

Rural Development

Bill Merrill

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AID APPROPRIATED TOTAL						
GRANT	403	403	704			704
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		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1)				403		301			
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TOTALS				403		301			

A. APPROPRIATION	N. 4TH FY		O. 5TH FY		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULED
	D. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	J. LOAN	
(1)							MM <input type="checkbox"/> 3 <input type="checkbox"/> YY <input type="checkbox"/> 8 <input type="checkbox"/> 0 <input type="checkbox"/>
(2)							
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TOTALS					704		

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 Charles S. Blankstein *[Signature]*

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CONTENTS

<u>Summary and Recommendations</u>	1
A. Recommendations	1
B. Description of the Project	1
C. Summary Findings	5
D. Project Issues	6
<u>Project Background and Detailed Description</u>	9
A. Project Background	9
B. Detailed Description	18
1. Project goals	18
2. Project purpose	19
3. Project outputs	21
a. Case studies and Methods Papers	21
b. Consultant identification and consulting assistance	31
c. Overview and Inventory of data/analysis methods	34
4. Output verification	37
5. Output assumptions	37
6. Project inputs	38

<u>Project Analysis</u>	41
A. Technical Feasibility	41
B. Financial Plan	42
C. Social, Economic, Women in Development, and Environmental Implications of Project	45

<u>Administration and Implementation</u>	49
A. Administrative Arrangements	49
B. Implementation Plan	54
C. Evaluation.	57

Annexes

A. Partial Review of Data/Analysis Methods Efforts to Draw Upon	A-1
1. Methodology components	A-1
a. Rural development decision making and information requirements	A-1
b. Methods of analysis to provide information	A-2
(1) Target group identification and analysis	A-2
(2) Choice analysis	A-3
(3) Impact analysis	A-6
c. Methods of data gathering	A-10
2. Methods work in some of the key rural sectors	A-12

3. Principal related work	A-12
B. Logical Framework Matrix	B-1
C. Critical Performance Indicator Network and Description	C-1

Summary and Recommendations

A. Recommendations

It is recommended that this project be approved at a level of \$704,000 in grant funds.

B. Description of the Project

AID has placed increasing emphasis over the past few years on targeting its efforts on the rural poor. This targeting emphasis has carried with it a heightened awareness of the need for improved data gathering and analysis, both for program and project planning and for project monitoring and evaluation. A substantial number of research and technical assistance efforts have been mounted by the Agency and other donors to help meet this need.

In spite of the multitude of data gathering and analysis efforts, AID and LDC rural development planners and project managers lack materials to systematically guide their managerial and technical decisions on data gathering and analysis investments. They also lack systematic linkages to the wide range of experts with social and managerial science skills applicable to their methodology problems. As a consequence, rural

development practitioners are frequently forced to make decisions on data gathering and analysis investments without solid information on the range of techniques and consulting assistance available and on the relative costs and benefits of various data gathering and analysis techniques.

This project is designed to help project analysts and managers make more effective investments in data gathering and analysis. This objective will be achieved by:

1. Providing access to consultants, both from the U.S. and LDCs, who have demonstrated expertise in the design and execution of data gathering and analysis systems appropriate for specific types of rural development problems. This will be accomplished by creating and periodically updating an evaluated consultant roster, identifying consultants for specific assignments, and providing some consulting assistance with funds from the present project.

2. Producing a series of "Methods Papers" focused on data gathering and analysis problems in selected types of rural development projects. Papers are planned for rural electrification, labor intensive

public works, integrated rural development projects, rural industries, and intermediate technology. Each of these papers will bring together practical examples of how to collect and analyze relevant data, to integrate evaluation criteria into project design, and to make assessments of the likely costs and benefits of alternative data acquisition and analysis procedures. The papers will indicate when and what types of outside consulting assistance may be warranted. They will also cite additional source material that would be helpful to the project manager in executing or learning more about particular data collection and analysis alternatives. Three to five case studies of AID or other donor supported projects and reviews of secondary source materials and research literature will form the basis of each paper.

3. Creating an "Overview and Inventory" of data and analysis methods applicable to a broad range of rural development project management needs. This Overview and Inventory document will incorporate suggestions for the generation and analysis of data useful to Mission and LDC project analysts and managers. It will provide general or middle range lessons drawn from the "Methods Papers" reviews of particular project types, from findings of related projects in AID, IBRD, and other agencies, and from a careful review of published materials. The Overview and Inventory will present a state-of-the-art summary and illustrative examples of such management information techniques as social indicators analysis,

various methods of benefit incidence analysis, decision analysis, and so forth. Procedures for assessing the problems and progress of target groups will receive special attention.

The project will be funded and managed by TA/RD, but carried out with the guidance of Regional Bureaus and Missions and in conjunction with many of their ongoing activities. Missions and Regional Bureaus will play a major role in selecting sites for the case studies and will have intellectual input to the case studies through their interaction with TA/RD and the contractor. The consulting assistance provided by the project will directly serve rural development information system needs of Missions and their host institutions.

The project will run for three years and will be carried out in the following three phases:

1. Phase I (September 1977 - September 1978), in which case studies and literature reviews for three of the Methods Papers as well as consultant rostering and assistance are begun.

2. Phase II (October 1978 - July 1979), in which the first three Methods Papers are completed, work on the two remaining Papers is initiated, and consultant identification and assistance services are expanded.

3. Phase III (August 1979 - September 1980), in which the remaining two Methods Papers are completed, an "Overview and Inventory" of data gathering and analysis techniques is produced, consultant related services continue, and the project is thoroughly evaluated to determine appropriate follow-on activities.

C. Summary Findings

The project is designed to facilitate the collection and utilization of data necessary to analysts and managers so that effective and efficient management control may be exercised throughout the life of rural development projects. In order to assist current practices in project management, the project will bring to operational personnel techniques and methods for securing and using data in cost-effective ways. By strengthening AID's project analysis and management capabilities, important savings will be realized in effort, money, and time presently lost because timely, informed decisions are attenuated by lack of appropriate information. In turn, these savings will be passed along to host governments and the recipients of AID's rural development efforts. The social and economic implications from improved project management are manifest.

D. Project Issues

The present document represents the culmination of an extensive process of review, discussion, and reevaluation. Several issues either addressed in the draft PP or surfaced during its review have led to modification or changes in project design. Principal issues were the following:

1. Is a "manual" of rural development data gathering and analysis methods desirable and feasible and, if so, at what stage in the project? The notion of a manual early in the project has been replaced by the present proposal that an integrated document (Overview and Inventory) be fashioned during the final phase of the project from the case studies, Methods Papers, review of literature, findings of related projects, and consultant experience. The scope and specific contents of this document will be finalized in a project review at the end of two years. At that time, sufficient experience will have been gained and the outputs of certain related projects will be available, making possible the design of a tight, useful, and non-duplicative document.

2. Should one or should more than one contractor be used to produce the project's outputs? The review process has led to a clearer recognition of the desirability of having a single prime contractor be responsible for:

(1) developing and maintaining a consultant roster and

identifying consultants for specific assignments; (2) generating a research design for and executing the case studies; and (3) producing the Methods Papers for each of the project types, as well as the integrating (Overview and Inventory) document. Appropriate sub-contracting will be allowed, however.

3. How does the present project relate to other efforts under TA/RD's "Critical Problems" program? In response to comments on the draft PP, the present paper is more explicit than was its predecessor on the relationship of this project to companion projects in TA/RD. In some cases, such as that of the rural industries data/analysis aspects of this project and the Off-farm Employment Project under the "Critical Problems" program, the efforts will be quite closely linked; the Off-farm Employment contractor's work on sector and project analysis will form a major input to the rural industries Methods Paper. In all cases, relevant data and analysis methods aspects of the "Critical Problems" projects will be drawn upon in producing the Overview and Inventory document.

4. How can one place manageable boards' on the problem of reviewing and presenting data and analysis methods for rural development? Concentrating the initial work on three to five project types seems to be a useful way of coming to grips with this issue. This should help to both narrow

and better focus the types of information system problems to be dealt with. At the same time, the types of decision problems and techniques covered in these areas, plus certain other areas of TA/RD's "Critical Problems" project, will be inclusive enough to form a basis for the more general Overview and Inventory document planned for the third year.

5. How can it be assured that this project will complement rather than duplicate related efforts of other offices? The need for an advisory committee specially designated for this project, cited in the draft PP, was reinforced by the review process just undergone. Several related activities managed by other TAB, PPC, and other AID/W offices were cited in previous PP drafts and are cited in here in Annex A. The present effort has been designed all along to draw on and complement these other efforts, rather than to duplicate them. The advisory committee should help assure this complementarity. Preliminary steps have already been taken to establish such a committee. That committee will also provide continued professional guidance to the project, over and above that provided by TA/RD.

Project Background and Detailed Description

A. Project Background

The PID for this project was developed in the spring of 1976 as part of the larger Office of Rural Development (TA/RD) project entitled "Rural Development Research and Consulting". After the circulation of this and subsequent documents, it was decided to disaggregate several major components and treat them as distinct projects. In so doing, however, the separate projects are closely coordinated in order to reduce duplication and strengthen complementarity. This project will collect and integrate aspects of sibling projects that bear particularly on present concerns.

This project proposal reflects the recognition reported widely in the literature on management decision making that design and administration of a project entails a sequence or series of decisions. For example, a given project or program may be said to begin its life when it is recognized by an organization that some new course of action is desirable. This problem recognition stage, itself the product of information evaluation, leads to scanning for alternative goal oriented actions. Once alternatives are found, they are evaluated.

The identification and evaluation of alternatives is perhaps the most critical stage in project development since viable alternatives ignored or rejected for lack of knowledge or defective recognition of their potential merit (i.e., poor evaluation) almost never are reintroduced for consideration later. Testing of the first set of alternatives with the best available and applicable techniques is therefore extremely important.

Following the selection of a set of alternatives it is possible for field tests or quasi-experimental pilot efforts to be carried out. Experimental social science recognizes the proposition that where major investments of resources are to be made, it is important to test results through experiments. Both in the selection of experimental sites and subjects and in the evaluation of experimental results, the quality and quantity of data are crucial to the utility of results.

Once an alternative is selected it is vital that means for obtaining operational indicators of impact (success) be built into actual operations so that project monitors may obtain information for making such corrections to operations as may be felt necessary.

In the project implementation phase it is crucial to hold regular and systematic reviews of success indicators. Yet often project designs fail to incorporate

meaningful impact evaluation criteria. Thus during and after a project runs its course there are no indicators to be checked to determine whether or not goals and objectives are being reached and what the causal relationships are. And all too often an essentially defective project design is replicated because it seemed to be successful.

It is a premise of this project that a wide range of data gathering and analysis techniques applicable to rural development planning have already been developed by management information specialists, social scientists, and development planners. Many of these are already in use in various less or more developed country settings. However, Mission and host government project managers and analysts generally do not have easy access to case study and state-of-art materials on alternative approaches. They also need more ready access to consultants who can assist them and their LDC counterparts in thinking through and designing management oriented data gathering and analysis systems.

Efforts must be made to find ways of incorporating throughout the life of projects effective and efficient data collection, analysis, and disseminating techniques. Specifically, Mission project analysts and managers must be guided to means for securing access to accurate, timely and useable data and for cost-effective means of translating

this into useable information. It is a major assumption of this project that no single set of techniques or methods can meet the evolving needs of Mission and LDC personnel; rather what is called for is information on cost, accuracy, and utility of different sources of data and alternative analysis techniques (including but not limited to those for which consulting assistance might be needed) that can be built into project planning and information. The central product of the project will be provision of assistance in the form of Methods Papers, consultants, and a state-of-art inventory of techniques appropriate to individual situations and stages of project development.

Both the Methods Papers and the consulting assistance will be focused on the planner or project manager who is faced with very practical problems of organizing his information needs and of deciding on types and levels of investment in data gathering and analysis to meet those needs.

The need for a project designed to assist project analysts and managers in identifying and choosing among alternative rural development data collection and analysis techniques is evidenced by current Mission activities underway in widely varying circumstances. At one extreme may be the Philippines, where a great deal of experimentation has taken place with data

gathering, analysis, and management information systems. The Philippine Mission has recently proposed a new project which will take stock of and digest impact analysis experiences and proceed with approaches that are complimentary and cumulative.^{1/} Tunisia, Pakistan, and several Latin America countries have rather advanced rural development data gathering and analysis methods planned or in place, also. However, it appears that the opportunity to learn from others' experiences with various approaches, even in these instances, is often limited. Analysts and managers in many of these countries are often seeking case study and state-of-art materials on data gathering and analysis approaches which they can use in adapting techniques to their own needs. Thus, even in the cases in which Missions and/or host government planning and project implementation entities are relatively well staffed, a great deal could be gained from greater familiarity with the broad range of data gathering and analysis techniques available and with their respective strengths and weaknesses.

At perhaps the other extreme are Yemen and some of the African Sahelian countries, where planning for rural development is just beginning and, as a consequence,

^{1/} Project Review Paper, "Economic and Social Impact Analysis/ Women in Development," USAID/Philippines, November 2, 1976.

where data, experience, and host country capacity to analyze, plan for, and monitor programs are particularly weak. Host country and Mission personnel needs for guidance material and consulting assistance in reaching decisions on how to expeditiously proceed with data gathering and analysis exercises are especially acute under those circumstances.

In response to a June 1976 airgram querying AID's Missions on the Agency's interregional research priorities, a number of Missions specifically identified data gathering and analysis problems, many of which will be addressed in one way or another by this project. Those Mission responses included:

1. Afghanistan: need for a description of the rural poor, especially highlighting small farmers and rural laborers, using trend analysis;

2. RED/Bangkok: need to update socio-economic benchmark surveys involving irrigation projects in the Mekong Region and expand to Indonesia, the Philippines, Sri Lanka, and perhaps Bangladesh;

3. Ghana: need for rural socio-economic profiles into household expenditures and farm systems;

4. Jordan: preliminary interest of Jordan Valley Commission in providing a management information system for Rural Development Project Assessment.

5. Tanzania: need for R&D on data collection and analysis in the areas of agricultural organization and management, agricultural technology, internal food marketing, soil classification and land use, and basic village level socio-economic investigations.

6. REDSO/WA: desire for social soundness criteria for SFWA region and ways to relate project planning social criteria to conceptualization;

7. REDSO/WA: need to determine how small farmers spend incremental disposable income derived from successful agricultural innovation.

8. Thailand: research needed to develop indicators of social change in rural villages using sample surveys, improved survey techniques, and coordination within national statistical system.

Other indications of country-specific needs for the outputs of this project have been expressed in various ways. For instance, the Pakistan Mission has sought material through TA/RD on ways to conduct social impact analyses of rural roads projects. The Near East Bureau has expressed interest in receiving assistance in data gathering and analysis for rural development over the next several years in Egypt and Yemen. And, TA/RD staff members have themselves recently found the need for analytical guidance materials in helping

develop or review Mission project papers in such areas as rural electrification (Philippines), rural roads (Ethiopia), and intermediate technology (Nicaragua).

The project described herein is designed to assist Mission and LDC analysts and project managers who find themselves facing decisions regarding project planning and management oriented information systems. It will do so by classifying types of information needs, by identifying and assessing alternative data gathering and analysis approaches to satisfying those needs, and by facilitating access to consultants who can assist in the application of various techniques. Rural development analysts and project managers will thereby better be able to choose among and implement various data gathering and analysis systems.

Because the project is inclusive of other efforts to identify appropriate assistance to meet information needs and solutions presently underway, it will act as a magnet to draw together and combine the products of other projects that offer guidance in the selection and use of management information in rural development activities.

TA/RD funded two projects in FY 1976 which will generate complementary materials. Development Alternatives, Inc., a Washington-based consulting firm, has conducted an initial survey of alternative data gathering

and organizational approaches for information systems. The completed document, now available in draft form, provides a portion of the overview and evaluation of the applicability of selected information generation techniques for LDC projects. The DAI findings will be useful as a start on the more complete inventory of methods to be included in this project. Northern Illinois University is undertaking a review of means of introducing noneconomics social science disciplines into agricultural sector analysis. Results from this work will also be useful in the methods inventory work of this project.^{1/} TA/RD projects being developed in rural financial markets, off-farm employment, rural market systems, fertility, area development, and other components of TA/RD's "Critical Problems" program will all have some data and evaluation aspects. Information on data and analysis methods generated in those projects will be integrated into the overview document planned for the third year of the present effort.

^{1/}A third TA/RD project of immediate relevance is reported in John M. Cohen and Norman T. Uphoff, "Rural Development Participation: Concepts for Measuring Participation for Project Design, Implementation and Evaluation," Cornell University Rural Development Committee Working Paper, Prepared for TAB/RD, USAID, December 1976.

B. Detailed Description

1. Project goals

The ultimate goal of this project is to improve income and employment opportunities of the poor in rural areas of less developed countries (LDCs). This is to be achieved through the subgoals of improved rural development project formulation, implementation, and evaluation.

Indicators of sub-goal achievement consist of:

- a. An increased number of AID supported projects with tight conceptualizations and stronger empirical bases.
- b. Reduced implementation problems in AID projects due to inadequate monitoring information.
- c. Better impact evaluation information flowing from AID supported rural development projects.

These conditions can be verified for the most part only qualitatively. This verification, with special attention to Missions and projects worked with over the course of this project, will be by:

- a. The content of rural development project PPs, evaluation reports, and completion reports.
- b. Mission, Regional Bureau, TAB, and other AID/W observations of the utility of monitoring information in project implementation and modification.
- c. AID and outside judgements on technical

validity of evaluation information generated,
as well as its use in policy formulation.

Critical to achievement of the projects goals are
that:

- a. Data gathering and analysis exercises
initiated by Missions/LDCs are carried through
to completion.
- b. Information generated by these data gathering
and analysis exercises is used in decision making.

2. Project purpose

The project's purpose is to bring about improved
management use of information in rural development
project planning, monitoring, and evaluation -- through
more effective and efficient use of social and management
science technicians and methods of data gathering and
analysis.

Conditions which will indicate the project purpose
has been achieved are:

- a. Greater involvement of appropriate LDC
and outside data gathering and analysis specialists
in information system designs at early stages
of project planning.
- b. Greater use of the entire range of data
gathering and analysis methods that have proven
useful in project planning, monitoring, and
evaluation work.

c. More integrated use of the data/analysis techniques of various social science disciplines, as opposed to the current artificial separation and categorization of discipline inputs to project planning and evaluation.

Verification of these conditions will take place by:

a. Observation of the nature and timing of requests for technical assistance in data/analysis methods.

b. Observation of the nature of data/analysis methods planned or used, as indicated by PIDs, PRPs, PPs, DAPs, etc.

c. TAB, PPC, and Regional Bureau observations in the field on the use of methods and techniques described in this project's papers or documents.

Necessary assumptions for achieving the project purpose are:

a. Consultants listed in the roster turn out to be available to Missions/LDCs and AID/W on a timely basis.

b. Case studies upon which the methods papers are heavily based turn out to be relevant to emerging project planning and analysis problems.

c. AID, and its Missions in particular, continue to place value on sound data gathering and analysis.

3. Project outputs

Consonant with the purpose of improving management use of information, this project has three separate yet interrelated outputs:

Case studies and data/analysis Methods Papers in three to five project areas;

Consultant identification and consulting assistance for Missions/LDCs and AID/W;

One Overview and Inventory document covering data gathering and analysis methods for rural development projects generally.

Each of these outputs is described below.

a. Case studies and Methods Papers

A major output of the project will consist of a set of "Methods Papers" setting forth procedures for incorporating various types of data and analysis in the design and management of projects. Three to five stand-alone documents covering different rural development project types will be produced. They will be designed to provide operational advice to project managers for making decisions on investments in information. The papers will place these managers in a better position to deal with social science and information system technicians and in choosing among data gathering and analysis options and alternative types of assistance.

Detailed assessments of information needs for project decision making, sources of data, and appropriate analytical techniques framed in cost-effective perspectives for project analysts and managers will be contained in them. These papers will combine the results of observations of actual ongoing operational projects (i.e., case studies of selected AID and other donor supported projects) with the results of a systematic review of published sources treating the role of data gathering and analysis and planning in the administration of field projects. Each Methods Paper shall contain a selected bibliography of sources directed to related data/analysis methods.

The aim of these Methods Papers is to provide field personnel handbook-type instruments which summarize field-tested procedures for securing and using planning and management information. By focusing on types of rural development projects currently being developed and managed by Mission personnel, the Methods Papers will bridge the gap between operational constraints and necessities, on the one side, and the latest developments in social sciences and management information sciences on the other.

Each of the Methods Papers will cover project decision making concerns ranging sequentially from project identification and design on through implemen-

tation and post-project evaluation (for considerations of on-going strategy determination). Data gathering and processing techniques applicable to target group identification and analysis, choice analysis, and impact evaluation will therefore be covered in each paper. (See Annex A for a more detailed discussion of some of the techniques and R&D work related thereto.)

Five programmatic areas or project types have been selected for treatment in the Methods Papers (one paper will cover each area) after extensive consultation with Regional Bureaus, PPC, SER, and other TAB personnel:

(1) Rural electrification -- The Agency has had significant experience with rural electrification, and major new projects are in the planning stage in several countries. Yet numerous officials in the Agency have recently emphasized the need for updated, systematic guidance on viable options for planning, monitoring, and evaluating the socio-economic impacts of these projects. Measurement of the primary and secondary (multiplier) income and employment effects of these projects are among the key methodology questions to be addressed.

(2) Labor intensive rural public works -- AID is also contemplating major project loans in rural roads and other public works schemes which are frequently undertaken in a labor-intensive mode. Data and methods

of analysis guidance is needed on such considerations in these schemes as benefit incidence, labor utilization, and organizational capacity.

(3) Integrated rural development projects -- Although the term "integrated project" is much used and abused, we use it here simply to connote a multi-faceted project, such as one containing both agricultural production and non-formal education components or one containing health services and transportation infrastructure components. Among the key data and analysis problems here are what indicators to use for the diverse components of such projects and how to attribute causality.

(4) Intermediate technology -- A great deal of attention is now being focused on intermediate technology projects, such as alternative agricultural product processing technologies. Data/analysis problems of special concern here include measurement of labor utilization and availability and income and employment displacement effects.

(5) Rural industry -- Off-farm employment and, hence, rural industries growth are becoming increasingly recognized as essential ingredients of most rural development strategies. In recognition of this fact, TA/RD has singled this out as a major area of effort within its Critical Problems Project. Michigan State University (MSU) will deal with a number of project and sector analysis issues relating to off-farm employment in that project.

The present project, focusing specifically on methods of analysis, will be carried out in close collaboration with the MSU effort and will be intended to supplement that effort with additional case studies and a management perspective.

It is proposed here to undertake case studies leading to methods papers in areas #1 through #3 during the first year and to initiate work on areas #4 and #5 during the second year. Flexibility will be maintained on the precise number and project types to undertake in the second year, however. Changes may be made -- prior to entering Phase II of the project -- as a result of consultations with the project advisory committee, members of the contractor's staff, and others.

Regional bureaus and Missions will be asked to nominate projects for case studies in the respective "project type" areas. Contractor staff -- customarily one or more individuals with expertise in management information systems and LDC experience -- will proceed to the sites and conduct investigations of: (1) the sources of data used by Mission and LDC personnel at various stages of each project's planning and life; (2) the efficiency with which information was generated and its usefulness in decision making; and (3) appropriate alternative sources of data and data analysis techniques.

Results of each case study shall be reported to the

project manager not more than 4 weeks after the site visit.

To insure comparability of case study research, a uniform research design or frame of reference will be developed during the first three months of the project. It shall be the contractor's responsibility to present to the project manager a panel of 6-8 recognized experts in the areas of rural development to be studied along with 3-5 experts in information systems who have LDC field experience. The project manager may augment this panel with personnel from AID as well as outside experts. In consultation with the project manager, the contractor shall determine procedures (such as a week-long workshop) whereby the exchange of ideas is accomplished leading to the production of a research design to guide the analysis of the case studies.

There shall be approximately 3-5 case studies executed for each selected rural development project type. During the third to eleventh months of the project, case studies shall be conducted on three of the project types; case studies for the additional project types will be undertaken during the thirteenth to twenty-first months of the project.

It is desirable that continuity of research personnel be maintained; the contractor must demonstrate in responding to the RFP what measures or guarantees will be entered into to assure this goal. However, subcontracting will be allowed if measures are taken to assure effective

integration of the sub-contractor's work with that of the prime contractor.

Actual site selection shall be made during the first three months of the project. Suggestive but not exclusive criteria for choosing the sites for the case studies include:

- level of development (it is preferable that sites represent the extent or type of development encountered in LDCs);
- importance assigned the site by Regional bureaus (contractor staff engaged in case study research may well serve local Missions as consultants on information problems to operational projects);
- size of Mission;
- stage or phase of project development.

Preliminary reports on each case study will be circulated to the panel of experts formed to construct the research design. Should a particular paper be judged deficient, a return to the site to gather additional information will be made. From the case study reports, the contractor's staff shall draw up "lessons of experience" discussions of particularly useful sources of data or techniques--to guide future Mission project development. These lessons form one of the major inputs to the "Methods Papers."

The contractor shall also commence during Phase I

of the project a review of extant publications, Agency documents, and other reports (e.g., IBRD papers) in order to locate accounts of the use and efficacy of planning and evaluation techniques in operational projects. Prior to undertaking this review, the contractor shall supply the project manager a "List of Sources" -- that is, a list of terms or headings for the bibliographic search, known archives or data banks, experts in the various fields who shall be asked for guidance, and similar indicators of familiarity with the appropriate sources of materials to be reviewed. At six month intervals the contractor shall deliver to the project manager a report on progress being made in locating and abstracting these secondary sources.

In addition to the search and abstracting of secondary accounts of the role of data and analysis in projects related to the Methods Papers, the contractor shall during Phase II of the project conduct a review of the literature dealing with the use of sepcific data and analysis techniques which may be brought to bear on particular problems identified in Phase I. Examples might be the measurement of secondary impacts or assessment of institutional capability. Many methodological innovations have emerged from the social and management sciences which have either failed to gain recognition in LDC situations or have yet to be tailored to operational imperatives. It is a principal task of

the contractor to ascertain the "state of the art" and to develop illustrative materials on the application and costs and benefits of such procedures as: nonobtrusive measurement techniques, multivariant analysis, linear programming, decision analysis, group interview techniques, economic base analysis, and so forth.

Lessons of experience from both the secondary accounts of operational projects and the literature of relevant social and managerial science research shall be incorporated in the Methods Papers.

Draft Methods Papers shall be reviewed by recognized experts in such areas of rural development as rural electrification, intermediate technology, and so forth who served on the panel designing the frame of reference for the case studies. These experts shall be asked to offer suggestions and comments concerning the applicability and soundness of these documents as guidelines for Mission personnel. The contractor is to involve as appropriate the advice and participation of these experts in writing the final draft of the methods papers. Additional reactions and suggestions may be sought from independent sources such as academics, consultants, and Agency personnel.

Sibling projects under the TA/RD "Critical Problems" umbrella in some cases address data and analysis problems and methodologies in areas outside the present project. Some of the lessons and information uncovered in these

projects may be relevant to the present project. Thus close coordination will be maintained with their project managers and contractors so that applicable materials can be integrated into the Methods Papers or into the Overview document scheduled for Phase III.

The above steps will lead to Methods Papers for each of the selected three to five rural development project types. This set of papers will provide the analyst or manager a carefully integrated, clearly operational set of guidelines, a review of the costs and benefits of many techniques, and information on the type of consulting assistance applicable to a wide range of Mission situations. Because the Methods Papers will share a similar format, vocabulary, and orientation, familiarity developed by an individual working with one paper may be transferred to others in the set.

b. Consultant identification and consulting assistance

The second set of project outputs is the rostering, identification for specific assignments, and provision of consultants, both U.S. and LDC, who have demonstrated skill and experience in the design and evaluation of management information systems appropriate for specific types of rural development projects.

Approximately 25 man months of consulting is directly funded by the project. Much of this consulting will be available to AID/W and Missions in conjunction with or in topic areas closely related to the case study work. Hence, while consultants are in Washington or in field Missions in connection with research on the case studies, they will also be available to work with AID/W, Mission, and LDC staffs on data and analysis problems they currently face. They can assist in the design of information systems for field projects, as well as review PPs or other documents in AID/W in which methods of analysis are at issue.

Project funded consulting will be provided by the contractors' own staff, as well as by other individuals accessed through the prime contractor but identified by TA/RD.

The contractor will also be responsible for developing a roster of consultants and, at TA/RD's request, for identifying and determining the availability of consultants for specific assignments to be funded by Regional Bureau or Mission funds. The roster shall be an evaluated listing of individuals and their capabilities, experiences, and general availabilities. In responding to the RFP, the potential contractors will be required to demonstrate: (1) how they propose to locate consultants for specified regional programmatic activities; (2) how they propose to evaluate and insure excellence in the candidates nominated for inclusion in the final roster; (3) what procedures will be taken to conform with the applicable provisions of the Privacy and Freedom of Information Act regulations; (4) how they intend to store and disseminate names of consultants; (5) how consultants with special data/analysis skills in other projects in the "Critical Problems" package will be integrated into the present network; and (6) how they will service TA/RD requests for identification and determination of the availability of consultants for specific assignments. Quality and appropriateness of submissions to the RFP will be determined in part by the thoroughness and feasibility of solutions to these six issues.

This systematic effort to create and formalize a network of experts will result in better and more timely advisory assistance to Missions and LDCs and

enlargement of the body of experts readily accessible for rural development assignments. Moreover, the project will facilitate long-term consulting/research relationships between individual Missions and first rate consultant talent so that these consultants may become, in effect, informal extensions of Mission staff. An additional benefit will be the interaction of consultants with LDC institutions and personnel.

The project is designed to provide some consulting assistance and identification during the first year of operation. Necessarily, however, the network and services will grow larger as efforts progress through the life of the project.

The contractor will be responsible for delivering within six months of the contract date a detailed analysis of the methods to be used in locating consultants. In addition, this first delivery must contain a thorough account of the techniques and procedures to be employed by the contractor in evaluating the suitability of potential consultants for functional and/or regional applications of data gathering and analysis methods.

Lists of qualified consultants shall be delivered to the project manager at six month intervals beginning ten months after ratification of the contract. This requirement is in addition to responding to requests for specific types of consultants as inquiries are obtained

by TA/RD from Missions and Regional bureaus. The contractor shall undertake to give assurances that such requests from the project manager will be dealt with as quickly as possible.

The contractor is responsible for delivering to the project manager at the end of Phase II (after 23 months) a list of consultants located by the present project as well as consultants identified in such other projects as may be applicable. In order to facilitate this integration, the contractor shall during the first six months of the project provide the project manager with a copy of the format used to record information about the individual consultants. The project manager shall determine if this formatting device is compatible with similar instruments employed in sibling projects of the "Critical Problems" program.

c. Overview and Inventory of data/analysis methods

An "Overview and Inventory" document covering methods of data gathering and analysis applicable to rural development projects generally will be produced in Phase III. This document will provide an integrated, single-source statement of data sources and analysis techniques for the design and management of rural development projects. Its precise format and inclusiveness will be

determined in the evaluation scheduled just prior to Phase III of this project. However, it will serve as (1) a statement of the state-of-art for the practitioner; (2) an indicator of gaps and "soft spots" in existing knowledge; and (3) an instructional tool for the preparation of Agency personnel responsible for project analysis and management. The document will be of use to Agency and non-Agency field managers, analysts, scholars, and consultants both in the U.S. and LDCs.

Most importantly, the document will present the field practitioner with practical, valuable insights to the implications of alternative ways of generating information for rural development planning. This will help make the practitioner or project manager a more effective participant in decisions leading to investments in data gathering and analysis.

The Overview and Inventory will draw together insights on the problem of incorporating timely, accurate, and cost-effective data at various stages of project development generated by (1) the Methods Papers; (2) the review of secondary and methodology literature; (3) other projects in the Critical Problems program; and (4) experts consulted during the development of the current project.

Rather than duplicating what is found in the Methods Papers or other accounts being developed both within and outside the Agency, the Overview and Inventory will present more general or middle range lessons applicable to rural development projects regardless of their specific region or function. It is especially important that this integrative function be performed, since several sources have delivered, and others can be expected to produce shortly, studies of the problems of incorporating optimal information in project decision making. Without a conscious effort to bring together the results of these disparate projects, much of the transferability of their results would be missed.

This single volume Overview and Inventory will constitute a state-of-the-art and statement of lessons of experience, augmented by discussions of the conditions under which specific data collection and analysis techniques are applicable to rural development projects. The document will contain selected bibliographies directing the user to additional discussions of issues and techniques presented in the narrative. The Overview and Inventory may be seen as a frontal piece to the Methods Papers, as an introductory text for project analysts and managers. At the same time, the Overview and Inventory will be a research agenda pointing to little-understood information management problems faced by Agency

and LDC personnel. These gaps could draw the future attention of academic researchers and Agency experts.

4. Output verification

We will know that project outputs have been satisfactorily produced when:

a. The Methods Papers and Overview and Inventory document are received and reviewed by AID practitioners and by qualified data/analysis experts from within and outside AID.

b. Mission/LDC requests for data/analysis assistance are filled by project-funded consultants or by consultants identified by means of the consultant roster.

5. Output assumptions

For project inputs to be transformed into outputs, it is assumed that:

a. Appropriate talent can be identified for the consultant roster and for project funded consulting assistance; i.e., that there are individuals who possess the expertise and field experience which qualify them to be consultants to operational projects and that within this talent pool there are individuals who are willing to accept assignments as consultants to AID Missions, LDCs, and AID/W.

b. The contractor and AID meet their respective commitments to the project.

c. State-of-art papers already completed for AID are of substance and value in conceptualizing and conducting efforts under the present project.

d. The collection and storage of consultant names and identification of consultants for specific assignments can be accomplished effectively and efficiently by a single contractor.

e. This collection and storage of names and identification of individuals can be done so as to conform with applicable privacy regulations.

6. Project inputs

AID's inputs to the project will be:

a. A state-of-art paper on "Rural Development Information Systems", now available in draft form.

b. A paper on "Non-Economics Social Sciences in Sector Analysis", in process.

c. TAB contract with a firm, university, or other entity to produce each of the outputs.

d. A TA/RD staff member to manage the project and provide substantive involvement in the overall effort, plus some inputs by other TA/RD professional staff members.

e. TA/RD secretarial and program officer support to backstop the effort.

f. Mission and host government cooperation to facilitate case studies.

Costs of the project are estimated to be \$704,000, to be obligated in FY 1977 and FY 1978 and expended over a 3-year project period. The fiscal year obligating budget is shown in brief below, and a more detailed line item budget is shown in the Financial Plan section of this paper.

Table 1. Obligating budget

<u>Budget item</u>	<u>Obligation Year</u>		
	<u>FY 77</u>	<u>FY 78</u>	<u>Total</u>
	(\$1,000)	(\$1,000)	(\$1,000)
Case studies and 5 Methods papers	280	161	441
Consultant identification and assistance	55	63	118
Integrating and overview work and Overview paper	<u>68</u>	<u>77</u>	<u>145</u>
Totals:	403	301	704

In addition to the above, TA/RD will budget time of a professional staff member (who is already on board) to direct the project, some time of other staff members to provide different social science perspectives, and adequate secretarial and program officer support.

Provision of project inputs will be verified by:

- a. Contracts being signed and executed, and
- b. TA/RD staffing patterns and levels being adequate to perform managerial, technical, secretarial, and programming functions.

Assumptions necessary for provision of the inputs are that:

- a. The project is approved.
- b. An appropriate contractor is available.
- c. Contracts are approved.
- d. Missions and host countries will agree to facilitate and cooperate in the case studies.

Project Analysis

The present Project Paper has benefited from an extensive review within the Agency. In addition to review by TA/RD's Steering Committee, it has been reviewed by other staff members in the Regional Bureaus, by all interested TAB offices, and by PPC/PDA and PPC/DPRE. Early drafts were also reviewed by Dr. Raymond Tanter, Professor of Political Science at the University of Michigan, and by U.S. Department of Agriculture staff members. Substantial revisions in project design, particularly as reflected in this final version of the PP, were made as a result of this review process.

A. Technical Feasibility

This project calls for activities leading to two types of outputs, including: (1) case studies leading to data and analysis Methods Papers for five "project types", plus an Overview and Inventory document and (2) consultant identification and consulting assistance for Missions, LDC institutions, and AID/W. It is feasible to carry out these activities through a number of different contractual and administrative mechanisms. However, producing the outputs called for with quality and timeliness can best be accomplished, we believe, through a single major contract.

This is discussed in the "Administration and Implementation" section of this paper. We are confident that appropriate contractors will submit proposals to carry out the project and that contractual activities can be structured and managed in an effective manner.

TA/RD is presently staffed to direct and provide substantive social science input to this project. With the addition of an additional program analyst, TA/RD will also be able to provide administrative and coordination services that go along with effective management of such a project.

In sum, TA/RD staffing and the planned administrative/contractual structure of the project, combined with the expanded interest and cooperation of the Regional Bureaus and Missions, result in a proposed project that is adjudged technically sound.

B. Financial Plan

Project costs, to be born by USAID, are estimated at \$704,000 (see Table 2), with approximately \$403,000 to be obligated in FY-77 and the remainder in FY-78. Any incremental costs to host countries for cooperating in this methodology effort should be negligible. Host countries and Missions will, of course, fund some of the consulting they request out of budget allocations for

project development, implementation, etc. Host country and Mission facilitation of the case studies involves no budgetary outlays other than the TAB funds provided by this project.

The project budget is shown in some detail in Table 2. The budget contains three funding categories, corresponding generally to the "outputs" shown in the Logical Framework matrix. There is some interrelatedness among items funded under the three budget categories. For instance, it is assumed that much consulting funded by the project will be performed by consultants who are also working on the case studies. Eighteen man months of such consulting are budgeted under item B in the budget. This, plus the seven man months of consulting shown under item C of the budget, brings the total of project funded consulting to 25 man months.

Activities budgeted under item A are also related to other project activities. A good deal of the principal investigator and other salaries funded under item A are necessary for direction of the case studies and Methods Papers (item B).

Although this project proposes obligations in two fiscal years (FY-77 and FY-78), funds will be expended over approximately a 3-year period beginning in 1977. This is implied in the Critical Performance Indicator (CPI) Network shown as Annex C to this paper.

TABLE 2 BUDGET FOR RURAL DEVELOPMENT DATA GATHERING AND ANALYSIS METHODS PROJECT

	QUANTITY	RATE	SUB-TOTALS	PROJECT TOTALS
A. Direction, overview, and integration (including overview document)				
Principal Investigator	10 mm	\$6,000/mm	\$60,000	
Other Investigators and Reviewers	5 mm	5,000/mm	25,000	
Secretarial support	6 mm	3,500/mm	21,000	
Travel and Per Diem			20,000	
Supplies, publishing expense, and misc.			<u>10,000</u>	\$136,000
B. Case Studies and data/analysis papers on "project types" (3-5 papers, with 3 begun in 1st year)				
Per set of case studies and paper:				
Investigators and reviews (and cons. asst.)	12mm ^{1/}	5,000/mm	60,000	
Overseas trips	3 trips	1,000/trip	3,000	
Per Diem on overseas trip	3 months	1,500/month	4,500	
Domestic travel and per diem			6,000	
Supplies, publishing expense, and misc.			5,000	
Secretarial support	4mm	3,500/mm	<u>14,000</u>	
Times 4.5 (1 of the 5 will be done in cooperation with another project, which will cover part of the cost of that one)-			\$92,500	\$416,000 ^{2/}
C. Consultant roster, identification, and assistance (in addition to assistance above)				
Professional, clerical, and secretarial time to develop and maintain roster and to match consultants with requests	12mm	\$4,500/mm	\$54,000	
Consultants funded by project (in addition to that above directly related to case study work):				
Salaries	7mm	5,000/mm	35,000	
Travel	7 trips	1,000/trip	7,000	
Per Diem	7 months	1,500/month	10,500	
Supplies and misc.			<u>4,000</u>	\$111,000 ^{2/}
Total unadjusted for inflation				663,000
Total adjusted for inflation ^{3/}				<u>704,000 ^{2/}</u>

^{1/} Includes 4 months time made available for related Mission and AID/W consulting; for 4.5 sets of case studies, this comes to 4.5 x 4 = 18mm of case study-related consulting for Missions and AID/W.

^{2/} Rounded

^{3/} 6% inflation on 1/3 of costs (2nd yr) and 12.36% inflation on 1/3 of costs (3rd yr.)

C. Social, Economic, Women in Development, and Environmental Implications of Project

This project is intended to enhance the social and economic conditions of the rural poor by facilitating the more effective use of available data/analysis methods -- by both A.I.D. and host government institutions. Better use of available methods can help bring about enhanced living standards for A.I.D.'s target groups by (1) improving the quality of rural development project formulation and implementation and (2) strengthening rural development project evaluation, which can lead, in turn, to improved policies and strategies. The case studies, Methods and Overview papers, and consulting assistance provided under the project will be designed to create an increased awareness of and capacity for applying the available methods.

In addition to assisting Mission's and LDC institutions in the application of improved methods generally, specific attention will be given to some of the techniques which can involve the poor themselves in the analysis and decision making process. For example, various survey and panel approaches for arriving at perceptions of members of the target group on goals and on alternative ways of allocating resources to attain goals have potential for greater use. Such participatory data gathering and

analysis approaches, used in appropriate contexts, can be means of enhancing social and economic well-being, as well as social satisfaction ends in themselves.

The tools of data gathering and analysis explored in this project should have a great deal of relevance to examining women's roles in the development process and, in turn, the impact of that process on women and their roles. The project will give serious attention to analyses of the role of institutions in particular project settings. Institutions governing women's roles in rural societies are among those which sound analysis techniques should be capable of considering. Also, the techniques for target group identification and impact analysis will be considered in part for their ability to single out rural women as a group and sub-classes of rural women for detailed analytical treatment. Specific client groups, such as rural women, can be focused on and analyzed by a number of impact evaluation techniques used currently by such social scientists and methodologists as demographers, sociologists, anthropologists and statisticians. The project contractor will be directed to assure that the special problems faced by women can be addressed adequately by the data gathering and analysis techniques. The Agency's capability to attack these problems should thereby be strengthened. Thus,

poor rural women will benefit ultimately from the improved analysis and planning which this project helps make possible.

Every attempt will be made to assure that this project has a positive social impact on professional communities and institutions within LDCs. Attempts will be made to maximize the use of available indigenous talent as consultants, and to assure that U.S. consultants complement rather than compete with this human resource. The contractor and U.S. specialists brought in to aid Missions and LDC practitioners under this project should be able to assist in the identification of appropriate local professionals and thereby encourage greater use of the skills already in each country. Professionals in the LDCs should be assisted by the project in keeping up to date on data/analysis approaches as a result of their access to the Methods Papers and Overview document. We see the collection of activities funded under this project as consonant with A.I.D.'s philosophy of upgrading and utilizing professional capabilities within the LDCs whenever possible.

This project should also be of assistance to U.S. minority institutions in their attempts to become increasingly involved in A.I.D. activities. The consultant roster will draw capable data gathering and analysis specialists from

minority institutions into A.I.D.'s consultant pool. Also, dissemination of the Methods Papers and Overview/Inventory document can increase awareness on the part of minority individuals and institutions of current analytic approaches in use by LDCs, A.I.D., and other donor agencies.

The methodology component of this project which focuses on impact analysis will contribute to improved consideration of environmental factors in rural development planning. Since environmental impacts of projects affect the well-being of target populations both as consumers (e.g., as users of water supplies for drinking, cleansing, and waste disposal purposes) and as producers (e.g., cultivators of lands threatened by wind or water erosion), means of assessing such impacts must be considered. Though we do not view environmental impact analysis as a central focus of this project, the capability of various data gathering and analysis techniques to include environmental variables will be duly considered.

Administration and Implementation

A. Administrative Arrangements

Three interrelated sets of activities will be contracted for in this project. They relate to: (1) direction, overview, and integration of the project activities, including production of an Overview and Inventory document; (2) conducting case studies and literature reviews leading to "Methods" papers for several project types; and (3) developing a consultant roster, providing consulting assistance, and identifying other consultants in response to specific requests for assistance.

An earlier draft of the PP raised the issue of whether the various project activities should be handled by a single major contractor or by two or more contractors. Relative advantages and disadvantages were discussed in detail. As a result of extensive review of the draft PP, dialogue with numerous individuals, more precise focusing of the project's activities, and further consideration of the contracting alternatives, it has been decided to handle all three sets of activities under a single major contract. This will both ease the management load for TA/RD and result in a more coordinated and consistent set of outputs.

The contract for the project will allow for appropriate subcontracting. For example, it may be efficacious for one or more of the Methods Papers (and case studies) to be done

on a subcontract basis. This will only be allowed if the major contractor demonstrates that a consistent, integratable set of outputs can be produced in this way. Subcontracting can be a highly useful mechanism for involving key individuals or firms in the case studies, Methods Papers, and consulting work of the project.

A major criterion in selection of the prime contractor is demonstrated familiarity with social science and other data collection and analysis techniques relevant from a rural development "managerial perspective". Indicators of familiarity include social scientists and management information specialists among proposed staff and previous experience with LDC governments or firms in application of data/analysis techniques.

Although many of the analytical methods of concern come from the social sciences, they are to be considered in this project from the standpoint of a planner, administrator, or project manager who must make decisions on which methods of generating information to commit resources to under given circumstances. To make such decisions on investment in data gathering and analysis, the "manager" needs to know what information can be obtained by using a given method, what confidence can be put in the information, how costly it will be to execute the data gathering and analysis exercise, how timely the information produced will be, and so forth. These concerns reflect what we mean by a "managerial perspective".

To provide this perspective, the contractor will need to combine managerial science with data gathering and analysis techniques drawn from or used by at least the following social sciences:

1. Economics (including agricultural)
2. Political science
3. Anthropology (cultural and economic)
4. Rural sociology
5. Regional science

The contractor must demonstrate not only how to combine managerial and social science inputs^{1/} in the project, but how an integrated approach to the use of these social science disciplines and their methods will be created. This is necessary if the Methods Papers are to indicate ways in which the broad range of technical, behavioral, and institutional considerations can be effectively combined and brought to bear on rural development project decision making.

An RFP will be issued which describes the outputs called for in this project and which requests proposals indicating:

1. How the managerial perspective and social science methods alluded to above can be brought to bear on the project;

^{1/}Skills in quantitative methods (including statistics) must come to bear on this project. In large part, these will be built into the managerial and social science disciplines involved in the project. However, the contractor will supplement those discipline specialists with other individuals who are specialists in quantitative methods per se.

2. How appropriate LDC experience can be built into #1 (including experience with the "project types being focused on);

3. The contractor's own resources plus the resources of others that he intends to utilize -- through hire or sub-contract procedures;

4. The contractor's experience in both methodology work and LDC work;

5. How the contractor intends to develop and maintain the consultant roster and to service requests to identify and help place consultants for specific assignments;

6. How the consultant roster and consultant identification service can be developed to continue beyond the life of this project, and what contractual/funding extension would likely be necessary to continue it; and

7. How the contractor proposes to provide the consulting services (as opposed to consultant identification) to AID/W, Missions, and LDCs that are funded by the project. In this regard, as implied in section B of the Budget table, it is important that many of the individuals working on the case studies and Methods Papers be available themselves for closely related, project funded consulting assignments.

The RFP will request potential contractors to indicate how they propose to produce all of the outputs in a combined and coordinated manner. However, AID will retain the option of contracting separately for various aspects of the project,

should the review of proposals received indicate that is the most effective way to obtain the various services called for.

Private firms, universities (and university consortia), and not-for-profit R&D institutions will be invited to respond to the RFP. A committee made up of TAB, Regional Bureau, PPC, and SER officers will review the resulting proposals on the basis of criteria attached to the RFP.

Once a contract is signed, continued close coordination with AID's Regional Bureaus will be essential to the success of this project, given its knowledge application and service orientation. Although TA/RD will continue to work with the Rural Development Steering Committee on major decisions concerning the project, a special committee will be established to (1) coordinate the flow of consulting services this project is designed to facilitate, (2) advise TA/RD on design and country-foci of case studies, and (3) advise TA/RD on development of the Methods Papers and Overview/Inventory document. The Committee should have on it at least one representative of each Regional Bureau who follows closely data/analysis problems Missions in his/her region face in their program and project design work.^{1/} Given their closely related work, certain TAB

^{1/} Given the many demands placed upon Regional Bureau staff members, TA/RD recognizes that this committee will provide advisory rather than staff support to management of the project. Moreover, it is recognized that the depth of that advisory role may vary among Bureaus, depending on their staff availabilities at any given point in time.

and PPC offices should also be represented on this committee. In fact, TA/RD has already requested concerned Regional Bureau, TAB, and PPC offices to designate individuals for such a committee. PM/MD will be accorded a similar invitation, given its interests in training aspects of data/analysis methods.

A member of TA/RD's professional staff will serve as project manager. This project manager, and to some extent other TA/RD staff members, shall be very much involved in the substantive data and analysis concerns related to design and execution of this project. TA/RD therefore expects to not only "manage and coordinate" the activities of the project, but also to work in a collegial fashion with the contractor's personnel in determining the scope and content of the case studies, Methods Papers, and Overview/Inventory document. This will require a substantial commitment of staff time.

B. Implementation Plan

TA/RD will be responsible for implementing the project through a contract with a private firm, not-for-profit institution, or university (or consortium). Contracts are to be signed and implementation is to begin in Fiscal Year 1977. This 3-year project will extend into late 1980. Details of the implementation schedule are shown in Annex C, the Critical Performance Indicator (CPI) Network and Description. In brief, the CPI indicates that:

(1) Preparatory and conceptualization work will begin in September 1977 and case study work will begin in December 1977;

(2) Three to five Methods Papers on distinct "project types" will be prepared between October 1978 and January 1980, followed by an Overview and Inventory document in 1980;

(3) Development of the consultant roster and some consulting assistance will begin in late-1977 and early-1978; and

(4) More active consultant placement and provision of consulting assistance will take place from late-1978 through late-1980.

More specifically, the project phasing will be as follows: Phase I, from September 1977 through September 1978, will involve conceptualization and planning for the case studies and Methods Papers, case study field work and literature reviews for first three Methods Papers, initial work on the consultant roster, and limited consulting assistance and consultant placement. The first three Methods Papers will be developed, case study field work and literature reviews for the remaining two Methods Papers will be undertaken, the consultant roster will be completed, and consulting assistance and identification/placement services will be provided in Phase II, running from October 1978 through July 1979. And

finally, during the Phase III period, covering August 1979 through September 1980, the remaining two Methods Papers on project types will be completed, consultant rostering and placement services and consulting assistance will continue, and a methods Overview and Inventory document will be prepared.

As indicated in other sections of this paper; active involvement of Missions and the Regional Bureaus will be called for in this project. However, since the case studies will generally relate to ongoing Mission activities and the consulting assistance will be in response to AID/W and Mission/LDC requests, the project should for the most part involve little if any additional work load for Mission and Regional Bureau staffs. The case studies will require Mission cooperation and would benefit from Mission logistical support, but since consulting assistance will be available in conjunction with the case study field work, such cooperation and support is expected to be forthcoming readily.

This project will be funded from FY 77 and FY 78 authorizations, with a major portion coming from FY 77 funds in order to facilitate a major contract being signed and project activities to begin in late 1977. It is difficult to estimate precisely how fast funds will be expended, but we expect about \$300,000 to be drawn down in each of the first two 12-month periods and the remainder to be drawn down in the final 12-month period.

C. Evaluation

Major project evaluations will take place at three points. (See the CPI, Annex C.) The first will occur in September 1978, when field work for the initial case studies and initial work on the consultant roster have been completed.

A second evaluation will be held in about July 1979. By then, the first three Methods Papers will be completed, field work on an additional set of case studies will have been carried out, and the contractor will have been actively involved in field consulting and consultant identification and placement. As part of this second evaluation, the precise scope and contents of the Overview and Inventory document will be finalized.

The third and final evaluation will take place during March to May 1980, several months prior to project completion. That final evaluation will take stock of the entire project effort and lead to a determination of what follow-on activities are in order.

Each of the data/analysis Methods Papers for the various "project types," as well as the Overview and Inventory document, will be reviewed by (1) Mission and LDC analysts and managers, (2) AID/W professionals, and (3) outside social and management science experts. After reviews and appropriate revisions, the papers will be distributed widely to Missions, LDCs, and other recipients.

Consultant rostering and identification/placement activities and project funded consulting assistance will be evaluated on the basis of (1) the extent to which additional assistance to Missions and LDCs on data gathering and analysis problems has been made possible and (2) the timeliness and quality of additional consulting assistance arranged through or funded by the project. TA/RD staff members will be able to observe many of the activities and results both by project monitoring and by field trips on their own consulting assignments. In addition, the project manager will receive continuous feedback from the TA/RD Steering Committee and from the Project Committee to be established.

Objectively verifiable indicators (OVIs) for project outputs, purposes, and goals -- and corresponding means of verification -- are listed in somewhat more detail in the Logical Framework matrix. These OVIs will constitute a portion of the inputs to the three formal evaluations scheduled for this project.

Annex A

Partial Review of Data/Analysis Methods Efforts to Draw Upon

The data/analysis methods papers produced by this project must incorporate not only the case study insights, but also relevant insights from related experiences, studies, and literature already completed or underway. The contractor will be responsible for reviewing and drawing upon such works. However, a preliminary review, to help direct the work of the contractor, is incorporated in this annex. Also, many of the subjects are addressed and some case experiences are reviewed in the recent TA/RD funded study by Development Alternatives, Inc. (DAI). The draft DAI report is entitled Information for Decision making in Rural Development, April 1976.^{1/}

Methodology components

Several interrelated methodology components need to be considered in developing the methods papers. They include (1) the rural development decision making process and related information requirements, (2) methods of analysis to provide information, and (3) methods of obtaining data necessary for the analysis.

a. Rural development decision making and information requirements

Methods of data gathering and analysis can only be effectively assessed in the context of information needs they are intended to satisfy. Hence, the case studies and methods papers must examine the pertinent decision making processes and the information needs that derive from them. The methods paper for each "project type" must therefore each contain an articulation of the rural development decision making/information needs framework which pertains generally to it. That framework for each project-type will attempt to capture the major decision making/information needs points within the host government and A.I.D. Mission planning and project management context.

In relating the decision making/information needs framework for each project type to choices among data gathering and analysis alternatives, decision analysis concepts may prove useful. Whether presented in decision analysis or other terms, each methods paper must be general enough to allow field practitioners to conceptualize their own decision and information problems in terms of it, yet structured

^{1/} Development Alternatives, Inc., Information for Decision Making in Rural Development (Draft), submitted to the Agency for International Development, Contract No. AID/ctr-C-1383, Work Order No. 20, April 1977.

enough to facilitate greater discipline in making choices on investments in data gathering and analysis. It must aid the planner or project manager in setting priorities on data gathering and analysis which reflect (1) availability and cost of information by analysis and data collection method, (2) relevance of information obtained to the decision problem the requester is seeking to address, (3) significance of the problem, and (4) time value of the information. Consideration of these factors allows at least qualitative, if not quantitative, assessments of information value and cost to enter into information investment decisions.

b. Methods of analysis to provide information

The identification of decision making problems and consequent information requirements leads logically to questions of appropriate methods of analysis to provide information. At least three broad types of analysis are applicable here, each of which covers a number of specific techniques. The first, target group identification and analysis, overlaps the other two. It encompasses a number of approaches to determine who constitutes a target population, what the behavior patterns and constraints to better standards of living of that population are, and how particular policies or programs affect the behavior patterns, constraints, and levels of well-being of that target group. Choice analysis, the second type, embodies explicit criteria for selecting strategies, intervention mechanisms, or projects from among the alternatives available. Finally, impact analysis attempts to trace through a program's effects in terms of goals, purposes, or outputs. Such an analysis may be either a projection of a program's on-going effects during its life or an ex-post evaluation.

(1) Target group identification and analysis

A.I.D. must be able to plan rural development programs with particular interest or "target" groups in mind. This implies the need for capability to identify rural populations and to sort those populations on the basis of various characteristics, including income, occupation, ethnicity, location, and so forth. It does not imply that planning and programming for target groups is done in isolation from total population and economy-wide considerations, but rather that the implications of programs for particular target groups are measured and considered. In essence, then, rural development planners must be able to segment statistically populations and to plan and analyze programs in terms of the needs of target segments.

Area frame sampling is one statistical technique now being applied with A.I.D. technical assistance in some Central American countries to identify rural population characteristics and to measure changes over time in those characteristics. A project being planned

by TAB in cooperation with ROCAP and the El Salvador Mission will draw in part on an area frame sample to develop "Progress Indicators for the Rural Poor".^{1/} The project is intended to provide technical assistance to the Secretariat for Economic Integration in Central America (SIECA) and to cooperating agencies in El Salvador to develop methodology and institutionalize capability for measuring socio-economic change over time in rural areas. The process of identifying particular population groups and measuring change over time in those groups should become better understood over the life of that particular project.

Work is needed to clarify appropriate ways of identifying rural populations for rural development planning, of identifying key characteristics of those population segments, and of measuring change over time in the characteristics.^{2/} Key characteristics which should receive attention in TA/RD's data/analysis methods project include (1) asset access, (2) skill access, (3) employment access, and (4) access to publically provided goods and services (e.g., health care). An additional "community" characteristic which must be identified very early in any planning process is the scope and nature of traditional organizational units which may serve as the initial base for generating community participation. Group-specific cognition/attitude information is another element of the social profile called for in developing programs to serve the rural poor. The methods papers resulting from this project should suggest effective frameworks and methods for organizing and analyzing these characteristics.

(2) Choice analysis

Optimization analysis is generally thought of as a set of techniques which draws upon quantitative information and uses maximization or minimization algorithms to select an optimum strategy, program, or project. Although such quantitative optimization analysis can sometimes be applied to rural development decision problems, other choice analysis methods will often be called for. Consideration of the range of decision making levels and problems involved in both "top-down" and "bottom-up" rural development planning (and combinations thereof) dictates the need for both quantitative and qualitative project selection and design techniques. For this reason, we use here the more general "choice analysis" term, to connote a range of quantitative and qualitative methods for sorting and ranking alternatives.

^{1/} "Progress Indicators for the Rural Poor", Activity Paper, TA/AGR/ESP, January 1977.

^{2/} A small project now being funded by TA/RD with Cornell University (AID/ta-C-1360) should provide some insights on the "landless poor" elements of target group identification and analysis.

Quantitative techniques for assessing projects and sectoral and regional plans have been treated extensively in the literature over the last two decades. The theory, and in some instances the application, of cost-benefit analysis has become extremely sophisticated. The state-of-the-art of cost-benefit analysis is quite well covered conceptually in such works as Mishan, Cost-Benefit Analysis: An Introduction^{1/} and Little and Mirrlees, Project Appraisal and Planning for Developing Countries.^{2/ 3/} Mathematical programming models have also been both written about and used extensively in agricultural, natural resources, and regional development research and planning.^{4/}

- 1/ E.J. Mishan, Cost-Benefit Analysis: An Introduction. New York: Praeger Publishers, 1971.
- 2/ I.M.D. Little and J.A. Mirrlees, Project Appraisal and Planning for Developing Countries. New York: Basic Books, Inc.
- 3/ Also see P. Dasgupta, S.A. Marglin, and A.K. Sen, UNIDO Guidelines for Project Evaluation (Project Formulation and Evaluation Series No. 2), New York: United Nations, 1972; I.M.D. Little and James A. Mirrlees, Manual of Industrial Project Analysis in Developing Countries, Vol. II, Paris: OECD, 1968; John R. Hansen, "A Guide to the Guidelines: The UNIDO Method of Economic Project Evaluation", IBRD Bank Staff Working Paper No. 166, April 1974; and J. Price Gittinger, Economic Analysis of Agricultural Projects. Baltimore: The John Hopkins U. Press, 1972. Examples of treatments of specialized cost-benefit topics include Bela Balassa, "Project Appraisal in Developing Countries", IBRD, Economic Staff Working Paper No. 119, October 1971; and Marcell Masse, "Secondary Effects and Project Appraisal", IBRD, Economics Department Working Paper No. 58, January 1970.
- 4/ See J. David Flood and Dean Schreiner, "Application of Regional Economic Analytic Models to Less Developed Countries", Draft Report for AID, TAB (Contract No. AID/CON/TA-147-491), June 1976; and Systems Analysis and Operations Research: A Tool for Policy and Program Planning for Developing Countries, Report of an Adhoc Panel of the Board of Science and Technology for International Development, Commission on International Relations, Washington, D.C.: National Academy of Sciences, 1976. For an example of optimization analysis applied to rural education decisions in the U.S., see Fred White and Luther Tweeten, "Internal Economics of Rural Elementary and Secondary Schooling". Socio-Econ. Plan. Sci., Vol. 7, pp. 353-369 (1973).

Special attention will be given in the methods papers to low-cost quantitative techniques that might be used in rural area planning and project decision making. However at least equal attention will be given to more qualitative approaches that may be called for in assessing institutional dimensions of alternatives. For example, it is not sufficient to determine the optimum number and location of fertilizer outlets in a marketing region. The rural development decision maker also needs information on the most suitable institution or combination of institutions to deliver the fertilizer. This calls for analysis of the comparative efficacy of private, public, and cooperative delivery mechanisms. The analysis must not only consider the single function at issue -- e.g., fertilizer distribution -- but how delegation of a particular function to a given institution affects (1) that institution's performance with respect to other functions (e.g., extension) and (2) the interrelations among institutions (e.g., private and public input suppliers).

To be useful, the methods papers must be able to go beyond the "checklist of institutional considerations and every problem in unique" approach. They must be able to give positive suggestions on methods or frameworks that facilitate integrated analyses of the more easily quantifiable factors (e.g., physical input-output relationships, prices) and the factors usually expressed in qualitative terms (e.g., administrative feasibility, participation potential) which go into project planning and implementation choices. In addition, the papers should contain suggestions on useful methods for quantifying certain variables (perhaps "potential for projects being maintained") which are usually weighed only in qualitative terms.

A central consideration that must be kept in mind in examining various decision making levels is that, compared with the planner at the national level or sector level, the local or regional planner is faced much more directly with specific, conflicting demands on the public resources available for investment in the area under his jurisdiction. This is a necessary aspect of rural development, but it presents the sub-national planner with decision problems that are not precisely the same as those of a central planner or of an administrative subordinate working at the end of a bureaucratic and functionally specialized chain. The problems of the former center around such things as the relationship of the planner to the community, the number of variables he cannot control, the highly distributive nature of the process of which he is a part, budget uncertainty, and so forth. The papers, and quite possibly some research in addition to or following this project, will need to address the analytical needs and methodological tools available for aiding investment and allocation choices under these circumstances.

Work on choice analysis methods will attempt to synthesize and evaluate the applicability of a number of diverse techniques. Included will be such quantitative approaches as linear programming for aiding rural road network choices, as well as various approaches for involving target groups in an iterative process of project identification, selection, and design. The case studies and literature reviews will attempt to draw from previous experiences -- both in the more and the less-developed world -- seemingly useful mixes of quantitative and qualitative techniques. Emphasis in the work on choice analysis, as throughout the project, will be on methods most useful in planning and implementation contexts, rather than in major research effort contexts.

(3) Impact analysis

The types of impacts to measure depend on the information required for decision making. Pre-project decisions require projections of certain output, purpose, and goal-level impacts as part of the choice analysis (previous section). Project monitoring and evaluation for decisions on project modification require impact data on projects as they unfold and their effects are felt.

However, impacts one would like to measure often are not measurable. It may be difficult to develop measurable indicators for some goals. The goal itself may be inherently difficult to measure (e.g., increased security) or the time lags between project implementation and goal achievement may preclude measurement of the latter in the time span available. Thus, proxies may have to be used for the impacts one is actually interested in. Or one may have to measure an impact at a different level in the goal-purpose-output hierarchy and rely on the assumed linkage between the impact measured and the higher level impact of actual interest.

The above considerations suggest that the impact analysis aspects of the methods papers must clearly delineate impacts (on purposes/outputs/goals) of concern to decision makers concerned with each particular project type and explore the measurement implications of obtaining that impact information. A good deal of work has already been done on socio-economic or impact indicators, and the methods papers must take that work into account. Among the studies already done are (a) a study by Leslie Wilcox and others at Iowa State University on "Methodology for Indicators of Social Development",^{1/} (b) a study of A.I.D.'s use of progress indicators, by Practical Concepts, Inc.,^{2/}

^{1/} "Methodologies for Indicators of Social Development", Iowa State U. (Contract AID/CSD 3642), reports dated 1972-75.

^{2/} Practical Concepts, Inc., "Progress Report: AID Use of Development Indicators", March 1974.

(c) the American Institutes of Research work in Thailand on impact assessment,^{1/} and (d) Practical Concepts, Inc. work under A.I.D. contract on indicators.^{2/} In addition, American Technical Assistance Corporation has focused specifically on goal-level evaluation in their Phase I report of a study for A.I.D.^{3/} Also A.I.D.'s Latin American Bureau has compiled and computerized a long list of progress or change indicators.^{4/} Most recently, AID/PPC has contracted a number of conceptual papers on impact measurement in connection with the Agency's report to Congress on Section 102(d) initiatives.

The syntheses contained in the methods paper will not be intended to break new theoretical ground, but will instead represent an attempt to distill from previous studies and from on-going studies ^{5/} lists of indicators which, in general, appear conceptually valid and measurable.^{6/} The methods paper will then spell out the indicators

- ^{1/} Robert E. Krug and Steven M. Jung, "Evaluating the Impact of Rural Development Programs", (American Institutes of Research/Contract AID-493-037-T), June 1974. For reviews of that work see Richard J. Barber, Associated, Inc., "Evaluation of Impact Assessment Techniques in Thailand", October 1974 and Development Alternatives, Inc., "The Utility of A.I.R. Impact Assessment Research in Thailand to the Development Process", Jan. 1974.
- ^{2/} Practical Concepts, Inc., "Indicators of Social and Economic Development", (Contract AID/csd-3375), November 1972.
- ^{3/} Richard Bernhart, et.al., "Preliminary Design of an Evaluation Methodology Beyond the Specific Project Level", American Technical Assistance Corporation (Contract Rpt. OAD-A-CR-127), October 1975.
- ^{4/} Gerald Schwab, "Progress Indicator Retrieval Program", A.I.D., Latin American Bureau 1975.
- ^{5/} On-going work includes the previously cited TAB project planned for FY 77 on "Progress Indicators for the Rural Poor". PPC also plans additional work on socio-economic indicators and impact assessment.
- ^{6/} For additional information on indicators, refer to Donn Block, "AID-sponsored Activities in the Examination of Measurement Criteria and Performance Indicators, and Related Topics", PPC/DPRE/PE, January 1976; and AID, TAB, "Social Indicators: A Selected List of References for AID Technicians", AID Biblio Series: Technical Assistance Methodology No. 2, December 1972.

it seems most useful to attempt to measure when faced with various information needs and data availability conditions. However, the presentations on this topic, as on other topics in the papers, will not necessarily consist of neat prescriptions. Instead, information will be provided the planner or project manager to aid him in deciding or at least narrowing the options on which indicators fit or can be adapted to the situation.

The review of indicators will by no means be limited to those that can be measured in monetary (income) or standard productivity (agricultural output) terms. Nor will it be limited to such other commonly discussed social indicators as nutrition and employment. It will encompass such other indicators of development and well-being as mobility possibilities, status and security, participation, "quality of community", etc. This will require a multi-disciplinary social science approach to the indicators problem.

Having identified seemingly appropriate sets of indicators, attention will turn to impact measurement techniques. (This is obviously not a one-way process, as the examination of measurement techniques may, in turn, lead back to a reconsideration of indicators, and so on, back and forth.) Measurement techniques must be able to capture both direct and indirect (secondary) effects of projects or programs, as well as the distribution of effects among various areas and groups. Attention needs to be given not only to whether or not particular effects are likely to occur or have occurred, but to casual relationships. For instance, it is not sufficient for the purposes of some types of policy decisions to know that nutrition levels have gone up in an integrated rural development program area. To make decisions on expansion of the program to other areas for the purpose, in part, of increasing nutrition levels, policy makers need information on what elements of the program caused the impact (change in nutrition levels).

Moreover, institutions must be included both among the potential causal elements and among the entities possibly impacted upon.

A wide range of techniques for analyzing impacts can be found in the literature, particularly in the literature of economics, regional science, and social indicators. In addition to direct measurement of impacts in monitoring and evaluation work, modeling techniques for projecting impacts can be used, including economic base, input-output, from-to, simulation, and multi-variate

analysis. Such techniques as causal path analysis can be used to help sort out cause and effect. A number of these techniques and their applicability to U.S. and LDC rural development planning have been very ably reviewed in reports by Doeksen and Schreiner and by Flood and Schreiner.^{1/}

Work on the methods papers will need to consider the conditions under which use of various impact analysis techniques are warranted. Many of the techniques available demand data and analytical sophistication either not available in many LDC rural development planning situations or available only at excessively high cost. Some rather expensive techniques may be warranted either as research tools, to test basic development hypotheses, or when a massive investment program is contemplated over several years in a rural region. In other cases, the information required of the impact analysis may call for quite simple and low-cost techniques. This might be true when basic decisions on development strategy for an area have been made, but project or program design questions remain to be worked out. For instance, decisions to go ahead with a farm-to-market road program may have been made, but questions of road qualities, locations, cost-sharing, and institutional mechanisms for implementation remain unanswered. This may call for techniques which can project at reasonably low cost the impacts of alternative rural road project designs on agricultural production and processing, on employment, on community structures, and on location of economic activity. The state-of-the-art appears to be particularly weak in the area of low-cost and relatively unsophisticated but efficacious tools for projecting impacts of rural development projects. Thus, the need for additional research in this area may be more clearly identified over the course of this project.

In reviewing impact analysis work, attention will be given to approaches to rural development analysis carried out by the U.S. Bureau of Census under a RSSA agreement with A.I.D. managed by TA/ACR/ESP.^{2/} Other work to be followed and assessed includes

^{1/} Gerald Doeksen and Dean Schreiner, Interindustry Models for Rural Development Research, Oklahoma State University Agricultural Experiment State Technical Bulletin T-139, Sept. 1974; and Flood & Schreiner, June 1976.

^{2/} See H. Albert Green, "Planning and Information: The Need and the Potential for Rural Development", Draft progress report for the Analytical Systems for Rural Development Planning Project of the USAID being conducted under the RSSA COM/CEN 03-75 with the U.S. Bureau of Census, May 1975. A completion report on this project is also now drafted.

A.I.D.'s analysis of farm-level impacts as part of a small farmer credit loan in Chile.^{1/} In addition to that and other AID project oriented work, the literature reviews going into the methods papers should cover impact analysis techniques used by other major international donors and by analysts concerned with domestic rural development programs in the U.S.

c. Methods of data gathering

A determination of information requirements and methods of analysis leads to the necessity of decisions on methods of obtaining data. Among the methods to choose from are included census or sample surveys, use of official government statistics, and use of unpublished government and business data. Each of these methods may take various forms. For example, there are numerous ways to structure survey samples, including purposive, random, systematic, and stratified approaches, as well as combinations of these. Similarly, several different techniques can be used to obtain information in surveys, such as participant observation, record keeping, direct measurement, structured or unstructured interview, and group interview approaches.

The efforts of this project going into data gathering alternatives are at least as important as those going into analysis alternatives. The methods of analysis mean little without appropriate data. It is data that are often constraining in LDC data/analysis choices. Therefore, the options for obtaining data must be a central aspect of each methods paper.

The methods papers will need to consider the various methods of data collection available in relation to types of data to be obtained and circumstances in which the method is most appropriate, as well as the strengths (benefits) and weaknesses (costs) of each method. The methods papers can build upon some partial state-of-the-art materials already available. One such document that is extremely useful is an Agricultural Development Council (ADC) publication entitled Field Data Collection in the Social Sciences: Experiences in Africa and the Middle East.^{2/} This report, based upon a conference held in Beirut on data gathering methods used in rural areas of Africa and the Middle East, covers considerations ranging from sampling methods to interviewer training. It gives first-hand accounts of conference participants' experiences with different approaches.

^{1/} See Samuel R. Daines, Evaluation of Small Farmer Credit in Chile: Analysis of Farm Level Impacts and Institutional Efficiency, prepared for the Ministry of Agriculture, Chile and USAID, May 1976.

^{2/} Bryant Kearn (ed.), Field Data Collection in the Social Sciences: Experiences in Africa and the Middle East. New York: Agricultural Development Council, Inc., 1976

Another review of data gathering considerations is found in Dommen's "Producing Good Farm Surveys".^{1/} Domen discusses in this report ways in which farm survey designs could be improved to enhance their utility and comparability. An extensive annotated listing of data sources on rural poverty in Central America, and ways in which the data were gathered, is found in another report by Dommen.^{2/} Weisel's paper on data collection procedures used in Vihiga, Kenya is quite useful as a case study and as an exposition on types and uses of local level data.^{3/} Young's report is also useful for the wide range of sources of data it cites for rural development planning purposes.^{4/} The work in Costa Rica by AITEC and the Costa Rican Institute of Municipal Development and Training may be instructive -- as a group interview approach to collecting baseline data.^{5/} And, among the sampling procedures which should be considered is the area frame sampling approach A.I.D. is assisting with in the Dominican Republic and Guatemala.^{6/}

PPC, in A.I.D., has funded activities to improve data gathering capabilities and will continue to have interests in this area. It has funded development of a standardized package household questionnaire, is developing a handbook on data gathering methods, and is funding a handbook on project monitoring and evaluation procedures.^{7/} TA/RD and PPC will coordinate their respective efforts along these lines.

The methods papers will attempt to present the case study findings in such a way that practitioners can make more informed judgments on when to pursue various data gathering alternatives. Alternatives covered

^{1/} Arthur J. Domen, "Producing Good Farm Surveys", Paper No. 75-2, n.d.

^{2/} Arthur J. Domen, "A User's Inventory of Data Sources on Rural Poverty in Central America", Prepared for USAID under Contract No. ctr-147-6060, n.d.

^{3/} Peter F. Weisel, "Data Collection Designed to Support Rural Development Programs -- the Case Study of Vihiga, Kenya", Discussion Paper No. 9, Vihiga Special Rural Development Program, November 1974.

^{4/} Frank W. Young, A Rural Development Inventory, Honolulu, Hawaii: Technology and Development Institute, East-West Center, 1976.

^{5/} Jeffry Ashe, "Collecting Base Line Data for Municipal Development Organizations", San Jose, Costa Rica, AITEC, Division of Accion International, December 1975.

^{6/} For a description of this procedure, refer to Earl E. Houseman, Area Frame Sampling in Agriculture. Washington, D.C.: Statistical Reporting Service, U.S. Department of Agriculture, November 1975.

^{7/} The monitoring and evaluation handbook is being produced by the Organization for Economic Cooperation and Development (OECD) Development Center, with PPC funding assistance.

will include those for obtaining qualitative as well as quantitative data. They will include both methods for obtaining data necessary for rather thorough choice and impact analyses and "quick and dirty" methods for obtaining useful information when other methods are precluded by time or resource constraints. The problem of institutionalizing data collection methods, especially where time series data are required, will also somehow need to be addressed in the papers in the process of assessing strengths and weaknesses of alternative methods.

2. Methods work in some of the key rural sectors

The data gathering and analysis methods papers produced in this project will focus on particular "project types." Although focused on data and analysis related to project decision making, these papers will need to consider the interface between project and sector analyses. To do this, account will need to be taken of the most recent sector analysis work in such areas as education, health, education, and transportation. The contractor and TA/RD will work with AID/W offices having responsibilities in those areas to make sure that key efforts and experiences are accounted for. For instance, TA/EHR and TA/AG/ESP have major on-going efforts in education and agricultural sector analysis, respectively. To the extent that the rural development "project types" focused on in the case studies and methods papers have education or agriculture elements, the experiences of TA/EHR and TA/AG/ESP (and their contractors) should be drawn upon. This should help assure that sector- and project-level analyses draw upon and feed each other. TA/RD intends to work closely with other AID/W offices to make this project complementary to the various sector analysis initiatives.

The analytical experiences of other donor agencies will also be drawn upon in producing the methods papers. The IBRD, for example, has done work on appraisal methods for rural roads projects, which will be reviewed for its relevance to the methods paper on "labor-intensive public works" projects.^{1/} However, much of the methodology suggested in the IBRD papers is based upon linear programming models. These formal programming approaches may prove useful for some levels of analytic capability and decision making but not for others.

3. Principal related work

Many of the significant completed or on-going research and data gathering and analysis efforts related to this project have already been cited in this annex. This section will serve to summarize the most pertinent of that work and to cite some efforts not yet mentioned.

^{1/} Arturo Israel, "Appraisal Methodology for Feeder Road Projects," IBRD, Economics Department Working Paper No. 70, March 1970; Meta Systems, Inc., "Systems Analysis of Rural Transportation," IBRD, Economics Department Working Paper No. 77, May 1970; and Helmut Schuster, "Agricultural Roads," IBRD, Economic Development Institute Seminar Paper No. 7, 1973.

Work on data collection approaches most relevant to this project include the Agricultural Development Council (ADC) seminars on data collection and some completed and newly funded work by Development Alternatives, Inc., (DAI). In addition to reports and papers on data collection methods it has already published,^{1/} ADC has in preparation a monograph on "minimum information systems" which should be ready at least in draft form by mid-1977. This monograph, an outgrowth of an Oxford conference on the subject, should be extremely useful, especially as an attempt to directly relate data needs to information needs for decision making.

Development Alternatives, Inc. (DAI) has been assisting A.I.D. Missions in development of information systems for rural development projects over the past couple of years. TA/RD, therefore, let a small contract to DAI in late 1976 to review some of their and others' experience with information systems. Their preliminary findings are contained in a draft report entitled Information for Decision Making in Rural Development.^{2/} The DAI contract represented initial work on some of the information problems which this new, and much larger, project will address. The DAI report should be a starting point for TA/RD and the contractor in this new project in identifying information system approaches, knowledge gaps, and case studies.

In addition to the ADC and DAI work, certain efforts of the United Nations Research Institute for Social Development (UNRISD) in Geneva are quite relevant. UNRISD's work on "Measurement of Real Progress at the Local Level" will test various data collection approaches for providing

1/ See Kearl (ed.), 1976; and the Agricultural Development Council, Inc., "Field Data Collection in Developing Countries: Experience in Asia," Seminar Report No. 10, June 1976.

2/ DAI, Information for Decision Making in Rural Development (Draft), April 1977. Other related DAI materials include: George Poyner and Donald Mickelwait, "Information System Requirements for Project Planning and Evaluation" (Draft), June 1976; DAI, "Short Paper on Information Collection and Analysis to support Agricultural and Rural Development Projects," submitted to the World Bank, July 1976; and DAI, Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects, Vol. I, Final Report, Appendix Two on "Information Systems to Support Rural Development Projects," May 1975.

rural development information.^{1/}

The work of TA/UD on "urban functions in rural development,"^{2/} with its emphasis on linkages, also pertains to this project. The planning concepts underlying that project are now being applied on a pilot basis in the Bicol River Basin of the Philippines.^{3/} TA/RD will maintain close communication with TA/UD in order to transfer relevant experiences gained in the "urban functions" work to rural development analysis generally.

A small contract with Northern Illinois University, managed by TA/RD, will help guide this project in incorporating social science disciplines other than economics in rural development analyses.— The report from this contract will explore the role of non-economics social sciences such as political science, anthropology, sociology, etc, in agricultural sector analysis, with particular reference to the Pakistan context. Although focused on agricultural policy analysis, that report should give some initial guidance on incorporation of these disciplines in rural development planning generally.

A current project managed by TA/AGR/ESP on "Poor Rural Households, Technical Change, and Income Distribution" may have some methodological relevance to this proposed project. The "Poor Rural Households" project is research oriented, however, so many of the benefit and cost incidence analysis tools utilized may turn out to be too skill demanding and costly to have widespread replicability in planning exercises.

Although multi-lateral organizations have long been concerned with pre-project analysis techniques, they are now devoting increased attention to project monitoring and evaluation systems, as well. The World Bank (IBRD) is currently reviewing the need for more systematized monitoring and evaluation of its projects.^{2/} The Organization for Economic Cooperation and Development (OECD) Centre is also studying project evaluation and monitoring systems. It is currently using a World Bank supported project in Cameroon and a Swiss supported project in Rwanda as case studies. German and AID projects may be added as case studies to the OECD Centre study. The OECD

^{1/} One piece of this work now underway on "Testing Scalogram Analysis of Distribution and Change of Levels of Living," is partially funded by TAB (and is monitored by TA/RD).

^{2/} Denis Rondinelli and Kenneth Ruddle, Urban Functions in Rural Development: An Analysis of Integrated Spatial Development Policy, for TA/UD, USAID, 1976

^{3/} Project Paper for Urban Functions in Rural Development, TA/UD, USAID, April 1976. Also see Richard E. Rhoda, "Guidelines for Urban and Regional Analysis: Types of Analysis Applicable to AID Activities" (Draft), TA/UD, USAID, Washington, DC: August 1976.

^{4/} Contract No. AID/CM/ta-147, Order No. 5523118532.

^{5/} Note Guidio J. Deboeck, "Monitoring and Evaluation of Agricultural and Rural Development Projects: Basic Concepts, Design and Illustrations," IBRD, Rural Operations Review and Support Unit, Agricultural and Rural Development Department, July 1976.

has contracted for a manual on monitoring and evaluation, which is scheduled for completion in early 1978.^{1/} The TA/RD data/analysis methods project may be able to benefit from these OCED efforts.

In addition to staying in touch with the specific efforts cited in this annex, TA/RD and the contractor(s) involved in this methodology project will wish to maintain especially close contact with (1) TA/AG/ESP's work on sector and project analysis techniques, (2) TA/UD's "urban functions in rural development" and "urban and regional analysis" work, (3) PPC/PDA's work on data gathering, socio-economic indicators, and impact assessment, (4) TA/EHR's education sector analysis work, and (5) TA/DA's proposed project on "Appraisal Health Management Systems."

^{1/} PPC in USAID is helping to fund work on that manual.

Annex B. PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 77 to FY 80
Total U.S. Funding \$704,000
Date Prepared: April 1977

Project Title & Number: RURAL DEVELOPMENT DATA GATHERING AND ANALYSIS METHODS

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																				
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Improved standards of living for the rural poor through:</p> <ul style="list-style-type: none"> -- improved rural development project formulation and implementation -- improved rural development project evaluation, leading, in turn, to improved policies and strategies 	<p>Measures of Goal Achievement:</p> <ul style="list-style-type: none"> . Larger number of AID supported rural development projects with tighter conceptualization and stronger empirical basis . Reduced implementation problems due to inadequate monitoring information . Better impact evaluation information flowing from AID supported rural development projects 	<p>Means of Verification:</p> <ul style="list-style-type: none"> . Content of rural development project PPs, evaluation reports, & completion reports . Mission, Regional Bureau, TAB, and other AID/W observations of utility of monitoring information in project implementation and modification . AID and outside judgements on technical validity of evaluation information generated, as well as its use in policy information 	<p>Assumptions for achieving goal targets:</p> <ul style="list-style-type: none"> . Data gathering and analysis exercises initiated by Missions/LDCs are carried through to completion . Information generated by these data gathering and analysis exercises is used in decision making 																				
<p>Project Purpose:</p> <p>More effective and efficient use of social science technicians and data/analysis methods in rural development planning, project monitoring, and project evaluation</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ul style="list-style-type: none"> . Greater involvement of appropriate LDC and outside technicians in data/analysis design at early stages of project planning . Greater use of the entire range of data/analysis techniques that have proven useful in project planning, monitoring, evaluation . More integrated use of the data/analysis techniques of various disciplines 	<p>Means of Verification:</p> <ul style="list-style-type: none"> . Nature and timing of requests for technical assistance in data/analysis methods . Nature of data/analysis methods planned or used as indicated by PIDs, PRPs, PPs, DAPs, etc. . TAB, PPC, and Regional Bureau personal observations in field of use of technicians and of methods described in this project's papers or documents 	<p>Assumptions for achieving purpose:</p> <ul style="list-style-type: none"> . Consultants on roster turn out to be available to Missions/LDCs, Regional Bureaus, and AID/W on a timely basis. . Case studies upon which methods papers based turn out to be relevant to emerging project planning/analysis problems facing Missions/LDCs . AID, and its Missions in particular, continue to place value on sound data gathering and analysis 																				
<p>Outputs:</p> <p>Case studies and data/analysis methods papers in five project areas</p> <p>Consultant identification and consulting assistance for Missions/LDCs</p> <p>One overview data/analysis methods document for rural development projects generally</p>	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> . Five methods papers covering different "project types" . 7 mm straight consulting in data/analysis methods + 18 mm consulting tied in with case studies . Consultant roster of 150-200 specialists in rural development data/analysis methods . One overview data/analysis methods document 	<p>Means of Verification:</p> <p>Methods papers and documents produced are reviewed by AID practitioners and by qualified data/analysis experts from within & outside AID</p> <p>Mission/LDC requests for data/analysis assistance are filled by project-funded consultants or by consultants identified by means of the consultant roster</p>	<p>Assumptions for achieving outputs:</p> <ul style="list-style-type: none"> . Appropriate talent can be identified for the consultant roster and for project funded consulting assistance . Contractor and AID meet their commitments to project . State-of-art papers already completed for AID are of substance and value in conceptualizing and conducting efforts under this project 																				
<p>Inputs:</p> <p>State-of-the-art paper on Rural Development Information Systems, already in process.</p> <p>Paper on Non-Economics Social Sciences in Sector Analysis.</p> <p>TAB contract with a firm, university, or other entity to produce each of the outputs</p> <p>TA/RD staff member to manage project and provide substantive involvement in overall effort, plus other staff inputs</p> <p>Mission and host government cooperation to facilitate case studies</p>	<p>Implementation Target (Type and Quantity)</p> <table border="1" data-bbox="582 1157 1031 1345"> <thead> <tr> <th>Budget Item</th> <th>FY 77</th> <th>FY78</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>. Case studies & 5 methods papers</td> <td>280</td> <td>161</td> <td>441</td> </tr> <tr> <td>. Consultant ident. & assistance</td> <td>55</td> <td>63</td> <td>118</td> </tr> <tr> <td>. Integration & overview work, & overview paper</td> <td>68</td> <td>77</td> <td>145</td> </tr> <tr> <td>Total</td> <td>403</td> <td>301</td> <td>704</td> </tr> </tbody> </table> <p>. TA/RD technical, program, and secretarial support.</p>	Budget Item	FY 77	FY78	Total	. Case studies & 5 methods papers	280	161	441	. Consultant ident. & assistance	55	63	118	. Integration & overview work, & overview paper	68	77	145	Total	403	301	704	<p>Means of Verification:</p> <ul style="list-style-type: none"> . Contracts signed and executed . TA/RD staffing pattern and level adequate to perform managerial, technical, secretarial, and programming functions 	<p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> . Project is approved . Appropriate contractor is available . Contracts are approved . Missions and host countries will agree to facilitate and cooperate in the case studies.
Budget Item	FY 77	FY78	Total																				
. Case studies & 5 methods papers	280	161	441																				
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Annex C (continued)

COUNTRY	PROJECT NO.	PROJECT TITLE	DATE	ORIGINAL	APPROVED
Interregional	1136	Rural Development Data Gathering And Analysis Methods	April 1977	<input type="checkbox"/>	<input type="checkbox"/>
PROJECT PURPOSE (FROM PRP FACESHEET)				REVISION #	

More effective and efficient use of social science technicians and data/analysis methods in rural development planning, project monitoring, and project evaluation.

CPI DESCRIPTION

Pre-Project

1. 5/20/77 PP approved
2. 6/15/77 RFP extended
3. 8/1/77 Contractor selected
4. 9/1/77 Contract signed

Phase I (13 months)

5. 9/1/77 - 12/1/77 Conceptualization, workshop, and planning for case studies.
6. 12/1/77 - 8/1/78 Case studies and concurrent reviews of literature carried on for three project types (and consulting work in conjunction with case studies)
7. 8/1/78 - 9/1/78 Workshop and assessment of case study and literature review findings and identification of knowledge and case material gaps.
8. 11/1/77 - 7/1/78 Initial formulation of consultant roster.
9. 7/1/78 - 10/1/78 Other consulting assistance and consultant placement via roster (limited in Phase I)
10. 9/1/78 - 10/1/78 Evaluation of Phase I activities and decisions made on Phase II activities.

Phase II (10 months)

11. 10/1/78 - 3/1/79 Completion of case study and literature review work and preparation of "methods" papers in first three areas.
12. 10/1/78 - 6/1/79 Case studies and concurrent reviews of literature carried on for two remaining project types (and consulting work in conjunction with case studies).
13. 10/1/78 - 6/1/79 Literature reviews on other "methods" problems identified in Phase I.
14. 6/1/79 - 7/1/79 Workshop and assessment of case study and literature review findings and identification of case material gaps.
15. 10/1/78 - 8/1/79 Other consulting assistance and placement of consultants via roster.
16. 10/1/78 - 8/1/79 Completion and maintenance of consultant roster.
17. 7/1/79 - 8/1/79 Evaluation of Phase II activities and decisions made on Phase III activities, especially on nature of overview document.

Phase III (13 months)

18. 8/1/79 - 1/1/80 Completion of case study and literature review work and preparation of "methods" papers in remaining two areas.
19. 1/1/80 - 5/1/80 Prepare overview document
20. 8/1/79 - 9/1/80 Other consulting assistance and placement of consultants via roster.
21. 8/1/79 - 9/1/80 Maintenance of consultant roster.
22. 3/1/80 - 6/1/80 Evaluation of entire project and planning for follow-on efforts.