires were checked by the field supervisor each evening for inconsistencies, missing information, and highly suspect responses in order that a re-interview could take place the following day if it proved necessary. Group A is made up of 175 project participants with loans starting before 1978; Group B is composed of 120 new BCA borrowers in 1978; and Group C is the control group, consisting of 288 farms.

Data Analysis - The evaluator's principal means of impact measurement is a cross-sectional comparison of participants. Two separate longitudinal samples are used to check and modify these cross-sectional results, and a comparison is made between the selected group of new participants and the matched control group to test the accuracy of this control group match. This survey design for impact comparisons can be diagrammed as follows:

(Daines/PCI-3)



The project's key assumptions are: 1) the increased production of improved coffee will increase the income and standard of living of the Haitian small farmer, as well as result in significant improvements in the balance of payments and revenue accounts of Haiti; and 2) production will rise and coffee quality improve through the effective delivery of a package of improved technology, fertilizer, credit, training, and organizational guidance. The key assumptions underlying the evaluation are that the evaluation's effectiveness depends on: 1) the degree to which project intends to achieve; and 2) the degree to which the evaluation directly addresses impact on those particular objectives. The evaluation contains no neutral descriptors. Success indicators used include: welfare measures of income (net farm income, per capita income, off-farm income); efficiency measures of income (labor share indices, net income per arable hectare); non-income standard-of-living indicators (housing value, housing roof quality and number of rooms, number of livestock); production (gross value of output per farm, internal rate of return on cash costs, coffee's proportion of impact, sources of increased production); physical yields (cereal yield patterns); land use intensity, tenure, and productivity; coffee production; coffee production technology (fertilizer, variety, age of stand); coffee marketing and prices; extension and technical assistance (number of extension visits, farmer opinions

(Daines/PCI-4)

on ways of improving coffee income); credit distribution and availability; credit demand; proposed use of additional credit; and credit burden and delinquency. There is also a short analysis of agriculture credit and technical assistance in non-coffee areas. Key variables hypothesized to affect project success are: project interventions; general price increases; faulty farmer recall (data reliability).

CONCLUSIONS: The evaluator concludes that: the project has achieved substantial increases in the incomes of approximately 70% of its participants; the poorest farms are the ones achieving the largest improvement; housing quality has improved significantly; total farm production impact estimates range from an increase of 87% on 0-3 hectare farms, to a decrease of 9% on farms over 5 hectares in size; two-thirds of the production impact is attributable to increases in coffee; coffee production appears to have increased by approximately 40% on participant farms; the project reduced the dependence of participants on coffee brokers and family lending sources; delinquency appears to be a growing problem of serious dimension; non-coffee lending has had no income, and only very slight production impacts; and farmers ranked alternative rural projects, in descending order, roads, schools, and health facilities.

RECOMMENDATIONS: The evaluator recommends that in the future, the project should focus more exclusively on smaller farms.

EVALUATION USE: Although the study is highly thought of by many professional evaluators, is extensively cited and discussed, and is now the model of a similar evaluation being conducted of a SSE program in Paraguay, it has not been well received by the AID Mission to Haiti. The explanation officially cited is that the evaluation is technically flawed because the different sampling frequencies were not weighted. However, the evaluator later weighted them in response to this criticism, and footnoted the minimal effect on evaluation results (about 5%). Another explanation proffered for the evaluation's poor reception and limited distribution is personality and political clashes within the evaluation team.

(10) Barclay/DAI

Project Synopsis

TITLE: Bushiangala Harambee Water Project; Kandara Water Scheme; Katothya Harambee Water Project; Katyethoka Harambee Water Project; Interchurch Seed Project; Diocese of Maseno South Rural Development Program; Kyuso Agricultural Improvement Scheme; Rural Enterprise Extension Service and Rural Loan Scheme; Kawangware Human Development Project; Center for Development of Rural Artisanry and Agricultural Machinery; Liboré Livestock Fattening Project; Maggia Valley Reforestation Project; Talak Plain Development Project; Project Oasis Aïr; Sudan Interior Mission Rural Development Program; Project Tchin Tabisgine; and Telemces Area Project.

DESCRIPTION: The above projects fall into four categories: 1) four are self-help rural water projects (Bushiangala, Kandara, Katothya, and Katyethoka, all in Kenya); 2) seven are rural development projects emphasizing agricultural productivity (Interchurch, Maseno South, and Kyuso in Kenya, and Oasis Aïr, SIM/Maradi, Tchin Tabisgine, and Telemces in Niger); four are projects with a strong skill formation and training thrust and a focus on income generation (REES/RMLS and Kawangware in Kenya, and CDARMA and Liboré in Niger); and two are projects mobilizing community labor for conservation of the natural and economic base (Maggia and Talak, both in Niger).

LOCATION: Throughout Kenya and Niger.

SPONSOR: U.S. Agency for International Development; Governments of Kenya and Niger; and various private and voluntary organizations (PVOs).

IMPLEMENTOR: Various PVOs.

COST: The aggregate cost to date of all 17 projects is approximately $8.48 million.

DURATION: Not available.

FUNDS SPENT AT TIME OF EVALUATION: See cost figure above.

ELAPSED TIME: Six years - 2 projects;
Five years - 1 project;
Four years - 2 projects;
Three years - 7 projects;
Two years - 5 projects.

Evaluation Specifics

TITLE: The Development Impact of Private Voluntary Organizations: Kenya and Niger (Final Report).

SPONSOR: Office of Private and Voluntary Cooperation, Agency for International Development.

EVALUATOR: A.H. Barclay, Jr., Project Director; and Marilyn W. Hoskins, Wambui K. Njenga, and Robert B. Tripp. Conducted under the auspices of Development Alternatives, Inc.

(Barclay/DAI-2)

DATE: 2 February 1979.

LENGTH: 97-page text, 82 pages of annexes.

COST: $64,000.

DURATION: Pre-trip preparation - 2 weeks;
Kenya fieldwork - 5 weeks;*
Niger fieldwork - 4 weeks;*
Report write-up - 4 weeks.

*A larger team size, and the need to refine field methodology, resulted in an average commitment of eight person-days per project in Kanya; the average time commitment was slightly over three person-days per project in Niger.

PURPOSE: The evaluation has two primary purposes: 1) assess the developmental impact of 17 PVO development projects in Kenya and Niger, and relate these impact findings to environmental factors and to the different strategies and approaches adopted by the PVOs concerned; and 2) develop an accurate and cost-effective field methodology for the comparative assessment of the impact of PVO programs.

METHODOLOGY:

Data Collection - Preparation for the evaluation began with visits to the home offices of ten U.S.-based PVOs. Information was gathered on the policy focus of each organization, and on planning and evaluation procedures already in use or currently being developed; simultaneously, advice and recommendations were sought regarding projects that might be visited. The bulk of the time in the field was spent in discussions with project participants, either in group sessions or individual interviews. The team developed a structured document for recording the data gathered on each project, but this did not take the form of a standard questionnaire. Instead, each member of the team utilized open-ended questioning techniques, taking written notes on the spot in those situations where it was appropriate to do so, or writing up notes later the same day from informal conversations that had yielded useful information. At the conclusion of the field visit, the accumulated field notes from all team members were used to assemble basic data for the structured collection document.

Data Analysis - The standardized data is divided into three analytically discrete variables:

1) Benefits - Direct benefits generated by the commitment of PVO resources, standardized for difference in project costs;

(Barclay/DAI-3)

2) Benefit Continuation - The potential that those benefits will be sustained after the donor's resources are exhausted or withdrawn; and
3) Benefit Growth - The prospects for future development in related activities by the same participant population, based upon the success of the present project.

This analytical model treats the above development impact dimensions as dependent variables, which are a function of two categories of independent variables: PVO strategy variables, and project environment variables. The model is then used to relate PVO strategy, project environment, and developmental impact, and to examine the principal policy considerations arising from these findings. Two key assumptions that underpin the continuation of AID's support to PVOs are: 1) the character and/or scale of certain projects may be better suited to involvement by particular PVOs than to direct participation by major donors; and 2) PVO experience contains, and will continue to generate, lessons of potential relevance to bilateral programs, particularly those with a "New Directions" thrust. Key evaluation assumptions are: 1) this type of empirical study must be geared to producing comparative assessments; 2) a compilation of existing evaluation reports would not be sufficient, nor would a collection of case studies; and 3) the task requires standardization of data points and indicators. Key neutral descriptors used include: short project descriptions (name, location, PVO, and function); characteristics of PVO intervention strategy (PVO profile, nature of PVO assistance); and details of project environment (physical resource base, preexisting development trends, organization base, societal differentiation, and host country government resources). Key success indicators are geared to measure developmental impact, and include: direct benefits (in-kind, monetized, number of beneficiaries, value in dollars of benefits per participant per year, annual recurring cost per participant, project cost per participant to date, and ratio of net benefits to cost); participation and use of project services (excluding indirect beneficiaries); benefit continuation (local organizations and project decisionmaking, participants' contributions to project, and project-related mechanisms for mobilizing resources); and benefit growth (adoption of practices recommended by project, individual farm or household level modernizing improvements, and new activities beyond project undertaken at community level). See above discussion for variables hypothesized to influence project impact.

(Barclay/DAI-4)

CONCLUSIONS: The evaluator uses an equal weighting scheme to determine each project's level of overall impact, and then ranks the 17 projects. No clear pattern emerges in the relationship between this ranking and either magnitude of project investment or type of activity undertaken; however, consistent relationships between project impact and both PVO intervention strategy and environmental factors are found. Other conclusions reached are: all projects in the sample could be credited with generating at least some positive benefits for the participating populations; the PVO community is very diverse and heterogeneous; projects examined have been implemented in situations where conventional mechanisms of development assistance have not been able to deliver benefits at the required leve; the PVOs reviewed are devoting serious attention to the problem of benefit continuation; and many questions still remain unanswered and hypotheses untested.

RECOMMENDATIONS: No recommendations of a "go/no-go" nature are proposed, but hypotheses of a more general nature are offered on the importance and means of discriminating between more and less successful approaches. Suggestions for future studies are also offered.

EVALUATION USE: The evaluation was presented at an AID-sponsored meeting of PVOs, during which the study's mechodology and findings were discussed. However, the evaluation has failed to achieve its objective of stimulating dialogue within the evaluation community due to AID's limited distribution of the report; distribution was restricted in response to the PVO assertion that comparative assessment is inappropriate.