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evaluation handbook

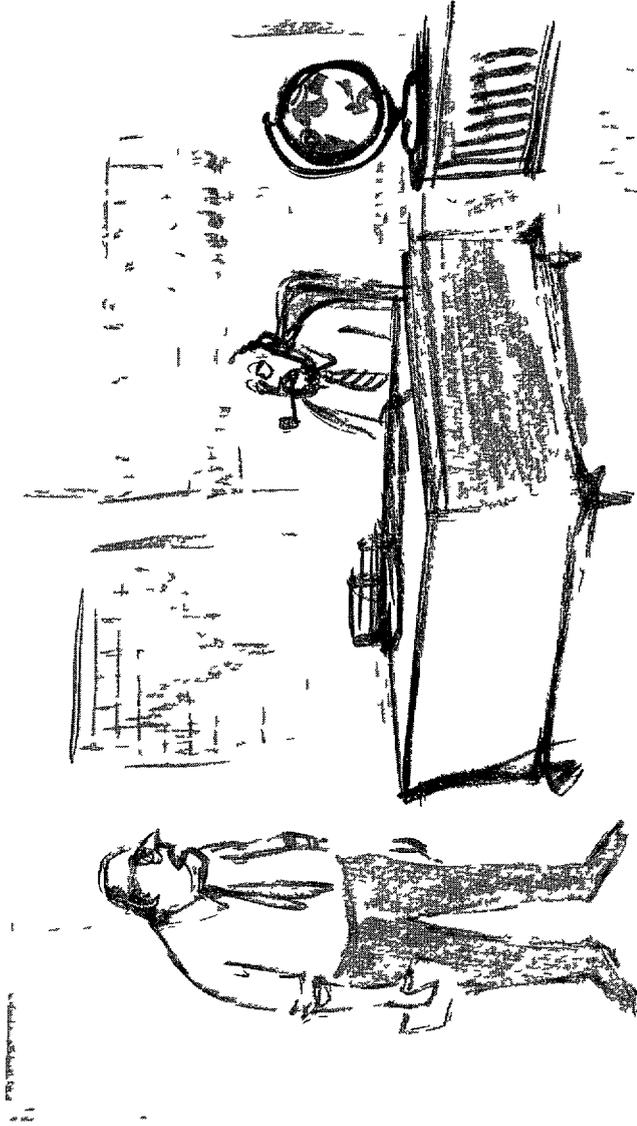


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Agency for International Development
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*“Don't just sit there. If you can't
think of anything new, then reevaluate something”*

• •
Drawing by W. Miller, © 1968
The New Yorker Magazine, INC

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FOREWORD

The program evaluation system in the Agency for International Development is contributing to improved program planning and execution. However, we must continue to sharpen our evaluative efforts so that they provide better answers to key questions and lead more directly to action.

In a recent memorandum to heads of Executive Departments and Agencies, President Nixon stated that

"Program evaluation is one of your most important responsibilities. As the President's Advisory Committee on Executive Organization has emphasized, each Agency must continually evaluate its own programs."

This Evaluation Handbook is designed to help our Missions do a still better job of evaluation. It is not a directive but a guide and should prove useful.


John A. Hannah
Administrator

INTRODUCTION

Prior to 1968, the efforts of the Agency for International Development to evaluate its activities were largely the responsibility of the Operations Evaluation Staff located in Washington. This staff consisted of Mission Directors between assignments and of other senior officials. Teams of two or three people visited Missions for six weeks or more to examine all aspects of the Mission program and operations. They made recommendations to both the Mission Director and the Administrator.

While this procedure was useful, it had shortcomings. Teams were regarded as inspectors who might pose a threat to continuance of an activity. Hence, Mission staff sometimes tended to be wary of volunteering information. Even where this was not the case, teams often found it difficult to acquire quickly an understanding of local factors influencing programs. As a result, Missions were often reluctant to accept their recommendations. In such cases, evaluation did not serve its purpose of improving programming or implementation.

Reliance on a headquarters evaluation staff made evaluation an intermittent operation rather than a continuing part of effective management. Moreover, the apparent advantage of obtaining an outsider's objectivity was somewhat offset by confining evaluation to his subjective judgment instead of making a continuing effort to collect objective data on quantitative or qualitative changes.

In the summer of 1965 the Administrator of A I D directed Missions to increase and improve their evaluative activities and to report on steps taken. This directive followed recommendations by Colonel George Lincoln. The Administrator's interest encouraged a good deal of activity, some of it consisting of self-analysis and some of bringing in outside consultants.

At the request of the Administrator, the status of program evaluation was re-examined in late 1967 and early 1968 by Joel Bernstein. The resulting report concluded that the Agency was devoting considerable effort to evaluation but was not getting full value from its efforts because

Neither technical advisors nor program managers visualized evaluation as an integral part of program management.

Collection and analysis of objective data were underemphasized

Machinery to facilitate evaluation and use of its findings was lacking

On April 13, 1968, the Administrator directed that a new system for program evaluation be established (See AIDTO CIRC XA 2931, f/13/68) Furthermore, Congress in a recent amendment (Sec 205b) to the Foreign Assistance Act called for greater use of the techniques of modern management, for purposes of evaluation

This handbook attempts to outline a "system" which deals with the inherent conflicts of using knowledge and insights of field personnel while minimizing their subjectivity, of enlisting enthusiasms of action-oriented people, and of encouraging local initiative in improving program management

Evaluation officers are part of the "system" Their creative ability, their careful attention to the need for facts, and their professional efforts to ensure that the evaluation function is properly performed will go a long way toward eventual improvement of the program evaluation system The material contained in the following pages represents a compilation and a condensation of information on the Agency's evaluation system previously forwarded to the field

The bulk of the writing and editing was done by Philip Sperling, AID/W, and Gerald Schwab, USAID/Tunis They relied heavily on Robert L Hubbell, David Mayer, Edgard L Owens, Herbert D Turner, other members of the Program Evaluation Committee and on many different people in the field Missions The cooperation of the Missions in providing comments on the earlier draft is very much appreciated by AID/W Many fine suggestions were received and strenuous efforts were made to incorporate as many as possible Finally, appreciation is expressed to Miss Christina Hussey for editorial suggestions and for shepherding the handbook through to completion, and to Mrs Laura F Warfield for her patience and skill in typing both the draft and the final copy for reproduction

The material is presented in handbook form in an attempt to assist evaluation officers, program managers, program officers and everyone else concerned with evaluation It should be a help to them in the performance of their duties and will provide a ready reference work for all those interested in learning more about this subject

C William Kontos

Director of Program Evaluation

A I D /Washington
October 1970

Chapter I

The A I D Evaluation System

For those not fully acquainted with the A I D evaluation "system", this section briefly reviews its component parts. Each facet is then discussed in greater detail in subsequent parts of the handbook.

A Mission Evaluative Process

A I D is one of the few agencies which has taken the logical but courageous decision of placing primary responsibility for program evaluation in the action units of the Agency. Instead of outside inspectors, A I D expects its field Missions to appraise progress toward targets and also to consider the validity of the targets themselves. Responsibility is so placed because only the Missions can make changes indicated by evaluative findings. For this approach to succeed, each Mission needs to set up a regular evaluative process which provides for the systematic collection and analysis of objective data, which periodically brings various viewpoints to bear on activities and problems, and which relates evaluative findings to action decisions. This process is much more than the preparation of reports, although its conclusions may be recorded in reports.

B The Program Evaluation Officer

Each Mission is required to designate a Program Evaluation Officer who has easy access to the Mission Director. For larger Missions, the Officer is expected to devote full time to this work, in smaller Missions he may also have other duties. He is regarded in the first instance as a "systems manager" or "evaluation advisor" who ensures that the evaluation function is properly performed, rather than one who performs the evaluations. That is, he works with project and other personnel to plan evaluations, arranges for resources in the form of information or consultants to help with evaluations, serves as a channel to transmit and receive lessons learned, and draws on reports of experience to help program planners.

C Evaluation Documents

The evaluation process begins with an annual evaluation plan in which a Mission decides what subjects it expects to examine, the schedule, method and resources needed. For any

individual projects, the standards and goals against which subsequent evaluations are carried out are set forth in project proposals (PROPs for non-capital assistance and Loan Papers for capital assistance) These are followed by more detailed implementation plans which set forth actions and expected progress on a time-phased basis Evaluation reports are then made in the form of the multi-page printed Project Appraisal Report (PAR) for non-capital assistance, in a form prescribed in various loan agreements, or in special reports for which the format is determined by the Missions The Agency's assumption is that situations differ so from country to country that rigid requirements on special evaluations are not desirable

D AID/W Evaluation Responsibilities

The Bureaus and offices of AID/W have several functions in connection with evaluation, including furnishing or locating consultants requested by Missions, disseminating evaluation techniques to the field, exchanging information on evaluative findings, and maintaining a "Memory Bank" (centered at the A I D Reference Center) to serve as a reference source and also for training new employees

To assure that such functions are actually discharged, AID/W also has its "systems managers" In the Office of the Administrator, there is a Director of Program Evaluation and his Deputy In each regional bureau there is a Program Evaluation Officer These people, together with representatives of supporting staff offices, form a Program Evaluation Committee which meets regularly to discuss procedures and exchange information

E Spring Reviews

An important AID/W - Mission activity is the conduct of "Spring Reviews," a major effort to examine experience with two or more substantive issues The topics are chosen by the Administrator in the fall Questionnaires go to selected Missions which prepare reports on the topics Experts in AID/W, the Missions or universities prepare papers on the issues to be analyzed In the spring, the Administrator presides over a conference lasting several days and attended by officers from concerned Missions and headquarters and experts from outside the Government Recommendations and conclusions for future operations and policies are then transmitted to the field Missions

F The Statutory Authority

The Foreign Assistance Act of 1969 makes explicit the obligation of the Agency to conduct evaluations Part I,

Chapter 2, Section 205 reads

"(a) The President is authorized to use funds made available under this part to carry out programs of research into, and evaluation of, technical economic, social and political problems of development, the factors affecting the relative successes and costs of development activities, the means, techniques and such other aspects of development assistance as he may determine, in order to increase the value and benefit of such assistance. In authorizing research designed to examine political social and related obstacles to development, emphasis should be given to understanding of the ways in which development assistance can support democratic social and political trends in developing countries

(b) In conducting programs under this chapter, the President shall conduct a continuous evaluation of the effectiveness of development programs, both past and current, using modern management techniques and equipment, so that experience gained in the development process may increase the effectiveness of current and future development programs "

Chapter II

The WHAT and WHY of Program Evaluation

A Evaluation Definition and Purposes

One of our colleagues once characterized A I D as having a

20-year job with a
10-year plan, a
2-year tour, and a
1-year appropriation

While the frustrations inherent in such a situation are obvious, A I D must at all times make the best possible use of its available resources. Program evaluation can play a considerable part in this effort, but it is valuable only when its findings are applied. If used properly, evaluation findings should permit Mission management (and AID/W) to materially improve the quality of its performance, if not, the work isn't worth the effort, despite its historical interest.

The classic dramatic character Lothario, when queried about the secret of his success, explained that over a long period of time he had found it most helpful to break each conquest down into three distinct component parts, i.e. planning it, doing it, and then analyzing it to determine why it had (or hadn't) worked out.

A I D 's analysis of its program management procedures also has identified three intertwined dimensions:

Programming - deciding what (and how much) to do, and how to do it,
Implementing - doing it,
Evaluating - appraising the actual results in order to determine effectiveness, significance and efficiency

While programming looks forward, evaluation endeavors to look backward. It provides the factual information about what happened and thus is one means of improving both programming and implementation of new and ongoing activities. Developing evaluation procedures which assure that evaluation will be systematic and objective and at the same time will tie in with action and not be an isolated exercise requires the attention of top Mission management.

There would appear to be relatively little disagreement in defining programming and implementation. Yet at a recent conference of evaluation officers, the discussion began to heat up when the group sought to define the term "evaluation."

Some said it means measuring progress toward a target.

Others said it is analyzing reasons for the outcome.

More said that there is no evaluation unless we look at the significance, at linkages, at relationships to sectors, to economic development, to civic participation, to something bigger than the project.

Some said evaluation is a PAR.

And others that evaluative analysis which produced only a PAR is paralysis.

A possible conclusion is: Evaluation can be many things. It can be whether we are meeting the targets. And if not, why not? Should we do more of the same? Should we change? Should we quit? And then it can be whether the targets make any sense. To use a somewhat more formal definition, program evaluation can be described as a systematic appraisal of actions -- in process or completed -- in order to promote improvements in either the planning or implementation of current and future activities. It is one aspect of the intertwined program management cycle consisting of planning or programming, implementation and evaluation.

Evaluation seeks to answer three basic questions which can be asked of all kinds of assistance at all levels -- project, sector, country program.

Effectiveness - are the targets being achieved?
what are the reasons for success or short-fall?

Significance - will the achievement of the targets contribute to the economic development or other broad goals? to what extent? what are the activities' advantages over possible alternatives? what about side effects?

Efficiency - is the cost reasonable? do the benefits justify the cost?

The primary purpose of evaluation is to assist program and project managers in making better decisions about programs.

and projects by

verifying the activity's appropriateness and effectiveness in order to permit an informed decision on its continued support,

providing a basis of selecting possible alternative courses of action, and

making lessons learned elsewhere available through a supporting system of information reporting, storage, analysis, retrieval and distribution

In brief, evaluation is designed to assist management in obtaining reasonably objective information on projects in a regular fashion rather than on an ad hoc basis, so that the lessons learned can be applied through either quick "feed-back" into current program decisions or to future operations in the same program or elsewhere. In addition, PARs and other evaluation documentation serve to "pull together" the experience and developments in the life of a project and provide a complete project history, bridging the gaps normally left by rotating personnel.

To date, A I D 's efforts in the field have been directed most systematically to the non-capital project level, i e , bilateral and regional TA, PL 480 Title II food donation projects, etc , although some Missions have made studies of entire sectors and a considerable number have evaluated capital projects. As A I D 's experience and expertise in evaluation grow, the scope of its investigations into these areas is bound to broaden.

B Adjuncts to Evaluation

Evaluation, as used in the context of this handbook, differs materially from regular audits and inspections. These are generally designed to appraise operations in order to determine compliance with internal management controls and regulations. As such, they do not challenge the choice of targets but accept them, while evaluation should ask whether accomplishment of the targets contributed to development. Audits may uncover inefficiencies in implementation which must concern the programmer and manager. Hence the evaluation officer should keep informed about audit findings and avoid any duplication of work as a Mission looks at project effectiveness and efficiency.

The Auditor General has recently instituted a special kind of management audit in a few Missions. A multi-disciplinary team headed by senior A I D officer with general experience looks at general program, financial and logistics

management in a Mission for several weeks. These management audits do relate to program evaluation in several ways. They comment on the Mission's conduct of evaluation as part of its general management. They may note whether the timing of special evaluations is coordinated with decisions that Mission management is making to re-orient projects. They may also refer to evaluative findings to see whether Missions are recognizing and solving their problems. While much broader than regular audits, these management reviews try to avoid making recommendations on program substance.

Evaluations also differ from project monitoring, which is concerned with keeping the Missions' technical staffs up to date on day-to-day management of project inputs. However, Missions which do regular monitoring have found that annual analytical evaluation is easier because many of the facts are readily available.

Evaluation also differs from PERT (Program Evaluation Review Technique), with its networks and critical paths which can assist in planning procedures. It is compatible with the use of PERT, which can be considered a component of the techniques used in system analyses or operations analysis.

C The Logical Framework for Evaluation

The underlying assumption on which the entire concept of evaluation rests is the recognition that much of what A I D is doing is experimental in nature and as such cannot be expected to be both relevant and successful in all cases. In fact, the development assistance process, like a scientific experiment, may be described as a series of hypotheses. We plan that if the donor and the recipient countries each provide certain inputs, then a predicted output will occur. This is the "manageable" interest. We then hypothesize that if this output does occur, then certain economic or social changes will follow. We go on to hypothesize further that if these changes take place, then higher living standards or national income or political stability or other broad goals will be achieved. The evaluator first confirms that the management responsibility was met and, if not, analyzes what changes are needed to produce outputs. He then becomes the scientist who tests these hypotheses. Were they valid? If not, what explicit or implicit assumptions proved incorrect? It is in this examination of the development assumptions of significance that evaluation goes beyond monitoring and auditing.

To recapitulate then, the process of analysis should follow the logical progression of a development project

- a If adequate inputs are provided, then planned outputs will be produced

- b If these outputs are produced, then purpose will be achieved
- c If purpose is achieved, then progress toward a higher goal will occur

The first stage of the progression - inputs to outputs - is manageable. The next stages - outputs to purpose and purpose to goal - are hypotheses which can be tested. Evaluation assesses progress of all stages and their linkages. If one stage does not lead to the next, evaluation looks for implicit assumptions requiring attention and considers possible alternatives in the mix of inputs or in the nature of the purpose and goal.

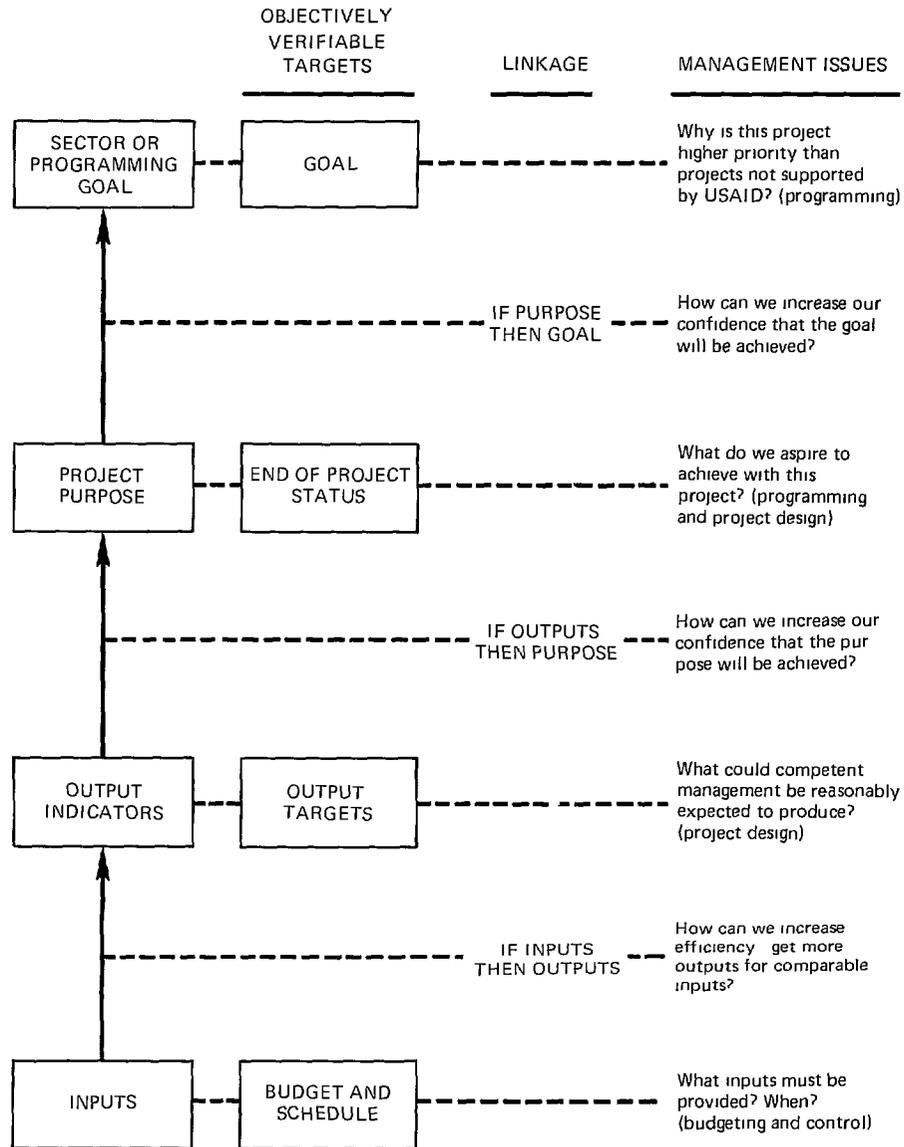
Note that the word "manageable" is used here in its twentieth century sense. A manager is not usually a czar who can issue orders. Instead, he assures the cooperation of equals so that results are achieved. Especially in A I D, where we operate in an "open system" with a host government and other donors, our project managers do not issue orders to everyone. Nevertheless, when A I D provides inputs to supplement host government and other donor inputs, it assumes some responsibility for outputs. Its "power" may consist of knowledge, attention, and persuasion rather than orders, but this is what modern management is about. A comparable situation is the project manager for Apollo 14 who cannot order the U S Navy to have ships in the South Pacific to pick up the astronauts, but who jolly well better be sure that it's arranged before a launching.

Use of this logical framework for projects requires that project progress be measured in two separate ways. First, outputs must be measured directly - that is, the Mission must measure the things that management is specifically required to produce. Second, however, the Mission must independently measure progress toward the project purpose. (This measurement must be independent of measuring outputs because to do otherwise would be a logical fallacy. It would not prove or test the hypothesis that "if" the output, "then" the purpose. It would merely be a restatement of the fact that the output had been provided.)

By focusing on independent measures of (1) outputs and (2) progress toward ultimate project purpose, the adherence to this logical framework should help reduce management's pre-occupation with inputs. Adopting the viewpoint of a "scientist" as opposed to a "manager" does not lessen management accountability. It simply clarifies the nature of the accountability and the distinction between the subjective and the objective. Production of outputs and achievement of

FIGURE 1

THE LOGICAL FRAMEWORK OF A TECHNICAL ASSISTANCE PROJECT



purpose are objectively verifiable. Thus, the only subjective element is the Mission judgment that producing the outputs will achieve the purpose. The adoption of the "scientific" viewpoint should not imply that there can be little confidence in judgments regarding achievement of purpose. The scientist thinks that certain results are probable. The more important aspect of his viewpoint is how he reacts, and what he does, when the results are not as expected. The scientist's careful and objective sorting of evidence is what A I D managers must strive for. This logical framework was designed to support such a careful and objective process. The logical framework is diagrammed in Figure 1.

For the evaluation process to be most useful to the Missions and AID/W, it must be carried out with the utmost candor and objectivity. Clearly, this is the only way to reap the maximum value from evaluation efforts. Proposals to change or adjust shortcoming in activities are the mark of an alert and flexible manager who takes advantage of experience. Adjustments may also be regarded as necessary corollaries of the difficulties inherent in the process of trying to effect social and economic changes. This process requires some change in the habits and communications of both AID/W and field Missions. When Missions are forthright enough to report that an activity needs revision, AID/W must refrain from inquisitorial probing but must instead offer support. It is to be hoped that this mutual effort at a more realistic appraisal of accomplishments will build greater confidence in our U S constituency than have past enunciations of overblown goals.

D Some Benefits of Systematic Evaluation

Missions have reported a number of benefits to date resulting from their efforts at systematic evaluation. Some of these are

1 Improved Understanding and Communication

An intangible benefit, which has been cited in a number of cases, has resulted from the process of evaluation itself rather than from utilization of findings. As a result of analyzing and discussing the project, communications within a Mission have been improved. Newly arrived technical advisers have learned more precisely what was expected of them and have become acquainted with the background of certain policies. Mission Directors and other supervisors have acquired a better understanding of the problems being encountered by staff members or contract teams. In some cases, subordinates had been struggling persistently to overcome a difficulty but had not yet requested help. Intervention by the Director at a higher echelon in the host government resulted in a prompt solution.

Similarly, the process of evaluation has facilitated communications with host governments when host officials have cooperated in the conduct or review of evaluations. The atmosphere of an objective inquiry which looks impersonally at the U S performance in recruiting advisers, delivering commodities, preparing training outlines, etc , encourages host officials to admit the shortcomings of their own agencies with less defensiveness than usual. In this way, senior host country officials become aware, as do Mission Directors, that certain problems exist and need their attention.

Missions report that they plan to make a greater effort to include host governments in the process of evaluations. Apparently earlier fears that joint evaluations would be cumbersome or less objective have proved exaggerated.

2 Better Performance

Missions say that execution of plans has been improved when evaluation reveals that some elements were behind schedule or of poor quality. Often, the situation had been known and the evaluation simply inspired people to put the item on an action agenda. In other cases, evaluation reveals new or unanticipated problems. For example, an evaluation of a development bank which had made fewer loans than expected indicated the need for training the bank staff in project preparation. A follow-up on the employment experience of technical school graduates drew attention to the inadequate salaries of many government positions for which the graduates were being trained. As a result, the graduates were going into commercial employment which did not use their training.

As the foregoing indicates, performance problems can occur either with the donor or with the recipient and correction may often involve a cooperative effort. Some Missions have used an evaluation report as a means for getting host government attention and stimulating actions.

3 Sharper Definition of Goals and Targets

In many instances, evaluations are drawing attention to the fact that project proposals are too often filled with high sounding goals which have not been reduced to observable targets. How does one evaluate a project whose purpose is to "help improve the quality" of some kind of public services or to "increase the effectiveness of an institution?" Frequently, the findings of an evaluation result in a more clearly defined purpose which provides a better basis for measuring progress and planning necessary actions.

Such findings have influenced programming of other projects. This past year, the Agency for International Development has been putting a new documentation system for non-capital projects into effect. The program review panel in Washington rejected 30 out of the first 37 project proposals examined for one region and more than half of the proposals for another region because their targets were too vague.

The effort to define targets may involve choosing quantifiable indicators. But it may also take the form of specifying observable types of behavior. For example, "improved education" may be represented by use of a problem solving approach rather than rote memory. A phrase which has evolved to help in both project planning and evaluation is "end-of-project status." What status or situation will be expected with successful conclusion of the project? How will independent observers know that the purpose has been achieved?

Sometimes targets have looked satisfactory but planned actions were not likely to achieve them. For example, one project with a target to "upbreed the quality of cattle, increase the exports of meat and reduce the foreign exchange deficit" was relying on only one foreign adviser. Another project had a target of "introducing the propagation of fish in farm ponds throughout a region in order to increase farm income and improve nutrition," yet the action plan called for developing a fish research institution with no provisions for demonstrations, distribution of breeding stock, or marketing.

Evaluations have led to changes in emphasis. Examples of findings that caused rethinking are

Resettlement projects have such heavy unanticipated overhead cost that their expansion should be avoided.

Significant changes do not occur in communities where there is only one new action but rather in those where several activities reinforce each other. Hence, geographic dispersion of "community development" may be carried too far.

Direct credit to farmers is too costly for the results -- an easier way is needed.

Emphasis on improvement of tax administration should shift from auditing to collection procedures.

Existing credit unions should be strengthened rather than new ones started.

An inventory of training needs would be useful

Improving access to markets affects agricultural production more than technical advice on production

The most difficult reassessments come with efforts to evaluate whether a project is making a contribution to broad economic goals. Instances have been found of targets being achieved but problems remaining unsolved. An example was a port where stevedores were trained but delays in turnaround time for ships persisted. We had neglected to complement the increased skills of the stevedores with more effective port management. In another case, the country had a good agricultural college but very low production per hectare. After such evaluation findings, Missions often comment that more research or investigation into the local situation is vital to good diagnosis of problems and prescription of remedies.

Chapter III

The Role of the Mission Evaluation Officer and the Evaluation Process

A The Mission Evaluation Officer

It has been said that the role of the program evaluation officers encompasses being educators (of their colleagues), managers (of the program evaluation system) and reporters (to top Mission management and AID/W). While this definition is delightfully brief, a somewhat more detailed look at the role and responsibilities of the evaluation officer may add to understanding.

The primary responsibility for assuring adequate program evaluation rests on the Mission Director. His attitude is a key to that of his Mission. How he organizes for this purpose should be up to the individual Mission Director. However, in any large Mission, he should have an officer with full-time responsibility for the staff functions needed to make the Mission program evaluation system work effectively. In other Missions, a similar set of responsibilities should be assigned specifically to a staff officer, and the Director should assure himself that provision has been made to isolate an adequate portion of that officer's time for this work, so that his other duties do not cause neglect of this vital management function.

The following list of representative duties for the Mission Program Evaluation Officer is excerpted from the official Agency Position Description (Program Evaluation Officer 0345 21). It is also indicative of the program evaluation work that should be carried on throughout the Mission.

1 Plans the Mission's program evaluation activities as a part of current and project program planning. This includes, in collaboration with the program management and technical personnel of the Mission

Reviewing and gaining an understanding of the objectives and the interrelationships of all component activities of the total program,

As an integral part of the program planning process, the identification of criteria for measurement of the effectiveness, significance, and efficiency of the

program's component activities and of the program as a whole, both for activities whose results can be quantified and those whose objectives are abstract, e g , improved administration, improved community leadership, changed attitudes, and readiness to accept change, and

Devising methods to obtain the data needed

2 Plans the implementation of the evaluation program, including helping the various elements of the Mission in planning and carrying out evaluations in their program areas, and identification of the need for and recommendations on the selection of outside evaluation resources

3 Develops and maintains contacts with outside individuals, groups, and organizations -- host country, U S , or other -- which have evaluation capabilities, advises the Mission on the need for using them and on their selection, plans their utilization, and evaluates their work

4 Directs the analysis of evaluation data to insure maximum utility of the findings for program planning and improvement

5 Advises the Mission on the organization of a system to insure availability and ready accessibility of evaluation studies

6 Keeps current on research and evaluation studies done by other Missions, countries, and agencies, develops a system for procuring such studies, and routes relevant materials to appropriate Mission elements

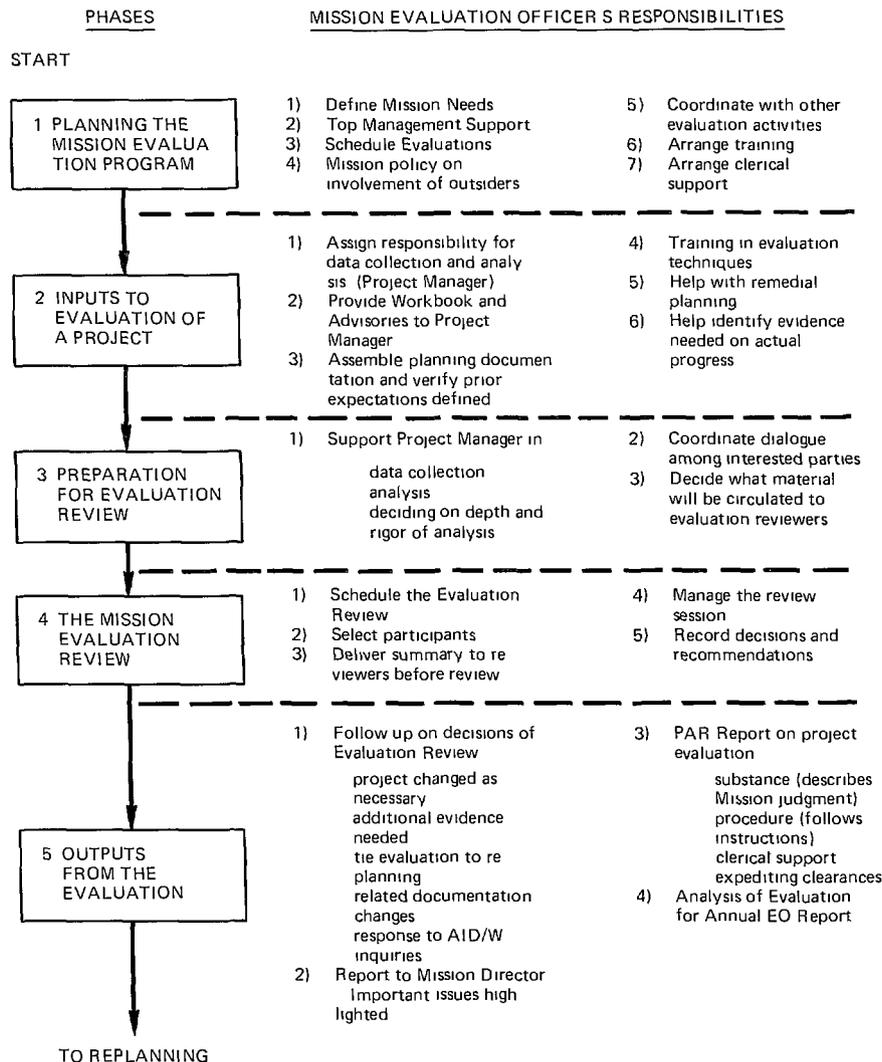
7 Keeps up to date on Agency policies and directives on program evaluation and advises the Mission on their implications and application

8 Analyzes evaluation results for general principles of potential value for Agency-wide application, and reports such analyses to A I D /Washington through the Mission Director

9 Prepares reports for the Mission on the status and results of the evaluation program

To summarize, the core assignment of the evaluation officer is to coordinate and facilitate the planning and carrying out of evaluation activities of the various Mission elements in order to develop a unified, orderly annual evaluation program (See Figure 2)

THE MISSION EVALUATION OFFICER'S RESPONSIBILITIES AT EACH PHASE OF PROJECT EVALUATION



Evaluation is not always well understood by project-level managers. Although the Manual Orders describe evaluation, and the Manual Orders are read by a reasonable number of Mission personnel, the ability to retain and actually apply the concepts of evaluation is frequently quite limited. As a general rule, only the Program Evaluation Officer understands the evaluation concepts. His definition and in many cases his approaches to implementing the evaluation process are usually well thought out and consistent with the Manual Order requirements. However, he is not always able to spread those concepts throughout the Mission and actually get Mission-useful evaluations started.

The basic problem faced by the Program Evaluation Officer is defining his own role in the evaluation process. In a number of Missions in the past, the Program Evaluation Officer started out as an evaluator - he actually analyzed projects and made recommendations. In many cases, this was not satisfactory. Where an Evaluation Officer performs the evaluation, it does not typically lead to effective replanning action (largely because the results of the evaluation are not readily acceptable to project and sector management.)

The more successful Program Evaluation Officers, with success being measured in terms of ultimate beneficial change to the projects, play three key roles that are recommended:

- he manages the evaluation process so it brings benefit to Mission management, and particularly to project management,

- he educates the other Mission personnel in that process not only in evaluation techniques, but in the fundamentals of project design,

- he serves as a reporter and recorder, enhancing vertical communications within the Mission.

There are a number of possibilities for the organizational location of the Evaluation Officer. One solution is to make him a division head in the Mission Program Office, particularly if this is a strong staff office that the Director uses broadly. This location also enables the Evaluation Officer to relate his work sensibly to on-going Mission operations, and to assist in assuring application of evaluation conclusions to implementation decisions.

Another possibility, based on the premise that the Evaluation Officer's area of interest goes beyond the programming area into general management, is to assign him to the Director's Office, with the charge that he maintain the

closest possible liaison with all appropriate offices

Regardless of the Evaluation Officer's organizational location within the Mission, special care should be taken to avoid giving him direct follow-up responsibilities in connection with evaluation reports. This means someone else in the Mission with project management responsibilities must assure that the follow-up is integrated into the regular Mission program management procedures. By avoiding the assignment of such follow-up tasks to the Evaluation Officer, Mission management will keep him free of the aura of a policeman and help create the type of atmosphere which will induce Mission operating divisions to seek his help and participation in formulating and planning evaluation work.

B Responsibility for Preparing PARs

While responsibility for evaluation ultimately rests with the Mission Director, no specific requirements have been prescribed in connection with procedures, staffing or organization for evaluation purposes within the Mission. Nor does Manual Order 1026 1 assign responsibility for preparing the PAR to a specific person or level within the Mission. Missions are, however, strongly urged to seek the broadest practical range of participation within the Mission in preparing the PAR (a) in order to gain better insight into the relative effectiveness of projects and of their significance or relation to sectoral and country objectives, (b) as a means of achieving greater objectivity and candor, and (c) to promote better vertical communication within the Mission.

Whenever possible, the preparation of the PAR should in the first instance be the responsibility of the project managers, since they have the greatest knowledge of project particulars and the immediate surrounding circumstances. This then needs to be supplemented, or balanced, through the application of broader and perhaps more objective Mission perspectives for such aspects as relationship to broader goals. This may come from either the Program Office or the Office of the Director and/or the use of Mission project review and evaluation panel.

C Use of Mission Evaluation Review Panel

It may be desirable to use a Mission review panel (a) to assure that broad Mission considerations are included in the review of project status, (b) to facilitate a fuller understanding of the project by key Mission personnel, and (c) to decide the necessary action for future improvement of the project.

The composition of such a panel would have to depend on the individual circumstances, organization, and staffing of the Mission. To the extent possible, panel membership should remain fairly stable, with additional representatives of the technical divisions (whose project is being reviewed) added as appropriate. At least one Mission endeavors to have a person from outside the Mission participate in the deliberations of the Review Panel, such as a substantive officer from a nearby Mission, an American businessman or an AID/W visitor. Missions may also consider the possibility of adding host government representatives to some or all of the review panel sessions.

The establishment of a representative review panel goes a long way towards applying evaluation findings to projects. It represents a valuable educational experience which benefits both project technicians and Mission management, helping close the circle in the planning, implementation, and evaluation process. In a Review Panel, each member has a certain role to play and certain responsibilities to undertake. Additionally, each member should fully understand not only his own, but the other members' roles and responsibilities. For example:

a. The Mission Director should

1. insist that the evaluation process comes to a logical culmination to ensure value for the Mission. The logical culmination of project evaluation is a realistic assessment of expectations, for this, the current plan must be judged in the light of alternatives that might increase the impact on higher goals.

2. insist that project evaluation results in a better plan, a better project, and a better program.

3. ensure that the PAR resulting from the Panel Review demonstrates the quality of the evaluation process, and of the management of the project.

The role of the Mission Director (or his Deputy) in the Panel Review is to ask project and sector management questions that are relevant to the Mission's overall concerns. Such questions should not be scaled to unimportant project issues, rather, the Project Manager should be asked to broaden his perspective to the important issues that confront the Mission.

In reviewing the PAR as a report to AID/W, the Mission Director must satisfy himself of three things: (1) that the report provides evidence of the hard-hitting high-quality analytical process, (2) that the important issues are dealt

with satisfactory, and (3) that follow-up action will be taken to resolve issues immediately or as a part of the regular reprogramming process

- b The Program Evaluation Officer should
 - 1 Create a Mission-useful evaluation process
 - 2 Ensure that project purpose is clearly stated and understood
 - 3 Ensure that objectively verifiable indicators of progress are used
 - 4 Ensure the process by which the project is expected to have economic development impact is clear
 - 5 Ensure that each participant in the Evaluation Review understands why the project is being attempted and his relationship to the project

His viewpoint is that of "orchestrator" of the evaluation process. He is not an evaluator. He must ensure that all participants in the process obtain value from it, with particular value obtained by the Project Manager. As a reporter, the Program Evaluation Officer must enhance the verbal communication -- from technician through Mission Director. An important aspect of his viewpoint is to keep the PAR as a report to AID/W separate from the evaluation process.

- c The Project Manager should
 - 1 present evaluative findings to other interested parties
 - 2 obtain from those parties their judgment of the implications for the future of the project
 - 3 clarify realistic expectations for the project in the next year

The primary role of the Project Manager should be as a presenter of evidence. What evidence is there of actual progress? How does it compare to the original plan?

The second role of the Project Manager is to identify alternatives to his current plan. The alternatives are presented to the Review Panel so the Project Manager can get help in assessing the alternatives. If there were in fact no alternatives to a project approach, then he would have uncovered an aspect of the project demanding particular

management attention -- the success of the project, and perhaps the goal to which it contributes, may depend upon an unavoidable set of activities

A third role of the Project Manager in the Panel Review is as a negotiator He establishes a plan for the next 12 months that realistically projects that which he expects to accomplish with the resources available to him He sets those planned accomplishments (outputs) as high as he responsibly can If the realistic targets are unsatisfactory to the Mission, an important issue has been surfaced Possible responses include more resources, reallocation of resources, acceptance of a more modest purpose, or terminating support altogether

Once the general purpose of a project is established, the process of negotiation begins This negotiation establishes exactly what the project is expected to accomplish in terms of a specific, verifiable "end-of-project" status The Project Manager and the Mission jointly accept responsibility for a hypothesis that certain outputs will result in this "end-of-project" status

Specifically, the Project Manager should come out of the evaluation process with a better plan for next year and a clearer view of the impact that achieving that plan should have on development objectives

- d The Sector Manager or Technical Division Chief should
 - 1 support and supervise the Project Manager
 - 2 make sure that the Project Manager understands why the project is being undertaken within the sector
 - 3 accept full responsibility for the sector, of which the project is a component

The only alternative to clarifying the intended impact of the project on a higher level goal is for sector management to explicitly accept full responsibility for the significance and relevance of the project, that is, sector management could sharply delimit the results of the project to outputs that can be easily verified -- such as a bridge, a road, or a trained graduate In this case, however, sector management limits the perspective of the Project Manager and project performance is likely to suffer A I D Project Managers are too frequently in the position of having limited knowledge of the sectoral plan, much less of the implications of his project for overall program strategy In this context, it would be surprising if the Project Managers' resources were being used to full efficiency The Sector Managers must bear the responsibility

and, when things go wrong, the blame To avoid this, the Sector Manager should enable the Project Manager to replan his project intelligently or at least enable him to recognize when the project is of increased or decreased relevance to the sector goal

e The Program Officer should

- 1 raise issues of significance to Mission policy and programming
- 2 establish connections between programming goals and the purpose of the project being reviewed
- 3 help ensure the following results from the Panel Review
 - (a) a clear understanding about what the project is expected to contribute to the overall Mission program and how to measure that contribution (the goal)
 - (b) the impact of the project on related projects and on such broad policy requirements as civic development (Title IX)
 - (c) the changes in major assumptions are recorded in the PAR and their implications for the project fully considered (When conditions indicate success is assured or that success is impossible with the resources available, project modification should be considered)

The Program Officer should both ask questions and provide suggestions to help sector and project management It also should be part of his agenda to understand the project better as an input to his overall programming

f Other Members in an Evaluation Review Panel

1 The Technician is an important source of information to be used in the evaluation process He should be asked to comment upon and help develop alternatives to current modes of project operations He should strive for the viewpoint of a candid and disinterested commentator One of the outputs of evaluation that he should insist on is a clarification of what is expected of him during the coming year The Technician should seek objectively verifiable measures of the results of his efforts His targets take into consideration both the difficulty of the job at hand and his capability as a Technician The Technician should come out of the evaluation process with a clear understanding of the overall purpose of the project To understand what one is doing, one must understand the reason for doing it

2 The outside consultant, if he is to provide real value to Mission management, must remember that his role is to provide evidence and/or expert judgment to help a specific person make a specific decision. He must insist that the Mission Director (or whoever has called him into the evaluation) says considerably more than "Please evaluate project X." The consultant must be advised of (a) exactly what decision needs to be made, and (b) who is going to make the decision (e.g., the Mission Director or sector management).

3 Host country spokesman, if present in a USAID evaluation, should provide candid feedback to USAID to help improve its projects. The objective of the feedback should be constructive criticism to resolve the critical problems that determine success of the project. Attention should be focused on key issues rather than personalities. He should try to avoid adopting a role as "advocate" or as "prosecutor." It will be easier for a host spokesman and for USAID personnel if the evaluation is used to review the evidence available, and the interpretation is a collaborative one.

Does the purpose of this project make sense to the host country? Are USAID expectations about progress toward end-of-project status realistic? What alternatives to the current plan might improve performance? What actions are required and by whom? What can the host spokesman say that will help USAID respond to the needs of the host country?

Chapter IV

Evaluation Documents

The following section describes, in abbreviated form, required evaluation documentation and procedures. In view of the changing nature of these procedures, and the fact that this handbook will not be re-issued with every change in the Manual Orders, the appropriate MO should be consulted for specific guidance and instructions.

An effort has been made in the following pages to identify the rationale of the various documents and some of the considerations which should go into their preparation.

A Annual Program Evaluation Plan

Each year, Missions submit their program evaluation plan for the coming year. The submission date is about the same time as for the Country Field Submission.

The plan includes three elements -- a list of evaluations on non-technical assistance activities which the Mission plans to undertake during the year, a list of special evaluations concerning technical assistance which go beyond the Project Appraisal Reports (PARs), and a schedule for PARs. For each special evaluation, the plan describes the purpose, method, timing and help wanted. (See PE #45-XA 894, 4/16/70)

The annual evaluation plan should reflect decisions of Mission management about key issues to which evaluative techniques will be addressed. These may involve preparing for follow-on activities when projects are nearing completion, considering whether the mix of current activities in a sector is dealing with the critical elements, searching for ways to re-vamp activities which are not achieving the anticipated social or economic impact, etc. In developing a Country Field Submission, Missions may encounter questions for which they lack adequate answers, because the CFS is for a budget year 12 months ahead, the Mission evaluation plan for the operating year can be designed to provide answers to these questions.

In order to relate the evaluation plan to such key issues, each Mission will need to involve key Mission officers in the formulation of the plan. Mission Evaluation Review Panels can be a useful forum for this purpose.

B Project Proposals

For each type of assistance project -- capital assistance, technical assistance, and food assistance -- some type of project proposal is required which will describe the targets, strategy, tactics, and general resource requirements and will serve as a basis for authorization by AID/W. These proposals may be designated as PROP (non-capital project paper - M O 1025 1) or Loan Paper (M O 1242 1). Increasingly, as capital and technical assistance are integrated, Loan Papers cover both

While the preparation of project proposals is relevant to this Handbook only insofar as they subsequently provide the targets and criteria against which later evaluations can be made, the importance of planning for evaluation at the start of an activity within the context of the project proposal cannot be over-emphasized

The first step in this process is to define project output targets and the developmental purposes which these output targets are intended to serve clearly and precisely enough to permit subsequent evaluations against them. Asking "how will I verify that I have achieved desired results?" or "What will the end-of-project status be?" will frequently lead to sharper definition of what is really wanted and will disclose possible ambiguities and conflicts in operations. Thus, planning for evaluation may obviate problems by providing immediate "feedback."

Having defined the economic, social, technical and/or physical changes which are to result from the project, the planner can then make arrangements to establish a baseline -- to verify the original situation from which the changes are to be made. Often, planners are aware that a problem exists but do not know its precise status when the new project begins. They may need to collect data for this purpose. Even if the planners know the situation, they should not trust their memories for the future time when they will be evaluating progress but should record the baseline status at the beginning. The recording is insurance against personnel turnover as well as forgetfulness.

The final step in planning evaluation as part of a project is to determine what indicators or other data will be needed to ascertain progress. If possible, the planners will use existing sources of data but they may need to arrange for regular collection of selected information as a part of the project activities. A special aspect of data collection may be the use of a comparable control group which will permit better interpretation of the causal relationships between project activities and observed changes. If a "control" seems

practical, project planning should include means to select control units and to collect baseline and change data from them ^{1/}

The amount of detail about evaluation plans included in the project proposal will, of course, vary with the nature of the proposal. For some types of loans, particularly those which involve tranches where the second phase depends on meeting certain specified conditions in the first phase, inclusion of a satisfactory scheme for evaluation may be absolutely necessary to gain the original project authorization. For non-capital projects, the basis of authorization may be clearly defined targets which will obviously permit subsequent evaluation, the details of conducting the evaluation, however, need not be specified at this point since annual Project Appraisal Reports are required.

PROPs and Loan Papers are designed to serve for the life of the project. Nevertheless, one result of evaluations during the project may be a decision to revise some part of a project plan.

C Activity Characteristics Sheet (ACS)

While the ACS is not an "evaluation" document, per se, it closely relates to evaluation since it facilitates the retrieval of information (see M O 1028 1). The ACS covers all projects which require AID/W authorization -- capital, technical, food and research, country, regional and inter-regional, permitting classification by 354 different characteristics. This sheet is filled in at the beginning of a project and then the coded data are put into a computer which can identify projects with any desired combination of characteristics.

This automated indexing is intended to serve several purposes. One of these is a matching service, which will bring Agency experience to bear on the development of new proposals by retrieving relevant documentation on similar on-going or completed projects. The characteristics of a proposed project would be coded and matched by computer against the characteristics of projects already stored in an automated data bank. The computer would thus identify the projects most similar to the proposed project, it would also list for each matched project the documents available in the A I D Reference Center (Memory Bank) whose services for evaluation are described in the next chapter. This procedure

^{1/} For a detailed treatment of baseline data collection and comparisons, see Chapter VII below.

could also be used to assist in the evaluation of on-going projects by drawing on experience with similar projects for comparative purposes. Another possible use of the indexing would be a tie-in with other automated data systems on personnel, contract, and financial transactions. Finally, it can be used to provide information on the pattern of the Agency's activities.

The preparation of the ACS is relatively simple for someone familiar with the project. Under normal circumstances, it is required only once during the life of the project, although procedures for revision do exist.

D Implementation Plans

As life-of-project documents, PROPs deal with general strategy rather than detailed tactics and schedules. The same is generally true of loan papers, although some of them may contain considerable detail. In either case, detailed plans of action are needed. These plans also provide the benchmarks for meaningful evaluation of two important aspects -- effectiveness and efficiency.

For non-capital projects, the Joint Project Implementation Plan (PIP) is prepared in the early stages of the project (see M O 1025 2). It sets out the work schedule and certain output indicators, as well as such key inputs as personnel, participant and commodity requirements. The progress of a project toward its established targets can be measured against these output indicators in a quantitative manner. Some projects, such as those of an advisory or institution building nature, do not readily lend themselves to quantitative measures. However, even in these cases, it should be possible to provide some definable steps or forms of behavior which are verifiable evidence of achievement.

The documentation for implementation of loans is more complex than for non-capital projects. In part, this difference reflects the fact that the host government is more directly responsible for documentation (it, of course, plays a major role in implementation of non-capital activities and its ideas should be reflected in the PIP). In part, the difference in documentation reflects the various stages of implementation. Thus a loan may involve various conditions precedent, each with its own specified reports. A loan may also depend heavily on implementation plans prepared by engineering or management consultant firms.

Whatever the formats and whoever the authors, the totality of the loan implementation plans should make clear the interim and final objectives of the loan so that progress and completion can be observed and evaluated. In some cases,

this may be simpler than for non-capital projects. The first-order target may be very tangible -- a building of certain specifications. In many loans, however, the targets are far from simple. Some loans have a large technical assistance element in them, with all the complications this implies. In others, the host government may agree to change policies and laws, may plan to construct facilities and may also be establishing an institution and training people. All of these elements are often found in a capital project and especially in a sector loan.

E Evaluation Reports for Capital Assistance

Some loan agreements or their supporting implementation documents specify the timing and nature of evaluations and the resulting reports. For other loans, Missions have themselves organized systematic collection of data and joint review sessions with the borrower. The "evaluation report" may be a series of documents which include statistical or other data, memoranda of staff recommendations from joint review sessions and memoranda of conversations between the Mission Director and the responsible Ministers of the borrowing government.

In still other instances, special evaluations of loan projects have been conducted by consultants who have submitted written reports. The design of special evaluation studies for either capital or non-capital assistance and the liaison with consultants to assure that the final reports are in a useful form are both discussed in Chapter VI.

Despite all these various approaches to evaluation for capital assistance activities, the actual conduct of evaluation is somewhat spotty, with some significant gaps in coverage. Some Missions have asked for more guidance and other field officers have suggested that AID/W consider prescribing some minimum systematic documentation analogous to the PAR described below.

F Noncapital Project Appraisal Report (PAR)

The Project Appraisal Report (PAR) is the prescribed evaluation document to be prepared annually by the Mission for each non-capital project and for the technical assistance elements of capital projects costing more than \$100,000 (See M O 1026 1). As such, it provides a vehicle for disciplined, periodic overview by each Mission of its own projects. The PAR is designed to relate to both the PROP and PIP described in preceding sections. It is a by-product of the Mission-useful evaluation process described earlier in Chapters II and III.

Although the first version of the PAR was developed after extensive field tests, use of professional consultants, and comments from various parts of the Agency, it was regarded as tentative and experimental. Therefore, shortly after it was put into effect, arrangements were made for another consulting firm to examine the experience with the evaluation of non-capital projects. As this is written, the PAR is being modified and refined so as to better meet the requirements of both the field and AID/W.

1 Timing of PAR Submissions

In the Annual Program Evaluation Plan, the Mission schedules PAR submissions. Normally projects will be evaluated approximately one year after project approval or after submission of the previous PAR, however, certain other factors should also be considered.

(a) Time and effort can often be saved by scheduling PARs so that they become summary reports prepared after the completion of in-depth studies or Mission audits. In this fashion, information and data developed in the course of the other activities can be used to greater advantage, and Mission management will be better able to judge the PAR document.

(b) Although the PAR itself is "decycled" in that AID/W has no rules on when it is to be submitted during the year, various Missions have cycled it in relation to their own program reviews. For example, some make a point of completing PARs in the autumn so that they can be used for Winter Reviews which they hold. Others finish PARs in the spring before they consider strategy for the CFS.

(c) Grouping of PARs can reduce the need for convening the PAR Review Panel, grouping by sector will greatly facilitate making judgements regarding the progress made toward the achievement of sectoral goals. These considerations should, however, be balanced against the peaking in workload which would presumably result for the technical divisions involved.

(d) One important factor in scheduling project evaluations is the availability of key project personnel. Every effort should be made to coordinate evaluation schedules with home leaves, etc., of the project manager who will take the lead in preparing the presentation to a review panel, the technical division chief, team chief, and other personnel most affected by the evaluation.

2 PARs for Terminating Projects

The requirement that PARs be submitted at the conclusion of a project has a dual purpose -- to permit learning from past experience and to increase the lateral transfer of this experience

Some sections of PARs on terminating projects can be treated quite superficially or ignored (e.g. promptness of inputs) while special attention is given to those parts of the PAR which will in the future shed light not simply on what happened, but also on how and why it happened. Thus, PARs on terminating projects should put special stress on recording the significant techniques which might be transferable or which give others ideas

PARs received on terminating projects have provided some of the most significant insights into the problems and successes of the U.S. effort in a country

One Mission also reports that it is instituting a simple periodic checklist for terminated projects to spot potentially serious problems which may affect U.S. interests

3 Optional PARs

PARs need not, under the present procedures, be submitted on certain types of projects, such as activities supported exclusively with the aid of U.S.-owned local currency. In those cases, the use of the PAR and its logical framework as a means of structuring a project evaluation is optional, to be carried out at the discretion of the Mission. The use of the PAR in those instances may help in systematizing review of selected activities, even when no PIP or PROP is prepared

4 PAR-type Reviews on Status of Implementation

Missions may elect to do partial PAR-type reviews on the status of implementation at various times of the year for individual projects, in addition to the annual use of the complete PAR

Several Missions have utilized parts of the PAR form as a basis for briefer project manager review sheet which is completed and checked periodically for formalized ongoing supervision of various aspects of project implementation. With this type of periodic review, the annual evaluation process can then concentrate on questions of relationships to general strategy, validity of assumptions, and necessary replanning

Chapter V

AID/W Evaluation Activities and Responsibilities

A Office of the Director of Program Evaluation, AID/W

The Director of Program Evaluation is located in the Office of the Administrator, and reports directly to him. He maintains a small staff and carries out the functions of his office in cooperation with the members of the Program Evaluation Committee, which he chairs. The Committee is comprised of the evaluation officer of each regional bureau and of several staff offices, including Technical Assistance, Administration and the PPC/Evaluation Staff and Programming Systems Staff. The latter has responsibility for the AID Program Documentation System and the Memory Bank.

The Director of Program Evaluation, together with the Program Evaluation Committee, coordinates the evaluation activities of the various bureaus and staff offices, including the exchange of approaches to and techniques of evaluation, provides general guidance and training in evaluation to the Missions, and develops new avenues and tools of evaluation.

With heavy reliance on the PPC Evaluation Staff, the Director of Evaluation exchanges ideas with the academic community, private consulting firms and businesses, foundations and international organizations, and other government agencies also involved in evaluating development programs. In addition to overall management and development of the evaluation system, the Program Evaluation Office and the PPC Evaluation Staff direct certain evaluative activities. These include some cross-cutting topics and some case studies on such subjects as the Korea export expansion program, development of handicraft industries and small business, methods of collecting local information, and a plan of evaluating education in less developed countries, some of which have not yet been published. These case studies are often determined by the availability of an expert in the particular field, whom the Program Evaluation Office can temporarily commission.

A number of inter-regional evaluations have also been carried out under the direction of the Program Evaluation Office, such as joint studies of AID-PASA activities with the Treasury and Agriculture Departments.

B Regional Bureau Evaluation Officers

The Bureau Evaluation Officer serves as the evaluation systems manager for the Bureau's staff and as an advisor on evaluation matters to the Bureau. He also represents his Bureau in the Agency's Program Evaluation Committee.

While the specific responsibilities of the Bureau evaluation officers differ from region to region, the following outline of functions is more or less generally applicable, and as such is an indication of the handling of pertinent Mission evaluative documentation in AID/W.

1 Monitors the AID/W handling of the Project Appraisal Report as outlined in M O 1026 2, including reviewing and distributing all PARs and bringing to the attention of appropriate offices such problems and special points of interest as required.

2 Serves as coordinating center in the Bureau for evaluation experiences, methodology and findings.

- a Informs the field and relevant AID/W offices about significant evaluation findings, methodological innovations and current changes in evaluation procedures.
- b Reviews and advises on Mission evaluation programs and acts as "backstop" for Mission evaluation officers.
- c Maintains a Bureau library of various evaluation studies, reports, and other relevant publications.
- d Provides Bureau liaison with the Director of Program Evaluation, A/AID, and represents the Bureau on the Agency Program Evaluation Committee and other Agency evaluation meetings (e.g., Spring Review).
- e Assures AID/W response to Mission requests for assistance and guidance in evaluation.
- f Reviews all in-depth evaluation reports and other evaluation studies and provides comments to field Missions in conjunction with similar responses by desks.
- g Maintains complete Bureau files for PROPs, PIPs and PARs and their schedules for submission.

- h Monitors quarterly exchange of status reports between Missions and desks (U-448 and W-58) regarding non-capital project documents
- i Assures that the Bureau and field Missions comply with the requirements of the Agency evaluation system
- j Provides results and analyses of evaluation findings to the A I D Reference Center and other interested offices

C The Administrator's Spring Reviews

AID/W schedules several program areas of high priority interest for special evaluation review sessions each Spring in lieu of the Spring phase of the program budget reviews conducted in the past. These are carried out under the chairmanship of the Administrator and in cooperation with top-level personnel from within and outside the Agency. A number of Missions, where the selected activity is important, are requested to submit data and special evaluation reports. These provide the basis for comparative or overall analyses prepared by AID/W under the direction of the PPC Evaluation Staff. These analyses are then discussed by a group of in-house and external experts to ascertain the implications of past A I D experience. The findings of these reviews are given wide circulation, and program policy makers are encouraged to apply the results and findings to Agency programming decisions.

D A I D Reference Center (Memory Bank)

Program Evaluation is done on the assumption that we can learn from our experience. Mostly, lessons learned will be used in the Missions where the evaluation occurred for modification of on-going activities or for planning similar future activities. However, some conclusions based on experience in one country may be transferable to other Missions. The conclusions may apply not only to the substance of projects and programs, but also to techniques to be used in studying feasibility or conducting evaluations.

Until recently, A I D has been characterized as an Agency without a memory. If a project manager sought reports on experience elsewhere, his technical backstop officer or his desk officer had to undertake a search to discover where similar activities had been tried, and then locate reports from scattered files. Regular retirement of records made it unlikely that reports over 3 years old could be located.

Within the past two years, significant progress has been made in overcoming this amnesia. The Bureau for Program and Policy Coordination has a unit (the Programming Systems Division) which has been concerned with all aspects of information management, including the design and flow of documents, automatic data processing, exchanges of information with other agencies and with universities, and the storage, cataloguing and retrieval of information. These last aspects-- storage and retrieval-- are most pertinent to evaluation.

1 Contents of Memory Bank

The A I D Reference Center (ARC), located in Room 1656, New State Building, is popularly known as the Memory Bank. It consists of a central, permanent collection of selected documents which is open to A I D, PASA and contract personnel and to scholars. It will also answer queries from the field, in accordance with a procedure described later in this section.

Evaluative documents are given top priority by ARC. Other types of documents stored are program documents (e.g. country programs, sector analyses, and country development plans), project files (key documents describing, authorizing or reporting on capital, Title II food, and technical assistance projects), and other significant documents (largely technical or research, but including some country information).

Arrangements have been made with mail rooms, contract offices, etc., so that copies of most of these documents are systematically sent to ARC. However, some special non-scheduled evaluations and other unusual reports may not get there unless the originating officers remember to send two copies. (As requested in AIDTO CIRC A-894 PE #45 Annual Program Evaluation Plan). Frequently, these special documents are among the most valuable resources. While documents on currently active projects are steadily acquired, similar materials on terminated activities are being collected on a less systematic basis by appeals to veteran AID/W officers who have maintained personal collections, or through the cooperation of Missions which have their own Memory Banks. Any readers of this Handbook who have items of possible interest are urged to send a list to ARC.

Program and project files are kept by country and number. In addition, key documents are catalogued according to the Dewey System. Such documents have been indexed and cross-referenced by as many attributes as necessary to make sure that they will be found in any reasonably thorough search of the catalog.

2 Use of Memory Bank

The best of the documents on categories of problems or duties associated with A I D jobs are selected by screening panels or selected specialists, so that they can be listed in annotated bibliographies which are widely circulated throughout the Agency and to interested outsiders. Arrangements have been made for items listed in the more recent bibliographies to be included in the collection of the Clearing House for Federal Scientific and Technical Information. The A I D bibliographies tell how to order copies of documents from the Clearing House for a modest fee.

The most direct use of the automatic features of the Memory Bank is expected to come through a "matching service" using the Activity Characteristics Sheet (ACS) as an index. The plan is for a computer run to tell which projects most nearly resemble a proposed project and also list the available pertinent documents. This service, which is now being tested, would be available both to the Missions and the desks which could then call for such documents as they may wish.

Requests for materials stored in the Memory Bank should be sent through the technical or geographical backstopping office concerned, asking them to contact the Reference Center. This has the advantage that an informed person may help the reference librarian select useful documents from the Center. Another way to assure good selection is to describe the problem in which help is needed rather precisely. For example, a request for "documents on artificial insemination" was responded to with a technical explanation by a veterinarian. What the requestor had really wanted was somebody else's experience on the kind of government set-up and farm organizations required to ensure success of an up-breeding program.

In addition, USAID personnel in Washington on consultation or rotation are encouraged to visit the Memory Bank to become familiar with it, and to use it.

Chapter VI

Special Evaluative Studies and Their Design

While the PAR is the prescribed basic mode for project evaluation, there may be critical questions or program issues which the PAR does not address, including capital assistance. Special studies or analyses may be made on components of projects, on entire sectors, or on any particular problem area confronting a Mission.

A Definition

For the purpose of this handbook, "Special Evaluative Studies" have been defined as in-depth studies which go beyond the PAR. A closer definition is not desirable at this point. The intention is to leave Missions free to design whatever format best suits a particular situation.

Special evaluative studies are likely to meet most, if not all, of the following conditions. They

- 1 Encompass a deeper analysis than that involved in the preparation of a PAR, often to consider problems flagged by a PAR.
- 2 Require technical or analytical skills which may not normally be available in kind or quantity in the Mission.
- 3 Relate project significance to the larger sectors of the economy.
- 4 Lay down a challenge as to the real purpose of the project -- reappraise its rationale -- and examine alternative courses of action.
- 5 Look into situations for which the PAR is not applicable, such as capital assistance.

B Selection of Topics for Special Evaluative Studies

The selection of topics for special evaluative studies can result from

- 1 Discussions with the host government.
- 2 A Mission determination, when project or sector goals need reappraisal -- many special evaluations are sector studies, because managers think that this approach may be more

likely to locate gaps or anachronisms in programs

3 Day-to-day monitoring and evaluation (a good approach for small Missions, but larger Missions presumably prefer to institute formal reviews to identify areas for in-depth study)

4 Observation of such factors as

a Trouble spots

b A change in scope of a project

c A project for which an extension or follow-up project is proposed or planned

d A project with a high cost or sizeable staff, or a project which is conspicuous to the public

5 An AID/W request, to obtain information for planning future strategy or activity,

6 A contractor's or participating agency's request

C Examples of Special Evaluative Studies

Possible ways of designing an evaluative study are virtually unlimited. The following are some examples of studies which have been carried out by Missions during the recent past

1 The evaluation of the institutional maturity of a country's agricultural university, under an A I D contract carried out over a 6-week period by two visiting consultants. Their recommendations were considered in developing plans for an agricultural research project with the institution

2 A joint Mission-host country team to examine an institute of business administration to ascertain the current effectiveness of the institution which had formerly been assisted by A I D, and to assess the relation of the institution to the host country's basic educational needs at the time of the study

3 A team of experts from the National Communicable Disease Center to review the Mission's malaria eradication program to identify reasons for failure to interrupt malaria transmission and evaluate adequacy of methods being taken to cope with the problem

4 A full-scale evaluation of a P L 480 Title II Food-for-Work program, carried out by a Task Force made up of PASA, contractor and Mission direct-hire employees, covering a wide

range of professional disciplines, and a representative of the host country's Ministry of Plan. The work of the Task Force was coordinated and the final report prepared by the Mission's Evaluation Officer.

5. A two-stage evaluation, carried out with the assistance of a consultant from the U.S. Department of Labor, Bureau of Apprenticeship and Training, of a terminating central training institute project. The study was designed to assess the success of A.I.D.'s institution building effort -- the ability of the project to carry on without further U.S. assistance -- and the relevance and value of the project to the host-country's development. The first part involved a three-month assessment to review the history of the project and the quality of technical assistance supplied, the second stage, to be conducted 12-18 months after the completion of the first, was to determine if U.S. assistance has had a sustained impact.

D. Stating the Problem

Probably the most difficult portion of any evaluative study is the initial phrasing of the question to be answered. If the wrong questions are raised, or the problems are not adequately identified in the first place, a lot of time and effort may be wasted coming up with the wrong answers. When a decision is made to undertake a special study, the following questions must be raised:

Who wants to know?
What is to be learned?
How is the study to be done?
Where is the study to be done?
When is the study to be done?
Why is the study to be done?

The answers to who, what, how, where, when and why will help shape the phrasing of the question itself and will help assure that whatever study plan is devised, it will reflect the realities of the situation.

The kind of questions raised by evaluation officers may sometimes run into conflict with basic policies of the Mission management. The potential for conflict is greatest when questions concerning the "why" of things are asked. This kind of question challenges the most fundamental premises, while the "how" type questions pertain only to methods or techniques within existing premises or policies. Since decisions frequently must be made in terms of administrative or "political" pressures, it is important to consider these and factor them in when designing any evaluative study.

There is an underlying philosophy of "operationism" in most social sciences which requires a problem or question to

be stated in such a way that one has to specify the operations or measures to be taken to define the concept and provide an answer. If it cannot be so stated - forget it. Restate the question so that it is realistic and meaningful. State it so that whatever operations have to be done to measure it are clear. For example, a question like "How many angels can dance on the head of a pin?" is a meaningless one. And so is a question like "Are we getting any Title IX effects out of the 'such-and-such' project?" This latter has to be rephrased into a question more like "Was there popular participation in the decision-making, the carrying-out, and the sharing-of-the-benefits in the 'such-and-such' project?" This question in itself leads to other specific questions like "How is 'popular participation' measured? How is 'decision-making' determined? How are the dimensions of 'carrying out a project' fixed? How does one quantify the 'sharing' of benefits?"

E Criteria for Designing the Study

Evaluation's primary purpose is to assist Mission management in the performance of its decision-making responsibilities. Evaluation studies, to meet their potential, must meet the following criteria which should be taken into consideration in their design.

1 Objectivity - Evaluation activities must minimize subjectivity and must be as straightforward and factual as possible.

2 Timeliness - Evaluative studies must become available to Mission management on a timely basis, especially if they are designed to provide "feed-back" to an on-going project.

3 Applicability - The evaluative study should have the potential of coming up with useful conclusions or recommendations capable of being put to use by the end user.

4 Communicability - Any findings should be amenable to "translation" from any academic language or technique used into a form readily understandable by those who will use its results and do the follow-up required.

5 Relevance - The study should be directly related to the problem as it has been stated so that the findings will be pertinent.

6 Scientifically Sound - The design of an evaluative study ought to adhere to those principles which assure the reliability and validity of the data being gathered. Both the collection and processing of the data should be appropriate to the design of the study and the conditions under which the study was conducted.

7 Scope or Depth - Evaluation should not fall into the trap of measuring only the progress or quality of performance of a given project, but should also at times seriously question the very premises on which the entire project is based. This point, often overlooked, was brought home in connection with a recent study about the malaria program in one of the A I D recipient countries. In that case, evaluations had in the past been carried out by epidemiologists and other competent specialists, yet it was only recently that the question was raised as to whether the strategy being followed (attack, consolidation and maintenance phases) was really practical in a country with a rudimentary public health infrastructure. In another instance, evaluators found an agricultural institutions project effective in meeting its goals, but found that the significance of the goals were outdated in terms of national needs.

F The "Ideal" Study Design

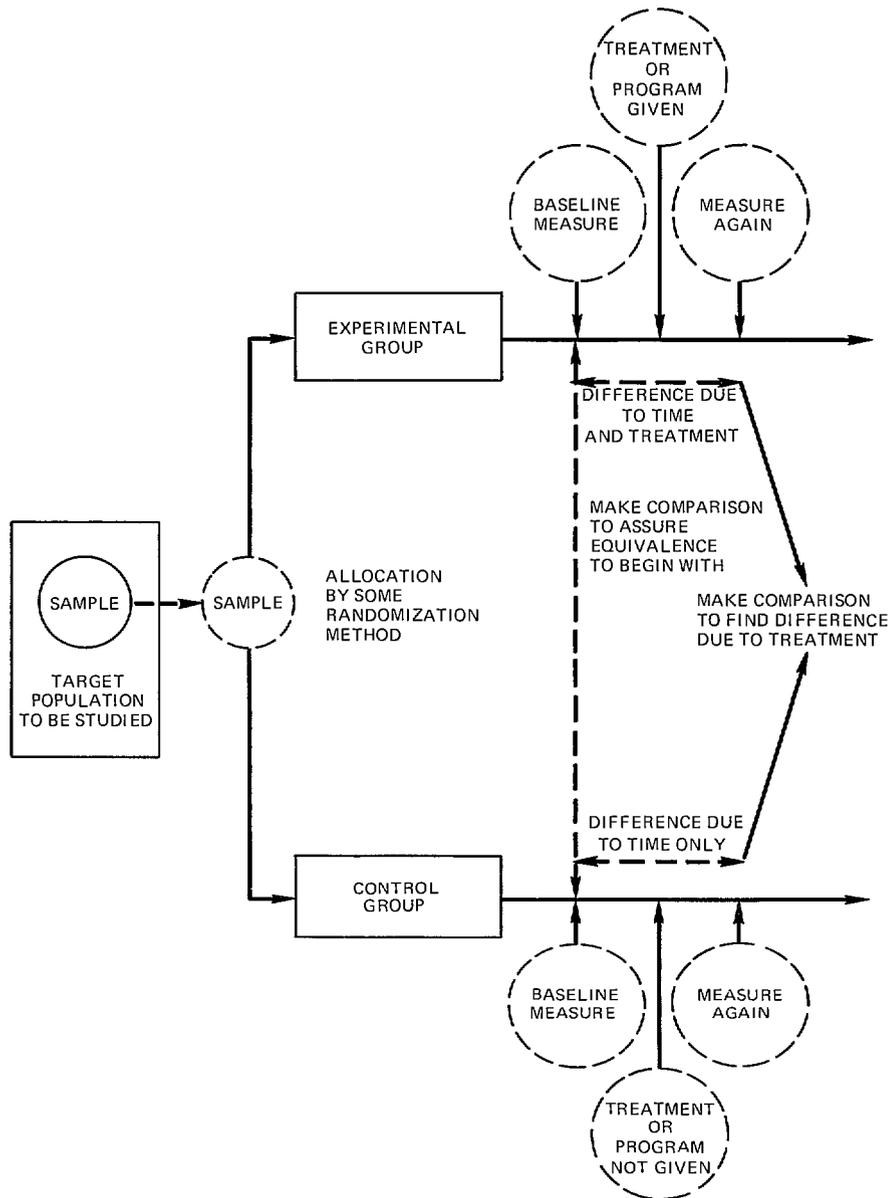
In the design of a study, care must be taken that comparisons are made clearly - i e , not confounded or confused with extraneous aspects. To accomplish this, the ideal study is so designed that when comparisons are made, the results are clearly attributable to one or the other of the factors involved. This cannot always be done. Real life situations tend to be complex and have interacting factors. If that is the case, any conclusions should honestly reflect what is happening - including the confusion. The best bet is to try to control as many of the factors as possible and to let only one or more factors vary.

The diagram showing the "ideal" study design is really the basic research design to which all other study designs are traceable. There may be all sorts of variants to the logic which this diagram pictorializes. But the logic remains fundamentally the same. It is a means for contrasting one variable with another while all other factors are considered "equal" - or at least kept under some form of control.

The design of the study indicates what approach will be used - e g , experimental, field survey, interviewing, administering of tests or "treatment" with some kind of program. It also defines the group to be studied and how a sample was chosen. These factors will influence the kind of statement that can be made at the end of the study - how general it can be or how specific it may have to be.

The diagram shows that a particular target population was selected for study and that a sample was taken from that population. Next the sample was broken into two groups by a scheme that assumes that the factors in the groups which might

"IDEAL" STUDY DESIGN FOR MAKING COMPARISONS



influence the results would have, if not equal, at least equivalent chances of occurring in both groups. Then tests are given, or baseline measures are made, in both the experimental and control groups. This comparison is made in order to make sure that the two groups are similar to start with. If there are differences to begin with, at least the differences are known. Then one group gets the "treatment" or program input, and the other does not. The same measurements applied at the baseline are applied again after the treatment has been given time to have an effect, if any. Then three more comparisons are made:

(a) The experimental group is compared with itself before and after the treatment.

(b) The control group is compared with itself before and after the "non-treatment" time period.

(c) The main comparison is really a comparison of the comparisons ($c = b - a$)

The following are the basic series of steps which should, if feasible, be followed in designing and carrying out an evaluative study:

(a) A statement of the problem.

(b) The selection of standards or criteria against which judgments are to be made.

(c) The identification of the critical variables or factors involved.

(d) The identification of the population or sample to be studied.

(e) The determination of the means to gather the necessary data and their collection.

(f) The analysis of the data.

(g) The interpretation of the data analysis.

The above "ideal" study design is admittedly just that, an ideal which regrettably cannot always be duplicated. Yet the fact remains that it does represent the fundamental design to which the logic of all other study designs can be traced.

There are a great many reasons why it may not be possible to reach the ideal. Most A I D projects to date have been started without any forethought for evaluation, and therefore

no arrangements were made to collect pre-test baseline data in control areas, and perhaps not even in the treated or experimental areas. Furthermore, factors independent of the "treatment" which also act as an agent of change may happen during the reform period, and the very fact that a "test" is under way may influence the outcome. Political and administrative circumstances may inhibit setting up control units for programs of a social or economic nature, and it is obviously impossible for social action programs to achieve experimental isolation comparable to the conditions in a laboratory or even to the conditions in agricultural test plots. Even when the ideal cannot be reached, however, judicious planning will allow the evaluator to obtain the maximum possible benefits from evaluation activities, provided the pitfalls are recognized.

An example of a comparative study with controls in the education sector is the study being carried out by USAID/Guatemala (See AIDTO CIRC A-1909 dated 9/6/69). Two pilot schools are being constructed with special classroom facilities and with the services of technicians. One is in an Indian-speaking area and the other in a Spanish-speaking area. These two schools will be compared with two established "control" schools where the same language is spoken but in which no innovations of any kind will be introduced. The students of all four schools will have to be essentially the same to begin with educationally, so baseline measures had to be taken of such things as teacher training, pupil-teacher ratios, supply and type of text-books, and level of achievement. After that, any differences found in attendance, drop-outs, promotions, or achievement levels may be traced to the innovations. But which innovation? The specially constructed facilities? or the technician services? To clear that up, two more experimental schools are planned for the comparison. These will have the same baseline measures and will have technician services but no specially constructed facilities. At the end of the study, comparisons will be made of the records on attendance, drop-outs, promotions, and educational achievement to see whether the schools with the specially constructed facilities, or the schools with the technician services, or the schools with both innovations, or the schools with no innovations -- had the best records.

Other design examples of special evaluative studies can be found on "Institution Building" (AIDTO CIRC XA-4247, 8/31/68) and "Population and Family Planning Program" (AIDTO CIRC XA-330, 2/12/69). Still others may be available in the A I D Reference Center.

G Suggested Checklist for Planning an Evaluative Study

1 Objectives

What is study (not project) objective?

Does study have potential of providing new (and needed) information? a new method? technique? procedure? or policy?

Will the final results possibly be important or significant for the project or program? Might they change some policy or way of doing things?

2 Methods

Are the techniques, instruments, or modes of inquiry to be used appropriate for the study design? for the foreign context?

Will the methods require adaptation to some local condition? Will this adaptation do violence to the design?

Are there sampling problems?

If interviewing or opinion survey techniques are to be used, have the questions been reviewed for meaningfulness in the local language and culture? good taste? political sensitivity? religious connotation? language problems?

Will the methods gather more data than are required? less? i.e., are they efficient, economical and effective in terms of the goals of the study?

3 Data Processing

Are the procedures for the statistical manipulation of the data to be gathered stated clearly? Is there a clearly conceived plan of what analysis will be done once the data have been collected?

Have statisticians or ADP systems experts been consulted regarding the program to be used?

Are the analytical procedures likely to produce meaningful statements?

4 Analysis and Interpretation

Has a wide variety of potential findings been considered? Does the logic or design of the study permit clearly stated generalizations?

5 Costs

Are the dollar costs for the evaluative study reasonable for the various categories (personnel, travel, supplies,

overhead etc)?

Are local currencies being used to the maximum extent possible?

Are there luxury or unnecessary items in the budget?

Has the budget estimate omitted consideration of some item (services by foreign personnel, differences in living costs from one place to another, etc)?

Are the total costs proportional to the scope or importance of the study? Is this study worth the investment? Will the evaluative study cost more than its results might save?

6 General

Will it answer the question it set out to answer?

Will the study produce explicit and useable results?

If it is not completed, will there be some salvage value?

If the study were completed, -- THEN WHAT?

H The Selection of Evaluators

The selection of the evaluator is of paramount importance to the success of the endeavor. Should the work be done by an "in-house" or "outside" evaluator? Once that decision has been made, where can an appropriate individual be located?

1 Basis for Selection

The selection should be made on the basis of the type of study desired and the information or data to be derived. Problems likely to be encountered and basic qualifications expected from the evaluator (such as language, knowledge of local conditions, technical expertise) should be spelled out in detail. On the basis of this information, the Mission can make an intelligent selection not only between the possible groups of evaluators, but also of the individual to be selected from within the group. In addition, this information will be most helpful in giving the potential candidates an understanding of what is expected of them.

In deciding on the type of individual for an evaluative study of narrow scope or one encompassing limited technical aspects, it should be remembered that a perceptive and inquisitive observer from outside the discipline being

evaluated may be able to make a valuable contribution by challenging basic assumptions and bringing a new perspective to the task. This consideration increases substantially the potential sources of evaluators, especially in the case of "in-house" or locally available personnel.

2 Combinations of "In-House" and Outside Experts

The above should not be construed as forcing a choice between "in-house" and outside experts. In fact, Missions may find that a team consisting of both A I D personnel and outside consultants will provide many of the advantages of both, e.g., the fresh outlook and objectivity of the outsider and the familiarity with the project and/or area, as well as the A I D perspective of the direct-hire employee.

3 Sources of Evaluators

The sources of "in-house" evaluators are Mission, AID/W or other Mission personnel, PASA personnel, U S university personnel on contract in the area, a task force of experts drawn from a combination of the above groups, with the Evaluation Officer serving as an advisor and ex-officio member. Requests for assistance in recruiting "outside" evaluators should be addressed to the AID/W geographic bureaus. AID/W technical bureaus may be able to recommend potential candidates. Potential sources include the roster of past and present A I D contractors and consultants maintained by AID/W, professional organizations, international organizations, U S Government agencies, roster of retired U S Government employees, U S university personnel independently in the area, third-country experts, etc.

I Consultants, The Care and Feeding of

Once the services of an outside consultant have been retained, the Mission should undertake the following steps to maximize his potential contribution.

1 Briefing of Consultant

As a means of focusing on the evaluative study to be carried out and to make the maximum use of the consultant's time while at the Mission, a detailed briefing document should be prepared and available prior to or upon his arrival. This document might contain the following categories of data:

- (a) project background and history,
- (b) project and sector goals,
- (c) operating strategy of the project to date and anticipated, including the assumptions about conditions or actions of other interested parties,

- (d) project operations,
- (e) reasons for making an evaluation,
- (f) scope of evaluation to be carried out,
- (g) extent of host government participation and contracts

In addition to this substantive briefing document, the consultant should also be given a document, prepared in cooperation with the Mission's Executive Office and other interested parties, outlining in detail the logistic support which can be provided and facilities available, (e.g. housing? transportation? PX and commissary privileges etc.) For a good example of a Mission briefing paper, see AIDTO CIRC A-970, 5/3/69 (PE #26)

2 Mission Participation and Liaison with Consultant

The Mission should designate a substantive Mission counterpart (Project Manager) as liaison officer to be responsible for keeping abreast of the work of the consultant and assuring that all relevant data available to the Mission be made available to him. In addition, there should be periodic review sessions between the consultant and appropriate Mission personnel to check the consultant's progress and to discuss the direction of his efforts. It should be the responsibility of the liaison officer to follow through on proposed changes after the departure of the consultant, as well as facilitate the work of the consultant and to assist him in overcoming local problems or preventing the duplication of efforts. A substantial input of Mission or AID/W skills in the course of the evaluation is desirable for a variety of reasons.

3 Timing and Submission of Report from Consultant

The consultant should be held to a mutually agreed upon realistic schedule. Except where this is clearly not possible, as in the case of collected data being analyzed by computers at the consultant's home institution, he should be required to submit his report (or at least a good draft) prior to his departure from the Mission.

J Analysis of Data

If data are to be analyzed by statistical techniques or by means of a computer, the statistician or ADP systems expert should be consulted early. They may want the data to be collected or expressed in some particular form which is most convenient for them to handle. They can frequently suggest various shortcuts in the data collection stage, providing that the information desired on completion of the analysis can be spelled out. This may save a good deal of effort. Many

people collect far more data than is necessary to know what they want to know. It may also be necessary to describe in detail the methods by which the data were collected, and the procedures for obtaining the sample. In both cases, systematic or constant errors may have been involved. The statistician may be able to correct for some of these, but not all the time. But he must be aware of what happened in the data collection stage so that if errors are present to begin with, they will not be compounded during the analysis. In this era of the information explosion there are many spurious reports because data were collected and analyzed without validity and reliability checks.

K Preparation of a Final Report

It is usually expected that when a special study has been completed, a report telling what was done, how it was done, and containing conclusions and recommendations will be written. While this is usual, it is often helpful to draft a preliminary outline before the study is even begun. Drafting such a report beforehand will help to clarify the thinking of the evaluator about what should be done, how it should be done, and the type of problems it should address. Care must be taken that the outline is used only as a device to help plan the study.

When the problem was initially posed for a special study, the problem was questioned from the standpoint of who, what, when, where, how, and why. When the study has actually been completed, the final report should cover the same points. It should state clearly and succinctly

WHAT the problem was

HOW the problem was studied. What procedures were used? What information was collected? How were the data analyzed? How were they interpreted?

WHEN this was done

WHERE this was done

WHY it was done. Every effort should be made to be explicit in the rationale so that others may understand the reasons for including some things in the investigation and omitting others.

WHO did it?

The final question for the final report is SO WHAT? State the conclusions clearly and concisely and make recommendations regarding the next steps to be taken.

Chapter VII

Measurement, Data Collection, and Analysis

A Measurement and Errors

Measurements are ways of replacing qualitative distinctions with quantitative distinctions. They introduce precision into judgments made about differences-in-kind by replacing them with differences in degree. The mere act of assigning numbers, of course, can lead to all sorts of errors. The most serious of these is the common belief that the different degrees of some quality always bear the same ratio as do the numbers assigned to them (e.g., is a day when the temperature is 100° twice as "hot" as a day when the temperature is 50°?)

Another kind of error is the belief that certain kinds of A I D operations cannot be quantified at all. In the present state of the art for many of our non-economic programs this may be so. Institutional growth and maturity, expansion of human skills and knowledge, and adaptation and transfer of technology are exceedingly difficult to pin down. However, they provide the challenge for trying to be creative in a problem area where a great deal of innovation is needed.

Another common error is the belief that measurements can be made directly of the phenomena one is observing. This is not always so. Usually, manifestations or indices of these phenomena are observed and measured. For this reason, the selection of indicators becomes critical. Indicators are selected because they are the manifestation of some output or change per se, or because they are considered equivalents or representations of the output. When they are the latter, they serve as proxy or surrogate indicators which stand for the real thing. To know whether the measures have accurately measured what they are supposed to measure, validity must be considered. To know whether the measures are dependable measures, reliability must be considered.

Validity refers to the degree with which some measure or indicator actually does what it purports to do.

Reliability refers to the degree of consistency or dependability with which results will be obtained on successive applications of the measure.

Both concepts are necessary to provide an estimate of the amount of error in our measures. Without them, there will be errors anyway, but their existence or magnitude will not be recognized.

The threats to validity and reliability are many, and great care must be taken to spot them, since they occur when and where they are least expected. An example of the very existence of a "test" influencing the outcome is found in the famed "Hawthorne" effect, named after a Western Electric plant of that name. In the course of a study of environmental factors affecting productivity, it was found that productivity improved when lighting was increased and again when lighting was decreased. The workers were pleased by the attention of the management. Such threats to validity can be mitigated by the use of control units, which also get attention or tests, but no actual input to produce change. Well-known instances of this approach are medical experiments requiring a placebo.

The Land Tenure Center of the University of Wisconsin has pointed out that the first conclusion about the effects of land reform on production in Bolivia was that production decreased for a few years and then increased. Now scholars think that the apparent early decrease was due to the fact that the newly independent farmers avoided the use of middlemen in marketing. The observers were not gathering data on the independent farmers. They were looking for the traditional proxy indicators of production by collecting sales data from established wholesalers. Some interviews with representative farmers probably would have revealed this fact.

Measurement methods may vary between the two units being compared. For example, two similar factories had quite different safety records. The factory with fewer reported accidents had first-aid kits throughout the plant. Hence, the only accidents reported were the more serious ones requiring a visit to the nurse. The factory with more reported accidents prohibited first-aid kits in the plant and thus forced all injured people to see the nurse.

Similar threats to validity occur when there are changes in the means of measuring the effects of the program. For example, law enforcement, accident prevention, disease prevention or other new "drives" are often accompanied by improved records-keeping. Then there may appear to be an increase - more crimes or accidents - simply because the new reports do not miss as many cases as the old reports. This threat probably should not be used as an excuse to defer improved records. Rather, the inability to make comparisons should be recognized.

B Data Collection

Project planning and evaluation both require data before either function can be performed. If project planning and evaluation are to be improved, objective data must be

substituted for intuition. Data can be as varied as the number of farmers who planted the new high yielding variety of rice, the amount of fertilizer, pesticide and water used, or how much was paid to the landlord for rent, to the bank for credit, to the merchant for seed, or to others for storing, milling and marketing the harvest. All these are data whether expressed in hectares of land, or pounds of fertilizer, or piasters, baht, or pesos. The first problem in data collection has to do with getting a clear specification of which data are required.

If evaluation is to be "built-in" to the project, the best data to be gathered are the kinds of information needed by the project manager for the day-to-day operations of the project. But with a view to their being used as evaluative data, they should be couched in terms of output indicators.

1 Direct Methods

Even in LDCs where statistical services are not very well developed, there are likely to be substantial sources of data that are often ignored. The main problem with their use, however, may be that the method in which they were collected, or the scope of problems they cover, may have been for purposes quite different from the present purposes to be served. In such cases, it may be possible to make arrangements to modify what is being collected.

(a) Available data. The following very brief list will illustrate the kinds of information often recorded by government agencies or private organizations. It is not exhaustive. (See Annex B for selected output indicators which have been used for various subjects.)

Public records: vital statistics about births, deaths, marriages, divorces, school attendance, arrests, court convictions, prison records, taxes and customs collected, welfare payments, bridge and highway toll receipts, automobile registrations, etc.

Private organizations: union records, farm co-op records, business payrolls, factory production records, shipping records, warehouse inventories, bank deposits, credit institution loan applications and approvals, truck company records, railroad passenger load, freight car loadings, hospital and insurance company data, import licenses, store sales, market prices, etc.

In addition, U.S. Embassy attaches collect and report data to

Washington USAIDs can probably also arrange to obtain data collected by other donors of foreign assistance, the UN family of specialized agencies, multilateral banks, regional councils, Ford, Rockefeller and other foundations and various voluntary agencies

(b) Direct observation This can be costly and time consuming. It has the advantage of not being dependent on the availability of persons willing to cooperate or capable of reporting the information desired. It also may permit the observer to stay out of what is being observed, although there are techniques for becoming a participant observer.

(c) Questionnaires and interviews These usually require highly skilled specialists in order to collect valid and reliable data and to avoid collecting a good deal of spurious information. There are ample reference works concerning these, USAIDs should rely on these and on specialists wherever surveys, opinion polls, or attitudinal studies are needed.

2 Indirect Methods

In LDCs where it may even be difficult to get a census of the population, someone going directly to the farmer to query him about last year's income or rice harvest might immediately encounter cultural or other problems. The farmer may not be willing to report these data accurately. He may suspect the interviewer of being a government agent who will eventually raise his taxes. Whatever the willingness or suspicions are, they too are data which have to be taken into account because they not only influence the kind of information the farmer gives, if any, but they may also determine whether he responds to a technical assistance effort at all. Where obstacles of this sort arise and data cannot be obtained directly, it is sometimes possible to obtain them indirectly or by proxy.

(a) Estimates, which are personal judgments, can be made. They are sometimes, but not always reasoned judgments and, therefore, it is not possible to place the same degree of confidence in them as in objective facts. Nevertheless, decisions may have to rely on the best estimate which can be made.

(b) Guesses, conjectures or surmises may have to be made. These are opinions or personal judgments based on insufficient evidence and the confidence placed in them is still lower. Decisions made on the basis of guesses may be entirely random. If statements have little evidence to back them up, it is best not to try to quantify them.

(c) Other indirect methods of gaining information can be used. Where the farmers cannot be counted directly, it may be possible to substitute a method whereby something else is counted and by logical deductions and inference a good estimate of the number of farmers is obtained. For example (1) aerial photos of the amount of hectarage being farmed are taken, (2) the average number of hectares per farmer is assumed, and (3) the number of farmers is deduced from that. The average number of hectares per farmer is reasonably assumed on the basis of what is known about the number of hectares per farmer from another part of the country. This may be a correct or an incorrect assumption.

Examples of other substitute methods of counting farmers are to compile from agricultural bank records the number of farmers who requested loans (some may not have asked for credit and thus will be missed), land title records will give owners but not tenants, (then names of tenants will have to be requested from the owners). The miller, the fertilizer salesman, the storage warehouse, the farmer's cooperative, and other groups dealing with farmers will all have slightly different numbers of farmers with whom they deal. All taken together will permit the best estimate with the minimum of error.

Other problems in the field hamper collection of data directly. Illiterate persons can't complete questionnaires themselves. Different languages or dialects in the same country compound interviewing problems. USAIDs are understaffed, and trained counterparts cannot be found. There may be travel restrictions. Aerial photographs are too expensive. The invasion of privacy of the family is forbidden, etc.

One Mission which had protested to AID/W that the data collection problem was practically insurmountable in the host country later realized that an impressive amount of data could be gathered by exercising ingenuity. The Food and Agriculture Officer had hired local moon-lighters to gather information on market retail prices in the bazaars. The field extension advisors had obtained samples of crops produced in different parts of the country and the prices farmers were getting for their harvest. A PASA economist interviewed farmers on farm costs and income. An individual scholar on a university contract team collected data on a rural family budget on his own time. An ILO advisor had arranged for a sample survey of the labor force using local high school girls who got good answers on the number of people in households. An engineering team promoted the establishment of an advisory committee from industry. A highway engineer had arranged for traffic counts on several major roads leading to markets. A visiting graduate student had done some research on land tenure. In some LDCs, there may be more data gatherers such as local libraries and

universities, research firms, professional societies, public and private educational agencies than would be suspected

The point of all this is that in many cases the data are already there, it's a matter of pulling them together

C Dimensions of Progress

The evaluator is faced with the need to establish some tangible indicators of the changes that are occurring over the life-history of the project

1 Baseline Data

Information about the status of things at the start of a project is called baseline data. These data become the "fix", zero-point, anchor point or bench-mark against which later measures will be taken. The milestone and progress indicator are terms which express some magnitude of difference or distance in the desired direction from the baseline. The difference between the progress indicator and the original baseline is essentially the only way of describing change. While what is being observed is dynamic (changing), there is no way of sampling the dynamic process itself. It is therefore necessary to fall back on a next-best substitute, namely taking two static measures -- the before and after situations -- and inferring that the in-between situation was a changing one.

Because of this, the selection of baseline data is governed by what changes are anticipated. These changes will guide the devising of future indicators of progress. Once the end-results and their indicators have been considered, a determination can be made of what baseline data are needed now. The recapitulation of the sequence of questions to be raised at this point is

- (a) What changes are anticipated?
- (b) What will the end-results of those changes be?
- (c) How are those end-results to be indicated in the future?
- (d) What data are available now which resemble that indicator? (And which can increase, improve, grow, or somehow change into that future indicator.)

Once the data have been identified which most accurately and completely describes the variable -- those data are the baseline data. An example of a rating scale used in a developing country to determine the baseline measurement for housing quality is given in Annex A-1 and one for community development is given in Annex A-2. These are intended to be suggestive only.

2 Output Indicators

Annex B shows a list of selected "output indicators" that have been tried in various A I D projects. The list is included to be suggestive only. Note that it is made up primarily of simple output indicators. The elements or variables in the host country situation considered changeable have been identified, and a simple quantification of that element is used to indicate a magnitude, e g , graduates per year. There is some tendency to confuse progress in marshalling inputs with output targets. There may be an output target of doubling the enrollment of a vocational school. This increased enrollment will require new buildings. Counting the number of additional classrooms built is an input measurement, while counting the additional numbers of students is an output measurement. Actually, the amount of change or progress is not measured by these simple indicators of occurrences in a project.

3 Progress Indicators

The output indicator becomes a "progress indicator" only when it is examined in relation to the life span of the project. The simple output indicator "Number of graduates per year" becomes a progress indicator only when the number of graduates this year is compared to the number of graduates last year. Progress indicators may be used to measure effectiveness if they are used in such a way as to compare what actually happened with what was expected to happen (project targets).

Note that the expectations may not have been realistic, and the output targets may have been set too high or too low in the first place. In this case, compute the difference between the output target originally set and the output target actually reached, -- and add a note regarding the reality factor. Progress indicators may be used to measure efficiency if they are used in such a way as to show the cost per unit in relation to the benefit accrued. Suppose a project goal was to turn out 100 graduates per year and that actually only 92 graduates were turned out. Suppose also that the project had cost \$500,000 plus \$60,000 in local currency. To oversimplify, the effectiveness was 92%, and the cost can be stated most simply as $560,000 \div 92$, or \$5,997 per student. Is that efficient? To determine that, information is needed as to what the usual cost per student is for that type of school (medical, or law, or teacher training, etc.) If experience factors show it should have cost only \$500 per student, that school was expensive and thus "inefficient". Either the cost has to be reduced or an increasing number of graduates has to be turned out at the same overall expenditure.

Output indicators may be used to measure significance if they are used in such a way as to compare what happened with some goal other than the project target. For example, to determine whether "100 graduates per year" in an education project has any significance for the host country economy, one must compare that output indicator with some goal pertaining to the entire education and human resources sector in that country or to other sectors. Such a goal might be found in the national manpower survey. For Nepal, 100 graduates per year may be significant, for India, it may not be. Inter-country comparisons may also help in adjudging significance. For example, if 100 graduates per year in India may only be adding to the ranks of the unemployed intelligentsia, the first conclusion may be that India is educating too many. But international comparison will show that Korea and Taiwan both have a higher proportion of educated people and a lower rate of unemployment. The problem in India may be the type of education or the nature of the labor market.

4 Performance Standards

The question being raised above is really whether some quantity of change is significant. Other ways of asking this are "How much of a difference makes a difference?" or "How much change must take place before it is considered to have an impact on development?"

The amount of progress indicated could be labelled something like minimal or maximal or optimal, in which case the entire range of progress expected would have to be known in advance. Further, to know whether the minimal or maximal change observed should be labelled "unsatisfactory", "adequate", "satisfactory", or "more than satisfactory", still other things have to be known. The meaning of "unsatisfactory" would have to be given in terms of some standard (e.g., an infant mortality rate of 75 per 100 live births might be considered "unsatisfactory" until it reaches a more tolerable or "adequate" rate of less than 30 per 100). Such a standard (or norm) is obtainable only by collecting the historical experience in various countries and (1) determining what the current status of development is by using various indicators and (2) making intra-country and inter-country comparisons of those indicators to see where on the scale of comparison a particular country lies. It should be remembered that these often go beyond the evaluation of A I D activities and are a step in the direction of assessing a country's total development program. Where A I D may be only one of several donors -- as in multi-lateral aid countries -- its contribution to development may be exceedingly difficult to discern.

Once the particular status of a sector's growth in a country is known, the rate of progress in the LDC may be seen to be very low or slow as compared to the same sector in the developed countries. Once the range of indicators or the rates of growth for a number of countries have been obtained, they can be used as standards of progress to describe a particular LDC's growth. Standards might be devised for many different kinds of development records.

(a) Edgar L. Owens, formerly Evaluation Officer in Thailand, did some research on the performance of several less developed countries. He made some preliminary judgments of norms or standards against which the performances of other LDCs might be compared. Some examples of Owens' standards are summarized in Annex C.

(b) Another example of performance standards is the list of Alliance for Progress indicators. The House Committee on Government Operations had requested AID to make a study to determine whether the goals established in the Charter of Punta del Este for the decade 1961-71 were realistic in the light of experience. With the assistance of the U.S. Census Bureau, the Latin American Bureau arranged for the regular reporting of a series of standard statistics for each of 18 countries. Some of the data come from the regular economic reports of the countries and other information was prepared under contracts with local universities or research firms. Data problems arose. Country statistical systems contained ambiguities. Figures were not always comparable between countries. Moreover, the first computerized printout revealed programming problems and updating difficulties. In many cases, countries adjusted preliminary figures in subsequent reports. Unless the old data in the computer were similarly adjusted, index and percentage computations could become misleading. Despite such difficulties, the Alliance indicators give promise of adding to the ability of Alliance countries to judge their own progress by comparison with their neighbors.

AID/W is not contemplating an extension of this reporting system to other regions. However, other USAIDs may find some of these indicators useful in evaluating aspects of their programs. The Alliance for Progress indicators are given in Annex D.

5 Non-economic Indicators

The emphasis on development by AID and its predecessor agencies has been preponderantly on economic growth and development. This is evident in the staffing patterns of the Agency, in the way it is organized to provide capital and program assistance, and in the procedures whereby

program decisions are made and priorities determined. These latter are largely in terms of the impact projects may have on increasing the gross national product (GNP) of a particular country.

The Foreign Assistance Act as amended in 1969 quite clearly affords political and social development a comparable priority to economic development. This can be seen not only in Sec. 207 (which has replaced Title IX,) but in Part I, Chapter 2, Sec. 201 of the Act. Congress has stated therein that in the furnishing of development assistance, certain things must be taken into account, among them:

" The extent to which the recipient is responsive to the vital economic, political and social concerns of its people and to increasing their participation in the development process "

For the loan officer, program officer, or other decision maker in the USAIDs, the question to be evaluated becomes: How is the "extent to which a country is responsive" to be measured?

There are still no adequate indicators which permit the measurement of the effectiveness, efficiency or significance of projects in terms of impact on the social or political aspects of a country's development. Part of this problem lies in the state of the art of the social sciences. Theory and doctrine regarding socio-political phenomena generally are described in qualitative terms. There is still no operational procedure to quantify such matters as social concerns or political affairs.

Considering the time taken by economists to devise and accurately measure GNP as an index of economic growth, it should be worth it to attempt to do something similar for the social and political aspects of growth. Most of the Alliance for Progress Indicators (Annex D) are economic indices, but some of them are addressed to what might be called "quality of life." It should be worth the effort to devise some equivalent of the GNP like NNW (Net National Welfare). An important step in this direction has recently been taken by the Agency in devising certain "Social Indicators" (Annex E). These indicators were designed to be incorporated in a country analysis to get a handle on civic development activities. They permit a systematic consideration of social development and popular participation and can be used in developing program priorities and objectives.

The emphasis in selecting these macro and sectoral indicators has been on access to resources (land, credit,

education, etc) and change in this access over time rather than on the more conventional aggregate measures which assess levels of living or welfare (health, nutrition, literacy, per capita GNP, etc), although some of the latter are also included. This is because level of living averages can conceal gross inequalities. The primary purpose here is to obtain a better picture of the extent to which different groups in the society have opportunities to participate. Income distribution would be one of the best indicators for this purpose, but since data on this subject are so scarce they have not been included. If income distribution data can be obtained, it would be highly desirable to include them.

In each of the sections an attempt has been made to show the relevance of the data for social development and popular participation. Overall, the data should help in the Missions' analysis of four factors essential to determining the need and the priorities for increasing participation as an objective of the A I D program.

(1) The pattern of modernization and its effects, i.e., what sectors are being most affected (either positively or negatively) by the spread of modernization, and in what ways?

(2) Which groups seem likely to be affected adversely by present trends (e.g., small farmers, wage earners, professional people)? Over what length of time?

(3) What opportunities are open to these adversely affected groups to redress the balance (e.g., increased access to credit, effective unions, more jobs in the cities, labor-intensive rural public works programs, etc)?

(4) What changes in host country development plans and/or programs are necessary to promote broader access to resources and opportunities? How feasible are such changes?

Knowledge of these four factors will allow specific A I D strategy and program recommendations to follow.

6 Advantages and Disadvantages of Using Indicators and Standards

If properly formulated and applied, progress indicators and performance standards can

establish that change has occurred and can indicate the character, direction and rate of the change,

permit the comparison of the actual change against that which was planned,

permit the assessment of the impact of the change on higher order goals,

show the contrast of a project's performance with that of similar projects,

allow the examination of the relation of input to output, of cost to benefit

Indicators and standards do have a tendency to cause apprehension and can indeed be harmful if wrongly applied since they

expose progress -- or nonprogress -- for all to see,

force the setting of targets more precisely than perhaps they should be set, given the uncertainties of the host country situation,

require quantitative measurements when much of the Agency concern is with qualitative improvements in human knowledge and skill, institutional capacity, etc ,

subject the Agency efforts to comparison with other projects and programs which are not thought to be comparable because of differences in cultural, economic, political, or other characteristics

Chapter VIII

Special Problems in Special Programs

A Regional Projects

There would appear to be, at present, basically four types of regional projects

- 1 A project carried out bilaterally with a regional organization, which is the equivalent of a host country
- 2 A project with two or more governments, but with no central organization with which to deal
- 3 A project involving several countries in cooperation with several donors to carry out a project located throughout these countries, e g , Rice Improvement in West Africa
- 4 A project consisting of a single institution in one country, which exists to serve several countries, e g Makerere University in Kampala

The extent of any special evaluative efforts would have to depend on the specific situation. The size of the U S contribution - either actual or contemplated in the case of projects likely to be expanded - and the likelihood of future applicability of the findings should be of primary consideration in the determination of the time and effort to be expended.

In the case of projects where A I D 's input is substantial and no, or only, limited other donor assistance is involved, evaluations should be made on the basis of original objectives, with the evaluator having the prerogative of challenging these objectives and, if indicated, recommending new directions and objectives.

In projects where A I D 's input is a minor part of the total, and where this input is not a distinct element, A I D evaluation should be minimal. A I D can, at the least, look at the significance of the total project to determine whether to increase or withdraw resources. If the total project is to be evaluated by another donor or by the host country, A I D 's input can be evaluated in a cursory way only. This is particularly true where A I D 's input represents a one-shot contribution.

Joint evaluations are likely to be more difficult in the case of regional projects where several host countries are involved and there is no central organization. In the case of projects involving major U S foundations or international organizations, the evaluator may wish to explore the possibility of conducting an evaluation jointly with such other contributors.

B Sector Evaluation

In many cases, Missions are making a coordinated attack on broad clusters of activities in agriculture, education, health, private enterprise, or collections of host country problems loosely defined as a "sector". Other so-called "sectors" such as export promotion, civic participation activities, or manpower have also been identified. Sector evaluation consists of reviewing the significance and success of all developmental activities in the sector - an important country problem area in which significant A I D resources have been committed (usually in more than one project) and for which an in-depth analysis of total program effectiveness is desired.

Sectoral evaluation differs from project evaluation in that it is broader in scope. It attempts to evaluate whether the projects themselves are making meaningful contributions toward the reaching of the more general sectoral goals. The end product of sectoral evaluation could be, for instance, the decision to discontinue some existing projects which are internally successful but of low priority in the sector as a whole, and to start other projects to fill in important gaps.

As used here, the term sector evaluation differs from sector analysis in several important respects. Sector analysis is usually required prior to the granting of a sector loan. A thorough analysis usually involves host country participation in a collection of raw and secondary data. Its purpose is to determine for that sector what the current situation in the country is and to develop a set of national goals for that sector. From such analyses decisions can be made on host country budgets, A I D programs, loan approvals, etc. Such analyses often require many months or years to complete and are most useful when the host country government plays a major role.

Sector evaluation on the other hand, can be carried out with or without host country participation. It can and often does take as its starting point the results of previously completed sectoral analyses (although such analyses need not, in all cases, have been carried out in order to do sector evaluation). Sector evaluation attempts to determine what the principal objectives are in the sector, both with regard

to host country and U S objectives, and then to examine past A I D and other efforts to achieve these objectives. It measures effectiveness of these efforts and attempts to judge priorities and to suggest future courses of action in the sector.

Sector evaluation covers all activity, grant and loan, capital and non-capital, and all sources of support - host government, U S , international, private, etc. Its specific objectives are

- (a) to identify the priority problems in the country and in the sector under study, and the interrelation of these problems
- (b) to plan a feasible strategy to solve these problems
- (c) to relate the specific goals of the U S to the sector goals under study
- (d) to review the resources which have been brought to bear on activities directed towards these targets during the period under study. (This step relates project and other activity goals to sector goals. As such, it measures significance.)
- (e) to determine the effectiveness and efficiency of these efforts in moving conditions in the country towards the targets. (e.g. Where were we? where are we now? and where are we likely to get to within a stated time period?)
- (f) to document the present difficulties or shortcomings in inputs, policies, resources, priorities, design, planning, etc., which are preventing achievement of targets
- (g) to recommend changes in U S policies, host country policies, resources and priorities, as deemed necessary

Sector evaluations may be conducted by Mission staff, by outside consultants or contractors, by AID/W staff, or any combination of these. Whatever the composition of the Sector Evaluation Team, the general course of action should include

(a) Review of all relevant data, reports, analyses, etc. to determine progress and problems. The team should have access to all relevant information, classified and unclassified, U S and host government, private and public. The Mission Director is responsible for assuring that such data are made available.

(b) Travel freely within the country, at the team's own option, to visit project sites, and to interview personnel

who may have useful knowledge or data, including A I D , host government, private individuals, members of international organizations, other donors, etc

(c) Develop hypotheses concerning conclusions and recommendations which can be tested and verified through interviews, data review, and inspections

(d) Assure that findings and recommendations include all relevant aspects of the country developmental situation Specifically, the team should be equipped to evaluate technical and economic aspects, political and social factors, financial and statistical data

(e) Review of the team's draft findings and recommendations in depth with the Mission Director or his designee, in sufficient time prior to the scheduled end of the evaluation to permit revision, where necessary, or such changes as the Mission Director may think appropriate

C Evaluation of Capital Assistance

An earlier chapter briefly touched upon one approach to evaluating capital assistance -- looking at its impact as part of a development effort for a sector of the economy Obviously, there are other aspects of this major part of A I D 's development assistance which can usefully be evaluated

As Chapter IV on Evaluation Documents makes clear, the logic of evaluating capital assistance and many of the techniques for doing so are similar to those for technical assistance That is, one states the objectives clearly, decides what data are needed to indicate progress, makes arrangements for collecting the data, analyzes the data to judge effectiveness, efficiency and significance and then makes decisions to improve an on-going activity or to change a succeeding activity

These similarities in the programming and evaluation approaches to capital and technical assistance have been somewhat obscured for two reasons One is that the new documentation which was prescribed in 1968 at about the same time that the Administrator launched the new emphasis on program evaluation, dealt only with non-capital assistance The second is that some capital assistance seemed so concrete, to use a pun, that modification of the projects (feedback from evaluation) seemed impracticable

Since 1968, the trend has been to de-emphasize distinctions between various kinds of assistance The form of funding is not necessarily a distinguishing characteristic -- a fairly sizable proportion of technical assistance is now loan-financed

In countries receiving supporting assistance (mostly in Southeast Asia), physical projects such as buildings, roads, power plants and water systems are grant-financed

Now, only a small part of A I D 's capital assistance consists exclusively of physical projects. About two-thirds of the loan portfolio is composed of "program" loans. These finance a transfer of resources in the form of general imports. They are designed to accomplish certain definite economic objectives such as encouraging private enterprise or dampening inflation. They are usually accompanied by formal or informal understandings about changes in economic policies to be made by the borrowing government.

A special kind of program loan, the sector loan, was first used by the Latin American region to influence policies in a single sector such as education or agriculture. It has now evolved so that it is often a fairly complete package of assistance for the sector and includes important commodities and equipment, construction, and technical advice or training to accomplish reforms and development. This pattern is also being adopted in other regions.

Even when a loan does not deal with an entire sector, it will often be concerned with policy, legislation, institutional development and technological transfer as well as capital inputs. The successful completion and operation of capital projects frequently depend on such non-physical elements as organization, price policies, or training.

Progress in such aspects of capital assistance lends itself to analytical evaluation because there is opportunity for applying the findings while the activities continue. In many cases, the financing comes in tranches, with the second installment dependent on changes in policy or administrative progress during the first installment. Even if the loans are for a period of a year or more, the first loan is often followed by another. This is true not only for program or sector loans but also for many project loans. A large part of A I D assistance is now for "repeat" projects -- an enlargement of the original project or a similar project in another part of the same country.

For all of these cases -- tranches, second loans and repeat projects -- evaluation of the experience is an administrative requirement upon which new funding is contingent. (In some places, this has been made a statutory requirement, e.g., the Selden Amendment, Sec. 14 of the Inter-American Development Bank Act.) Loan agreements and implementation documents may specify evaluation procedures during the life of the loan. If not, capital development offices in AID/W usually require a thorough report in the follow-on loan application.

As with technical assistance, these evaluations go beyond monitoring the delivery of inputs and the production of outputs to consider whether broader goals - for example, more practical education - were achieved. Such evaluation requires measurements which are distinct from those for project outputs. Outputs, for instance, may be equipped schools, but the real test of the practicality of the education must be measured by whether and how the graduates are employed and their training used.

Although required evaluation (as distinguished from monitoring and auditing) for capital assistance is now quite widespread, it is not yet as systematic as for non-capital assistance. The design for evaluation tends to get worked out on an ad hoc basis, loan by loan. The findings from evaluation are often buried in the applications for follow-on loans, so that retrieval of lessons for use in other countries with similar projects may be difficult.

This "ad hocery" may reflect two ways in which loans differ from other assistance and which may complicate the use of a "system". For one thing, they are not programmed annually. For another, their implementation is more dependent on the host government. Nevertheless, some Missions have suggested that a system might be helpful -- that it might save separate Missions from having to devise their own evaluation schemes, might prevent some gaps in coverage, and might simplify reporting. Moreover, the preparation of loan applications for "repeat" projects might be easier if information on the first project was more readily accessible. The practicality of devising a more systematic approach is being explored.

The foregoing has dealt with evaluative questions for capital assistance which are similar to those for non-capital assistance. This section will be concluded, however, by noting some aspects of capital projects which are unique.

Some opportunities for feedback in the physical aspects of capital projects do occur, although they are limited by time factors. The possible extent of design change depends on the stage of progress. Changes may appear necessary because the project is behind schedule, because of revised predictions about demand or because of unexpected physical conditions. Other reasons for design changes may be to counteract cost increases or to make better use of local materials or skills. Non-design physical feedback may be concerned with some changes in inputs such as more trucks, more laborers or different scheduling.

Because of the time pressure for construction decisions, the analysis which leads to feedback must be part of or follow closely upon frequent implementation reviews and cannot be left for annual evaluations. The question for "systems design" is whether the presently prescribed progress reports for capital projects deal too exclusively with physical and financial inputs and do not invite broader examination of operations. For example, are the various elements of the projects in phase? -- are operating procedures and personnel being readied for the completion of construction?

After the project is completed and operating, another set of questions can be asked. The answers may affect operating policies of the existing project, or follow-on projects, or they may provide transferable lessons. They may influence the future choice of projects, the quality of feasibility studies, the nature of design, method of implementation, type of organization, amount of accompanying technical assistance or the kind of conditions precedent. Examples of post-project questions in different problem areas are

Engineering - architecture to examine such questions as

(a) What is the use experience - traffic patterns, power plant loads, acre feet of irrigation water, classroom hours, number of out-patients and type of in-patients? etc

(b) What is the maintenance experience - Amount of machine downtime? Do culverts carry floods? Does reservoir silt too rapidly? Does road surface hold up? Does building heat? etc

Accounting to compare actual costs and income for income-producing projects with those in the feasibility studies, to analyze cost elements for ways to reduce operating burdens, to provide data for rate setting, etc

Economics to assess actual cost/benefit ratios and compare them to predicted ones, to study correlations between various types of projects and general economic growth, to examine the effects of various types of transport systems, or power generation or skill training, to compile data on aspects which are ancillary to projects, etc

Political science and public administration to look at the effective methods of internal organization and training, the ways of gaining political support, the procedures to avoid graft, the advantages and disadvantages of independent regulatory agencies, or regional or planning agencies, the techniques for obtaining, using or controlling local participation, etc

Timing A problem which can pervade all the various problem areas noted above is timing. For example, was the project conceived at the right stage of development? Was its capacity usable immediately upon construction? Was there a reasonable period allowed for growth (without too long a period for servicing debt on unproductive capacity)?

D Evaluation of Participant Training

While a trained participant may be thought of as a target output in itself, in the evaluation of projects, the trained participant is counted as a human resource input contributing to the project goals. Parts II - 4 and III of the PAR assess that portion of a non-capital project where the training of indigenous personnel may have contributed positively or negatively to the project accomplishments. Part II - 4 of the PAR provides space for a narrative explanation of how participant training (as a resource input) may have contributed to the effectiveness of the project.

In an effort to assess the overall participant training program, the AID/W Office of International Training has devised a system for evaluating the program. This will be dependent on baseline information collected in a systematic manner from the participants themselves when they start this training.

Structured questionnaires with personal interviews will provide the basic data which will then be analyzed by means of the usual statistical techniques used in survey research. An entry interview shortly after the participant arrives in the U S will supply information on such things as (1) his opinions and reactions to the way in which he was selected, (2) his pre-departure orientation and other preparation, (3) his language capability, (4) his conception of his coming training program, (5) his attitudes towards the training, (6) his attitudes toward the U S, and (7) other such matters while they are still fresh in his mind.

After his training sojourn has been completed, and he is on the eve of departure for his home country, he is given an "exit-interview." These interviews have been conducted for some time under a university contract. The interpretation of their findings will now be enhanced by comparison with the entry interviews described above. Special reports on these exit interviews have been issued from time to time in addition to full annual reports. The most recent report is "Participant Assessment of A I D Training Programs," dated July 1970.

Perhaps the largest training evaluation effort the Agency has ever made included interview data collected from participants who had returned to their home countries and had been there at least one year after return. It was conducted from 1960 to 1967 and included 34 countries. The findings were published as individual country reports, four regional reports, and a global combination, issued in 1966, entitled "A I D Participant Training Program -- An Evaluation Study "

A I D believes that interest in individual participants should not end upon their return home. If full benefit is to be derived from training abroad, it is essential that their training and professional stimulation be continued after return to regular work, otherwise some or all of the hoped-for benefits of training abroad may never be realized. For this reason, a follow-up of the returned participants is an essential and integral part of the participant training program. It seeks to attain such objectives as (1) assisting returned participants in developing, extending, and transmitting to others the technical and managerial knowledge acquired during their AID-financed training in the U S or third countries, (2) introducing attitudes and values which are essential to social and economic development and building of social and political institutions, and (3) broadening the participants' understanding of the U S , its people, culture, policies, and institutions.

Follow-up activities are adapted to the local situation in a country. They consist mainly of

- personal and/or written contacts with returned participants

- publishing and periodically up-dating a participant directory

- formal presentation of Certificates of Achievement

- arrangement for conferences, workshops and seminars

- publication of newsletters and professional journals

- stimulation and support of an Alumni Association

- provision of technical literature

- encouragement and extension of membership in American professional societies

- use of returnees to orient new participants

organization of English language refresher courses

supplementary training through correspondence courses

The success of a follow-up program depends on purposeful planning, based on appropriate procedures. It is the responsibility of technical advisors in the Mission in the returnees' country. The Mission Training Officer coordinates, stimulates and guides the follow-up activities. The Evaluation Officer will find much rich data here, and especially in the "Returned Participant Follow-up Activities Report" (U-418) submitted annually by the Mission. Practically all of these follow-up activities are "behavioral" indicators which lend themselves to quantification (e.g. how many requests for technical literature were made? how many took supplementary training? how many returnees were used to orient new participants or to train others in the new technology they had learned?)

Neither the PAR as presently designed, nor the interviewing in the U.S., address themselves to what may be a critical consideration for evaluation of participant training activities -- the total manpower strategy. Should the Mission change the mix between in-country and out-of-country (participant) training? Should in-country training be on-the-job? in classrooms? Should participant training include a different proportion of groups or individuals for observation? for university degrees? for third-country visits? etc. Missions should also consider their programming strategy concerning participants, since this part of the program is a significant portion of the total. Should we put more or fewer resources into training?

Chapter IX

Issues in Program Evaluation

A Candor and Objectivity

As the creator of the comic strip "Pogo" once said

On this very ground, with small flags flying,
and tinny blasts on tiny trumpets, we shall
meet the enemy And he may not only be ours,
he may be us

Candor means forthrightness with the additional sense of freedom from bias, prejudice or malice Objectivity means existing independently of mind and being observable or verifiable by scientific methods

The current program evaluation system has a somewhat subjective bias in that it requires project managers to evaluate the projects they themselves are managing The important issue here is to make sure that subjective element is minimized The project must be given as honest an appraisal as possible Stating real facts, with all the "warts and pimples," can be a tremendous advantage Conversely, there are great disadvantages in not being candid and objective The facts become blurred with emotional or personality overtones Decisions cannot be made readily where the facts are fuzzy

Opinions, beliefs and values are blended in people's mental processes after long exposure to life experience and education within a particular culture Americans tend to view the world through "red, white and blue" colored glasses Sometimes there is an awareness of these attitudes, inclinations, ideals and interests, but not always As a result, predispositions and values are hidden and cannot be fully controlled Subjectivity can be reduced by recognizing their existence, by stating as explicitly as possible what the value premises are

The same issue may arise in dealing with consultants who may have been hired specifically for their "objectivity " They too sometimes need to be discouraged from making premature judgements Further, neither the USAID nor AID/W personnel should prejudice an evaluation by a consultant by hinting at the desired results, nor by selecting a consultant known to hold a viewpoint which is favored

B Release of Evaluation Information

The process of evaluation starts with an underlying basic assumption that it will be a good thing for planning and implementation. There is a school of thought that does not accept this basic assumption. The argument runs: A PAR showing that a project is not successful can make the project manager look silly. Sending a special evaluative study to AID/W can make the Mission Director "look bad". Releasing evaluative information which can be taken out of context might redound adversely on the Agency. Still others question whether evaluation information should be provided to PASA team members, contractors, or host country officials where it might interfere with the rapport, even though it might be useful in improving the project progress.

The issue is not a simple one. It is not just a matter of accepting the basic assumption in the first place. It is also a matter of what is meant by "a good thing for planning and implementation." If it turns out to be counterproductive, it is not a good thing. The issue hinges on whether everyone has been properly prepared to receive evaluation information in the spirit in which the evaluation was done. It is especially important to recognize that actions or recommendations to improve an activity are not personal reflections on the people involved.

C Relation of Project and Program Goals

AID's present evaluation system is project oriented. Although the PAR instructions call for a discussion of the major objectives, there is frequently no direct tie-in between the project target and the broader sector objectives, or the U.S. goals for the particular country. As mentioned in Chapter II, the linkages between project targets and purposes, between project purposes and sector goals, between sector goals and country program goals or objectives may be considered a series of interconnected hypotheses about economic, social and political development.

In actuality, however, the impact of a small project establishing a pilot agricultural school, for instance, on a broad objective like "self-sufficiency in agriculture" is not going to be great, and is going to be exceedingly difficult to trace. Such is the case when a country strategy includes such broad objectives as "reducing the balance of payments gap," or "making the distribution of income in the rural areas more equitable." In such cases it may be useful to approach a project from a different perspective such as analyzing it within the context of a sector evaluation, described in the preceding chapter. Or one might approach evaluation by posing

a problem such as, "How do we increase rice production?" or, "What conditions must exist if country X is to achieve self-sufficiency in agriculture?"

Approaching a project, particularly a small one, from one of these angles may provide a project manager with a better framework for judging the relationship between project purpose and a higher goal - i e , the series of interconnected hypotheses about economic, social, or political development that characterize every project, no matter what its magnitude

D The Evaluators Themselves

The value of the program evaluation process is in direct proportion to its use by Mission management in planning and implementing projected and on-going programs. Experience has shown that evaluations carried out by, or under, the direction of Missions are most relevant to their needs and that the findings are more likely to be accepted. Thus, while it was realized from the beginning that the Missions might require additional manpower and expertise to conduct viable evaluation programs, it was felt that the primary responsibility for conducting such programs, i e , selecting and directing evaluators, must remain in the hands of the Missions.

This placement of responsibility, on the other hand, poses several problems. Mission personnel may find it difficult to be objective, they usually lack time, and they may not be acquainted with data gathering and analytical techniques. Various approaches can help overcome such difficulties. Outside consultants can provide objectivity, time and expertise. Missions can organize special task forces which take advantage of skills available in university or PASA teams, while joint evaluations with host governments may provide additional manpower for data gathering.

Some of the pros and cons involved in using outside consultants are

One of the primary issues here is to minimize the subjective element. It should be remembered that consultants in specific functional field may have a strong bias one way or the other. However, it is generally conceded that a disinterested outside consultant may be able to offer greater objectivity in the evaluation of a given project.

The outside consultant in most cases will be handicapped by his lack of familiarity with the project or program and the Mission perspective. Unless familiar with prevailing local conditions and customs, the outside consultant-evaluator is likely to encounter

considerable difficulties and unexpected delays in the design and conduct of an evaluative study

The outside consultant may be able to bring into play specialized knowledge and familiarity with different techniques and fresh viewpoints which are otherwise not readily available. Consultants may also be able to assemble a staff of varied and cross-disciplinary expertise which cannot readily be matched within the Agency

The effect on the host government of recommendations by a recognized non-U S government source may be greater than those coming from U S Government sources. An outside consultant may be able to prepare and present a more frank and candid report than an agency of the U S Government

E Host Government Participation

Host country participation in evaluation would appear to be often desirable, and in fact, essential in some cases. Yet, despite the success achieved where host governments participated in the preparation of evaluative studies, there has been relatively little experience in this regard. Variations in host country involvement have included

1 Interviews by A I D evaluators of some host government officials

2 Participation in a review panel by a host country official

3 Presentation of his findings by a consultant to a joint meeting of host country and U S A I D officers

4 Annual or semi-annual joint project review discussions, perhaps at a "retreat "

5 Joint planning of continuing data collection and then collection through host country channels

6 Joint participation in a task force

Among the problems encountered and fears expressed by Missions in connection with joint evaluative studies are

Fear that Mission-Host Country relations will be damaged

Apprehension that such studies might heighten conflicts which might already exist between various sections of

the host government and which might be detrimental to the project, host government operating agencies may feel threatened by the planning agencies which may participate in or sponsor the evaluations (On the other hand, it has been pointed out that evaluations can take place both on the working and policy level, and certainly should concern both levels)

Host government sensitivity to criticism and difficulties in getting the host government to talk freely (In a number of instances, this fear has been shown to be unfounded, though it should be kept in mind in designing the procedures to be followed)

Unwillingness or inability on the part of the host government to detail qualified key personnel to time-consuming evaluative studies

Adverse press comments which might result from such studies

Language difficulties

The belief that in some quarters, the desire for joint evaluations will be taken as an admission on the part of the United States that it is not capable of evaluating the programs

Security considerations related to U S goals

Finally, though not normally expressed by Mission, there is presumably the feeling that it usually is easier (e g , less trouble) to carry out the studies within the confines of the Mission and the unwillingness on the part of the Mission to "wash its dirty linen in public," especially when the study results might reflect unfavorably on the Mission's performance

On the other hand, among the benefits likely to be derived from active host government participation in evaluations are some of the following

Participation is likely to stimulate host government interest in and support for a project in that it increases the government's involvement and identification with the project

Joint evaluation exercises will help the United States and the host government to re-examine their mutual interests in a project and to redefine its objectives, if such a change is warranted

Closer personal contacts, better understanding between United States and host government officials and education of the latter are likely to result

New approaches resulting from evaluative findings are more likely to receive the host government's support

The evaluation process may open up additional host country sources of information and data, thereby resulting in better informed and more valid findings

Training in evaluation techniques for host-country officials

The exact method of approaching host government participation in evaluation studies depends on local circumstances and manpower. The greatest success seems to have been achieved by those Missions approaching joint evaluations on a gradual basis, on the project level, involving local governments or institutions more deeply from year to year. When host governments reach the point of self-analysis about their own operations, they will have passed an important milestone toward ability to solve problems and manage development without outside assistance.

APPENDIXES

ILLUSTRATIVE BASELINE MEASURES

I Housing Quality
 (This* has been used as a rating scale by a housing officer to get a quantified measure of housing quality in different cities or different sections of the same city)
 * Adapted from Cornell U Index of Housing Quality (Contract AID/csd-817)

	SCORE		
	Yes	or	No
1 Inadequate original construction or conversion dirt floors	2		3
2 Considerable wear on inside steps or floors	2		3
3 Are the rooms in good order?	3		2
4 Is the furniture in good repair?	3		2
5 Substantial sagging or bulging of outside walls or roof	1		3
6 Shaky or unsafe porch, steps or railing	2		3
7 Broken or missing window panes	2		3
8 Rotted or loose window frames	2		3
9 Deep wear on doorsill, door frames or outside steps	2		3
10 Badly rusted or partially missing gutters and downspouts	2		3
11 Is the lot clear and in good order?	3		2
12 Inadequate original construction or conversion makeshift interior walls	1		3
13 Inadequate original construction or conversion makeshift exterior walls or roof	1		3
	<u>over large area</u>	<u>over small area</u>	<u>none</u>
14 Holes, open cracks, rotted, loose, or missing materials on inside walls	1	2	3
15 Holes, open cracks, rotted, loose, or missing materials on floors	1	2	3
16 Holes, open cracks, rotted, loose, or missing materials on ceilings	1	2	3
17 Substantial sagging of floors or walls	1	2	3
18 Holes, open cracks, rotted, loose or missing materials on foundation	1	2	3
19 Holes, open cracks, rotted, loose or missing materials on outside walls	1	2	3
20 Holes, open cracks, rotted, loose or missing materials on roof	1	2	3
21 Where is water obtained?			
Other			(Score 1)
Pipes or wells outside			(Score 2)
Piped into house			(Score 3)

- 22 What type of lighting does unit have?
 Other (Score 1)
 Electric (Score 3)
- 23 What kind of fuel is used for cooking?
 Other (Score 1)
 Electric or gas (Score 3)
- 24 What kind of refrigeration is used?
 Other or none (Score 1)
 Electric (Score 3)
- 25 What toilet facilities are available for this household?
 Other (Score 1)
 Flush toilet inside (shared) or outside (Score 2)
 Flush toilet inside, exclusive use (Score 3)
- 26 What kind of bathing facilities are available for household?
 Other (Score 1)
 Installed tub or shower inside (shared)
 or outside (exclusive use) (Score 2)
 Installed tub or shower inside,
 exclusive use (Score 3)

TOTAL score possible = 3 x 26 = 78

II Measuring Community Development*

This is a draft of an instrument for comparing the level of development of communities and urban barrios. Its purpose is to provide a systematic way of selecting communities which are most ready to take advantage of development programs or outside help such as Peace Corps Volunteers. It is designed to be completed by one person in about half a day in small communities or, at most, one full day in large communities or barrios in cities. It is not an instrument for thorough, in-depth study of the community. Rather, it represents the first step in choosing high potential communities for development. The baseline measures will be obtained

(1) by walking up and down each street of the community, counting and classifying houses, and counting stores, public buildings, restaurants, theaters, etc

(2) by talking to four or five knowledgeable community members, such as the local priest, teniente politico, school teachers, coop leaders, and others to find out such factors as existing active organizations, outside entities represented in the community, community projects, social problems or health problems

* For illustrative purposes only. By courtesy of Richard J Greene, USAID/Ecuador

These baseline measures of community achievements and activity should reflect the will and energy of community leaders and members. In other words, communities that are well organized and have many improvements and services are likely to have more dynamic populations than do less developed communities. These active communities are the ones which, hypothetically, should benefit most from development resources, whether Volunteers, technical assistance, organization efforts for coops, education programs, and the like.

COMMUNITY SURVEY

I IDENTIFICATION

- A Name of community _____
B Location (approximate time by car and direction from major town or landmark) _____
C Is community capital of canton _____ or parish? _____
D Region Coast _____ Sierra _____ Oriente _____
E Date of founding _____
Predominant first language Spanish _____
Quechua _____ Use both Quechua and Spanish _____

II House types and population estimates (tabulate number in each category) TOTALS

- A Chozas (houses markedly poor, shacks compared to rest) _____
B Paja, palm, wood roof _____
C Zinc, ardex, cement roof _____
D Tile (clay or cement) roof _____
E Cement roof _____

Total houses in community - _____

- F Houses under construction (foundation begun or more) _____
G Give estimate of number of people per house _____
H Estimate of total population _____
= _____
(Total houses) x (People)

III COMMUNITY SERVICES (Indicate type or number in each category) A Water System (check which are used)

Wells _____
Community Faucets _____
Water in Houses _____
No improved water system - river, irrigation ditches lake, etc _____

B Community Electric System
Present _____ No customers _____ (ask company or coop) None _____

C Communications (check every mode that is in community) Telephone _____ Telegraph _____ Radio transmitter _____ Newspapers delivered daily _____ Number per day (ask agent) _____

D Street System - No streets, only trails _____ Only one street _____ Number blocks dirt streets _____, gravel _____, cobblestone _____ paved _____

E Transportation System - Number roads to community _____ Number hours by foot to road _____ On main road _____ Distance (time) by car to main road _____ Taxi service in community _____ Number buses per week _____ Train service _____ Plane service _____

F Public Services (indicate number)
 Plaza _____ Military Buildings _____
 Chapels _____ Municipal Government Bldgs _____
 Catholic Churches _____ Agency offices _____
 Protestant " _____ Community Center Bldgs _____
 Post Office _____ Primary schools _____
 Police Station _____ Colegios _____
 Fire Department _____ Parques Infantiles _____
 Municipal Bathrooms _____ Canchas _____
 Open Markets _____ Health Posts _____
 Covered Market Buildings _____ Hospitals _____

G Private Services (indicate number)
 Banks _____ Hotels or Pensiones _____
 Restaurants _____ Drugstores _____
 Movie Theaters _____ Barbershops _____
 Billiard Halls _____ Shoe Repair _____
 Gasoline Station _____ Tailor/Seamstress _____
 Mechanic Shop _____ Carpenter Shop _____
 Print Shop _____ Other (specify) _____

IV COMMUNITY SPECIALISTS (indicate number)

Priests (full time) _____ Doctor _____
 Teniente Politico _____ Nurse _____
 Jefe de Registro Civil _____ Dentist _____
 Policia _____ Teachers _____

V COMMUNITY ORGANIZATIONS (padres de familia, Recreation, social religious, cooperatives, political, agricultural)

Name	Type (Purpose)	Frequency of Meeting (Formal or Informal)	Number of Socios
1 _____	_____	_____	_____
2 _____	_____	_____	_____
3 _____	_____	_____	_____
4 _____	_____	_____	_____
5 _____	_____	_____	_____

VI COMMUNITY PROJECTS (Physical improvements planned or in process)

A Project description _____

B Community Organization Sponsor _____

C Work stage Only Planning Underway (explain progress, e.g. start of organizing, talk to agency etc) _____

When actual work started _____ Date scheduled completion _____

D Agency Participation

No agency help _____ Community initiated, agency help with execution _____ Agency initiated and execution _____ Agency(s) which are participating _____

VII COMMUNITY ECONOMICS

A Land tenure of surrounding community

Mainly commercial haciendas _____

Mainly small property owners _____ Estimated plot size _____

Mainly haciendas which are subdivided arrendatarios, desmonteros, arimados, partidarios (circle which is the dominant arrangement), estimated plot size _____

B Production (List major crops or products shipped for sale outside of community)

1 _____ 4 _____

2 _____ 5 _____

3 _____ 6 _____

C If city barrios, list major occupations of inhabitants

1 _____ 4 _____

2 _____ 5 _____

3 _____ 6 _____

D Industries (list all types, include artisan industries)

1 _____ 4 _____

2 _____ 5 _____

3 _____ 6 _____

VIII COMMENTS (Explain if any of the following are present)

A Fundamental social or economic change movements (e.g. plans for land acquisition, obtaining water rights etc)

B Community Problems (e.g. serious health problems, delinquency, alcoholism)

C Special economic circumstances (e.g. artisan economy, presence of important industry, etc)

SELECTED OUTPUT INDICATORS

For illustrative
purposes only

MARKETING AND DISTRIBUTION

- *Number firms participating in sales training program
- *Number national sales training seminars held
- *Number product-use pamphlets produced
- *Number training films produced
- Number warehouses erected
- *Number trainers trained
- *Number training meetings conducted (in sales techniques,
technical use of product, and management procedures)
- Number trained farm organization supervisors on duty
- *Number education meetings (for fertilizers, pesticide)
- Number of farm organizations

CREDIT

- Increase in field staff
- Number rural banks established
- Number bank branch offices opened
- Number of import and distribution loans
- Value of import and distribution loans
- Number of loan applications processed
- Number of loan applications approved
- Proportion of cultivators receiving loans (number
recipients of loans divided by number of cultivators)

CROP PRODUCTION

- *Hectares improved variety planted
- Seed standards developed
- Seed growers association established
- *Number farmers trained in new techniques
- *Tons seed grain imported
- Tons seed grain produced locally
- *Seed storage facilities constructed and equipped
- Private sector seed importation system developed (number
of importers)
- Number tons of yield harvested (milled)

ANIMAL PRODUCTION

- Number breeder hatcheries (broiler and egg producers)
established

*These are input measures showing progress in a course of action towards a target but are not the target outputs themselves

- Number day old chickens produced per year
- Number market eggs produced per year
- Number swine farms established (or improved)
- Increase in brood sows
- Increase in market hogs
- Number vaccine production and testing centers established
- Number quarantine stations existing
- Number animal disease diagnostic centers established
- Amount vaccine produced
- Number hogs (chickens, dogs, etc) vaccinated
- Number feed mills established
- Amount produced per year of balanced formulated feeds
- Number abattoirs established
- National livestock center established
- Number pigs for sale

LAND REFORM

- Number hectares aerial photographed (or surveyed)
- Number of titles registered or distributed
- Necessary legislation passed
- Percent farmers on own land

MANPOWER DEVELOPMENT

- Number occupational employment surveys completed
- Number on-the-job training systems in operation

TAX COLLECTION

- Increase in revenue over last year

CIVIL SERVICE

- Degree nepotism
- Degree corruption
- Degree Administration efficiency
- Degree promotion on basis ability
- Degree recruitment on basis ability

COMMUNICATIONS

- Newspaper circulation per 1000
- Number pieces mail per 1000
- Radio TV per 1000
- Cinema attendance per 1000
- Total number telephones in country
- Number telephones in major cities
- Number telephones outside major cities

INSTITUTIONAL MATURITY

Political viability demonstrated
Professional status recognized
Technical competence proved
Survival capacity demonstrated
Ability to attract financial resources shown
Capacity to innovate demonstrated
Services being used in community

LABOR

Number collective bargaining contracts
Number members in unions divided by number of wage earners
Changes in real wages and benefits

EDUCATION

Number classrooms built
Number graduates of teacher training colleges
Number prototype libraries established
Number returned participants assigned to appropriate positions
Percent literate adults in population
Percent children able to pass UN reading test
School enrollees, ratio to school age population
Number of drop outs, % drop outs by grade and age
Access to education - number of members of minority group
- girls, numbers and percent of total
Student-teacher ratios
Number of teachers in position
Literacy rates - changes for total population and percent over 15 years old
Number textbooks written, printed, revised, distributed
Percent vocation education graduates placed
Earnings of vocational education graduates vs untrained
Budget support from local or central government

PERFORMANCE STANDARDS

These are Edgar L. Owens' "working" standards of progress. There is nothing "official" about them. But they are among the few rule-of-thumb standards that are available and useable to make comparisons. They are summarized here in the interest of generating further discussion and research on them.

A General Economic Indicators1 Per Capita Income

A good rate indicates rapid progress in both industry and agriculture. A poor rate suggests some major problems, which historically, we know are probably found in agriculture and agro-industries, since rapid industrial progress follows farm progress. For a good rate, a norm seems to be 5% or more, while a poor rate is something substantially less than 5%.

Per Capita Domestic Product
Percent Annual Growth 1950-66

Japan	7 5 <u>1/</u>
Puerto Rico	5 7
Israel	5 7
Taiwan	5 1
Egypt	3 9 <u>2/</u>
Turkey	3 0 <u>2/</u>
Venezuela	2 9
Iran	2 9
Tunisia	2 3 <u>2/</u>
Brazil	2 1
Philippines	2 0
Chile	1 8
Pakistan	1 5
India	1 4
Colombia	1 3
Argentina	1 1
Morocco	-0 6 <u>1/</u>
Indonesia	-0 6 <u>3/</u>

1/ 1952-65, 2/ 1955-65, 3/ 1958-66

2 Exports

Increases of \$2 to \$5 (current prices) per capita per year have been recorded. It ought to be possible to increase exports at a rate of \$1.50 at a minimum. Very low rates, such as 20¢ or 30¢ indicate major problems.

Equally important, the proportion of exports that are processed in some fashion should rise by several percent a year

Exports - Per Capita - Early 1950-s-1966

	<u>Early 1950's</u>	<u>1966</u>	<u>Change</u>
Israel	\$27 93	191 43	163 50
Taiwan	10 66	41 29	30 63
Turkey	14 52	15 37	85
India	3 39	3 11	-0 28
Brazil	26 90	20 94	-5 96

Exports - % "Processed" - Early 1950's-1966

Taiwan ^{a/}	14 0%	71 7%	57 7%
Israel	44 5%	73 0%	28 5%
Brazil	6 8%	15 1%	8 3%
Turkey	18 3%	15 4%	-2 9%
India	54 0%	47 3%	-6 7%

^{a/} Taiwan figures omit refined sugar which was 60% of total exports in 1954 and 10% in 1966. Inclusion gives the impression of no progress in processing

3 Birth Rate

Once a secular decline in the birth rate sets in, as in Taiwan and Puerto Rico, then the rate should decline by around 1/2 per 1,000 per year for 2 or 3 decades until it is down to 20 per 1,000 or lower

Birth Rates Per 1,000 Population

	<u>1948</u>	<u>1967</u>	<u>Change</u>
Puerto Rico	40 2	26 2	-14 0
Taiwan	39 7	28 5	-11 2
Israel	28 6	24 8	-3 8
Mexico	44 6	42 7	-1 9
Egypt	42 7	41 2	-1 5

Middle 1960's

Indonesia	50 (approx)	Brazil	44
Philippines	50 (approx)	Chile	43-45
Iran	48	Colombia	41-44
Morocco	46	Peru	44-45
Pakistan	44	Turkey	40
Tunisia	45	India	40 (or more)
Thailand	45 (or more)	Argentina	22-23

B Agriculture

1 Agricultural Productivity

Yields per acre of the basic food grains of a country are a good indicator of the extent to which small farmers are going modern since the only countries with high yields and a high rate of increase are those in which small farmers have been brought into a modern agricultural system. Where yields per acre are very low to begin with, an average annual rate of increase less than 3% is unsatisfactory and generally means that small farmers are still using traditional production inputs and cultural practices.

Cereal Crop Yields - Pounds Per Acre

	<u>1948-50</u>	<u>1964-66</u>	<u>Change</u>	<u>Average Annual Rate of Change</u>
Taiwan	1799	3242	1443	3.7
S. Korea	1642	2559	917	2.8
Chile	1123	1454	331	1.6
Thailand	1189	1477	288	1.3
Turkey	833	1049	216	1.4
India	641	807	166	1.4
Peru	1226	1379	153	.7
Pakistan	1036	1136	100	.5
Colombia	914	1003	89	.6
Brazil	1169	1194	25	.1
Philippines	932	937	5	.1
Tunisia	440	426	-14	-.1
Morocco	600	551	-49	-.5
Iran	898	765	-133	-1.0

2 Fertilizer Consumption

When fertilizer usage is virtually nothing to start with, the amount per acre per year should increase to 50 pounds in a decade, (on the basis of fertilizer nutrient, i.e. a 10 pound bag of 5-10-5 is two pounds of fertilizer nutrient.)

3 Agricultural Credit

Preliminary research on production credit suggests that the annual requirement is somewhere in the neighborhood of a quarter of gross annual agricultural product. The proportion of farmers receiving institutional credit should be 80-90% which can be taken to mean that such credit is available to all farmers. There are always a few who do not use it.

4 Extension and Research

More work needs to be done on quantitative measures of qualitative inputs. For example, looking at countries where agricultural extension works and where agricultural research is, first, good, and second, communicated to farmers, might give a clue to desirable ratios. Tentative suggestions are

- a One extension worker for every 1,000 agricultural workers
- b Perhaps almost as many researchers as extension workers
- c Expenditures for agricultural research should be around 1% of the value of annual agricultural output

C Rural Development

1 Rural Capital Formation

Capital formation is a necessary component of an agricultural revolution as well as of other development. Moreover, part of this capital should come from rural areas. Generally speaking, if statistics are available, the deposits in rural banks, cooperatives and other institutions are close to zero because local financial institutions that farmers are willing to use do not exist. In Taiwan, in 1966, such deposits were 21% of the national total. Taiwan had one savings institution for each 2,500 farms. How well these ratios would fit other countries would need to be determined.

2 Farm-to-Market Roads

If general, geographically dispersed development is to occur, a country must move from an acute shortage of farm-to-market roads (including canals where feasible) to adequacy in some reasonably short period, say one decade. A possible standard of adequacy may be 2 1/2 to 3 miles of road for each square mile of cultivated land. To reach this ratio in a decade would require construction of about 1/4 mile of road per cultivated square mile per year, if the country starts with 1/2 mile of road per cultivated square mile.

Farm-to-Market Roads - Ratio of Miles to Cultivated Sq Miles

U S A	3 28	Philippines	1 14
Taiwan	2 67	India	79
East Pakistan	2 45	West Pakistan	71
Chile	1 91	Tunisia	58
Colombia	1 59	Iran	47

Note The metric equivalent of 2 1/2 - 3 miles of road to one square mile of cultivated area is approximately 1 1/2 - 1 3/4 km of road to one square km

3 Location of Facilities

A good deal can be told about the quality of economic development by statistics on the distribution of various physical facilities between the capital or the largest city and the rest of the country. For example, 3/4 of the telephones in Thailand are in Bangkok. In Taiwan, the proportion in Taipei is much lower. The same kind of unequal distribution is true of post offices, schools, clinics, factories, financial institutions, warehouses, etc. Such simple statistics tell a good deal about the ability of a government to get development underway outside of urban complexes, which, again, tells something about the state of agriculture. Work is needed before standards of performance can be developed.

D Industry and Power

1 Manufacturing Output

In countries with little industry, an increase of output of at least 10-11% per year ought to be possible for at least a decade, and possibly several.

Percent Increase in Manufacturing Output 1953-67

	<u>Total Increase</u>	<u>Av An Rate of Increase</u>
Pakistan	626	14.0
Taiwan	574	13.3
Turkey	391	10.2
Philippines	284	7.7
Thailand	283	7.7
India	242	6.4
Colombia	207	6.2
Chile	175	4.0

2 Electricity

If electric power production is more than 100 kwh per capita per year, an annual increase of 10% is acceptable. If production is less than 100 kwh per capita per year, percentage increases are misleading because the starting base is so low. Below 100 kwh an increase of 10 kwh per capita per year appears to be acceptable.

Increase in Electric Power (kwh per capita) 1948-1966

	<u>1948</u>	<u>1966</u>	<u>Increase</u>	<u>Percent Increase</u>	<u>Kwh per Year Increase</u>
U S A	2552	6339	3787	5 5	na
Puerto Rico	218	1773	1515	14 0	na
Israel	364	1735	1371	9 0	na
Venezuela	81	979	898	16 9	na
Taiwan	116	579	463	9 3	na
Argentina	281	679	398	5 0	na
Chile	484	761	277	2 5	na
Turkey	34	174	140	na	7 8
Tunisia	35	129	94	na	5 2
Morocco	44	104	60	na	3 3
India	16	77	61	na	3 4
Pakistan	2	37	35	na	2 1
Indonesia	10	14	4	na	2

E Education

1 Secondary Enrollment

Enrollment in secondary schools reflects both opportunity and desire, since it is not often compulsory in LDCs. Desire for education relates to the general social attitude about education, the job market, the ability of families to forego labor of a teenager, etc. But it may also reflect the quality of the schools. Hence, when enrollment in secondary schools as a percentage of the age group rises by around 1 5% a year, it is possible but by no means certain that some improvements in quality are underway.

Illustration

Secondary age population	=	1,000,000
1 5% of population	=	15,000
Secondary school enrollment	=	200,000
1 5% of population increase	=	7 5% school increase

The basic premise here is that educational reform tends to be a laggard. It follows, rather than precedes progress in other areas. Historically, a trend away from rote memory toward problem solving in education has not been set in motion until educational opportunities above the literacy level were expanding fairly rapidly and a substantial portion of the secondary age group are enrolled.

Increase in Secondary Enrollment As
Percent of Population Aged 15 - 19

	<u>1950</u>	<u>1964</u>	<u>Percent Change</u>
Taiwan	15	58	43
Chile	18	48	30
India	14	34	20
Egypt	7	29	22
Brazil	10	27	17
Peru	9	26	17
Turkey	6	20	14
Tunisia	9	20	11
Iran	5	19	14
Morocco	2	13	11
Philippines	22	33	11
Pakistan	15	25	10
Thailand	7	14	7
Indonesia	3	10	7

2 Third Level School Enrollment

Universities, technical schools, normal schools and others beyond the secondary level should have 500 students per 100,000 total population. Because of the enormous variations among countries in the starting point, it is hard to suggest an optimum rate of increase toward this goal.

Increase in Third Level Students Per 100,000 People
(1950-1964)

	<u>1950</u>	<u>1964</u>	<u>Change</u>
Taiwan	87	530	443
Egypt	167	500	335
Chile	160	430	270
Turkey	118	293	175
India	113	284	171
Pakistan	93	227	136
Colombia	94	214	120
Iran	34	108	74
Tunisia	50	101	51
Morocco	15	78	63
Indonesia	8	69	61
Thailand	141	175	34

F Health

1 Infant Mortality

If infant mortality is high to start with, say 75 per

1000 or more, then a reduction of around 3 per 1000 per year would be a reasonable standard until the rate is down to less than 30 per 1000. Such a decline can be taken as evidence of a reasonably effective rural health service.

Infant Mortality Per 1000 Live Births (1948-1966)

	<u>1948</u>	<u>1966</u>	<u>Change</u>
U S S R	81 0	26 1	-54 9
	56 6	20 2	-36 4
	78 3	36 7	-41 6
	114 4	72 9	-41 5
	109 0	66 5	-42 5
	136 1	82 4	-53 7
	147 0	107 1	-39 9
	32 0	23 7	-8 3

2 Medical Personnel

Effective medical services require a variety of different kinds of personnel. Hence ratios of nurses to doctors, medical technicians to doctors and something about midwives probably are a better indicator of progress in health than the ratio of doctors to the population, although this is commonly used (partly because it's an available statistic). Suggested ratios are 2 or 3 nurses to one doctor and 4 to 6 technicians to one doctor. Rates of progress require more research.

Number of People Per Doctor

	<u>1950's</u>	<u>1965</u>	<u>Change</u>
Israel	435	410	-25
Puerto Rico	2335	975	-1360
Egypt	4265	2370	-1895
Taiwan	2319	2510	+191
Turkey	3295	2860	-435
Iran	6640	3840	-2800
India	6395	5780	-515
Pakistan	34300	6200	-28100
Tunisia	6760	8990	+2230
Morocco	11370	12120	+750
Venezuela	2290	1300	-990
Peru	4210	1560	-2650
Chile	1900	2100	+200
Colombia	2740	2360	-380
Philippines	12300	1300	-11000
Thailand	7510	8820	+1300
Indonesia	75700	34800	-40900
U S A	760	675	-85

INDICATORS - ALLIANCE FOR PROGRESS

PER CAPITA GROWTH

Goal - 2 5% growth per capita per year

Indicators - GNP, total and per capita
GNP, Growth rates total and per capita
GNP, indexes total and per capita

Advantages of Indicators - Combines effect of production and population growth
Best single overall measure

Shortcomings of Indicators - Intercountry comparisons need adjustment for constant dollar exchange rates
Masks or omits other significant variables such as income distribution or rural-urban disparities

INCOME DISTRIBUTION

Goal - More equitable distribution to economic and social groups, with larger shares of benefits of progress going to needier sectors and investment

Indicators - Index of investment
Income distribution
Average earnings by sector (where available)
Social progress - life expectancy
- access to education
- agricultural productivity

Advantages of Indicators - Income distribution is best available quantitative indicator of general welfare
Relate to some of necessary policy measures for social progress

Shortcomings of Indicators - Standards of living affected by prices and social services, so

that inter-country comparisons
less meaningful than intra-
comparisons over time

TRADE DIVERSIFICATION

Goal - Make national income structures
increasingly free from depend-
ence on export of a few primary
products and on import of
capital goods
Stabilize export prices or income

Indicators - Composition of exports
Trends of GNP sectors
Indexes - production manufactured
exports

Advantages of Indicators - Like the income distribution,
supplement GNP as an indicator
of general development

Shortcomings of Indicators - Do not relate to price stability

INDUSTRIALIZATION

Goal - Accelerate rational industrializa-
tion to utilize natural
resources and provide employ-
ment, taking full advantage of
both public and private sectors

Indicators - Value added by manufacturing
Power production
Output of specific manufactures
Export of manufactures

Advantages of Indicators - Value added measures actual
contribution of processing,
while output figures may be
better for inter-country com-
parisons by eliminating
comparative price problems
Export of manufactures gives a
clue to their competitiveness
Power consumption is recognized
as a good general indicator of
industrial sophistication

Shortcomings of Indicators - Should be used in conjunction with other indicators for agriculture and education, since LDC's have often been tempted to over-emphasize investment in the visible aspects of modernity at the expense of general development

AGRICULTURE

Goals - Raise the level of agricultural output and productivity greatly
Improve related storage, transportation, and marketing services

Indicators - Central government agriculture expenditure -
index
% of GNP
% of total government expenditure
Total agriculture production -
aggregate value
index
per capita index
Total crop production -
aggregate value
index
Total food production -
aggregate value
index
per capita index
Agricultural schools - enrollment and graduates
Agricultural coops - numbers and members

Advantages of indicators - Production was considered best general comparable indicator because it tends to average out variations in individual crops, soils, weather, etc
Per capita indexes relate production growth to population growth
Expenditures show level of government interest

Shortcomings of indicators - Production does not necessarily indicate progress in technology as do F A O reports on yields per acre for many crops (although these figures must be compared over an extended time series to average out weather variations)
Production and needs do not always relate directly, since countries can or should import and export widely different proportions of their consumption and output

AGRARIAN REFORM

Goal - Comprehensive reform leading to effective transformation of unjust systems of land tenure and use so that, with timely and adequate credit, technical assistance and facilities for marketing and distribution, land becomes a basis of economic stability, welfare and dignity of man who works it

Shortcomings of possible indicators

- No uniform indicators possible
- Uniform figures not available

Reform consists of more than tenure
Credit and other supporting measures

EDUCATION

Goals - Eliminate adult illiteracy
Assure access to 6 years of primary education for each school age child by 1970
Modernize and expand vocational, technical, secondary and higher educational and training facilities
Strengthen capacity for basic and applied research
Provide the competent personnel required in rapidly growing societies

Indicators - Central government education expenditures -
 index
 % of GNP
 % of total government expenditures
 Primary schools -
 enrollment
 student teacher ratios
 teachers
 graduates
 classrooms constructed
 Secondary schools -
 student teacher ratios
 teachers
 graduates
 General secondary and higher schools - enrollment
 Teacher training institutions - teachers
 Teacher training institutions - graduates
 Higher schools - graduates
 Illiteracy

Advantages of Indicators - Generally relate directly to targets

Shortcomings of Indicators - Do not report on qualitative goals such as "modernize", "strengthen research capacity "

HEALTH

Goals - Increase life expectancy at birth by a minimum of 5 years and
 Increase ability to learn and produce by
 Providing public water and sewage disposal to 70% of urban and 50% of rural population
 Reducing mortality of children less than 5 years of age by one-half
 Controlling more serious communicable diseases
 Improving nutrition
 Improve basic health services

Train medical and health
personnel
Intensify health research

Indicators - Practicing physicians
Practicing nurses
Hospital beds
Life expectancy
Potable water availability
% of population provided with
sewage facilities
Death rates for major epidemic
diseases
Food calorie availabilities

Comment - General goal of increased ability
to learn and produce was
generally translated into
countable actions

GOVERNMENT REVENUES

Goals - Improve ability to collect
revenues needed to support other
goals
Improve equity of tax systems
Improve effectiveness of tax
systems in promoting development

Indicators - Domestic revenues - index
Domestic revenues - % of GNP
Tax revenues index
Central government tax revenues -
% of GNP
Central government tax revenues -
% of domestic revenues

Advantages of Indicators - Total revenue as a % of GNP is
probably the best single indica-
tor of country self-help,
although some non-tax revenue
may reflect entrepreneurial
activities of governments

Shortcomings of Indicators - Data on regional and local
revenues likely to be incomplete
Central government revenues may not
be useful for inter-country com-
parisons because of variations in
reliance on local governments

SUGGESTED "SOCIAL INDICATORS"I GeneralA Population Distribution

Knowledge of the spatial distribution of population is useful for many types of social, political and economic analysis. The reason for requesting a division of the population into rural vs various size urban categories instead of the more conventional urban-rural classification is to obtain some picture of the relative significance of urban communities of different size with different socio-economic functions: 1) market-towns (5,000 - 20,000) which can serve as centers of agro-industrial activity, 2) medium sized cities (more than 20,000) which serve as regional centers and can absorb much of the rural-urban migration, and 3) vast urban agglomerations to which villagers flock after leaving intermediate cities in which their integration is probably difficult.

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
a) Rural Population					
b) Towns of 5,000 - 20,000					
c) Intermediate Cities					
d) Major cities					

B Access to Education - Primary School Scholarization Rate

School attendance in relation to school-age population indicates how much of the population has access to education. Differential urban and rural rates are especially significant since the rural population generally has inferior access to education and similar services. Because education is so important a factor in social mobility, school attendance ratios (scholarization rates) may also serve as an indicator of social mobility.

If school enrollment and population data are broken down by urban and rural, as it is for some countries, differential urban and rural scholarization rates can be calculated. In the absence of such data it may be possible to make an estimate based on general knowledge of the availability of primary schools in rural areas.

Primary School Scholarization
 Number of grades
 Age at entrance to first grade

		<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
<u>NATIONAL</u>	1 Enrollment					
	2 School-Age Population (Age ___ to ___)					
	3 Scholarization Rate (1-2)					
<u>URBAN</u>	1 Enrollment					
	2 School-Age Population					
	3 Scholarization Rate (1-2)					
<u>RURAL</u>	1 Enrollment					
	2 School-Age Population					
	3 Scholarization Rate (1-2)					

C Distribution of Service Activities Telephones

The number of telephones in the major cities should be stated along with the total number in the country. The number of actual instruments is preferable to the number of telephone numbers listed in directories since it gives a better indication of telephone use, but if the former is not available the latter can be used. These data are presumably available at the telephone bureau (PTT) or company. The number of telephones per 100,000 of population is useful as a measure of the development of communications, but the purpose of this indicator is as a measure of the extent to which service activities (businesses, government offices, commercial agriculture, etc.) are geographically dispersed throughout the country or narrowly concentrated in one or two centers. The distribution of telephones is thus a proxy for the distribution of economic activity other than traditional agriculture and handicrafts.

		<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
	1 Number of Telephones (Total)					
	2 Number in Major City (Cities)					
	3 Number outside Major City (1-2)					
	4 Percentage Outside Major City (3-1)					

D Communications Newspaper Circulation

The circulation of newspapers expressed as the daily sales of newspapers per 1,000 of population gives an indication of what proportions of the population is participating in the national economic, social, political and cultural life. All newspapers, including local weeklies, can be included but it is presumed that the total circulation is preponderantly accounted for by metropolitan dailies and that this figure is relatively easy to get

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
1 Daily Newspaper Circulation					
2 Population (1,000)					
3 Circulation per 1,000 people (1-2)					

II Agricultural

The following are combinations of economic and social data and various indicators useable for evaluations in the agricultural field. National accounts information is assumed to be already available, both in the countries and in AID/W.

A Distribution of Land Ownership

The pattern of land ownership is closely tied to social structure and the distribution of power as well as to production. It is therefore important to know the existing situation and to have some understanding of the way it is evolving, i.e., toward greater concentration or greater equality. The pattern of land holdings may be described by size and by type of holding. Missions should use some recent year for which information is available. Repeating these data for five year intervals will show trends. The entries under column (1) "Hectares", may need to be revised depending on how the country groups farms by size. (One hectare = 2.47 acres)

Land Holdings Pattern, 19__

<u>Hectares</u>	<u>Land in Farms</u>	<u>Number of Farms</u>	<u>Average Size</u>
(1)	(000 hectares) (2)	(000) (3)	of Farms (2-3) (4)
0 - 2.4			
2.5 - 5.0			
5.0 - 9.9			
10.0 - 19.9			
20.0 - 49.9			
50.0 - 99.9			
100 & over			

Farmer - Land Relationship 19__

<u>Hectares</u>	<u>Owner</u>	<u>Tenant</u>	<u>Share-cropper</u>	<u>Landless Laborer</u>	<u>Other</u>	<u>Total</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0 - 2 4						
2 5 - 4 9						
5 0 - 9 9						
10 0 - 19 9						
20 0 - 49 9						
50 0 - 99 9						
100 & over						

B Access to Modern Farm Technology

The extent to which farmers are participating in the use of improved inputs is an important determinant of the rate at which the agricultural sector is able to modernize. Use of chemical fertilizers, on which data are relatively good, may be taken as a proxy for the whole range of improved inputs and practices. For this purpose the most useful indicator of fertilizer consumption is the proportion of cultivators (excluding farm laborers) using chemical fertilizers. If this is not available, annual consumption of chemical fertilizers (expressed as kilograms of plant nutrient, not bulk fertilizer) per hectare of cultivated land would be an acceptable alternative

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
1 Number of Cultivators (excluding farm laborers)					
2 Cultivators using chemical fertilizers					
3 Proportions using fertilizers (2-1)					

or

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
1 Annual Consumption of Chemical Fertilizers (M T of nutrient value)					
2 Cultivated area (1,000 hectares)					
3 Use of fertilizer per hectare (kg) (1-2)					

C Access to Agricultural Credit

Access to credit on reasonable terms is a major factor affecting the adoption by farmers of improved practices and purchased inputs. It is therefore important to know what

proportion of the agricultural population (cultivators, not farm laborers) has access to such credit

Distribution of Credit by Farm Size, 19__

<u>Hectares</u> (1)	<u>Number of Loans</u> (2)	<u>Total Value of Credit</u> (3)	<u>Average Value of Loans 3-2</u> (4)
0 - 2 4			
2 5 - 4 9			
5 0 - 9 9			
10 0 - 19 9			
20 0 - 49 9			
50 0 - 99 9			
100 & over			

Distribution of Loans by Source, 19__

<u>TOTAL, All Sources</u>	<u>Number of Loans</u>	<u>Total Value of Credit</u>	<u>Average Value of Loans 3 2</u>
---------------------------	----------------------------	----------------------------------	---------------------------------------

Government Agr Bank
Private Banks
Farmers Cooperatives
(incl Credit Unions)

Separate tables on this sort of information may be gathered for short, medium and long-term loans - the latter being those lasting more than twelve months

D Access of Farm Population to Markets

Farm to market roads make it possible for farmers to produce for an off-farm market and thus constitute a major determinant of whether they adopt improved practices. The possibility open to farmers of participating in the market can be gauged by the extent of the feeder or farm-to-market road system. Kilometers of farm-to-market roads usable throughout the year by motor vehicles (and kilometers of canals, if relevant) per square kilometer of cultivated land give a good measure of the extent of the transport system. The national highway system should be excluded, but if it is impossible to separate it out, use total road mileage

1960 1965 1970 1975 1980

- 1 Kilometers of feeder roads
- 2 Area cultivated (1,000 ha)
- 3 Roads/cultivated area (km/ha)
(1-2)

E Monetization of Agriculture

The relative sizes of the subsistence (or non-monetized) and the commercial (or monetized) sectors is an important indication of the extent to which farmers are participating in the national economic system and in the national life generally. This can be measured in terms of the share of total agricultural output produced in the subsistence sector or in terms of the proportion of cultivators working in the subsistence sector. (The two ratios will differ since productivity in the subsistence sector is lower than in the commercial one.)

1960 1965 1970 1975 1980

- 1 Gross value of agricultural output
- 2 Gross value of subsistence output
- 3 Share of subsistence sector (2-1)
- 4 Number of cultivators
- 5 Number of subsistence cultivators
- 6 Share of subsistence cultivators (5-4)

III Employment and Wages

A Structure of Employment Wage and Salary Earners

The size of the wage and salary earning component in the total economically active population reflects rationalization and institutionalization of economic activity. It can be used as an indicator of modernization. This group consists of those paid regularly by the week, month or year, such as the employees of government agencies, public or private business enterprises, commercial agriculture, and organizations dispensing professional and personal services. It does not include the self-employed (e.g., in agriculture, handicrafts, small shops or street-vending) or casual labor employed for short periods (e.g., migratory agricultural workers).

1960 1965 1970 1975 1980

- 1 Economically Active Population
- 2 Wage and Salary Earners
- 3 Ratio (2-1)

B Unemployment

Unemployment is a structural problem of modernization that may have economic, social, and political consequences if it rises steadily or is not alleviated over long periods of time. The number of unemployed is, of course, more meaningful if related to the total labor force as provided for in the table below. Since urban unemployment presents special

problems, provision is made in the table for presenting it separately in relation to the urban labor force

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
1 Unemployed					
(a) Urban unemployed					
2 Labor Force					
(a) Urban Labor Force					
3 Unemployed as proportion of Labor Force (1-2)					
(a) Urban unemployed as proportion of urban labor force (1a-2a)					

C Trend in Real Wages

The purpose of this measure is to ascertain whether the economic position of wage earners has improved or deteriorated, and how much. The average daily wage (for that portion of the labor force on which wage statistics are available) should be deflated by the index of the cost of living (or other appropriate deflator)

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
1 Money Wages					
2 Cost of living index (1960=100)					
3 Real Wages $100 \times (1-2)$					

D Unionization

The extent of unionization, as measured by the percentage of the wage earning population which belongs to a union, when taken with the activeness of the trade union movement, as measured by the number of workers engaged in strikes during a 12-month period, gives an indication of the degree of organized expression available to the wage-earning population. The data are more relevant when compared with real wage trends in III C above.

The membership data are presumably available from the trade unions. The wage earning population used as the denominator should (like the numerator) exclude agricultural workers and civil servants, but include employees of state enterprises.

The data on strike participation are simply an estimate of the number of workers who participated in strikes, not of man days (or years).

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
1	Number of Wage Earners				
2	Union Membership				
3	Union members as % of Wage Earners (2-1)				
4	Number of Workers Participating in Strikes				

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and
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Bernstein, Joel, REPORT TO THE ADMINISTRATOR ON IMPROVING AID's PROGRAM EVALUATION Feb 1968, 36 pp plus attachments AID/Washington, D C 20523 ARC ** Catalog No 353 1, B 531

Sections of this report are devoted to the meaning, purpose and rationale of program evaluation, motivational problems in getting evaluation carried out, a description of the proposed A I D evaluation system, and actions required to establish this system Attachment TAB A is titled "The Nature of AID's Assignment", TAB B "Linking Program Evaluation and Other AID Functions", and TAB C "What Would the Evaluation Functions of Various A I D Offices Be in the Proposed System?" There is also a summary of the principal general conclusions

Boston University, REPORT OF A I D PERSONNEL -- EVALUATION OF THEIR PERFORMANCE IN AFRICA PROBLEMS AND SUGGESTIONS Jan 10, 1968, 67 pp Prepared for AID/Washington by the African Studies Center, Boston University, Boston, Mass ARC Catalog No AFR 353 1, B 747

The Report contains information expressed by A I D personnel regarding their work in Africa and some of the frustration and difficulties encountered There is a summary of the recommendations made by those interviewed on ways of obtaining more effective performance Data were collected from 61 interviews conducted during the period of 1964 to 1966 Tables give a statistical summary of the replies to questions used in the survey

Elkinton, Charles M , SUMMARY REVIEW AND INTERPRETATION OF EVALUATION RESULTS FROM THE FIRST 100 PARs SUBMITTED BY NESA MISSIONS AND 321 PARs SUBMITTED WORLD-WIDE Draft, May 21, 1970, 9 pp , NESA, AID/Washington, ARC Catalog No 353 1, E 43

Report examines Project Appraisal Reports (PARs) and finds that A I D Missions have put a major effort into systematically assessing project achievements Project rate of progress and impact is noted Positive and negative aspects of host country performance, training and commodity elements are discussed Conclusions based on the analysis of the PARs are given

* Prepared by Reign S Hadsell, AID/Washington
** A I D Reference Center

Esman, Milton J , THE INSTITUTION BUILDING CONCEPTS - AN INTERIM APPRAISAL March 1967, 66 pp Prepared under an A I D Contract csd-763 by the Inter-University Research Program in Institution Building, Graduate School of Public and International Affairs, University of Pittsburgh, Pittsburgh, Pa 15213

Based on four field projects in Nigeria, Thailand, Ecuador, and Turkey, the author examines the points he believes are of primary importance in establishing a successful institution-building program The environment of an institution is studied to determine the factors which, if properly used, would serve to make a program of institutional development successful In his conclusion the author suggests 10 points which he feels should be used as guidelines by practitioners interested in institution-building theory

Fry Consultants, Inc , PROJECT EVALUATION AND THE PROJECT APPRAISAL REPORTING SYSTEM, July 1970 Prepared for AID/ Washington as final report in three volumes under Contract No AID/csd-2510 (Vol I, "Summary", Vol II, "Findings and Documentation", and Vol III, "The Implementation Package") by Fry Consultants, Inc , Washington, D C , ARC Catalog No 353 1, F 946

Includes material from a one-year study to improve techniques of evaluating non-capital projects sponsored by the U S Agency for International Development Study techniques included in-depth interviews of both AID/Washington and USAID Mission personnel overseas about technical assistance projects, preparation of Project Appraisal Reports and other means of evaluation Views of host country personnel were solicited where feasible Mission evaluation processes and uses of the PAR were characterized by recreating project reviews Recommendations include a simplified Project Appraisal Report designed to be more "useful" to USAID Mission management, a Project Evaluation Workbook for organizing material by a Mission Evaluation Officer, other project evaluation advisory material involving Mission procedures for review, and a suggested revision of the PAR Manual Order regarding implementation of an improved evaluation system within A I D

German Foundation for Developing Countries, METHODS AND PROCEDURES OF EVALUATION IN DEVELOPMENT AID Berlin Conference Report, Nov 18-22, 1966, 211 pp Deutsche Stiftung Fur Entwicklungsländer, 53 Bonn, Simrockstrasse 1, West Germany ARC Catalog No 309 223, G 373

Contains full transcripts of summaries or presentations on project and program evaluation methods used by nine international agencies and eight donor governments The reports

of six ad hoc working groups formed by the conference are included. These reports discuss the types of divisions within agencies handling evaluation, and present criteria for joint donor/recipient approaches to evaluation. Also considered are the means and methods of evaluating capital aid, training programs and the social impact of development aid. There is a 20-page bibliography.

Hayes, Samuel P., Jr., EVALUATING DEVELOPMENT PROJECTS
Technology and Society Series UNESCO Document Number
SS 65/V 17/A Second ed., revised 1966, 116 pp. United
Nations Educational, Scientific and Cultural Organization,
Place de Fontenoy, Paris 7e, France U.S. Sales Office
UNESCO Publications Center, P.O. Box 433, New York, N.Y.
10016 Price \$2.50 ARC Catalog No. 309 22072, H 418

This publication was first published in 1959 under the title, MEASURING THE RESULTS OF DEVELOPMENT PROJECTS. It suggests analytical techniques for measuring social and economic development projects to find out just how effective the projects have been. Describes steps which should be taken before project evaluation begins and identifies the kind of data which project evaluators need. Suggests ways to collect data and how to analyze and interpret them. An appendix provides a brief discussion of methods of sample selection, classifying, coding, tabulating and summarizing data. There is a three-page bibliography.

Higgins, Benjamin, "The Evaluation of Technical Assistance,"
INTERNATIONAL JOURNAL, Vol. XXV, No. 1, Winter 1969-70,
pp. 34-55. Canadian Institute of International Affairs,
31 Wellesley St. East, Toronto 284, Canada. Single copy
price \$2.00 U.S. Department of State Library No. I 638

The author, a professor of economics at the University of Montreal, draws on his experience with technical assistance missions in ten countries, and with two special evaluation missions for OECD and the UN in Greece and Libya, to outline what he considers to be the main problems of evaluating technical assistance programs. He lists certain basic requirements of the development process indicating that technical assistance is only one factor among many which are necessary for economic development. He describes certain common complaints advanced by donor and recipient governments about technical assistance. Suggests, in broad terms, some of the questions which need to be asked in evaluating such programs.

Higgins, Benjamin, Alexander Stavrianopoulos and Angus
Maddison, FOREIGN SKILLS AND TECHNICAL ASSISTANCE IN GREEK
DEVELOPMENT, 1966, 169 pp. Development Center of the
Organization for Economic Cooperation and Development

U S address OECD Publications Center, Suite 1305,
1750 Pennsylvania Ave , N W , Washington, D C 20006
Price \$3 50 U S Department of State Library No HC
295 M 24

The report is an appraisal of the technical assistance furnished Greece from bilateral and multilateral sources during the period roughly between 1954 and 1963. Consideration is given to high-level policy advisors as well as specialized technicians operating at the grassroots level. There is an examination of (1) the economic and social situation in Greece during the time covered, (2) the skills needed for rapid growth, (3) how foreign training supplemented Greek skills, (4) the channels of aid, (5) the role of different donors, and (6) the efficiency of technical assistance administration. One conclusion drawn was the importance of utilizing regional planning within the overall framework of technical assistance. Finally, the report considers how Greece, as a donor, has helped other developing countries.

Hubbell, Robert L , EFFECTIVE UTILIZATION OF FINDINGS OF EX POST EVALUATION FOR IMPROVING AID POLICIES AND TECHNIQUES 1970, 12 pp , Agency for International Development, Washington, D C 20523 ARC Catalog No 353 1, H 876

This paper, prepared for the O E C D Seminar on Ex-Post Evaluation held in Wassenaar, The Netherlands, October 28-30, 1970, describes the ways in which the U S Agency for International Development is using evaluation findings to improve understanding and communications, develop better performance, and sharpen the definition of goals and objectives. Details are given on the techniques used to transfer knowledge about evaluation findings and to utilize them effectively.

IBRD, PROJECT APPRAISAL 1962, 18 pp Industry Division, International Bank for Reconstruction and Development, 1818 H Street, N W , Washington, D C 20006 ARC Catalog No 338, I 61

Prepared for a seminar on industrial programming. Describes the techniques of project appraisal, the information required to permit an appraisal and the factors which are considered in appraisals made by the Bank. The information in this report should be useful to all who are engaged in planning for industrial development.

Jacoby, Neil H , AN EVALUATION OF U S ECONOMIC AID TO FREE CHINA, 1951-1965 A I D Discussion Paper No 11 January 1966, 99 pp Prepared under Contract to the Bureau for the Far East, AID/Washington, D C 20523 ARC Catalog No CH 309 223551249, J 17

The report is a comprehensive analysis of the U S aid program to Taiwan In the Preface, A I D Administrator Bell identifies the report as a milestone study which will be of use for years to come The author develops his own tests for deciding whether aid has or has not been useful Economics, social, and political development are discussed, and there is a summary of lessons learned relative to the U S foreign economic aid policy

Johnson, Frances B , EVALUATING AID DEVELOPMENT EFFORTS
DRAWING THE THREE DIMENSIONAL PROFILE March 7, 1966,
8 pp AID/Washington, D C 20523 ARC Catalog No 353 1,
J 66

A system is outlined by which A I D could measure the impact of its programs The importance not only of economic aspects but also of socio-political factors is pointed out A questionnaire is included which could be used as a basis for collecting data which would permit Agency officials to judge whether a country will experience material and social progress

Kerwin, Harry W , AN ANALYSIS AND EVALUATION OF THE PROGRAM
OF TECHNICAL ASSISTANCE TO EDUCATION CONDUCTED IN IRAN
BY THE GOVERNMENT OF THE UNITED STATES FROM 1952 TO 1962
1964, 285 pp A doctoral dissertation submitted to the
Graduate School of Education at American University,
Washington, D C ARC Catalog No IR 370 0955, K 41

The dissertation gives a detailed historical overview of practically all education programs in Iran and how they were supported by U S technical assistance efforts In the summary chapter the author evaluates the positive and negative factors affecting these programs These factors are divided into the following five categories personnel, economic, political, administrative and socio-cultural

Lefes, William S , AN ANALYSIS OF PARs FOR THE AFRICA REGION,
March 1970, 21 pp , AFR/DP, A I D , State Department,
Washington, D C 20523

This report presents an analysis of 99 PARs submitted to AID/W in FY '69 and early FY '70 Of the projects analyzed, 38 per cent are in agriculture, 20 per cent in education, 13 per cent in public administration, 9 per cent in training activities such as participant training and scholarships, 5 per cent in public health and population, and 15 per cent in miscellaneous activities The report concludes that 85 per cent of the projects examined are rated satisfactory Projects with university contracts tend to be rated highest achievers Projects which were "behind schedule" tend to be rated at the lowest level The average number of factors marked less than

satisfactory is highest for "Role of the Host Country" Implementing agencies were given high positive ratings for their technical knowledge, they were faulted in timely recruitment of qualified technicians The report contains six charts and eight tables

Legum, Colin (Ed), THE FIRST U N DEVELOPMENT DECADE AND ITS LESSONS FOR THE 1970s, 312 pp , Praeger Publishers, Inc , 111 Fourth Ave , New York, N Y 10003 Price \$15 00
U S Department of State Library No JX 1977 F 56

The publication was issued in cooperation with the Vienna Institute of Development It includes a review of technical assistance activities during the 1960s The role of both the developed and the developing countries are discussed Ten leaders concerned with economic development programs explain their views regarding technical assistance and some of the lessons which have been learned Other authors present their observations and comments The total input of ideas results in a variety of opinions regarding the best way to proceed with the development decade of the 1970s

Leonard, William R and others, CRITERIA AND METHODS OF EVALUATION PROBLEMS AND APPROACHES UNITAR Series No 1, 1969, 160 pp Institute of Training and Research, United Nations, New York, N Y ARC Catalog No 309 223, U 58b

This report is in two principal parts (a) planning and management of development projects and (b) the tools or methods for project evaluation analysis Aspects of evaluating economic development programs are reviewed Factors discussed include national implementing machinery, size and cost of programs, longevity of projects, regional projects, technical experts, and program planning There is a recommendation that a pre-condition of more purposeful program formulation and management be the retrieval of past experience In discussing methods of evaluation, topics such as planning and control, cost-benefits, and project relation to regional development are discussed A number of the program evaluation problems encountered in UN projects are identified and analyzed

Lincoln, George A , IMPROVING A I D PROGRAM EVALUATION, REPORT TO THE ADMINISTRATOR October 1965, 44 pp plus 16 annexes AID/Washington, D C 20523 ARC Catalog No 353 1, L 737

This report was prepared in part as a result of an expressed Congressional observation that "one of the most critical needs of the Agency is for more objective and effective evaluation of its programs and projects " The requirements of an evaluation system are examined and methods of analysis discussed Program evaluation is related to activities, objectives, and a time

frame A practicable approach to improving the A I D program evaluation is suggested Annexes include a summary of past and current efforts in evaluation

OECD, THE EVALUATION OF TECHNICAL ASSISTANCE Technical Assistance Evaluation Studies Series, 1969, 134 pp Organization for Economic Cooperation and Development, Paris U S address OECD, Publications Center, Suite 1305, 1750 Pennsylvania Avenue, N W , Washington, D C 20006 Price \$2 90, U S State Department Library No HC 60 064

This report is the first in a series based on lessons learned from the OEEC-OECD technical assistance program which has been in operation since 1969 Part I of this publication is a study of evaluation plus appended case studies prepared by the OECD Secretariat Sections are devoted to a discussion of the objectives, types, methods and limitations of evaluation Part II contains reports on technical assistance evaluation methods used by Sweden, the German Federal Republic and the United States Part III is comprised of statements regarding the OECD evaluation report made at the OECD Technical Cooperation Committee Meeting, November 8, 1968 A 14-page bibliography lists over 100 publications on evaluation from international agencies, participating OECD countries and non-governmental organizations

Opler, Morris E , SOCIAL ASPECTS OF TECHNICAL ASSISTANCE IN OPERATION Tensions and Technology Series UNESCO Document No SS 53 V 4A, April 1954, 79 pp United Nations Educational, Scientific and Cultural Organization, Paris, France Price 75 cents U S State Department Library No HC 60 063

This publication is based on a joint United Nations - UNESCO Conference held in March 1953 in New York City The objectives and nature of international technical assistance programs are discussed There is a review of the inter-relationship between economic and social factors, the importance of local administration and implementation, and the role of the technical expert One chapter is devoted entirely to criteria used to evaluate technical assistance programs and projects A four-page selected bibliography is included

Sen, A K , GENERAL CRITERIA OF INDUSTRIAL PROJECT EVALUATION U N Publication No CID/IPE/B 9, 1965, 39 pp Prepared for the United Nations Center for Industrial Development U N Publications, Room 1059 UN Building, New York, N Y , 10017 ARC Catalog No 338, S 474

Outlines methods of evaluating industrial projects to select

those most beneficial to the economic development of the country (India) Considers employment, foreign exchange earnings and other important factors in project evaluation

Solomon, Morris J , ANALYSIS OF PROJECTS FOR ECONOMIC GROWTH
1970, 499 pp Praeger Publishers, Inc , 111 Fourth Ave ,
New York, N Y 10004 Price \$17 50 State Department
Library No HD 82 S 625

Sets forth an operational system for the formulation, evaluation and implementation of economic development projects The author notes that projects can be analyzed for alternative methods of implementation, and these alternatives should be evaluated in terms of a country's total goals Chapters 4, 5, and 6 deal specifically with evaluation, citing tools to be employed and examining the relationship between project formulation and evaluation Broad use is made of statistical methods Examples of planning with the Program Evaluation Review Technique (PERT) are used

Spruyt, Dirk J , Francis B Elder, Simon D Messing, Mary K Wade, Brooks Ryder, Julius S Prince and Yohannes Tseghe, "Ethiopia's Health Program - Its Impact on Community Health," in the ETHIOPIAN MEDICAL JOURNAL, Vol 5, No 3, July 1967, 87 pp Ethiopian Medical Assn , Addis Ababa, Ethiopia ARC Catalog No ET 614 0963 E 84

The evaluation of public health services made in this report covers the six-year period from 1961 to 1967 Health conditions in three selected health center communities and three matched control communities were studied at the time the health center programs were being initiated and again three to four years later in order to measure program effectiveness The period between these baseline and resurvey studies was used to carry out several special studies including a functional analysis of each health center program An analysis of Health Service activities is made, diseases identified, health attitudes studied, and aspirations noted One of the authors notes that if a program is to improve there must be a critical and honest examination of mistakes as well as recognized successes As a result of this evaluation study, twelve specific recommendations for improvements in the Ethiopian health program are made

Thomas, D Woods, and Judith G Fender (Eds), PROCEEDINGS
CONFERENCE ON INSTITUTION BUILDING AND TECHNICAL
ASSISTANCE, Sponsored by the Agency for International
Development and the Committee on Institutional
Cooperation, Dec 4-5, 1969, 164 pp Committee on
Institutional Cooperation, 1603 Orrington Ave , Suite 790,
Evanston, Illinois 60201 ARC Catalog No 309 223 A 265K

Compilation of papers with general discussion of each presented at two-day Conference in Washington, D C Papers included cover the institution-building model developed by Milton Esman and its use in project planning and implementation, project review and maturity testing Theoretical concepts of institution building and their empirical application are given comprehensive treatment, and a number of useful approaches, including checklists, are offered as guides to evaluators of institutional progress

United Nations, APPRAISING AN INDUSTRIAL PROJECT IN INDIA U N Publication No CID/IPE/D 16, 1965, 15 pp Prepared for the United Nations Center for Industrial Development U N Publications, Room 1059, United Nations Building, New York, N Y 10017 ARC Catalog No IN 332 66, I 42

Describes India's system of planning for economic development through industrial programming and industrial bank operations Outlines appraisal procedures and methods of evaluating projects

United Nations, EVALUATION OF PROGRAMMES OF TECHNICAL CO-OPERATION, AGENDA ITEM 15 Document E/4151, May 3, 1966, 92 pp Report of the Secretary General of the Economic and Social Council, United Nations, New York, N Y ARC Catalog No 309 223, U 58c

This report is in response to a resolution of the UN Economic and Social Council calling for a systematic and objective evaluation of the impact and effectiveness of technical cooperation carried out by the United Nations family of organizations Addenda 1-3 of this report reproduce the intensive country evaluation studies carried out in Thailand, Chile and Tunis The report of the Secretary General summarizes the scope and method of the country studies and his findings, observations and recommendations based on them The country reports provide information on the deficiencies and shortcomings as well as the successes of technical cooperation programs Various methods and standards are reviewed by which objective evaluative judgments can be made It is pointed out that program evaluation will contribute to increased project effectiveness, provide perspective for future programs and assist in the formulation of essential standards for the evaluation process

United Nations, INDUSTRIAL PLANNING Monograph No 17, U N Sales No E 69 II B 39, Vol 17, 1969, 95 pp United Nations Industrial Development Organization, Vienna, Austria U S Sales Office United Nations Publications, Room 1059, United Nations Building, New York, N Y 10017 ARC Catalog No 338, U 58d

This Monograph is based on the Proceedings of the International Symposium on Industrial Development held in Athens, Greece during November and December 1967. One section of the report deals with the evaluation of industrial projects.

United Nations, PRIORITY CRITERIA IN PROJECT EVALUATION U N Publication No E/CN 14/ASIII/2/1, 1966, 9 pp Economic Commission for Africa and Center for Industrial Development U N Publications, Room 1059, U N Building, New York, N Y 10017 ARC Catalog No 338, U 58

An investigation of techniques for use in establishing priorities for new industrial projects with special emphasis on developing countries.

United Nations, REPORT OF INTERREGIONAL SYMPOSIUM ON INDUSTRIAL PROJECT EVALUATION U N Publication Sales No 66 II B 11, 1966, 92 pp U N Center for Industrial Development U S Sales Office United Nations Publications, Room 1059, United Nations Building, New York, N Y 10017 ARC Catalog No 338 6, U 58

The report includes the proceedings of the Symposium which was held 11 to 29 October 1965 in Prague, Czechoslovakia. Participants came from thirty developing countries and there were many observers from other countries. The criteria and methods of industrial project evaluation are examined and case studies are cited for illustration. Different organizational frameworks for project evaluation are discussed and general conclusions and specific recommendations for improving project evaluation are made.

USAID/VIENTIANE, LAOS, EVALUATION, JOINT RLG/USAID ACCELERATED RICE PRODUCTION PROGRAM 1967 - 1969 November 1969, 203 pp Agriculture Division, AID/Vientiane, Laos ARC Catalog No LS 633 18, U 58

This in-depth study covering three years of effort to increase rice production in Laos points up the importance of joint host government - U S cooperation in project evaluation. Seventeen points in project development are identified, and there is listed a group of actions considered necessary to further increase aid effectiveness. Country background data are given. The project goals and program are discussed and a statistical base for program evaluation is outlined. The use of aerial photography for a land-use inventory is suggested.

U S Department of State, A I D , REPORT ON PROJECT MANAGEMENT PROBLEMS Nov 1969, 38 pp AID/Washington, D C 20523 ARC Catalog No 353 1, H 541

A staff report prepared for A I D management by a special study group composed of representatives from the Regional Bureaus and the Auditor General. The study was based on in-depth interviews of 106 A I D project managers, and other supervisory U S officials in eight recipient countries. The study teams developed 16 specific findings. For each of these, they present a brief discussion and a series of recommendations designed to improve A I D project management systems and overcome the problems revealed by the survey.