REPORT COVER
GAO-348 (July 68)

NEEDED IMPROVEMENTS IN THE INFORMATION SYSTEM FOR TECHNICAL ASSISTANCE PROJECTS

Agency for International Development

UNITED STATES
GENERAL ACCOUNTING OFFICE

MAY 3 - 1972
(Date)

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

INTERNATIONAL DIVISION

Dear Mr. Birnbaum:

The attachments to this letter summarize the results of our review of the Agency for International Development's information system for technical assistance projects. Our findings were discussed with officials of your Bureau and their informal views were considered in the preparation of the attachments.

Our review focused on (1) the extent to which reports on previous technical assistance projects were useful to AID and contract technicians who implement new technical assistance projects and (2) the effectiveness of AID's system for collecting, identifying, and disseminating technical information obtained in carrying out projects. With respect to the second objective, we concentrated our efforts on the operation of the Agency's central repository for such documentation, the AID Reference Center (ARC).

Technical assistance has been a key component of U.S. foreign aid since 1942. In recent years, technical assistance provided by AID has exceeded $350 million per year. From 1961 to June 30, 1970, the cost of technical assistance was more than $5.7 billion. As of June 30, 1970, there were over 1,800 on-going technical assistance projects and nearly 4,700 completed projects.

Technical assistance helps less-developed countries acquire, modify, and generate the knowledge, skills, and institutions they require for development. It usually takes the form of providing the services of professional and technical organizations and people to less-developed countries.

The success of technical assistance will be enhanced if new projects can benefit from the experience of previous projects. The extent of potential benefits will depend upon the usefulness of the information generated and the efficiency of the system which AID has for making available to technicians and others working on technical assistance projects the accumulated experience of the Agency in areas similar to those in which they are involved.

AID requires that information useful to AID and contract technicians be generated as part of the regular project reporting system. However, we found that little information of this type was actually generated.

AID appears to have made the beginning efforts to centralize technical assistance projects materials and other AID and non-AID development materials for the purpose of making information more readily available to AID personnel and others through the creation of the Reference Center. However, we found that ARC's collection of technical assistance reports dealing with the substance of projects was generally inadequate, identification of ARC materials by means of bibliographies was insufficient, and dissemination of bibliographies has been limited. We also found that there were no organized efforts to disseminate project technical assistance materials to or among the missions.

Accordingly, we are suggesting that the Assistant Administrator, Bureau for Program and Policy Coordination, AID:

1. take appropriate action to insure that the authors of required technical assistance project documentation include a technology transfer description of the processes, methods, and procedures used to achieve programs and/or project results in addition to the usual descriptions citing accomplishments. Possibly, restructuring of one or more of the existing program and project documents could serve to make it a more effective instrument for transferring technological information. Alternatively, an entirely new report could be considered to replace one or more of those in existence,

2. require that copies of evaluation and technology transfer documents, such as feasibility studies and unscheduled special studies, for new projects be forwarded to the ARC, and that existing documents for ongoing projects in the files of various bureaus of AID be evaluated and forwarded to the ARC if their quality is such that they would be of value as technology transfer documents,

3. increase the bibliographic coverage of technical assistance projects, keeping in mind possible merging of such activity with AID-contracted study proposals recommending periodic indexed accession listings, and

4. make efforts to assure that mission and contract personnel receive copies of bibliographies.

Copies of this letter and attachments are being sent to the Administrator, AID, and to the Foreign Operations and Government Information Subcommittee, House Committee on Government Operations.

We shall appreciate receiving your advice on any actions taken or planned relative to the foregoing. We shall be happy to discuss these matters with you or members of your staff at your convenience.

We would like to express our appreciation for the cooperation and assistance furnished to us by the Agency for International Development during this review.

Sincerely yours,

J. E. Milgate
Associate Director

Attachments

Mr. Philip Birnbaum, Assistant Administrator
Bureau for Program and Policy Coordination
Agency for International Development

ATTACHMENTS

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AID'S REFERENCE CENTER

The AID Reference Center (ARC), also called the AID Memory Bank, came into existence in January 1967 following various studies which found that AID lacked a focal point for collecting its experiences. For example, a 1965 management study concluded:

> "It has often been said that AID has an inadequate memory. Evaluation reports on projects in process or completed are scarce, and what has been done tends to go into files and disappear. Moreover, files become incomplete and their contents lost over the years."

The functions of ARC are to collect documentation of past AID and predecessor experience, receive current documentation from AID sources and help AID officials in securing needed information and documents from AID and other sources. One of ARC's high priorities is to collect "evaluative" documents and make them available throughout AID and to other interested agencies and persons. Evaluative documents are defined by ARC as appraisals of AID experiences for the purpose of providing guidance which can be used for improving program planning and execution. Such documents generally comment on an activity from the point of view of its effectiveness, efficiency or program significance.

ARC contained about 100,000 documents at the time of our review. These cover (1) surveys, studies, published and unpublished reports, and journal articles, (2) Agency program and project documents, (3) end-of-tour reports, (4) classified Agency materials on administrative and program matters, (5) other materials bearing on Agency objectives and programs, (6) materials on individual LDC's, (7) materials of

international organizations, institutions and foundations on development, and(8) bibliographies on various aspects of foreign aid. ARC also maintained a central file of key documents on active technical assistance projects. AID-designated key documents are those required for project planning, implementation, and evaluation as noted in items one through four, pages 3 and 4.

INFORMATION GENERATION

A variety of documents and reports are usually generated for the typical AID technical assistance project. The documents and reports are commonly known as AID memory, and include project agreements, project paper, project implementation plan, and project appraisal reports, as well as progress reports, final or terminal reports, end-of-tour reports, and special studies. A brief description of each follows, including relevant AID policies and direction on their preparation and content:

1. Project Agreement (PROAG) is the document between the U.S. and the cooperating country reflecting the commitments and targets agreed upon. The narrative describes results to be achieved and the nature of the action and responsibilities of each party concerned with the implementing actions.
2. Project Paper (PROP) is an analytical life-of-project document which (1) describes the situation and environment within which the project is undertaken, (2) identifies contributions to objectives, (3) defines planned targets, results and outputs, and (4) sets forth the general plan of action.
3. Project Implementation Plan (PIP) translates the Project Paper into a detailed plan of action in a framework useable for subsequent evaluation. It is primarily a mission tool to facilitate planning, implementation, review and evaluation.

4. The Project Appraisal Report (PAR) is intended to briefly document for AID/Washington that missions have annually applied the Agency's prescribed evaluation system to all technical assistance projects. The PAR summarizes the results of evaluating actual performance during the past year against a project's goal, purpose, inputs and outputs. It also lists the actions which mission evaluation has concluded are needed to improve project performance, assigns an action agent (or agents), and schedules completion dates for the actions.
5. Progress reports set forth the status of implementation of the project. They may also indicate plans for the ensuing period, current problems, and recommendations.
6. Final or terminal reports summarize project accomplishments, methods of work, and recommendations regarding unfinished work or program continuation.
7. End-of-tour reports are for the purpose of transferring the personal knowledge of the individual about differences between U.S. and local practices which have caused problems, the adaptation of U.S. practices which have been more or less successfully tried, and suggestions for future activities. Field employees are encouraged to submit end-of-tour reports on an optional basis to fill the gap between project documentation and their personal experiences gained, particularly

in the case where the employee or his supervisors feel that his experiences include successes or failures from which the Agency can learn to improve its policy and operations and which should be preserved for technical and professional reference use. A suggested check list includes elements such as (1) purpose, (2) methods, procedures and standards used, (3) organization and institutions involved, (4) human resource factors, and (5) material resource factors.

8. Special Studies include feasibility studies, unscheduled special reports, special evaluation studies, and analytical reports on development assistance problems and issues. Special studies may be initiated by either field missions or AID/Washington offices and generally address subjects and problems with broad application to AID policies and operational methodologies in one or more fields of specialization.

The purpose of most of these documents and reports is to enable AID management personnel to plan, implement, monitor and appraise technical assistance projects. From discussion with AID officials, we learned that the most useful documents and reports for AID and contract technicians implementing technical assistance projects are those which combine a description of the process or methods used to achieve these results. We will refer to reports containing these two elements as "technology transfer" documents.

During our field work in eight countries (Colombia, Costa Rica, Ethiopia, India, Kenya, Panama, Philippines, and Tanzania) we discussed the usefulness of existing technical assistance project documents as well as the type of information that would be most useful to AID technicians and also to host country technicians. We met with over 200 AID and 50 host country officials, technicians and advisors.

Eight-four (84) percent of AID personnel interviewed stated that they do not generally receive useable information on projects similar to their own and 90 percent indicated that technology transfer documents on other AID projects would be beneficial to them in carrying out their own projects.

Host country personnel responses were similar. Seventy-seven (77) percent of the host country officials, technicians and advisors interviewed indicated that they do not receive technology transfer documents on technical assistance projects and 86 percent stated that such documents would be helpful to them or to others working on similar projects in their country.

Comments made by AID personnel interviewed regarding efforts to produce useful information from technical assistance projects included the following:

1. Technical reports of the type that would be useful to another technician are prepared "more by chance than design."
2. End-of-tour reports are written hurriedly and without guidance. They are something to be done before leaving an assignment, like turning in your keys.
3. The system for capturing, editing, and distributing good documentation is weak. More needs to be done to segregate useful from less useful material--to make available and more easily accessable quality documentation.
4. Most AID reports are merely justifications and are not designed to communicate technical know-how.
5. While the quantity of information can be measured in yards, field technicians are starved for useful technical documents.
6. The present information is usually in-house oriented for AID guidance. AID's reporting requirements are managerial tools for monitoring projects.
7. Use of technical documentation oriented to the technician or project manager and including the operational aspects of the activity would serve to make U.S. assistance more effective.

8. Some technical assistance needs may be as satisfactorily met by supplying the right technical information at the right time to the right user as by assigning a technician.

9. A system to provide cross-fertilization of ideas between technicians and advisors within the various countries as well as between the developing countries is needed.

10. A good technical information system would "spark ideas".

A July 1970 contractor's report to AID by Fry Consultants Incorporated, whose responsibility was to appraise AID's evaluation system and to suggest modifications (most of their modifications were adopted), commented:

> "After more than twenty years of technical assistance to less developed countries (LDCs), AID is, and should be, sensitive about criticism that its projects are not well managed. Observers inside and outside of the Agency have noted the lack of lateral transfer of experience from one project to another. The Fry Consultants noted that they themselves were becoming an informal communications channel, carrying information about what was going on in other Missions--information that had transfer value but for which there was no normal channel.
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> "The defense for current practice has been that the heterogeneity of technical assistance projects severely limits transfer value. Projects are distributed in a variety of cultures and economic sectors. Varied types of assistance are offered (advisors, training, commodities). And, after all, economic development is still an art rather than a science.
>
> "Yet the fact is that there are strong family resemblances among the projects supported by AID, and many projects could profit from sharing experience. Lack of information about similar projects does not automatically result in project failure. However, it does omit the options recognized by Mission management, and restricts the evidence available for making important decisions. In the best situations, people within the Mission or on AID/W supporting staff supply the required alternatives and evidence from their personal experience; too often decisions are improvised based on the intuition and insight of the men on the firing line. Improvisation is unavoidable in some situations--systematic management is superior when it can be used."

Based on the above, we conclude that only a nominal number of documents useful to technicians charged with the responsibility of implementing technical assistance projects are produced.

COLLECTION, IDENTIFICATION AND DISSEMINATION

COLLECTION

Each of AID's regional bureaus and the Technical Assistance Bureau are responsible for maintaining project files containing the reports and other documents, as described in Attachment II, generated for technical assistance projects. As already indicated, the ARC is the central repository of such project materials.

The key project documents are usually prepared by the AID project manager and/or staff. Other technical assistance reports dealing with more descriptive and informative aspects of the project, such as progress reports, final or terminal reports and special studies, are usually prepared by private contractors, other government personnel from participating agencies, and responsible AID personnel.

Based on our review, we believe that the ARC has obtained a good collection of key documents. On the other hand, its collection of documents dealing with more descriptive and informative aspects of AID technical assistance projects was limited. In our opinion, these "substantive" reports are the core of the "evaluative" documents--the collecting of which ARC regards as top priority.

These conclusions are mainly based on our review and comparison of more than 700 documents available in the ARC with those maintained in bureau project files for 52 technical assistance projects, selected by AID as constituting the Agency's most successful projects. Our comparison

of planning, implementation, and evaluation documents (key documents) showed that for 38 of the 52 projects, the ARC had most such documents. For the remaining 14 projects, there were no planning, implementation and evaluation documents in the ARC -- seven of these 14 projects were completed before the ARC came into existence.

Our comparison of substantive reports for the same 52 projects showed that (1) for only four projects did ARC coverage of reports dealing with the substance of the project appear adequate, (2) for 21 projects there were no reports in the ARC dealing with the substance of the project, and (3) for the remaining 27 projects, there were some reports in the ARC dealing with the substance of the project but the coverage was not adequately representative of those in the bureau project file.

The relatively good performance with respect to project planning, implementation and evaluation documents was due to the fact that such documents have been required to be forwarded to ARC since early 1969 and ARC has made special efforts to obtain the documents for current projects as well as ones initiated in prior years. Forwarding of reports prepared by private contractors to ARC has been required only for projects initiated since May 1970. Participating Agency Service Agreement reports - progress, completion-of-service, and end-of-tour reports - were not sent to the ARC but were directed to be sent to AID's Office of Procurement, Participating Agency Staff. In addition to these directives, we noted in the AID Evaluation Handbook (guidance to AID

personnel in evaluating AID technical assistance and other non-capital programs and projects) that special nonscheduled evaluations, often considered among the most valuable resources, may not get to the ARC unless originating officers remember to send them. While the above noted instructions exist, awareness of the content of such instructions by AID personnel was notably lacking during our review.

In a separate review, unrelated to the above comparison on the 52 projects documentation, we also reviewed final project appraisal reports (PAR's), end-of-tour reports by AID technicians who had completed project assignments, and final or terminal contractor reports to determine whether these reports could be considered technology transfer documents. AID's manual orders covering these reports (see pages 3 and 4) suggest or require that they include technology transfer information. In the case of final or terminal reports, such information is required only in summary form as is the final PAR. The submission of an end-of-tour report is optional.

We examined 50 end-of-tour reports, 20 final PAR's[1] and 50 final or terminal contractor reports. We found that only 14 reports (3 end-of-tour and 11 final or terminal contractor reports) of the 120 reviewed could be considered technology transfer documents.

A major reason for the poor performance of final PAR's in the above review was that the reporting format was the same as for ordinary PAR's. The November 1970 revised format was too brief and it did not provide space for any in-depth narrative. Thus, there was no effective provision made for discussion of the techniques employed on the project.

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[1] All final PAR's submitted since the requirement was added to the AID Manual Order in November 1970, were reviewed.

According to AID officials, recent emphasis on the evaluation system as a mission-useful process and the consequent change in purpose and reduction in size of the PAR have made it less appropriate for describing "in detail what happened and also why and how it happened." AID told us that possible structuring of a final PAR to provide for indepth treatment of project results was being considered along with alternative reporting means.

In regard to contractor reporting requirements, AID officials also pointed out that regulations require the contractor to submit "copies of a final report which summarizes the accomplishments of the assignment, methods of work used and recommendations regarding unfinished work and/or program continuation." While these instructions may be interpreted as conducive to technology transfer information, they are not necessarily sufficiently detailed to assure compliance with the results desired. For the purpose of technology transfer, AID considered it may be advisable to structure the requirements to call forward the kind of description and analysis desired for technology transfer.

IDENTIFICATION

The ARC maintained project documents in files classified by country and project number. Other historical, evaluative materials were generally cataloged by country, subject, contract number (where printed), author, source and title.

AID's Washington employees may obtain documents from the ARC by means of a card catalog, by using the central file of key documents on

current technical assistance projects, by browsing through the uncataloged collection or through use of subject bibliographies. Knowledge of ARC documents by overseas personnel, however, was mainly limited to what was listed in the bibliographies. Requests for documents from overseas personnel were handled by regional bureau backstop personnel who obtained copies of ARC documents or reports and mailed them to the mission personnel. ARC personnel indicated that the selected subject bibliographies were also an important way of identifying ARC material even for Washington personnel.

The bibliographies are compiled by technical specialists based primarily on a review of AID reports and documents identifying beneficial material in relevant subject areas. The bibliographies cover not only AID reports and documents but also available non-AID materials on the subject.

We found that although AID efforts to identify ARC materials by bibliographies have progressed, the coverage of technical assistance projects was still limited. For many subjects, there have not been any bibliographies published. Comparison of published bibliographies with AID's list of categories of technical assistance projects showed that no bibliographies have been published for 60 of the 78 listed categories. These 60 categories as of June 30, 1970, include 1,373 projects and represented about 75 percent of AID's total active technical assistance projects with cumulative obligations of more than $2.4 billion.

A February 1971 study contracted to the National Archives and Records Service of the General Services Administration by the AID Reports and Documents Task Force also found that lack of an adequate identification system results in AID documents remaining known only to the originating office even though they are of interest or significance to others. This study, under review by AID's new Agency-wide Informations System and Requirements Committee, is in consonance with one of the recommendations of another report ("Management Information Requirements for Future U.S. Technical Assistance", July 16, 1971) and proposes the incremental development of an overall reports and documents system which will start with the initiation of a computerized ARC accession lists on a quarterly basis in book-catalog form with subject, author, and project number indexes. Within such recommended computerized system, preparation of the present type selected subject bibliographies would have a place but not a major role or emphasis according to AID.