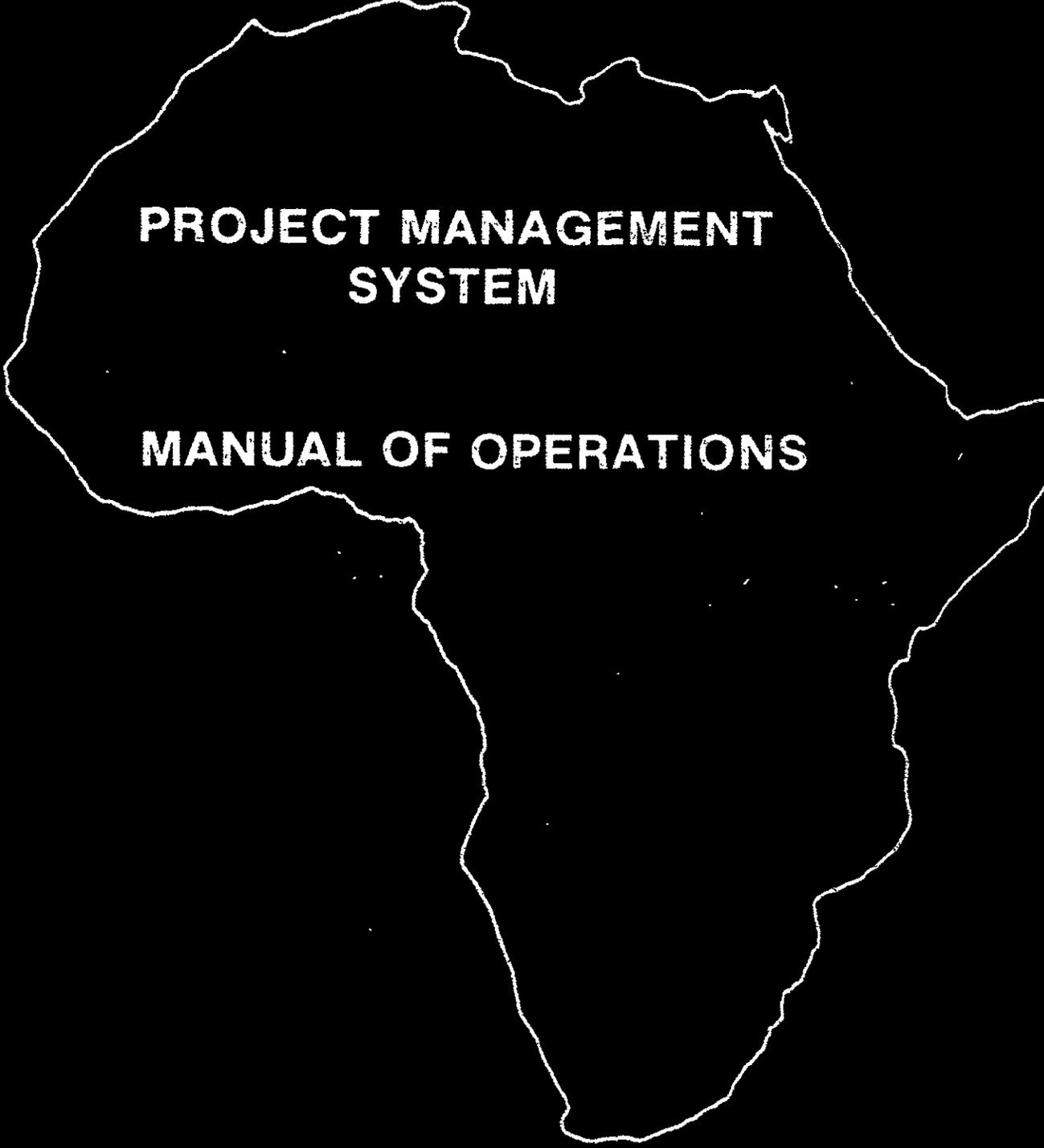


**AFRICA BUREAU  
AGENCY FOR INTERNATIONAL DEVELOPMENT**



**PROJECT MANAGEMENT  
SYSTEM**

**MANUAL OF OPERATIONS**

**— FINAL REPORT —**

**MAY, 1976**

THE AFRICA BUREAU PROJECT MANAGEMENT SYSTEM

MANUAL OF OPERATIONS

Phase II Final Report

Volume II

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Presented by:

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# Preface

Under contract to the Agency for International Development's Africa Bureau, Practical Concepts Incorporated (PCI) developed and tested, on a limited basis, a management information system that was designed to meet that Bureau's needs for information on project performance.

The Project Management System (PMS) design, prepared under an Indefinite Quantity Contract (AID/CM-otr-C-200), Work Order #9, was presented to the Bureau in February, 1975, in a two volume report entitled: "An Integrated Management Information System for the African Bureau", Phase I, Final Report. As a part of the system design activity, PCI demonstrated the applicability of the basic system concepts to four Bureau projects supported by the Regional Economic Development Services Officer for West Africa (REDSO/WA).

In a second phase of the contract effort, PCI further tested the PMS approaches in nine (9) West African Field Offices of the Bureau. The findings of these tests, which considered the PMS approaches, as well as the Agency-wide requirement to install a Project Performance Tracking (PPT) system, were reported to the Bureau in November, 1975, in a draft volume entitled: The Africa Bureau Project Management System: Field Test Results and a System Implementation Plan, Phase II Final Report, Volume I.

The present volume is PCI's final report on the PMS engagement. This report takes the form of a manual of operations that codified the PMS approach, and provides guidance material for the Bureau. The Bureau

intends that the Manual of Operations provide guidance to Bureau offices as they install and use the PMS.

Practical Concepts Incorporated wishes to thank the Bureau Officers' who worked with its project team in developing and testing the PMS concepts. Project Officers and the Directors of Bureau Field Offices in Senegal, Liberia, Mali, Chad, Upper Volta, Dahomey, Ivory Coast, Cameroun, Niger, and in the REDSO/WA offices provided a broad range of project efforts that served as tests of the applicability of the PMS concepts. PCI would also like to thank Mr. James Meenan of the Bureau's Office of Development Resources, who served as technical monitor for the effort, and whose concern for the development of the system has been both substantive and supportive.

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# **Introduction**

## A. SCOPE AND APPLICABILITY

This document is the Manual of Operations for the Africa Bureau Project Management System (PMS). The PMS defined in this Manual of Operations is applicable to all Africa Bureau offices that bear responsibility for the management of Bureau supported development projects.

The Africa Bureau takes responsibility for the planning and management of development programs and projects in and/or for the African nations. The Bureau maintains Country Development Offices, Regional Development Offices, Regional Economic Development Service Organizations, and USAID Missions on the African continent, as well as planning and support offices in Washington. Through delegation of its authority, the Bureau extends management responsibility for development projects to:

- ° Directors of Bureau field offices who bear the responsibility for the development of programs and/or specific projects in an African region or country;
- ° Individual Agency officers who bear the responsibility for day-to-day management of Bureau projects, including the management of such grantees or contractors as may be associated with the project;

- Washington offices that bear the responsibility for approval and support of development projects in and/or for regions or countries in Africa.

The PMS described in this Manual of Operations applies to loan and grant funded projects undertaken by the Bureau.

#### B. SYSTEM OBJECTIVES

The objective of the Africa Bureau in installing the PMS is to establish performance-oriented project management and reporting as standard practice in the Bureau.

The objective of any management information system is to provide the right information to the right individual at the right time. The right information is that required by managers to effectively fulfill their responsibilities. The right individuals served by the PMS are those that bear responsibilities for project management and for monitoring the effectiveness of project managers. The right time presumes identification of potential problems sufficiently early that options can be intelligently assessed, and the best decision reached in time for action to be taken as necessary.

The PMS is a user-oriented management information system. It provides the basis for an effective management information flow through an approach to project design, approval, and implementation that focuses on project performance. PMS reporting draws on the performance specifications laid forth in project design to define project-unique reporting requirements. Thus the system is flexible and responds to project performance needs rather than only to administrative or budget cycle constraints.

Through installation of the PMS the Africa Bureau intends that:

- There be a clear and obvious change in the quality of Bureau project designs and project implementation plans;
- Project reporting both within Field Offices, and between these Field Offices and the Bureau be focused on project performance, both in terms of management and as related to development impact;
- Project Officers, Field Office Directors, and Bureau personnel in Washington have available the information required to fulfill their management and reporting responsibilities;
- Problems in project implementation are successively raised to higher management levels until resolved;
- All of the above result in important, measurable, development impact.

To achieve these Bureau objectives the PMS has been designed to be readily adaptable to the variety of Field Office management arrangements developed by the Bureau.

C. OVERVIEW OF THE SYSTEM

The Africa Bureau PMS applies practical management concepts to define an integrated approach for project planning and project reporting in the Bureau.

Two concepts are central to the integrated approach provided by the PMS:

- Performance reporting focuses on actual project performance in relation to project plans;
- Successively higher levels of management require information on project performance, but at different levels of detail.

The PMS focuses on a streamlined approach for project reporting within the Bureau. Fundamental to the development of efficient project communications is a shared view of the project -- its design, its financial, implementation and evaluation plans, and its performance targets...at all levels.

The PMS views the design phase of a project as a continuous flow. Bureau and Agency submissions required during the design phase are considered to be successively refined statements of the project design.

During project design, five PMS products are produced that assist the responsible Project Officer in completing the submission requirements attendant to project authorization as defined in Handbook #3: Project Assistance. The five basic PMS products created in the project design phase are:

- a. A project design developed and summarized using the Logical Framework approach;
- b. Project Networks that express at an operational level the sequence and timing in the project design and include performance indicators for key events;
- c. Summary field-to-Washington reporting network showing critical performance indicators (CPI Network);
- d. A Financial Management Plan that defines the project's budget, obligations, and projected expenditures by output over time;
- e. The outline of a project Evaluation Plan that identifies critical points for measuring project performance and significance in light of major project decision points;

The PMS reporting approach records actual versus planned project performance. At successive management levels, each PMS user monitors project performance and receives reports on preselected project events, (see Figure I-1) maintains information for backup and reference, and reports upward on the events monitored by the next higher level of management.

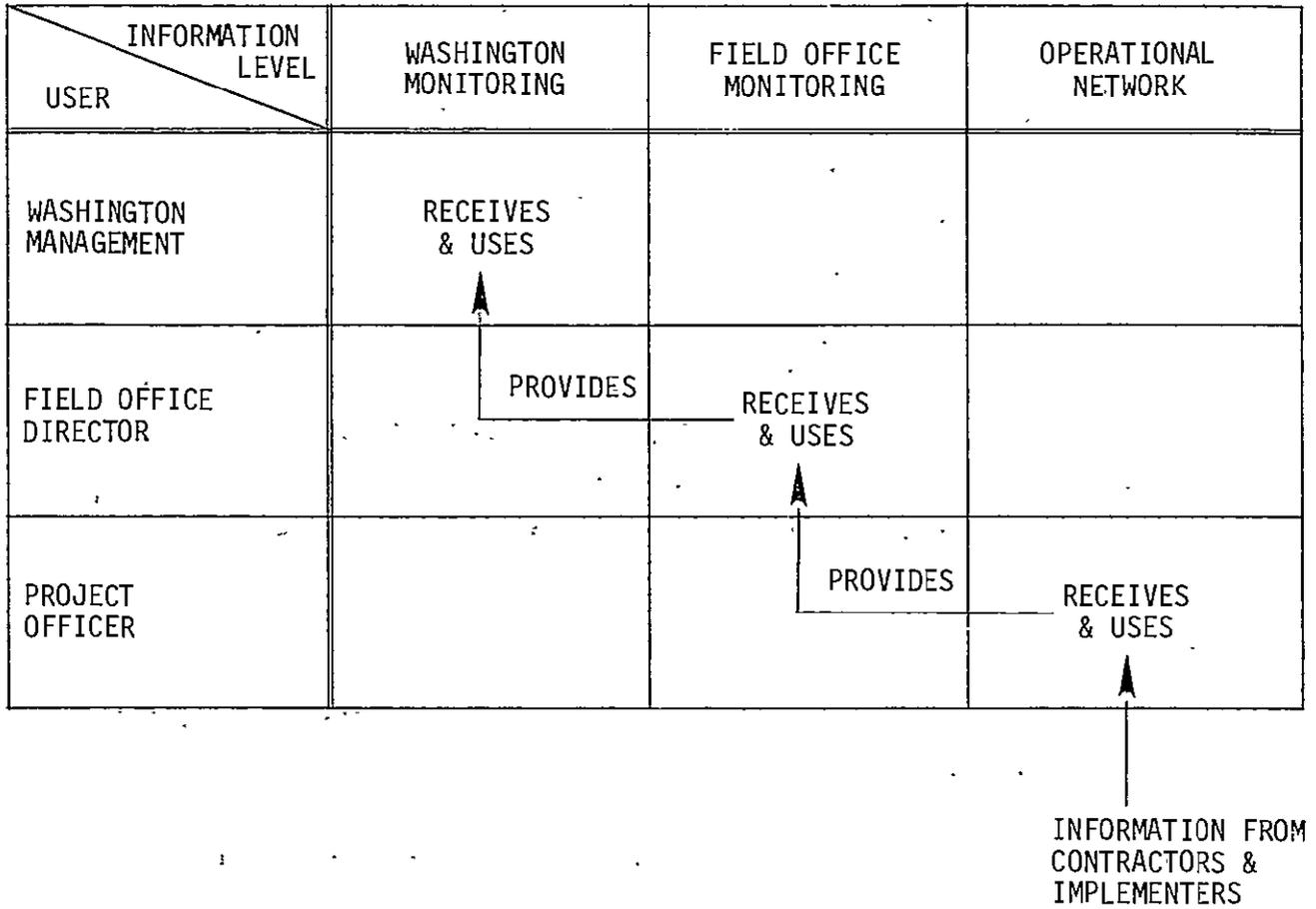


Figure I-1: SYSTEM USERS AND INFORMATION LEVELS

Reporting under the PMS may be one of two types:

1. Positive Reporting: Confirms that key events are progressing as planned;
2. Exception Reporting: Assumes key events are progressing as planned unless otherwise informed.

Each Field Office, with Bureau concurrence, will select a reporting basis for its projects. Using a Positive Reporting Basis, Achievement Reports will be provided on pre-defined key project events through the life of the project. Under an Exception Reporting basis, management reports will be provided only when key events are jeopardized.

Projects selected for Positive Reporting will report performance of each key event within the total project as of the date it is achieved. The report is called an Achievement Report and will normally be submitted on or before the planned performance date. Achievement Reports provide information on progress against project plans. The Achievement Report meets management's needs to stay informed of project status. When an Achievement Report is not received on or about the date of planned performance, the Bureau automatically assumes that the event was not achieved on schedule at the planned level of performance. Failure to automatically submit an Achievement Report generates an inquiry cable from Washington to the field. When the field knows an event will not be achieved as planned, Exception Reports can be utilized.

With projects on the Exception Reporting basis, two types of Exception Reports reach management: The first type of Exception Report, Performance: Endangered\* warns management that an event may not be achieved; the second type, Performance: Missed, informs management that an event has

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\* Endangered reports are a type of report included under the "special" reports category required in the PPT system developed by PBAR.

been missed. These two reports provide management with information it requires concerning problems hindering project implementation. The Bureau knows that an event being monitored in Washington is endangered when a cable is received indicating that events on the operational network have been missed. The PMS prescribes that when operational network events are missed, reports indicating that Washington reporting events (Critical Performance Indicators) are endangered be forwarded to the Bureau as an early warning of a possible problem in meeting a Critical Performance Indicator (CPI). A CPI which is on schedule, but of insufficient amount or quality, will count as a CPI missed.

#### D. RELATIONSHIP TO OTHER AGENCY SYSTEMS

The Africa Bureau PMS provides a basis for meeting Agency documentation, submission and reporting requirements. Through the development of project management systems within each of the Bureau's field offices the Agency-wide requirement for installation of a Project Performance Tracking (PPT) system is met and supported through lower level management processes.\* The PMS tailors the procedures for meeting Agency requirements to meet Bureau needs and to ensure a high quality management process within the Bureau.

The Africa Bureau PMS complies fully with the PPT system by applying the same reporting rules to the relationship between the Africa Bureau and the Administrator as are applied between the Field Offices and

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\* The Project Performance Tracking (PPT) System is an Agency-wide requirement for project performance tracking based on project-specific CPI networks and descriptions. The PPT system does not specify Bureau procedures for meeting this requirement, rather it will, through a PPT instruction manual, to be issued early in 1976, identify alternative approaches for meeting the Agency requirements. The Africa Bureau PMS defines one such approach for meeting the PPT system requirements. Note: PPT calls for last critical date...PMS calls for planned dates.

the Bureau. That is, at the time project designs and CPI networks drafted in the Field Offices are reviewed in the Bureau, the Bureau reviews the events it will monitor and on which it will report to the Administrator, i.e., CPIs. Normally the events included at this level will be those that affect project duration, budget, and goal and purpose level impact. When the Bureau must report that an event it is monitoring has been missed, it prepares its report for the Administrator using the information provided in the Field Office Exception Report and information on Washington action that is being taken to assist the Field Office.

Figures I-2 and I-3 display the overlapping nature of the PMS and the major Agency systems. The PMS is compatible with Agency-wide procedures and products required during three phases of the life of a Bureau project: Project design, project approval,\* and project implementation, including evaluation for the project.\* A brief review of these project phases follows together with a discussion of the relationships between the PMS and other Agency systems.

## 1. Project Design

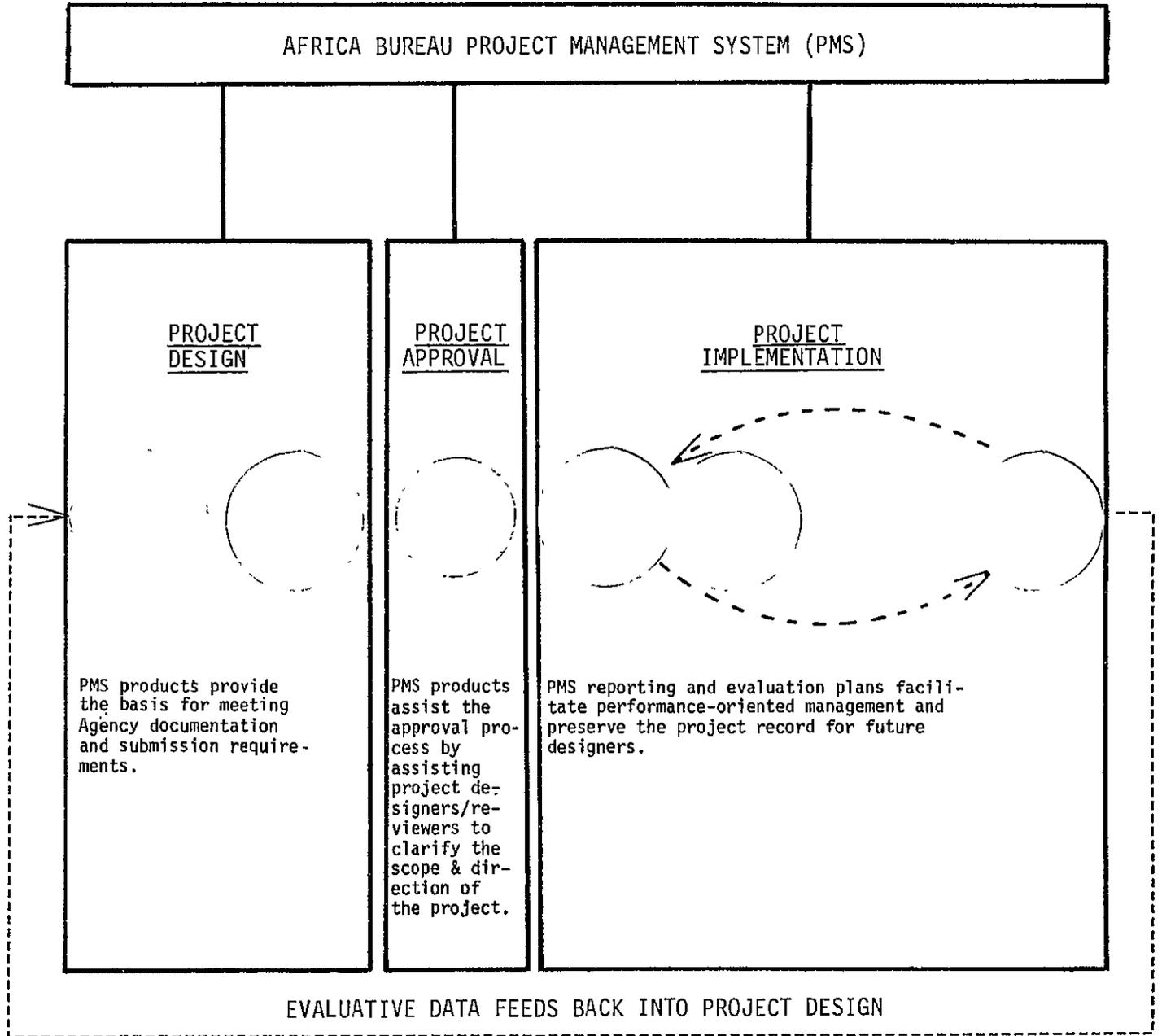
Project design commences with the identification of a potential project idea and terminates with the submission to the Bureau of a Project Paper (PP). The design documentation and submission process is a repetitive one. Preliminary ideas for projects are developed approximately fifteen months before project authorization is expected. These preliminary idea papers-- Project Identification Documents (PIDs)--are submitted, at the latest, with the Annual Budget Submission prepared for each Bureau Field Office. Following PID approval, a refined project plan is submitted in the form of a

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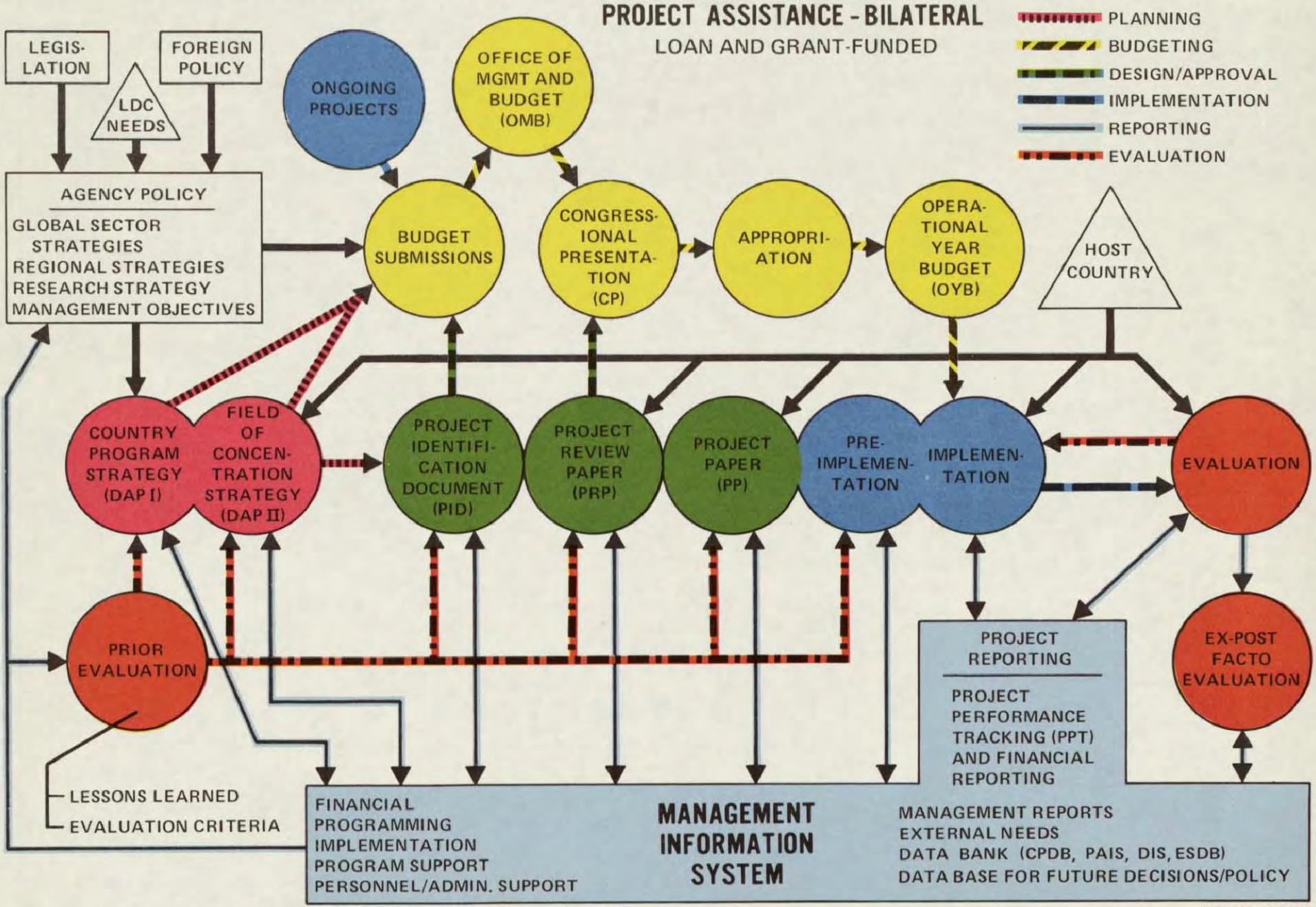
\* AID's Handbook #3: Project Assistance should be consulted concerning the total set of Agency requirements for project approval.

Figure I-2:

PMS ADDRESSES KEY PROJECT  
ELEMENTS IN THE AGENCY-  
WIDE MANAGEMENT INFORMATION  
SYSTEM



# INTERACTION OF MAJOR AGENCY PROCESSES



Project Review Paper (PRP), which forms the basis for the Bureau's contribution to the Agency's Congressional Presentation for the upcoming fiscal year. The final project design submission, the PP, is the basis for authorization of project funding. The PMS project design products are a central portion of the documentation required for project approval and subsequent implementation. Figure I-4 diagrams the flow of submissions during the course of the project design phase. The Agency's Handbook #3, Project Assistance describes this process in detail.

## 2. Project Approval

Bureau management reviews both the intermediate and final products of project design. In the PMS Manual, the discussion of project approval focuses on the review and approval of the PP, the final design submission. Sections are also provided dealing with PIB and PRP review procedures. During the Washington review of the PP, Bureau management considers the proposed Field-to-Washington reporting points, in terms of level of effort, quality and schedule, for the project, as well as the final design and budget for the proposed project. Washington approval of the PP carries with it authorization of funding for the project, and activation of the project networks.

## 3. Project Implementation

Project Implementation commences with Approval of the Project Paper (PP). During project implementation, management utilizes the PMS products developed for implementation monitoring and early problem identification at two levels in the Field Office: The project manager level and the Field Office Director level. The PMS products also provide the basis for field-to-Washington reporting during the implementation of the project. Figure I-5 displays the system's approach to "nesting" information reporting based on the successive levels of management responsibility for

the project. Based on an agreement between the field and Washington, project reporting is to be undertaken on a Positive or Exception basis. The PMS specifies the project conditions under which management reports are generated, for both the Positive and Exception reporting.

The PMS serves AID and host country management officials routinely during project implementation. On an optional basis, the PMS can also serve AID intermediaries concerned with management at the subproject or project "output" level. For example, USAID might impose similar reporting requirements on a VolAg that manages a component of a project.

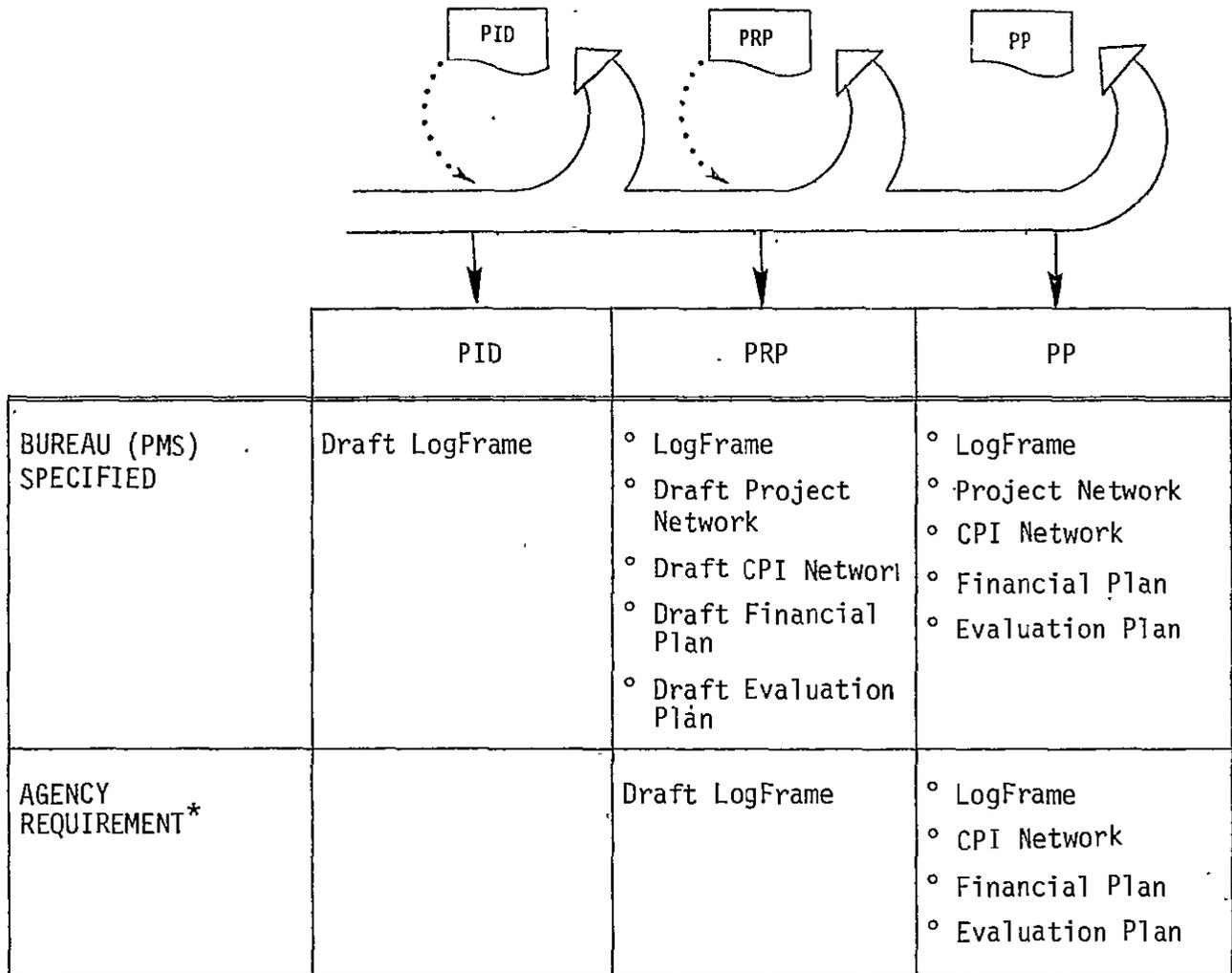


Figure I-4: PMS SUBMISSIONS IN THE APPROVAL PROCESS

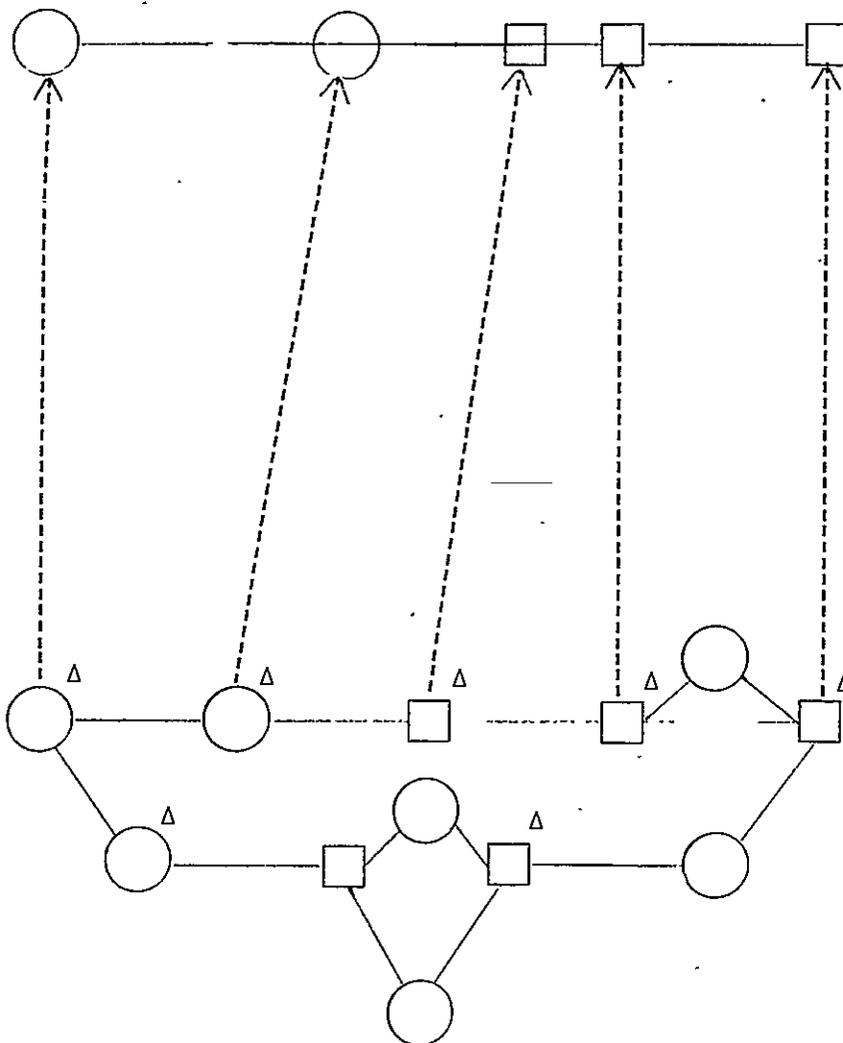
The PMS guidance on submissions in the Africa Bureau supplements rather than supercedes requirements listed in the AID Project Handbook #3.

\* The requirements also include complete documentation for the PID, PRP and PP as described in AID Handbook #3: Project Assistance.

Figure I-5

WASHINGTON  
MONITORING  
(CPI Network)

OPERATIONAL  
NETWORK



Δ Denotes events to be monitored by the Field Office Director.

Note that in some cases the CPI dates will be later than the planned performance dates shown on the operational network.

SECTION TWO

# System Description

The PMS flow of procedures and products is described schematically in Figures II-1, II-2, and II-3. All of the procedural aspects of the PMS and each of the resulting system products are identified in the diagram column headings

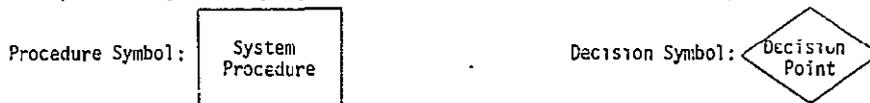
System procedures and products, as well as bureau decision points, are identified by symbols, letters, and numbers in the system description diagram.\*

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\*The symbols and codes used in the system description diagram are identified in detail below. On each figure the symbol key is repeated.

PROCEDURES AND DECISIONS

All system procedures, and all decision points in the system are identified by numerals. The procedures and decision points are, however, represented by different symbols in the diagram:



PRODUCTS

System products are identified by the letter R and the number of the procedure that leads to the product, e.g., R-14. These products have their own symbol:



One additional symbol is used in the system description diagram and the reader should be aware of its use. The extra symbol is a large arrow that signals movement from one page of the chart to the next. This connector symbol is shown below:



Directional lines with small arrows are used in the description diagram to indicate the flow of products and procedures. In the following example a process is shown to result in a product:



The division of the system description diagram into three separate figures is intentional. Each of the figures in the system description diagram treats a major activity in the life of a Bureau project. Thus Figure II-1 focuses on field office action during project design. The majority of the user/operators identified in the column headings for this figure are field office personnel, or as in the case of a Country Development Office, may represent some of the services provided to a field office by a regional (or AID/W) office. Host country officials will be involved in these planning steps. As this level of involvement will tend to be country-unique, a discussion of specific host-country activities has not been included, but some possible actions are included (not numbered) in the system description diagram.

Figure II-2 considers the PMS procedures and products during Washington approval of a project and in Figure II-3, the implementation phase of the project is considered. During implementation, both field and Washington are involved in monitoring project performance.

For ease of reference, Section Two is divided into major section headings under which the individual PMS procedures and products are grouped and discussed. A list of the Section headings follows.

SECTION TWO: OUTLINE

- A. Planning the Project Design Effort (Procedures 1-2)
- B. Project Design (Procedure 3-5)
- C. Networking (6-8)
- D. Reporting (9-10)
- E. Evaluation (11)
- F. Financial Plans (12)
- G. Review & Approval Process--Field (13-16)
- H. System Displays (17)
- I. Review & Approval Process--WASHINGTON (18-24)
- J. Amendments & Updates Prior to Implementation (25-26)
- K. Project Implementation & Monitoring (27-35)

Figure II-1: PMS OPERATIONS: PROJECT DESIGN PROCEDURES AND PRODUCTS

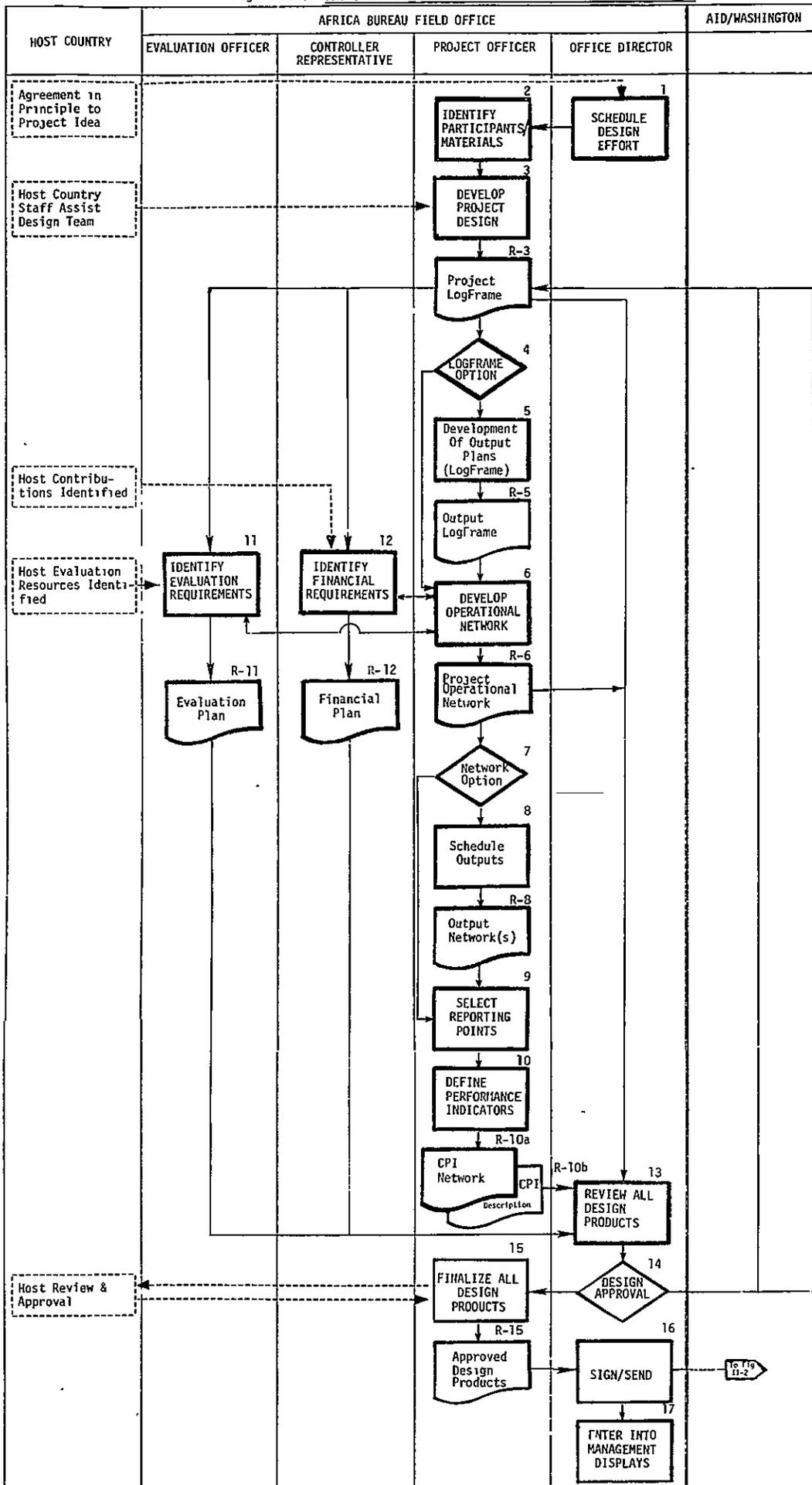


Figure II-2: PMS OPERATIONS: PROJECT APPROVAL PROCEDURES AND PRODUCTS

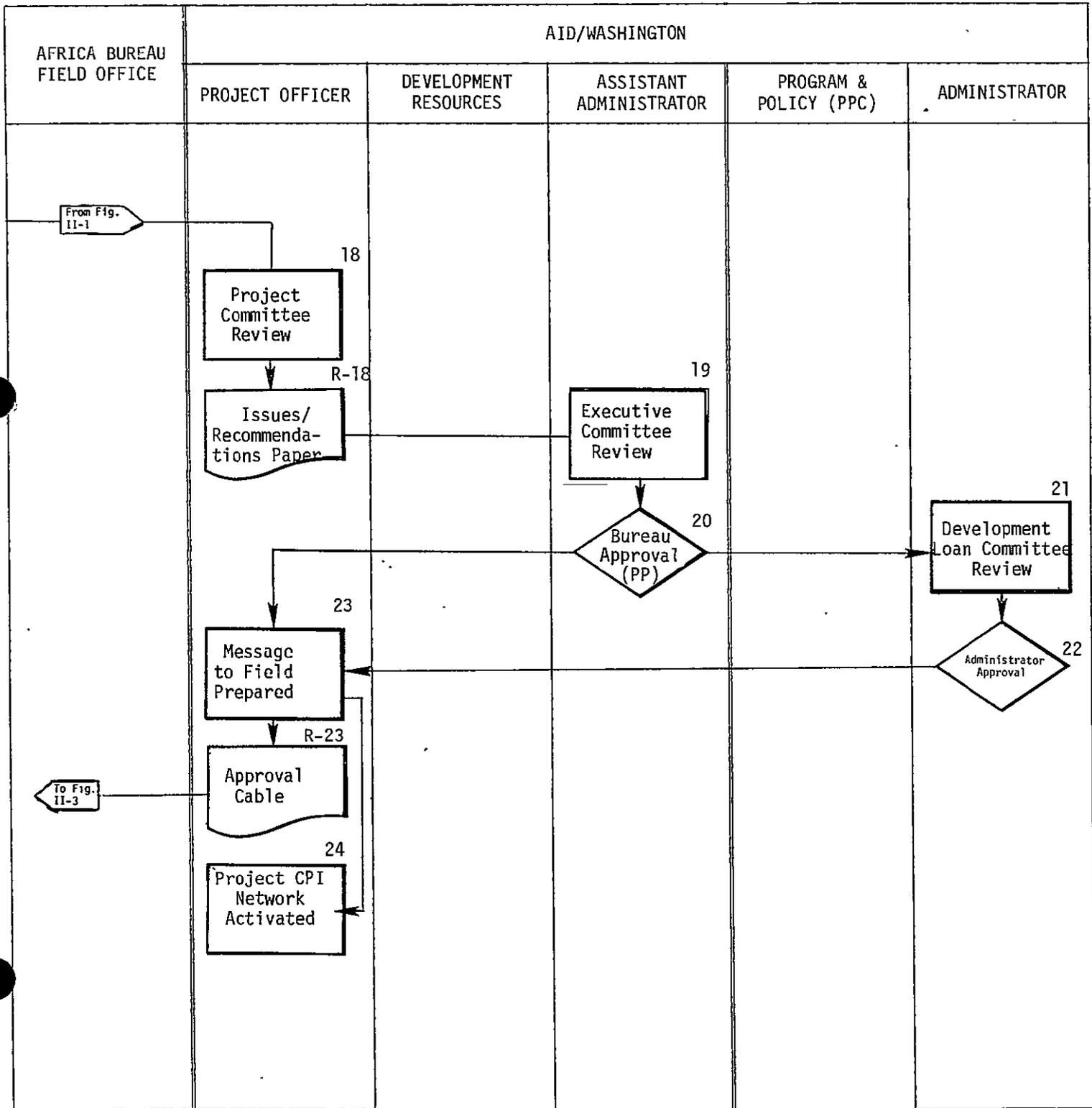
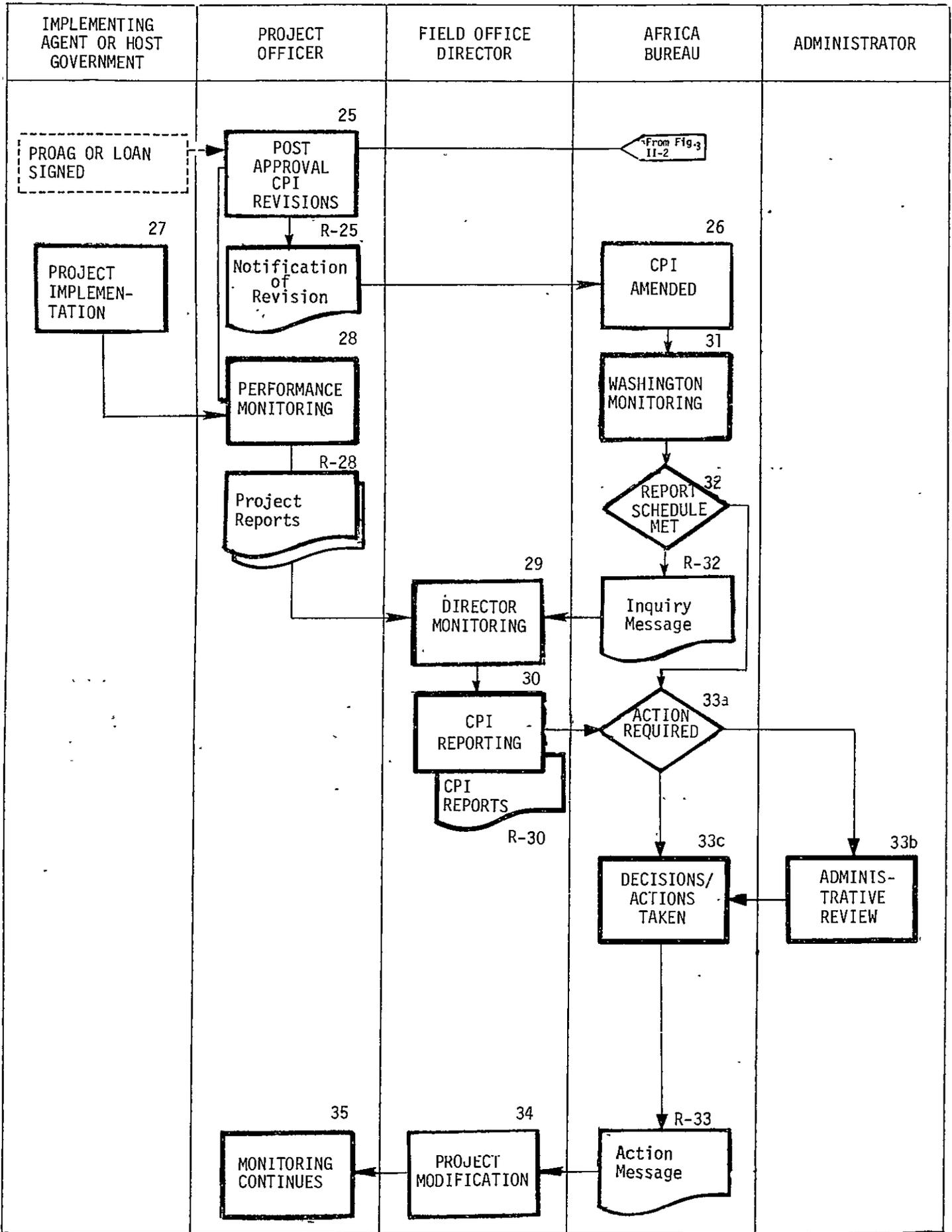


Figure II-3: PMS OPERATIONS: PROJECT IMPLEMENTATION PROCEDURES AND PRODUCTS



A. PLANNING THE PROJECT DESIGN EFFORT

1.

SCHEDULE DESIGN EFFORT
------------------------------

Project ideas can be initially identified either by a Field Office or in Washington, depending on the nature of the project. In the normal case, project ideas will result from programmatic analysis of a situation and its problems. The Development Assistance Papers (DAPs) are a source of project ideas, as are sector analyses. Responsibility for the transformation of a project idea into a project plan normally lies with the office that has generated the project idea.

Flexibility in scheduling project design activities is constrained by planning submission deadlines set by the Agency; current messages concerning these schedules should be consulted prior to the development of a project planning schedule.

It is the responsibility of the Field Office Director, or Washington Office to set internal deadlines for the development of PMS products during the project design effort. In setting such deadlines, the Director should include adequate time for his own participation in the review and finalization of these planning documents. Time should also be provided for host country involvement.

The Director has the responsibility for coordinating the schedules for all project design efforts undertaken by the office. Planning schedules for specific projects should be developed to facilitate the participation of key individuals. Further, the schedule for planning a project should avoid peak work load periods, periods of home leave, host country holiday periods, etc.

The Director is responsible for ensuring that the participants in the design process have the background and training required to produce the PMS design products. The Director should determine whether the design process participants are well grounded in the PMS design concepts, and either provide, or secure the services of others who will provide, such training as is required.

The project design schedule must take into consideration the fact that the development of the PMS design products complements a three step design and approval process defined by the Agency. The design process must be scheduled so as to successively meet internal office deadlines relating to the submission of the PID, PRP, and PP.

2.

IDENTIFY PARTICIPANTS/ MATERIALS
--

All parties (AID, the host government, U.S. Grantees, etc.) that are to be assigned major project responsibilities must agree on the project objectives, approach and the division of responsibilities within the project as early as possible.

It is the responsibility of the Director of an office that has elected to plan a project to designate an individual who will manage the design process and be responsible for the timely development of AID planning submissions, the PID, PRP, and PP. Ideally, the individual assigned these responsibilities would subsequently assume the responsibility for project implementation management as well.

The Director is further responsible for identifying all of the major parties who are likely to be involved in execution of the project, and for facilitating the initial contacts between the project designer and appropriate individuals in host and third country organizations, as well as technical support personnel in other divisions of the Agency.

It is the responsibility of the project designer to manage the involvement of the advisory personnel in the planning process. Participation in the project planning process by non-AID personnel is encouraged whenever their cooperation in executing the project is desired or expected. The degree and nature of participation by advisory personnel is an office and project-specific decision. Advisory participation by host personnel, AID and/or non-AID technical advisors, or other donors may vary from direct involvement in every analytical step to simple review and critique of the major products of the PMS planning process.

Documentation may be required to support the design process. While the specific documents required will vary from project to project, the documentation package needed by project designers will generally include:

- Host country planning documents, e.g., multi-year plans, sector plans, etc.;
- AID country and/or regional planning documents, e.g., DAPs;
- Technical literature;
- Data on past AID efforts in the same area, e.g., PPs and evaluations of similar projects;
- Data on the country and/or past project efforts available from international organizations, e.g., the World Bank, and from other donors.

The project designer is responsible for assembling such documentation as is required by the design team, and for maintaining the design files. As each stage of the project approval process is completed, the project designer is responsible for securing and maintaining final copies of the major submissions -- PID, PRP, and PP, as well as the full set of PMS products -- Logical Frameworks and networks developed for the project.

B. PROJECT DESIGN

3. DEVELOP  
PROJECT  
DESIGN

The Logical Framework is both an approach to project design and a summary matrix of that design. The process and the product serve to crystalize the basic elements of the project and to define project performance in terms that can be verified.

Responsibility for the development of the project Logical Framework lies with the project design team leader. The role does not require that the project Logical Framework be prepared as an individual effort. Rather, it calls for the management of a group process that results in the clarification of shared objectives, and the definition of a technically responsible approach for achieving those objectives. A Logical Framework matrix is a by-product of this process which must be completed for each Bureau project (see Figure II-4).

R-3



Additional guidance concerning this process and the resulting product can be found in AID's Project Assistance Handbook #3, and in the Agency's Project Evaluation Guidelines.

Figure II-4: AID PROJECT LOGICAL FRAMEWORK  
(AID Form 1020-28)

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project: \_\_\_\_\_  
From FY \_\_\_\_\_ to FY \_\_\_\_\_  
Total U. S. Funding \_\_\_\_\_  
Date Prepared: \_\_\_\_\_

Project Title \_\_\_\_\_

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes:	Measures of Goal Achievement:		Assumptions for achieving goal targets:
Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status.		Assumptions for achieving purpose:
Outputs:	Magnitude of Outputs:		Assumptions for providing outputs:
Inputs:	Implementation Target (Type and Quantity)		Assumptions for providing inputs:

It is the role of the design team leader to insure that alternative approaches are considered during the early stages of the project planning process. Further, the design team leader is responsible for recording the results of these discussions since the identification of alternatives is required in the first formal Agency project documentation submission, the PID. AID's Project Assistance Handbook #3, Chapter 3 provides additional guidance on this early step in the planning process in a section entitled: Means-Ends Analysis.

Beginning with this section of the PMS Manual, examples of system products are provided in their completed form. Throughout the system description narrative, the fictional example of a millet production project in a country called Tehristan will provide the samples of completed PMS formats. In Figure II-5, the project design for this sample project is summarized in a project Logical Framework.

4.



The PMS recommends, and specifies as a system option, the development of a Logical Framework for subproject elements, project "outputs." The development of Output Logical Frameworks are recommended in the following circumstances:

- a. Where the relationship between a set of inputs and the expected output is unclear;
- b. Whenever the transformation of project resources (inputs) into results (outputs) is to be managed by more than one organization or individual.

Figure II-5:

LOGICAL FRAMEWORK  
FOR  
SUMMARIZING PROJECT DESIGN

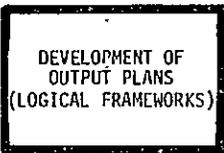
Est. Project Completion Date \_\_\_\_\_  
Date of this Summary \_\_\_\_\_

Project Title: TEHRISTAN MILLET PRODUCTION

	NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																										
DEVELOPMENT HYPOTHESES	<p><b>Program Goal:</b> The broader objective to which this project contributes</p> <p>Food grain needs met from internal production by 1980.</p>	<p>Measures of Goal Achievement</p> <p>1. 10% annual reduction in food grain imports beginning 1978;</p> <p>2. Annual grain consumption of rural population increases from 50 to 75 kilos per person by 1982;</p>	<p>1. Import records;</p> <p>2. Rural household survey.</p>	<p>Concerning long term value of program/project:</p>																																																										
	<p><b>Project Purpose:</b></p> <p>Increased millet production in Central Area of Tehristan.</p>	<p>Conditions that will indicate purpose has been achieved. End of project status</p> <p>1. Increased yield of 40% over 1975 levels by 1977;</p> <p>2. Increased millet production of 50% (40,000 tons) in target area by 1978.</p>	<p>1. Analysis of harvest results, field agent reports;</p> <p>2. Harvest figures.</p>	<p>Affecting purpose-to-goal link</p> <p>1. Grain prices do not increase more than 10%;</p> <p>2. Population growth remains constant.</p>																																																										
MANAGEABLE INTEREST	<p><b>Outputs:</b></p> <p>1. Office &amp; training center built &amp; equipped.</p> <p>2. Trained extension agents working with farmers.</p> <p>3. Small farmers enrolled for participation in project.</p> <p>4. Inputs &amp; technical assistance provided to enrolled small farmers.</p>	<p>Magnitude of Outputs necessary and sufficient to achieve purpose.</p> <p>1a. Construction of office &amp; training center sufficient for staff of 5 completed according to technical plans and specs by Sept. '76;</p> <p>b. Equipped w/supplies &amp; materials for 1st year operations by Sept '76.</p> <p>2a. Agents successfully complete week of curriculum in modern cultivation practices &amp; harvesting procedures;</p> <p>- 15 agents by Feb '77;</p> <p>- 30 agents by Feb '78.</p> <p>b. Each farmer visited by extension agent not less than 3 times between March &amp; November.</p> <p>3. Farmers in Central Area w/less than 1 hectare of land agree to participate in project</p> <p>- 350 farmers enrolled by Mar '77;</p> <p>- 800 farmers enrolled by Mar '78.</p> <p>4a. Each enrolled farmer receives necessary seeds &amp; fertilizer by May of each year;</p> <p>b. Each farmer correctly plants and cultivates seeds.</p>	<p>1a. Physical verification;</p> <p>b. Physical verification;</p> <p>2a. Agents pass post-course examination;</p> <p>b. Issuance of motorbike to agent;</p> <p>3. Enrollment forms completed &amp; returned to headquarters;</p> <p>4a. Extension agent reports &amp; field area tour;</p> <p>b. Extension agent reports &amp; field area tour.</p>	<p>Affecting output to purpose link.</p> <p>1. Government crop buying policy &amp; prices will encourage production;</p> <p>2. Transportation &amp; storage facilities adequate to handle volume of productivity.</p>																																																										
	<p><b>Inputs:</b> Activities and Types of Resources</p> <p>1a. Select facilities &amp; develop building plans;</p> <p>b. Request bids &amp; construction proposals, review &amp; select construction firm;</p> <p>c. Locally procure tables, chairs, blackboards, other supplies;</p> <p>2a. Recruit extension agents;</p> <p>b. Develop &amp; test training curriculum;</p> <p>c. Train extension agents;</p> <p>3a. Develop publicity materials &amp; enrollment forms;</p> <p>b. Provide selected farmers w/tour thru Southern Region project;</p> <p>c. Complete initial farmer visits by Sept '76.</p> <p>4a. Finalize seed &amp; fertilizer requirements by April '76,</p> <p>b. Complete procurement paperwork process by May '76;</p> <p>c. Arrange transportation for inputs from port to distribution points.</p> <p>d. Develop extension agent record system &amp; extension visit schedule.</p>	<p>Level of Effort/Expenditure for each activity (Cost in thousands)</p> <table border="1"> <tr> <td>1. Cost of output</td> <td></td> <td>'76</td> <td>'77</td> </tr> <tr> <td>-Construction</td> <td>\$20</td> <td>\$25</td> <td>0</td> </tr> <tr> <td>-Equip &amp; supplies</td> <td>\$5</td> <td></td> <td></td> </tr> <tr> <td>2. Cost of output</td> <td></td> <td>\$73</td> <td>0</td> </tr> <tr> <td>-Recruiting expenses</td> <td>\$13</td> <td></td> <td></td> </tr> <tr> <td>-24 manmonths extension &amp; training advisor</td> <td>\$60(annual)</td> <td></td> <td></td> </tr> <tr> <td>3. Cost of output</td> <td></td> <td>\$5</td> <td>0</td> </tr> <tr> <td>-Printed materials</td> <td>\$2</td> <td></td> <td></td> </tr> <tr> <td>-Farmer tours</td> <td>\$3</td> <td></td> <td></td> </tr> <tr> <td>4. Cost of output</td> <td></td> <td>\$140</td> <td>\$193</td> </tr> <tr> <td>-Seeds</td> <td>\$65</td> <td></td> <td></td> </tr> <tr> <td>-Fertilizer</td> <td>\$238</td> <td></td> <td></td> </tr> <tr> <td>-Trans/distribution</td> <td>\$30</td> <td></td> <td></td> </tr> <tr> <td>PROJECT COST BY YEAR</td> <td></td> <td>\$243</td> <td>\$253</td> </tr> <tr> <td>TOTAL PROJECT COST</td> <td></td> <td>\$496,000</td> <td></td> </tr> </table>	1. Cost of output		'76	'77	-Construction	\$20	\$25	0	-Equip & supplies	\$5			2. Cost of output		\$73	0	-Recruiting expenses	\$13			-24 manmonths extension & training advisor	\$60(annual)			3. Cost of output		\$5	0	-Printed materials	\$2			-Farmer tours	\$3			4. Cost of output		\$140	\$193	-Seeds	\$65			-Fertilizer	\$238			-Trans/distribution	\$30			PROJECT COST BY YEAR		\$243	\$253	TOTAL PROJECT COST		\$496,000	
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TOTAL PROJECT COST		\$496,000																																																												

Output Logical Frameworks for a project can always be developed at the discretion of the Project Officer, and can be called for by the Field Office Director.

5.



Optional Output Logical Frameworks are developed using the same approach for developing project Logical Frameworks. Two alternatives are defined:

- a. Develop separate Logical Frameworks for each project output--recommended when different individuals and/or organizations are responsible for output production;
- b. Identify suboutputs for each output within the project's full Logical Framework--recommended when more detail is required, but where a single manager is involved.

While both approaches serve to describe the project in greater detail, the first approach--separate LogFrames--is generally preferred. Output LogFrames can be developed on a selective basis and used where specific outputs require greater clarification. Further, use of the separate LogFrames preserves the desired simplicity in the Project Logical Framework.

Figure II-6 illustrates the process for developing separate output Logical Frameworks. In this process a single output from the full project is placed in the first column, second row of a new matrix (Purpose Level). The purpose of the full project is recorded in the first column, first row (Goal statement) for the new matrix. Development of additional detail concerning the output is then undertaken by using the first column, third row to identify the subordinate results (or suboutputs) that lead to successful

PROJECT MASTER LOGFRAME

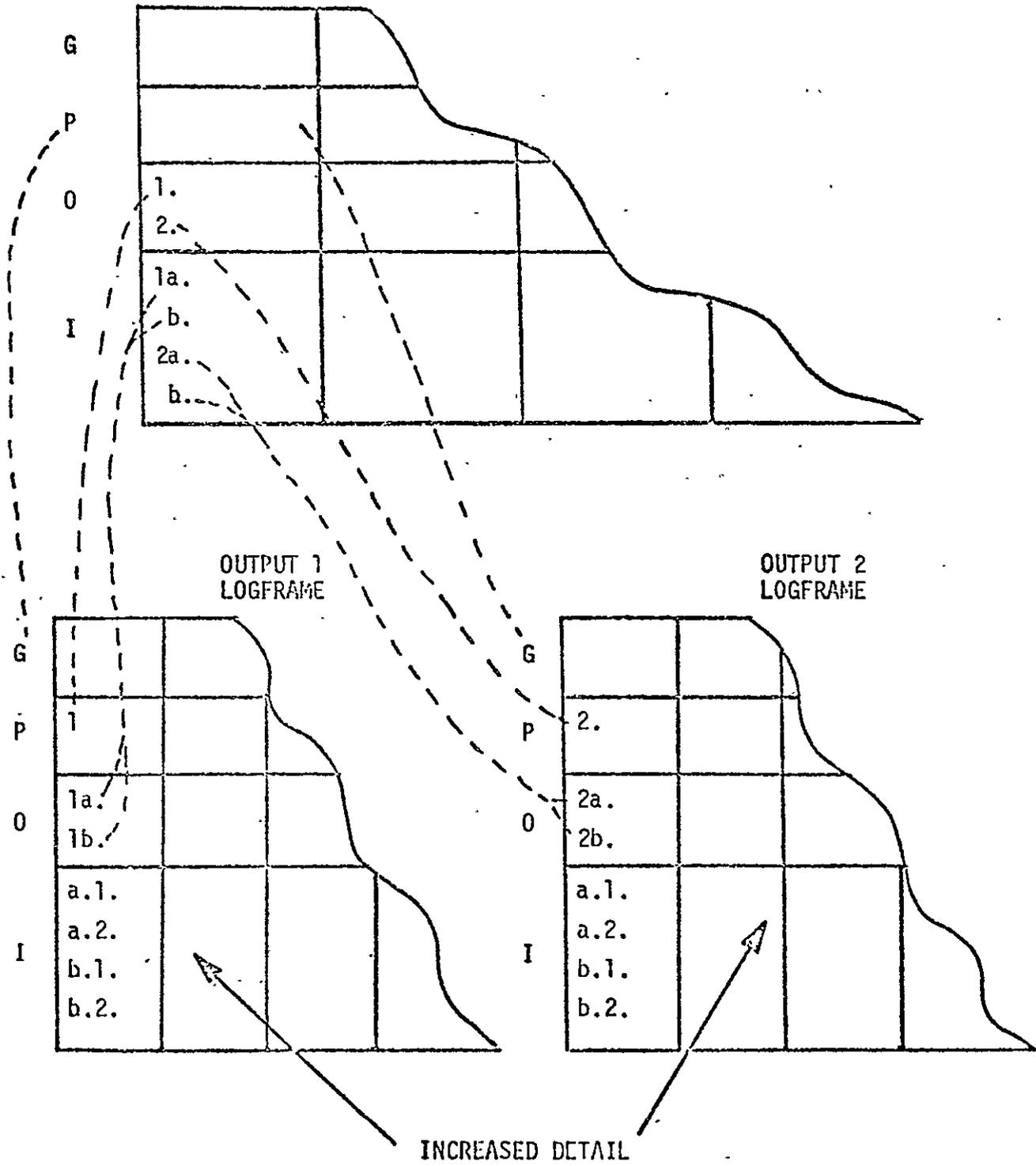


Figure II-6: THE PROCESS FOR DEVELOPING SEPARATE OUTPUT LOGICAL FRAMEWORKS

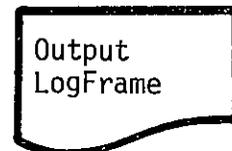
production of the output. The inputs or resources and activities required to achieve the output do not change. However, identification of the subordinate results may serve to clarify the type of resources required for production of the output. The Logical Framework concepts are used as normal for completing the Output Logical Frameworks.

While Figure II-6 characterizes the process of developing additional detail concerning the creation of a project output, the project manager should recognize that a participatory process similar to the process used to specify the project outputs is required to define the subordinate results leading to the development of an output. Further, the process manager should be aware that identification of the subordinate results may require the participation of technical specialists who may or may not have participated in the initial design effort.

Figure II-7 illustrates the approach that may be employed to develop further output detail within the full project Logical Framework. When this approach is used, the subordinate results are defined using the process identified above of the development of separate LogFrames.

Figure II-8 shows an output LogFrame for the Millet project, illustrating the increased detail that can be developed to assist management.

R-5



PROJECT MASTER LOGFRAME

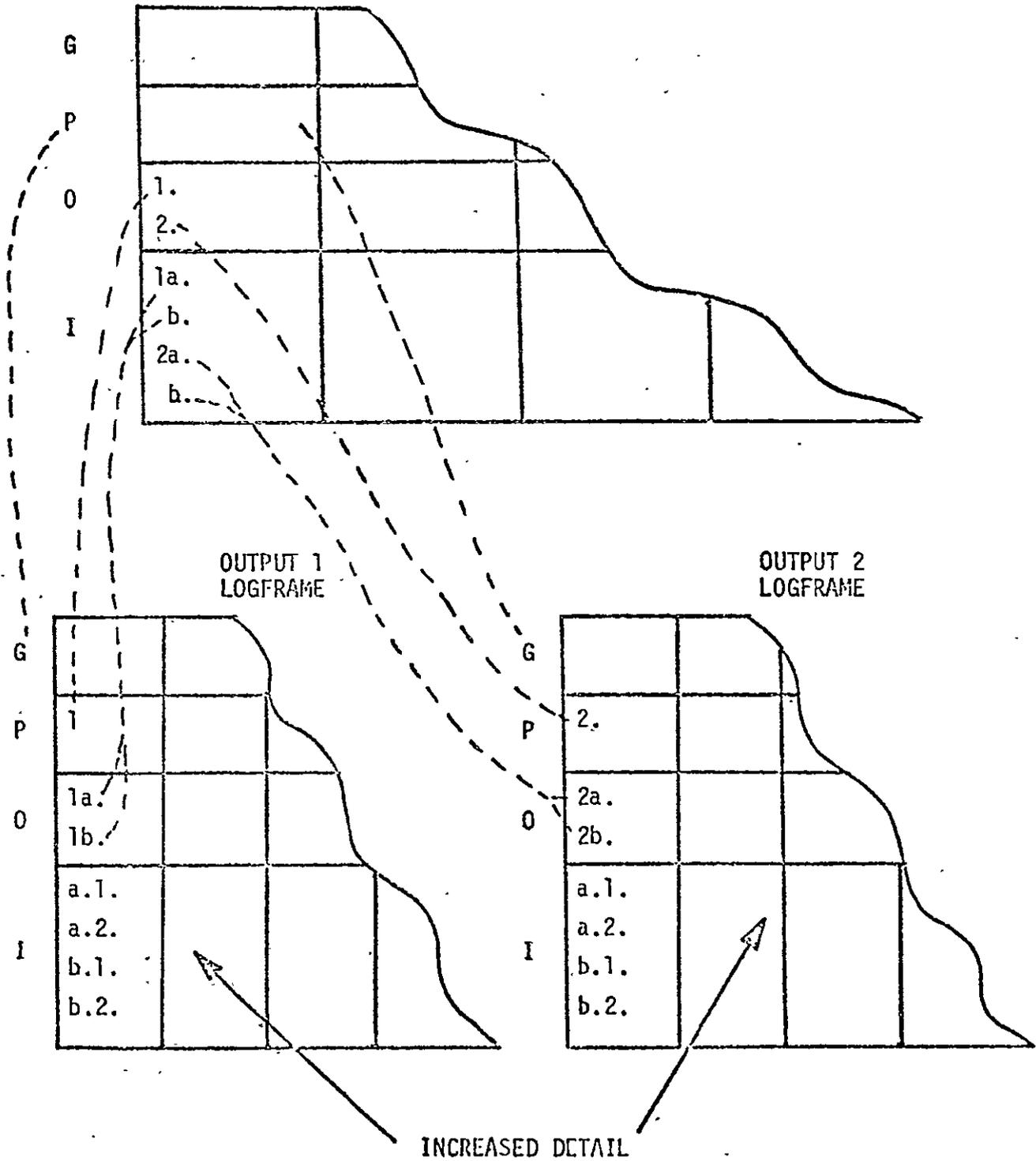


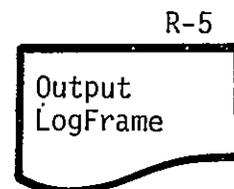
Figure II-6: THE PROCESS FOR DEVELOPING SEPARATE OUTPUT LOGICAL FRAMEWORKS

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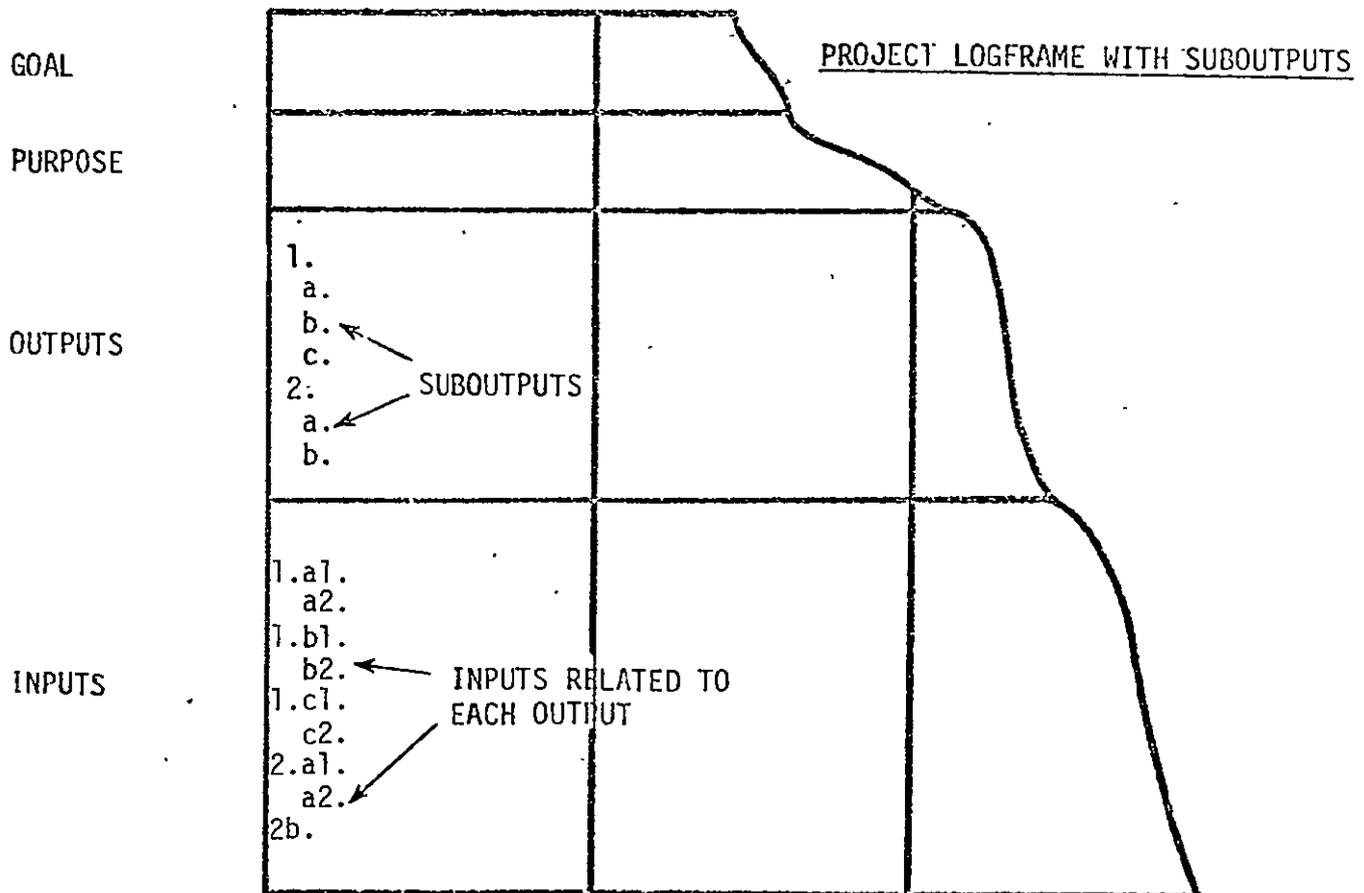
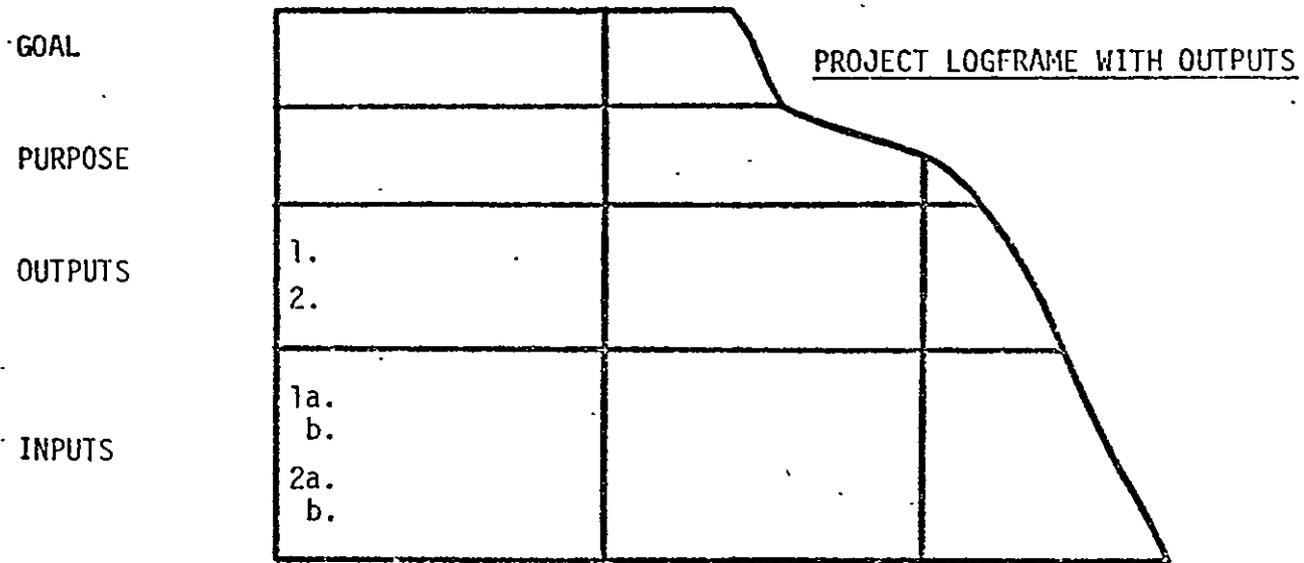


Figure II-7: PROCESS FOR DEVELOPING FURTHER OUTPUT

Figure II-8

LOGICAL FRAMEWORK  
FOR  
SUMMARIZING PROJECT DESIGN

Est. Project Completion Date \_\_\_\_\_  
Date of this Summary \_\_\_\_\_

Project Title TEHRISTAN MILLET PRODUCTION -- OUTPUT LF #2

		NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																						
DEVELOPMENT HYPOTHESES	If Purpose, Then Goal	<p>Program Goal The broader objective to which this project contributes</p> <p>Increased millet production in Central Area of Tehristan.</p>	<p>Measures of Goal Achievement.</p> <p>1. Increased yield of 40% over 1975 levels by 1977; 2. Increased millet production of 50% (40,000 tons) in target area by 1978</p>	<p>1. Analysis of harvest results, field agent reports; 2. Harvest figures</p>	<p>Concerning long term value of program/project</p>																																						
	If Purpose, Then Purpose	<p>Project Purpose.</p> <p>2. Trained extension agents working with farmers.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status</p> <p>1. Agents successfully complete curriculum in modern planting techniques, cultivation practices, &amp; harvesting procedures: -15 agents by Feb. '77; -30 agents by Feb. '78; 2. Each farmer visited by extension agent not less than 3 times between March &amp; November</p>	<p>1. Post training examination of competence of agents.</p>	<p>Affecting purpose to goal link</p> <p>1. After training, agents will continue with millet project.</p>																																						
	If Outputs, Then Purpose	<p>Outputs.</p> <p>A. Extension agents recruited; B. Training curriculum developed &amp; tested; C. Agents effectively trained/certified; D. Mobility provided for agents.</p>	<p>Magnitude of Outputs necessary and sufficient to achieve purpose.</p> <p>A. 18 prospective agents (to allow for possible dropouts) w/minimum 3 yrs farming experience &amp; living in Central Area recruited for training; B1. 3 week curriculum developed covering cultivation (soil preparation, testing, plowing), planting techniques (timing, seed depth, spacing), harvesting procedures (timing, tool use, drying); B2. Curriculum tested w/Ag Ministry trainees, evaluated &amp; appropriately modified; C. Minimum 15 agents complete 3 weeks training &amp; demonstrate ability to effectively teach farmers techniques learned prior to certification; D. Each agent provided w/motorbike w/carrying rack for supplies on completion of training &amp; certification.</p>	<p>A. Extension advisor recruitment records; B1. Printed curriculum materials &amp; teaching aids; B2. Modified curriculum, C. Post-training examination of agent skills &amp; competence, D. Motorbike issuance receipts.</p>	<p>Affecting output to purpose link.</p> <p>1. Post-training examination appropriate means of evaluating agents' ability to train farmers.</p>																																						
MANAGEABLE INTEREST	If Inputs, Then Outputs	<p>Inputs: Activities and Types of Resources</p> <p>For output A.</p> <p>1. Develop publicity materials 2. Publicize program 3. Interview prospective candidates 4. Select candidates for training</p> <p>For output B.</p> <p>1. Hire extension advisor 2. Design training curriculum 3. Test curriculum w/Ag Ministry 4. Revise training approach/materials 5. Print training materials, develop training aids</p> <p>For output C.</p> <p>1. Set date to begin training 2. Move equipment (plows, etc) to training center 3. Administer 3 week training course 4. Test &amp; certify each agent</p> <p>For output D:</p> <p>1. Complete procurement paperwork 2. Order motorbikes 3. Receive &amp; inspect motorbikes 4. Issue to agents</p>	<p>Level of Effort/Expenditure for each activity</p> <table border="1"> <thead> <tr> <th>MANDAYS</th> <th>COST</th> </tr> </thead> <tbody> <tr><td>1. 20</td><td>\$ 1,000</td></tr> <tr><td>2. 10</td><td>500</td></tr> <tr><td>3. 20</td><td></td></tr> <tr><td>4. 5</td><td></td></tr> <tr><td>1. 10</td><td>60,000</td></tr> <tr><td>2. 40</td><td></td></tr> <tr><td>3. 15</td><td></td></tr> <tr><td>4. 20</td><td>4,500</td></tr> <tr><td>5. 10</td><td></td></tr> <tr><td>1. 1</td><td></td></tr> <tr><td>2. 10</td><td></td></tr> <tr><td>3. 21</td><td></td></tr> <tr><td>4. 4</td><td></td></tr> <tr><td>1. 10</td><td></td></tr> <tr><td>2. 5</td><td>7,000</td></tr> <tr><td>3. 5</td><td></td></tr> <tr><td>4. 3</td><td></td></tr> <tr><td></td><td>\$73,000</td></tr> </tbody> </table>	MANDAYS	COST	1. 20	\$ 1,000	2. 10	500	3. 20		4. 5		1. 10	60,000	2. 40		3. 15		4. 20	4,500	5. 10		1. 1		2. 10		3. 21		4. 4		1. 10		2. 5	7,000	3. 5		4. 3			\$73,000		<p>Affecting input to-output link</p> <p>1. Qualified potential agents can be located; 2. Ag Ministry trainees assistance in evaluating curriculum can be obtained.</p>
	MANDAYS	COST																																									
1. 20	\$ 1,000																																										
2. 10	500																																										
3. 20																																											
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	\$73,000																																										

C. NETWORKING6. 

DEVELOP OPERATIONAL NETWORK
-----------------------------------

Networking is the graphic display of the sequence and interdependence of activities and events in a development project. As a project planning tool, networking increases the designer's confidence in project plans. The Logical Framework states the resources and activities that are required in order to produce the project outputs. Networking illustrates how the resources and activities will be used to produce these outputs. The networking exercise tends to bring to light constraints on project activity that were not previously evident. This can result in an improvement in project design and subsequent revision of the project Logical Framework. The two processes act on each other in a continual process of design improvement.

The development of an operational network is a two-step process:

- Determination of the logical sequence of project activities;
- Analysis of the time required to complete all project activities.

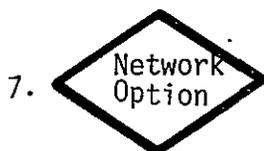
The PMS specifies that a network displaying the sequence and timing of project events and activities and including the achievement of project purpose be developed for each project.

In Appendix A of the Manual, a supplementary discussion of "How-to-do" networking is provided. This Appendix also includes a discussion of optional methods for putting dates on the network.

The full project, or operational, network contains all major activities, events, and assumptions required for project success, including the achievement of project purpose. Both events directly included in the AID portion of the project, and important "interface" events from other projects (AID, donor or host), are displayed in an operational network. A sample operational network is illustrated for the fictional Tehristan Millet project in Figure II-9.

When the operational network is completed, each event is numbered from the top downwards and from left to right as shown in the Tehristan network (Figure II-9). Where an event on this network is also shown in the CPI network (PPT system) for field-to-Washington reporting, the CPI number is included in parentheses under the event number. This is reversed on the CPI network, where each CPI is numbered and under it is placed the operational network event number in parentheses. For example, on the operational network shown in Figure II-9, the numbering on event 23 is  $\begin{matrix} 23 \\ (3) \end{matrix}$ , showing that this event relates to CPI #3.

R-6

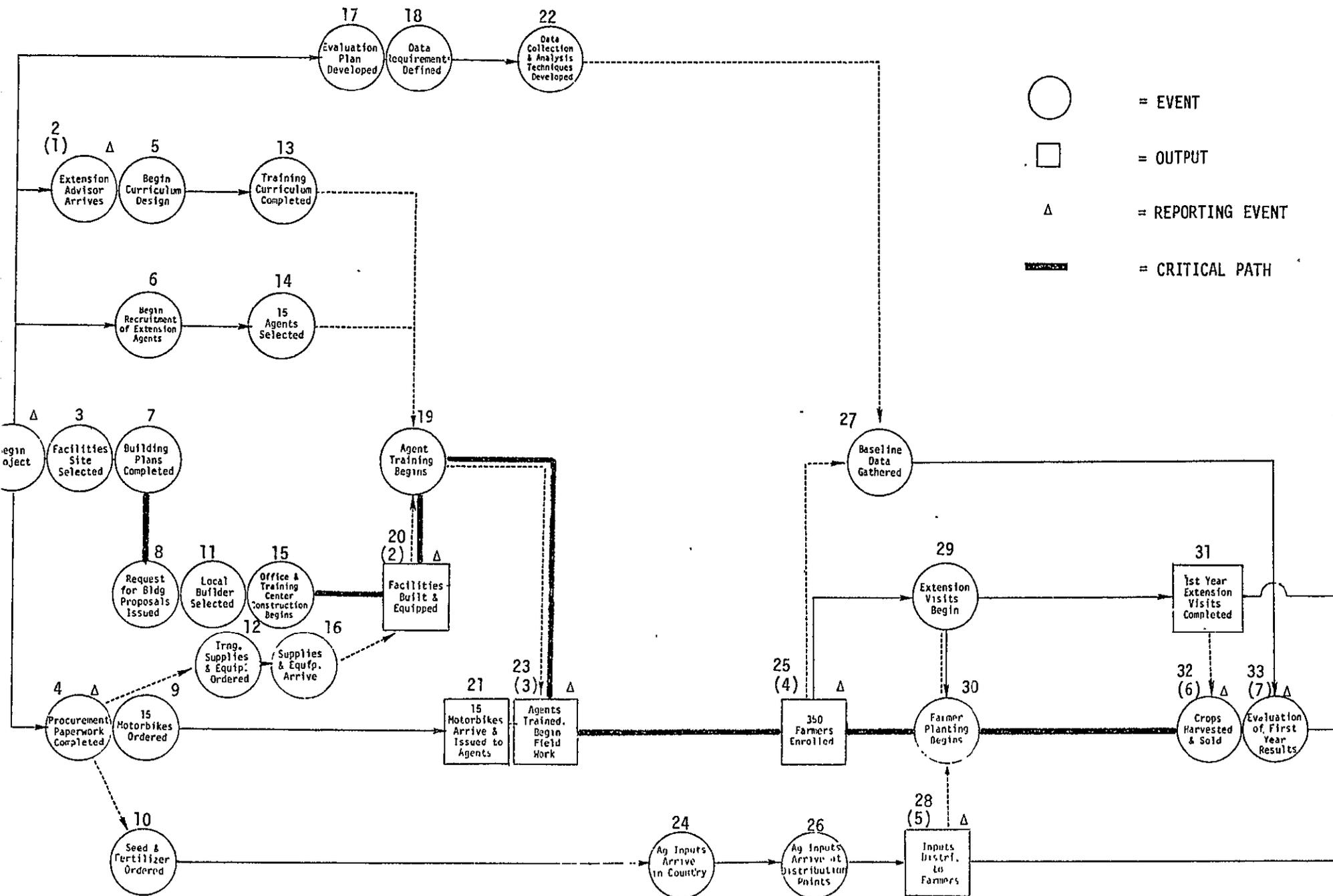


The PMS recommends as an option the development of output networks under the same type of circumstances that suggest the development of Output Logical Frameworks:

- When greater clarity concerning the steps required to produce an output is required;
- When different managers will be responsible for the production of outputs in a single project.

As in the case of Output Logical Frameworks, either the Project Officer of the Field Office Director can elect the output network option.

Figure II-9: TEHRISTAN MILLET PROJECT OPERATIONAL NETWORK (Partial Network--First Year Only)



8. Schedule  
Outputs

Appendix A of the manual describes the networking process in detail. This network process is used to develop output networks to the level of detail considered useful by the project manager for each output. For each completed output network the project manager selects those events he wishes to include in his operational network. He then combines these events and activities from all the output networks into one less detailed, operational network. Figure II-10 shows how the Output Nets can be combined and summarized to form the operational network. The level of detail for this approach again depends on the information needs of the project officer to implement and monitor his project and will vary according to the type and complexity of the project.

Output networks, when developed, can be used as the basis for reporting to the project manager by the agent responsible for producing the output (i.e., host, contractor, voluntary agency, etc.). Completed Output networks need not be forwarded to Washington

R-8

Output  
Network(s)

D. REPORTING

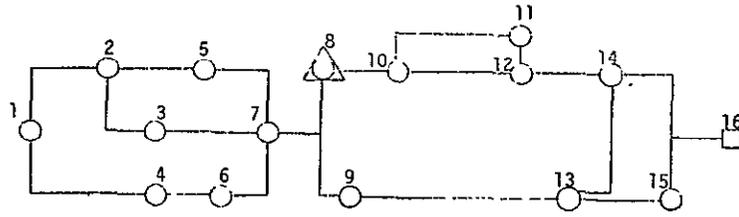
9. SELECT  
REPORTING  
POINTS

a. Internal to Mission (AID Office, etc.)

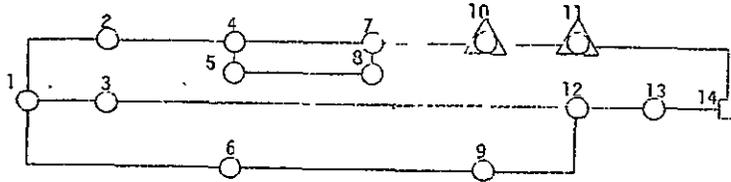
Once the project operational network is completed, key events for higher level monitoring can be identified. The project officer recommends to the Director's attention those events on the operational network most indicative

Figure II-10:

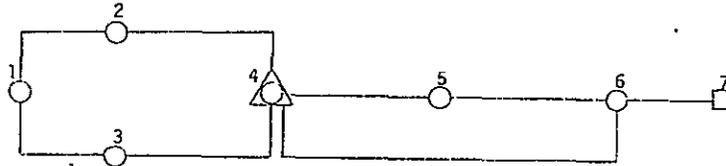
OUTPUT 1:  
Training  
Centers  
Built



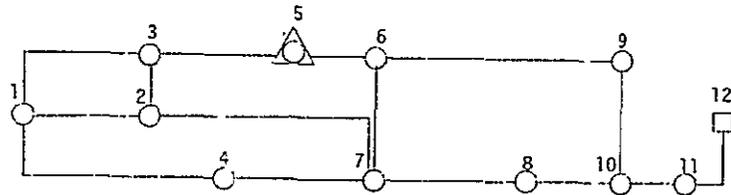
OUTPUT 2:  
Trained  
Extension  
Agents



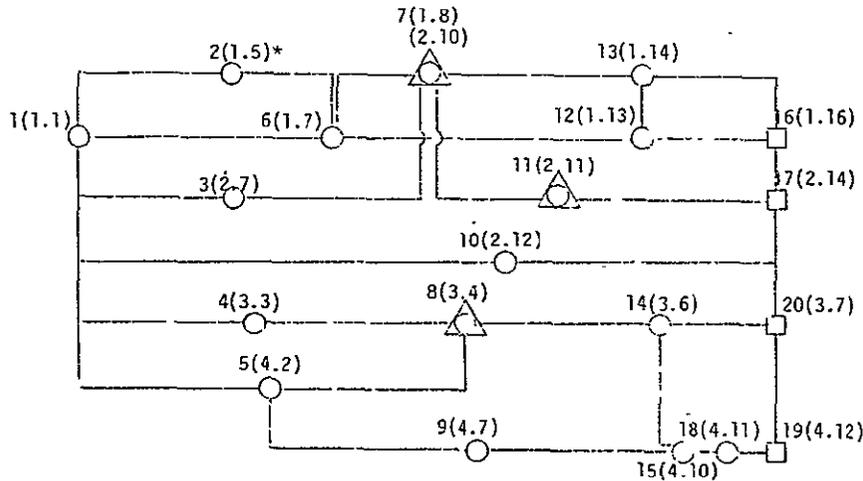
OUTPUT 3:  
Farmers  
Enrolled



OUTPUT 4:  
Inputs & TA  
Provided to  
Farmers



OPERATIONAL NETWORK FOR PROJECT OFFICER USE



\* Numbers in parentheses refer to output network numbers for ease of reference in this example. They are not included in the completed operational network.

of project success, as well as those events most likely to cause problems. Interface events with other projects and events along the critical path should also be pointed out as being of possible monitoring interest to the director. In the dialogue with the director, the project officer should explain the implications of each event for the project. During this dialogue, the director selects for his monitoring activity, those events from the operational network he considers to be central to the achievement of project objectives. Figure II-9 shows the events the Field Director will monitor for a portion of the Tehristan Operational Network. They are indicated on the Operational Network by a small triangle placed above the event to be monitored:



Once the Field Director monitoring events have been identified on the Operational Network, the project officer (design team) identifies the performance indicators in terms of quantity and quality for each of the events selected for monitoring by the director. These are the desired performance levels.

b. Field to Washington Reporting

At the same time, the director will select events for field-Washington reporting which may be some or all of the events he has selected for his own monitoring activities. Together with the project officer he will determine at what point in time these events will become critical to project success. This is the beginning step for developing the CPI\* network, and focuses on the first dimension of a CPI which is timeliness. The CPIs are displayed in a summary network as shown in Figure II-11. Thus, CPI reports, in addition to focusing on "critical" levels of achievement in terms of quality and quantity (described in Procedure 10), are generated at "critical" dates rather than operational network target dates.

\* CPI=Critical Performance Indicator: CPI Networks are part of the Agency-wide Project Performance Tracking (PPT) System requirements. Further information is available in AID's Handbook #3, and in the new PPT manual, shortly to be circulated.

country:	project no:	project title:	date:	/ X / original	PPT appr
TEHRISTAN	000-501-007	TEHRISTAN MILLET PRODUCTION	1/76	/ / revision#	

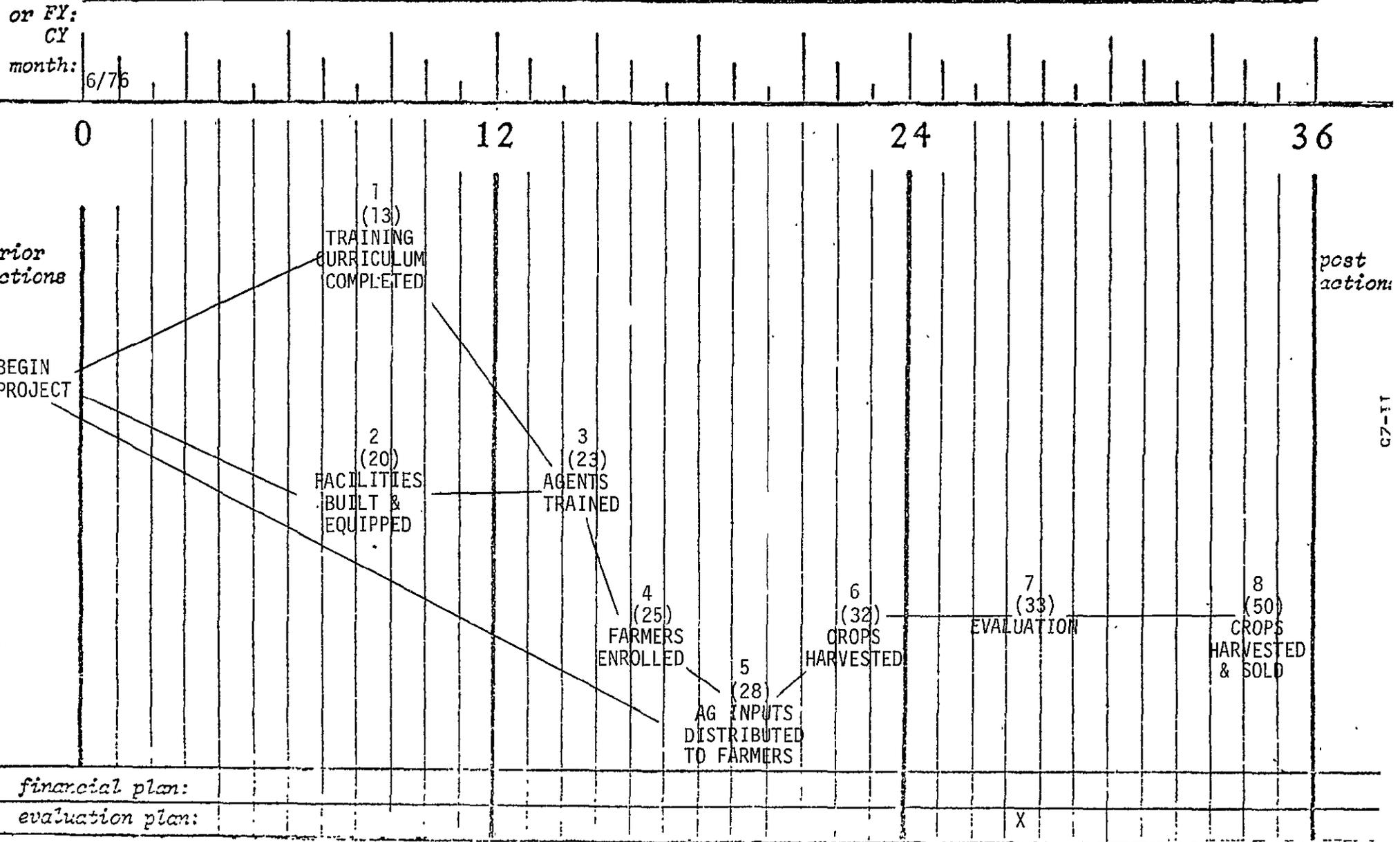


FIGURE II-77: CPI NETWORK FORMAT

(Event number from operational network is shown in parenthesis following CPI number)

The Agency defines critical dates as those dates for which failure to achieve performance would jeopardize the project in terms of (1) achievement of purpose, (2) project completion date, and (3) budget. The identification of problems at the Field Office level may lead to their resolution before the "critical date" of a CPI. The difference in dates works to the advantage of the project: The anticipation of a reporting date on the Operational Network focuses internal field office attention on project problems and their resolution; anticipation of a "critical date" focuses office attention on the actions/options it will report to Washington if the CPI can not be achieved on schedule and/or in the desired quantity or quality.

10.

DEFINE PERFORMANCE INDICATORS
-------------------------------------

a. Operational Network Performance Indicators

Sound project planning requires establishing the measures of performance which signal project success at interim points during project implementation. A performance indicator is a statement of the type of performance expected in connection with the achievement of a project event. For each event in the project network it should be possible to specify performance expectations not only in terms of a target date, but also in terms of the quality and quantity of the results associated with that event. These indicators serve two important functions:

- ° Assessment of planned versus actual performance, so as to judge the project probability of success and the need for revision;
- ° Objective reporting of progress to higher management levels.

In the Africa Bureau PMS, performance indicators are established for all events monitored by the Mission Director. As a system option, the project officer may choose to develop performance indicators for all operational network events. This provides for more frequent assessment of actual project progress.

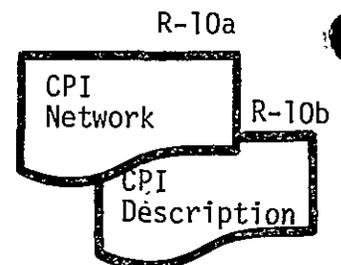
The discipline of the Logical Framework Approach for Project Design and Evaluation requires that indicators be objectively verifiable. That discipline applies equally to performance indicators related to network events. An indicator specifying "education improved" is not objectively verifiable. "Improved" may mean three people can read and write, or it may mean 60% of the population in the 10-20 age group can read and write. An indicator stating "32 student physicians graduate with grades of B+ or higher;" and timeliness--"July of 1976," is objectively verifiable. Performance indicators for events that are to be monitored require specification in terms of quality, quality, and timeliness.

b. Critical Performance Indicators

It is the responsibility of the project team to define critical performance indicators. Reporting on critical performance indicators between the field and Washington is on the basis of "critical" levels. The critical level for the time dimension is a "critical date;" the critical level for substantive performance is a minimum performance level in terms of quantity and quality. As in the case of the critical date, critical in terms of performance indicators connotes a level of performance that would jeopardize achievement of agreed-upon project objectives, specifically the project purpose. In identifying a performance indicator for Field Office reporting, a Project Officer may specify a target such as: 100 graduates with A averages. In defining a critical minimum for Washington reporting the project team may judge that the purpose of the project could still be achieved if only 80 graduates were provided with

no less than a B average. The target of 100 indicates that the project has defined a desired level, acceptance of 80 would be less than optimal, yet the project could be successfully completed if no other critical variables changed. Once these Critical Performance Indicators (CPIs) have been identified, they are displayed in a CPI (Critical Performance Indicator) Network.

The CPI Network is a graphic representation of the project's Critical Performance Indicators, and their relationships. The Agency's format for displaying a CPI network is presented in Figure II-11. The reader should note that the dates for project events on the CPI network are not consistent with the dates on the operational network. The change in dates in the CPI network reflects the PPT system requirement that CPIs be included for reporting at the point where they are critical to project success.



c. CPI Description

As CPIs displayed on the network are necessarily briefly described, using only key words, a CPI network must be accompanied by a more detailed description of each CPI. This more detailed description is recorded in the CPI Description Format shown in Figure II-12: This format is an integral part of the complete PPT submission. Each CPI should include critical date, critical achievement levels in terms of quantity and quality and, in addition, should identify the responsible action agent. The form in Figure II-12 has been filled out to illustrate the recording of critical performance indicators for the fictional Tehristan project for field-Washington reporting. The PPT Manual, which will be circulated in March, 1976, contains further detailed information.

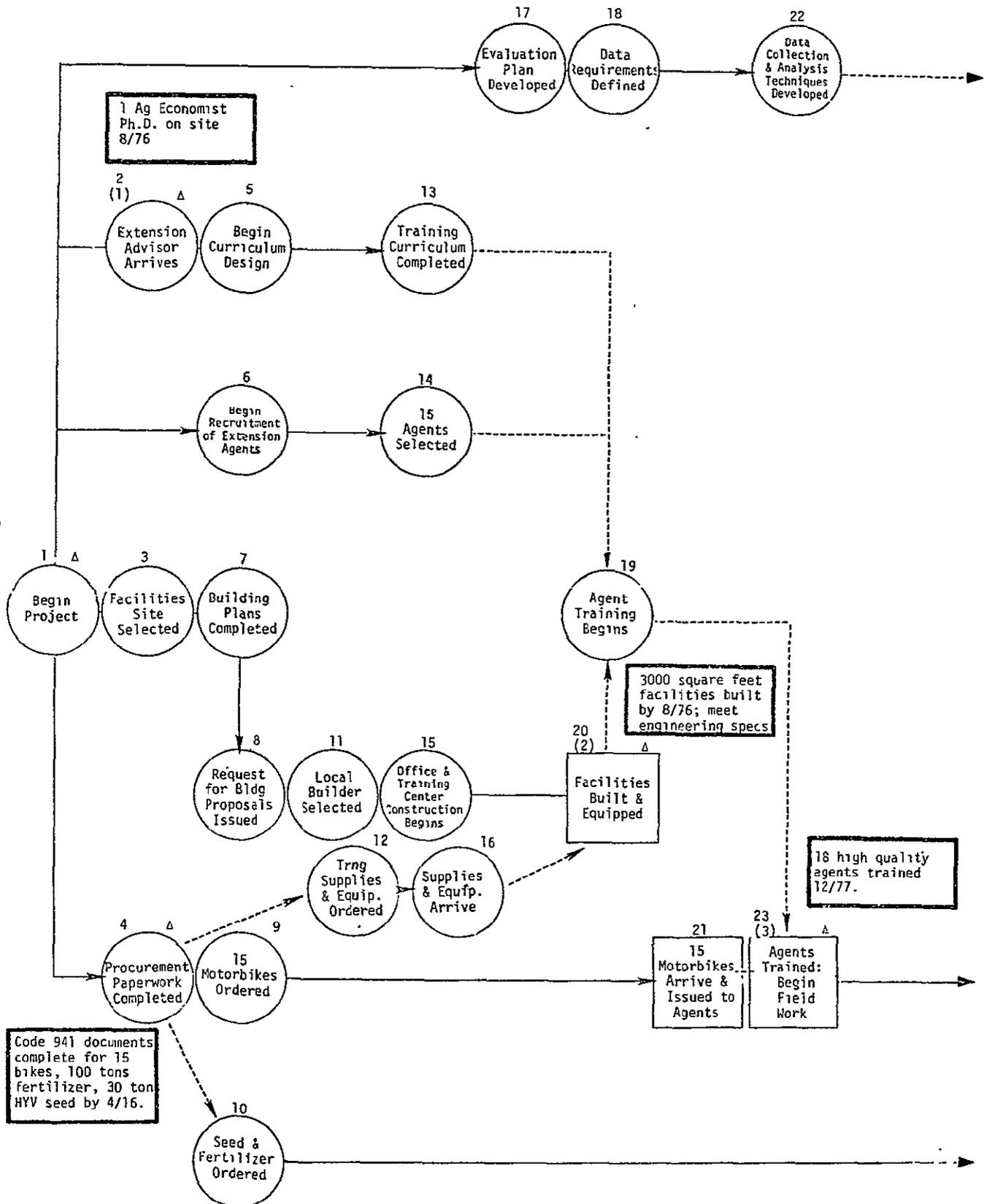
d. Performance Indicators on Operational Network

There are two optional PMS formats for describing performance indicators for internal use in the field office. The most direct method is to place the indicator description directly onto the operational network, close to the event being monitored, as in Figure II-13.

This method is used when the performance indicators are not too cumbersome and the events being monitored are not too many.

The second option is to type the performance indicators and the relevant CPIs on the same form so that the Field Office Director can make instant comparisons when reviewing performance indicators on the operational network. He will not have to turn to the CPI format and search for the CPI to see what the critical performance levels are; the information will be together on one sheet. The disadvantage of this format lies in the duplication of effort; the CPIs will have to be typed again in the Washington reporting format. (Where the Director is reporting all his monitoring events to Washington, this format might obviate the need for the CPI format.) An example, using the Millet Production project, is shown in Figure II-14. (A third column could be added to record actual achievement.)

Figure II-13: PERFORMANCE INDICATORS PLACED DIRECTLY ON OPERATIONAL NETWORK (Partial Network)



OPERATIONAL NETWORK			CPI NETWORK		
EVENT		PERFORMANCE INDICATOR	CPI		CPI DESCRIPTION
#	DATE		#	DATE	
2	6/76	1 Ag Economist (Ph.D.) who has worked for 5 years in LDCs on-site ACTION: BUREAU	1	18/76	Ag Economist (Masters) with at least 8 years work experience in LDCs on-site. ACTION: BUREAU
4	4/16	Code 941 Procurement documents completed for 18 motor bikes and spare parts, 100 tons fertilizer, 30 tons HYV seed ACTION: MISSION	N/A		
20	8/76	3000 square feet office and training facilities constructed according to plan. Engineering acceptance by AID engineer 8/76 ACTION: CONTRACTOR	2	10/76	Same
23	12/76	18 agents complete training in pest prevention, modern planting techniques, animal traction, etc. All agents receive 80% or more on written and practical tests. ACTION: CONTRACTOR	3	12/76	15 agents complete at least 90% of all subjects taught. 15 agents receive 70% or more on written and practical tests ACTION: CONTRACTOR

Figure II-14: Optional format for displaying operational network performance indicators and CPIs.

E. EVALUATION11. 

IDENTIFY EVALUATION REQUIREMENTS
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The PMS evaluation planning requirement calls for the identification of both the logical evaluation points in a project and the type of data that must be available if quality evaluations are to be conducted at those points. The Agency evaluation system recommends identification of such points as well as the early identification of the data required for evaluation. AID does not currently require such specification on a project-by-project basis. Hence, the project-specific requirements for evaluation planning are incorporated within the PMS. The PMS calls for the explicit identification of evaluation requirements for a project and the acceptance by project management of the responsibility for meeting these requirements.

The PMS project evaluation plan considers two aspects of evaluation: (a) data requirements, and (b) timing. In the following sections, each of these aspects is defined for the PMS.

a. Evaluative Data

The data required to perform an evaluation of a project is not always generated automatically. The evaluation planning process is designed to define the data requirements for project evaluation and to incorporate the collection of such data into the normal project activity.

While it is not possible to specify the types of data required in all projects, it is possible to identify broad categories which the designer should consider in relation to his project:

- Baseline Data: To determine the impact of a project it is necessary to establish what the conditions were before the project began. When the need for such data is recognized either after the project budget is finalized, or after the project has begun, it is often impossible to collect baseline data. The time to identify the need for baseline data--on a target group, on economic indicators, on the use of current facilities, etc.--is during the project design phase. At this point it is still possible to allocate funds to baseline data collection activity and to actually collect this data before the project begins and creates effects in the project environment;
- Growth Data: In evaluating performance in some projects it is necessary to know not only the final result but also the pattern by which that result was achieved. Growth data is generally described as being a set of periodic assessments on a single indicator. These assessments can then be plotted on a graph to describe the pattern of change resulting from project activity. As in the case of baseline data, it is necessary to define the need to collect such information prior to beginning the project -- it will not be possible to secure this type of data after the fact in a large number of cases;
- Post-Project Data: In some projects the evaluator is primarily concerned with what happened after project activity ceased. This is particularly true for demonstration projects, and projects where spread-effect is predicted. Here too it is necessary to plan early for data collection. In this case it is not necessary to undertake the data collection early, but the funds should be secured during project planning.

For further discussion of evaluative data the designer is referred to the Agency's Project Evaluation Guidelines and the Evaluation Handbook developed by the Agency. While the PMS manual does not define every type of data requirement that may face the designer, it does point the way for a data requirement analysis. It is the responsibility of the designer to carry this process forward to define the special data collection problems and requirements for his project.

b. Evaluation Timing

The planning of evaluation activities is facilitated by use of the project network as a method of visually identifying the points in the project where the Bureau has leverage on the course of project events. Leverage here is simply defined to be points in the project when the results of an evaluation could be applied to the process of deciding whether the project should continue according to the existing plan, or whether that plan should be modified in some way.

The Bureau's degree of leverage varies by project, and for similar projects depending on the degree of collaboration between AID and the other parties involved in the project. In some projects, points of refinancing may be the only real leverage points where evaluation results can contribute to the decision-making process. However, in most projects there will be additional leverage points where evaluation can contribute to the project dialogue. In projects that provide results on a cyclical basis (e.g., training program, agricultural projects, etc.), the end of a cycle is often a logical point of evaluation. In projects where a single large facility overshadows other outputs, evaluation is often needed

before the facility is completed in order to determine whether the assumptions about its use are still likely to be valid (e.g., are people moving into the area where the facility is being developed, etc.). Evaluation prior to the completion of this type of project facilitates the discussion of options for modification of the project plans, even where the project has been fully financed and is being managed by the recipient.

Evaluation timing is project-unique in the PMS. While the Agency requirement for annual evaluation is still in effect, the Africa Bureau considers a clear and responsible project-specific evaluation plan approved in the Bureau to be a basis for seeking exemption from an automatic annual evaluation requirement. Realization of the potential benefits of project-unique evaluation plans and evaluation timing is an opportunity for the project designer; where the opportunity is not taken, the annual requirement, will still apply.

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The project evaluation plan as described in the AID Project Handbook #3 results from the process of defining evaluation requirements and is incorporated into the two primary project planning tools: The project Logical Framework and the project Networks.

Substantive data collection requirements are incorporated into the project Logical Framework. This incorporation is made in two places: The Means of Verification column and the Input column.

In the Input row for the project, the resource requirements for the special data collection activities identified in the Means of Verification column are identified. These resources are a part of the project resources in much the same way administrative costs associated with the project are Inputs. Their consumption is required for good project

management, but the use of these resources does not directly correspond to the production of specific project outputs unless the data collection effort is significant enough to warrant identification as a separate output (i.e., Output 6: Data collected and analyzed).

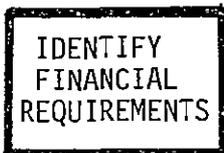
The timing of evaluation suggested through the analysis of the project evaluation requirements is incorporated into the project's network. The evaluation points are identified as project events, and event symbols for each evaluation point are incorporated into the full project network. Normally the incorporation of these events does not require recalculation of the network. Figure II-15 shows how an evaluation is recorded in two places on the CPI network.

R-11



F. FINANCIAL PLANS

12.

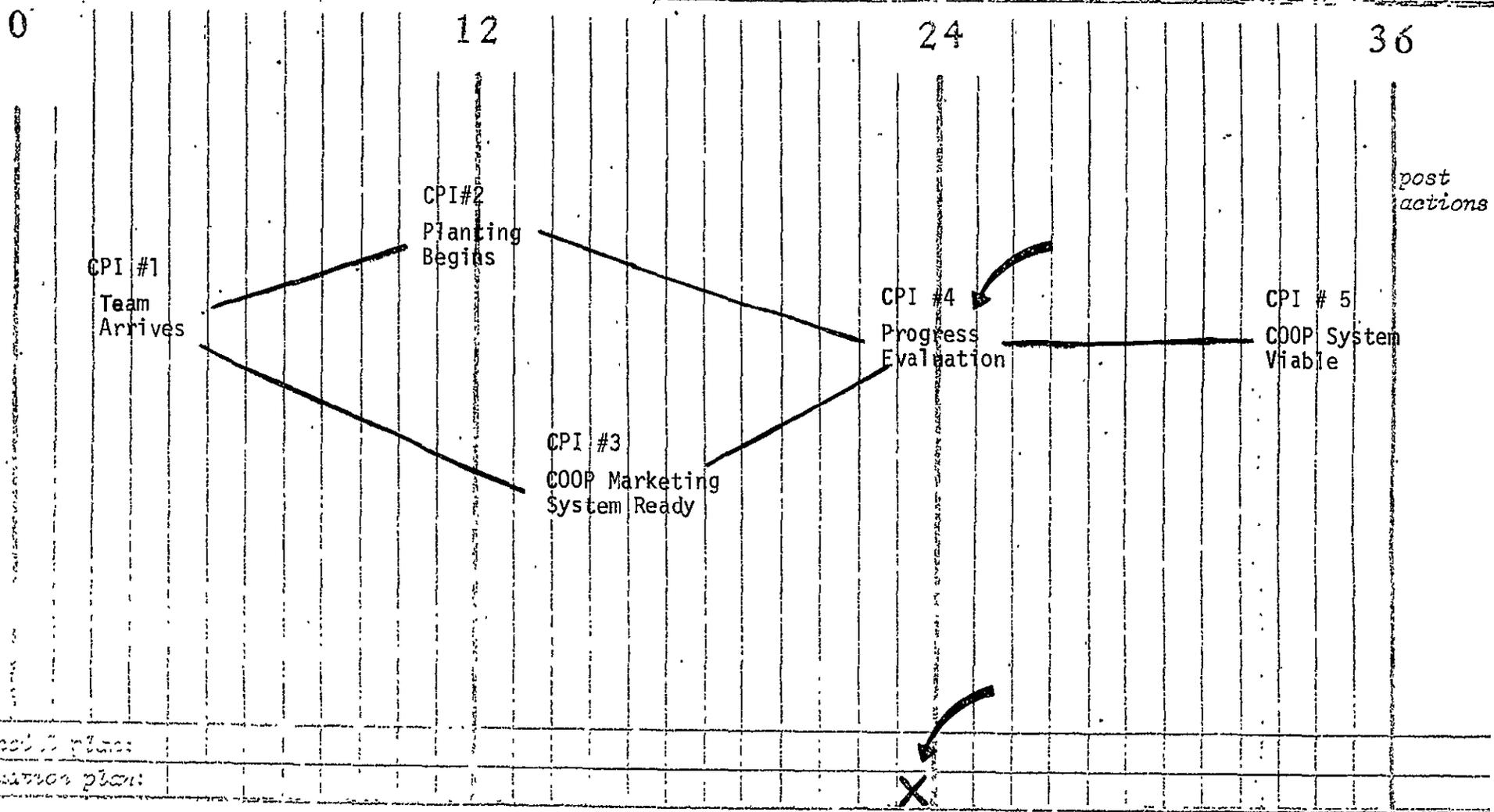


The issue of overall project financial management is being reviewed by the Agency, and it is hoped that guidelines will be issued by the end of the Fiscal Year. The guidelines will be coordinated with PBAR activities and facilitate preparation of financial information to conform with the Project Accounting Information System (PAIS) functional requirements. Output costing may not be an Agency requirement but will be a system option.

PROJECT PERFORMANCE TRACKING (PPT) SYSTEM

country:	project-no:	project title:	date: / / original	PPT appr
			/ / revision#	

FY:  
CY  
nth:



II-38

branch plan:  
evaluation plan:

PBAR/A-15-75

CRITICAL PERFORMANCE INDICATOR (CPI) NETWORK

Figure II-15: Evaluations are identified twice in the CPI Network

The Africa Bureau PMS recommends that an output costing approach be used in developing the project financial plan. Output costing is a logical extension of the Agency's effort to adopt a system of performance-oriented management.

Performance-oriented management requires that performance objectives are met within a defined schedule and budget. In Section D, the Africa Bureau PMS Manual defines the networking concepts that are to be applied in developing the project schedule. In this section, output financial plans are defined as the recommended approach to developing the project budget. Additional advisory material on output costing is to be found in Appendix B of the manual.

Output financial plans are based on the project resource requirements identified in the process of developing the project's LogFrame and operational network. These resource requirements are grouped in terms of the output they support. Output costing uses the grouped resource requirements as the basis for identifying project obligation plans and expenditure plans in two dimensions:

- a. Total project costs: All project costs, by output, including costs incurred by the host country and other donors;
- b. AID costs over time: Forecasts of project obligations and expenditures by output for all AID funds. Inclusion of host country and other donor funding in these forecasts is an option that is available to the planner; it is not required for the PMS.

Output financial plans result from an assessment of project resource requirements and an analysis of the dollar value--the cost of procuring--these resources.

Development of the project's financial plans can commence as soon as the project's basic design has been formulated in draft. In general it is recommended that the output costing exercise be undertaken concurrent

with, or just after the development of the project's network(s). Early involvement of the financial member of the team can be expected to facilitate the output obligation and expenditure forecasting procedures.

Normally the development of the project's financial plan will be a joint effort involving the project team and a representative of the Controller's office. In some Bureau Field Offices this financial member of the team will be part of the Field Office staff, in other Field Offices this team member will be associated with a larger Field Office or with a Regional office. In the latter case, participation by the financial member of the team will require special attention to the scheduling of working sessions.

a. Project Financial Plan

The PMS encourages the development of two financial plans for each project. The first of these plans, the total funding plan, is the basis for financial approval of the project. Data from this plan is needed for the PP submission; draft financial plan data is needed for the project's PRP submission. The second plan, the projection of project expenditures over time, is the basis for accrued expenditure reporting during the project life. In the following subsections these two plans and the formats for their presentation are discussed. Worksheets and guidance on the development of these planning documents are provided in Appendix B of the manual.

R-12



b. Total Cost Plan

Each of the Agency's successive project approval documents--the PID, PRP and PP, call for an identification of project costs at successively

increasing levels of detail and accuracy. The basic components of the total cost plan required in these approval documents are: The AID (loan or grant), host government, and other donor contributions to the project. Agency documentation requires that these contributions be identified both the first year of the project and as a total for all project years.

Directions for development of the PRP, and the Africa PMS, stipulate that during the project design and approval process the project costs be broken down by project output. From the Agency standpoint the development of the output cost breakdown serves as a test of the quality of the project design. In the Africa PMS this quality check is carried out, but in addition the development of the output cost breakdown provides a basis for project obligation and expenditure forecasts needed by the Bureau for implementation and monitoring purposes.

The Agency's Handbook #3: Project Assistance provides a format for the costing of project outputs/inputs.\* This form can be completed for the PRP based on the development of the PMS output expenditure plan. A sample of a completed PMS output expenditure form for the Tehristan Millet project is shown in Figure II-16.

c. Planned Accrued Expenditures

In the PMS, project plans identify the manner in which resources will be consumed over the life of the project. The PMS approach to life of project costing recommends that the consumption of resources be displayed:

- (a) By output as the basis for the development of total life of project expenditure projections;

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\* AID, Project Assistance, Handbook #3, 1975, page 5B-3.

PROJECT COSTING BY OUTPUT

Project: Tehristan Millet Production

Date Prepared: 1/76

Costs by Output	SOURCES OF FUNDS					Total by Output	
	Grant	Loan	Other Donors		Host Country		Other Donors
			1. _____	2. _____			
Output 1: Office/Training Center	\$ 25,000				\$ 5,000	\$ 30,000	
Output 2: Trained Extension Agents	\$133,000				\$20,000	\$153,000	
Output 3: Farmer enrollment	\$ 5,000				--	\$ 5,000	
Output 4: Technical Assistance to Small Farmers	\$333,000				\$60,000	\$393,000	
<b>TOTAL BY OUTPUT</b>	<b>\$496,000</b>				<b>\$85,000</b>	<b>\$581,000</b>	

Figure II-16: TOTAL PROJECT FUNDS FOR SAMPLE PROJECT (in Thousands)

- (b) By year for each output, and in addition by quarters during current project years, i.e., expenditure forecasts for the first year of a project to be identified by quarters at the start of the first year; second year quarterly expenditures to be developed at the start of the second year, based on data concerning actual year one expenditures.

The Agency's Project Performance Tracking (PPT) system requirement that total project expenditures be projected on an annual (at minimum) basis is met through the PMS expenditure projections by output and year. The total of the output expenditures planned for a year--or for a quarter--amount to the total AID expenditure expected during a given period of time. The PMS accrued expenditure plan further serves as the basis for financial reporting during the project life: This document defines the "planned" financial performance against which "actual" project financial performance is monitored. A similar situation is true for obligation forecasts.

Appendix A of the Manual provides worksheets and guidance for the development of obligation and accrued expenditure projections. In Figure II-17, the planned accrued expenditure format is provided, including examples for the fictional millet project.

	YEAR ONE FY ____								YEAR TWO FY ____		YEAR THREE---- FY ____		TOTAL ALL YEARS	
	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Grant	Loan	Grant	Loan	Grant	Loan
	Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan						
Output 1: Office/Training Center	\$ 3,000		\$ 10,000		\$ 9,000		\$ 3,000							\$ 25,000
Output 2: Trained Extension Agents	\$ 6,000		\$ 12,000		\$ 34,000		\$ 21,000		\$ 60,000					\$ 133,000
Output 3: Farmer Enrollment							\$ 5,000							\$ 5,000
Output 4: Technical Assistance to Small Farmers	\$ 20,000		\$ 30,000		\$ 50,000		\$ 40,000		\$ 193,000					\$ 333,000
TOTAL	\$ 29,000		\$ 52,000		\$ 93,000		\$ 69,000		\$ 253,000					\$ 496,000

Figure II-17: PLANNED ACCRUED EXPENDITURES FOR SAMPLE PROJECT (In Thousands)

G. Review and Approval Process--Field

13.

REVIEW ALL DESIGN PRODUCTS
----------------------------------

Review of the project design products is a key stage in the design process. In the review, the design products are examined for their validity in describing the project and their adequacy in meeting management needs.\*

The review process is a collaborative one involving the Office Director, either in Washington or in the field, and the Project Design Team. It is the responsibility of the Design Team to take the initiative in explaining the project and demonstrating that it has been fully and accurately described in the PMS products. The Design Team Leader takes the responsibility for pointing out alternative strategies and project issues for the Director. The responsibility for presentation of the financial plan and/or the evaluation plan may be delegated to the Controller or the Evaluation Officer, respectively.

It is the responsibility of the Director to test the logic of the project design, and to validate for himself that the project's Logical Framework, network, financial plan and evaluation plan address the central issues of the project design.

The review of the project design products should result in a decision by the Director as to whether to move forward on the project design effort. In some cases the review should signal the Director that further efforts are unwarranted and the project can go forward; in other cases the Director may require further clarification or analysis prior to his submission of the project for Washington consideration.

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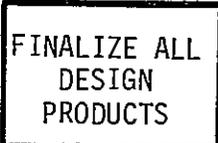
\* Project designs are reviewed before the PID, PRP and PP submissions. In each review the degree of detail in the design products increases.

14. 

The PID, PRP, and PP are developed concurrently with the PMS products. The PMS provides tools for assisting the project design team in developing these required documents. The necessary elements for inclusion in these design documents (PID, PRP, and PP) in addition to the PMS products, are described in the Agency's Handbook #3: Project Assistance. These elements include such items as the economic analysis, social impact study, project justification and narrative description, etc.

Once the normal documentation and appropriate PMS products are prepared, the design package is ready for approval by the Director.

There are no fixed criteria governing Director approval of a PMS design package: However, the questions shown in Figure II-18 should be answerable from a review of the PMS elements. Where the answer to each question is satisfactory, submission of design documents to Washington will normally be warranted. By his approval, the Director indicates his confidence in the PMS products and design documents the design team has developed. He signals his willingness to present the project as an integral and important part of his program.

15. 

Following Director review and approval, the project design team makes the appropriate revisions in the project design documents and prepares final copies of the PMS design products and all elements normally submitted

A. LOGICAL FRAMEWORK & PROJECT NETWORK

- Does the project LOGICAL FRAMEWORK accurately describe the project? Is it consistent with the description that has been presented?
- Have key assumptions been identified in LF and highlighted in narrative?
- If the Project Officer monitors the events identified in the network, will the main project information needs be satisfied?
- Does the network explicitly show the production of all outputs and sub-outputs?
- Do the relationships between events appear logical?
- Are the time estimates for accomplishing various activities realistic?
- Is the Project Officer monitoring at a level of detail appropriate and sufficient to "keep on top" of the project?
- Is the network comprehensive enough to permit Director monitoring of a few selected milestone events?
- Are the "Critical Performance Indicators" truly critical to project success?

B. EVALUATION

- Is the evaluation outline an adequate basis for developing a full evaluation plan?
- Have all key issues of evaluative interest been identified?
- Is the anticipated timing of evaluations geared to project decision points?
- Is the data collection and analysis plan realistic?

C. FINANCIAL PLAN

- Have the project elements been broken down into output components sufficient for realistic costing?
- Can the costs of outputs and suboutputs be determined and identified by cost component?
- Have the costs been broken down by appropriate time periods?
- Are assumptions made in the financial analysis realistic?
- Does the cost of each project output appear reasonable compared to the importance of each output in attaining the project purpose?

Figure II-18: SUGGESTED DIRECTOR REVIEW QUESTIONS

The degree of confidence should be increased with each submission.  
(Some questions will obviously not be appropriate at the PID stage.)

with the PID (or PRP, or PP, as appropriate) documentation. Normal procedures will be followed for the formal submission of these documents-- as described in AID Handbook #3. Facesheets for these formal submissions are available in the Bureau's Washington and Field Offices, as are the Agency's Logical Frameworks and CPI Network, and CPI description forms.

The PMS package at the point of PP submission consists of:

- One copy of the Logical Framework(s);
- One copy of the financial plan;
- One copy of the operational network;
- One copy of the CPI network and CPI indicator description.

These elements are incorporated as required into the Agency's PP format.

At the point of the PRP submission, one draft copy of each of the PMS elements is submitted as appropriate. The PID submission should include a draft Logical Framework. Figure I-4 defined this submission schedule for the PMS design products.

R-15

APPROVED  
DESIGN  
PRODUCTS

16.

SIGN/SEND

The Director reviews the products to insure that his recommendations for modification have been incorporated. If satisfied, the Director signs off on the final package.

The Office Director's signature on the total PMS design package signals completion of his final review of the design products. They can now be submitted to Washington.

H. System Displays

17. 

ENTER INTO MANAGEMENT DISPLAYS
--------------------------------------

A major responsibility of Bureau managers is to assure that the PMS will be used. If LogFrames and networks are filed away, attainment of project objectives may be hampered. It is important to display key information where it can and will be used.

It is the responsibility of the Field Office Director, or his designee, to develop and maintain displays for the PMS system. While no specific approach to field office management displays is required, the following functional specifications should be considered:

- Easy access: Displays should be maintained where they will be seen, and where they create a convenient environment in which project progress can be discussed. For one Field Office this may suggest display in the Director's office, for another a central hallway or conference room might be chosen;
- Easy revision: The portfolio of projects changes over time, and event dates change for specific projects. Both of these factors suggest that the PMS manager place a premium on developing a local display system that is easy to revise.

In the following paragraphs a number of suggestions for display systems are provided. They are included in order to stimulate Field Office creativity in developing a display system that serves local management.

a. Summary Project Status Board

A Summary Project Status Board illustrates all Director and Washington reporting events for each project over a period of approximately 18 months. In most cases, the events for each project are shown in a single line. The board would be updated every six months, permitting a visual look ahead of at least one year. An example of such a board for four projects is shown in Figure II-19.

The Status Board has a movable cursor hanging vertically down the board to mark the current date. As more projects are brought into the PMS, the projects could be grouped by responsible Project Officers or there might be as many summary Project Status Boards as there are Project Officers.

b. Action Boards

A companion management tool, the Action Board, is designed to ensure that when exception items are raised, the actions decided on are recorded and targeted for completion by a specific date so that project actions can be tracked in the same manner as the project itself.

An example of the proposed Action Board is shown in Figure II-20. When an action to resolve a problem is chosen, it is recorded in the Action column. The "action agent" (individual responsible for carrying out the agreed-upon action) is listed in the appropriate column, along with the agreed date the action will be completed. The date by which the problem must be resolved is also recorded on the Action Board. This shows management how much time is available if the initial actions do not resolve the problem and alternative strategies are required.



STATUS	PROJECT	KEY EVENT, PROBLEM & DATE	ACTION	ACTION AGENT	DATE OF ACTION REQUEST	MUST COMPLETE ACTION BY	PROBLEM RESOLUTION REQUIRED
□	Livestock	X23 (3/74) Contract signed	1. Develop detailed schedules; 2. Waive CPs or extend date; 3. Cable to contractor & AID/W for above cleared by CDO; 4. Schedule assistance in setting targets, schedules and evaluation.	1. Contractor 2. AID/W 3. Williams 4. Eval Officer	1/24	2/15	2/28
		3/1 contract signing improbable based on ambiguities in targets & schedules.			2/16	2/20 1/24	
□	Hospital	Y74 (5/74) AID approves Construction Contract	1. Host government to formally approve contract amendments; 2. Release funds for contractor payment upon contract signing.	1. GURC 2. AID	12/15	1/31	2/15
		Contractor began construction w/out AID contract approval & is not being paid.			1/31	2/5	
□	Bridge	M16 (3/75) CPs to be met	1. REDSO review of CPs; 2. Analyze CPs & prepare data for review; 3. Cable recommendations to AID/W re waiver, extend CPs; 4. AID/W resolves issue.	1. Smith 2. Jones 3. Smith 4. AID/W	1/20	1/31	3/12
		CPs will be missed.			1/16 1/20	1/30 2/5	
	Telecomm	5C2 (10/15/74) Operations Manual in Use	1. Cable field for status of Event 5C2.	1. Patrick	1/20	1/28	1/28
		No episodic report received.					

Figure II-20: ILLUSTRATIVE PROJECT ACTION BOARD

If target dates are not set, there is a danger that more immediate day-to-day pressures and activities will take precedence. The Action Board assures that required actions are not "forgotten" and helps maintain the forward-looking emphasis of the information system. An Action Board is displayed along side each Summary Project Status Board, and the two are used in conjunction. Events in trouble are flagged on one side of the display and the appropriate actions will be shown immediately opposite. When a problem is totally resolved, the actions will be removed from the Action Board.

c. Method of Displaying Boards

Where more than one display board will be used, they can be conveniently wall-mounted and opened to the appropriate place somewhat like a book as shown in Figure II-21. When not in use the boards can be closed flat against the wall.

It is anticipated that these boards will be a dynamic and useful way of focusing management attention on anticipating and resolving problems, thus preventing many potential exception conditions from occurring.

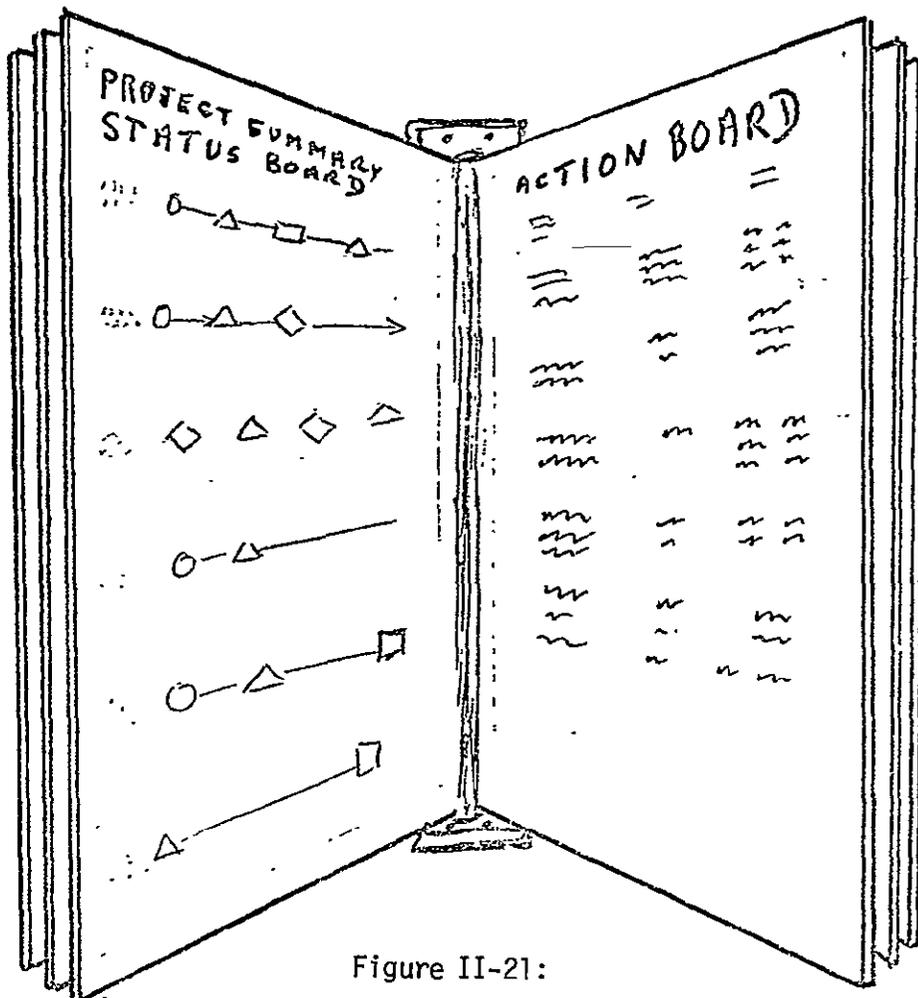


Figure II-21:  
SAMPLE DISPLAY BOARD

I. Review and Approval Process--Washington (chart 2-3)

18. 

PROJECT COMMITTEE REVIEW
--------------------------------

Three project approval submissions are forwarded for Washington review: the PID, the PRP, and the PP. In each submission some portion of the PMS design package is incorporated. Each of these submissions requires review and approval within the Bureau. Receipt of a PID, PRP, or PP activates the review process.

The full PMS design package is considered for approval in the PP review. Only a portion of the full package is considered during the PID and PRP reviews. While the system description chart and the accompanying narrative focus on the PP review procedure, a brief review of the PID and PRP reviews is provided below.

a. PID Review and Approval

At the PID stage none of the PMS design products are formally required by the Agency. However, the Bureau prescribes the submission of a draft Logical Framework with the PID.

The PID review is coordinated within the Bureau; representatives of other Agency Bureaus will be included in the PID review whenever their expertise is required. Normally the PID review will be scheduled in the Bureau within ten days after PID receipt.

The PID review considers the substantive importance of the proposed project and its consistency with Bureau and Agency policy. PID approval carries with it authorization to develop a PRP. PID approval is conveyed to the field by cable. No standard format for this approval cable is defined. Further description of the PID review and approval process is provided in Chapter 8 of the Agency's Project Assistance Handbook #3.

b. PRP Review and Approval

At the point of PRP submission the Agency requires a draft LogFrame for the project as well as the usual PRP documentation. The Bureau additionally prescribes drafts of the project's operational and CPI networks as well as drafts of the project financial and evaluation plans.

The PRP review is held within two weeks of PRP receipt. The PRP review is a Bureau review which focuses on the soundness of the project and on its proposed funding level. In general, the Bureau expects that approved PRPs will proceed through the PP process and be entered into the Congressional Submission. Hence, it is imperative that careful review be given to the PMS design products that are submitted with the PRP. PRP approval is normally communicated to the field by cable. Chapter 8 of Project Assistance Handbook #3 provides more detail concerning the PRP review and approval procedures.

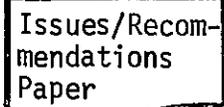
c. PP Review and Approval

The Project Committee Review is the first step in the PP approval process. Upon receipt of the PP/PMS design package by the Bureau, the Geographic Office schedules a Project Committee Review to be held within fifteen working days. Representatives of appropriate offices, e.g., Development

Planning (DP), Development Services (DS), General Counsel (GC), etc., are notified and sent copies of the PP submission for review. Other Agency Bureaus and offices are invited to participate in the PP review.

The Project Committee, in its review of the PP/PMS package, focuses on any remaining issues concerning project soundness, as well as on the quality of the project's proposed implementation plan, and is guided by a minimal set of criteria. Project Logical Frameworks that do not set forth clear objectives and targets for each objective and/or project networks and CPI networks that do not identify performance indicators for each of the project outputs, as well as the project purpose, do not warrant approval. It is recommended that the Project Review Committee be guided by the same type of review questions (presented in Figure II-18) as the Field Office Director uses in his internal review and approval process.

R-18



Issues/Recommendations  
Paper

d. Issues/Recommendations Paper

A record of the issues and recommendations from the Project Committee review is prepared by the Geographic Office and cleared with other offices that have participated in the Project Review.

19.

EXECUTIVE COMMITTEE REVIEW
----------------------------------

The documentation originally submitted by the Field Office and the issues/recommendations paper prepared by the Project Committee serve as the basis for this review. The Executive Committee Project Review is normally chaired by the Assistant Administrator. The Executive Committee has the authority to approve PP submissions that do not involve loan funding or the use of AID Housing Investment Guaranties.\*

20.

BUREAU APPROVAL
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If the PP is approved by the Executive Committee, and the project is not one that:

- a. Requires the Administrator's approval;
- b. Is an AID loan;
- c. Is an AID Housing Investment Guarantee (HIG),

the project receives programmatic approval for its life as estimated in the PP.

If further approvals are required, the recommendations of the Executive Committee, along with the original PP submission, are forwarded to the Development Loan Committee (in the case of a loan of HIG) or the

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\* Criteria for projects which are to be submitted to the Administrator/ Deputy Administrator for approval are listed in Attachment A to AID Circular Airgram #466 contained in Chapter 3 of the AID Project Assistance Handbook #3.

Administrator (in the case of a project that falls within the criteria for submission to the Administrator).

21. 

The Agency's Project Assistance Handbook #3 describes the Development Loan Committee and its review process:

"The Development Loan Committee is an interagency group established by law to review AID's loan criteria and policies, as well as proposed AID loan and guarantee projects. It is composed of senior U.S. Government officials and is chaired by the AID Administrator. Normally, the Committee meets at a staff level and is then known as the Development Loan Staff Committee (DLSC). The DLSC is chaired by the AA/PPC/DPRE."

Normally at this stage of the review process the recommendations of formal review committees will be accepted unless the financial aspects of the project raise serious questions. Loans of more than \$10 million must be forwarded to the Administrator for final approval.

22. 

The recommendations of the Development Loan Staff Committee for projects over \$10 million will normally be set forth in a signature memorandum for the Administrator.

Administrator approval of a loan of HIG project is based on the recommendations provided by the committees that have considered the project. Administrator action on a project can take a number of forms (see AID's Project Assistance Handbook #3):

1. Immediate authorization;
2. Immediate authorization based on modifications;
3. Approval with deferred funding;
4. Disapproval (a rare step);
5. Placed in pending status until modifications are made.

The Administrator's decision will normally be communicated first to the Bureau sponsoring the project. This Bureau will then prepare the cable notification for the field office.

23.

MESSAGE TO  
FIELD  
PREPARED

When the PP has received the appropriate Agency approval (see Procedure 20, page II-57) the Geographic Office prepares a cable for the field office.

This cable includes clear instructions concerning modification of the project and/or, by separate message, for modification to the proposed reporting schedule. Modifications to the reporting schedule should refer to the event and CPI numbers as well as the event and CPI descriptors to avoid any possible confusion. (Event refers to events on the operational network, CPI to events/indicators being monitored on the CPI network).

R-23

Approval  
Cable

24.

PROJECT CPI  
NETWORK  
ACTIVATED

Transmission of the project approval cable immediately activates the CPI network. The Bureau is responsible for assuring that in fact PMS networks are used by Washington Bureau Managers to monitor project performance.

The Assistant Administrator, or an individual to whom he assigns a PMS coordination function, is responsible for ensuring that management displays for the PMS system are developed and maintained within Washington. The approaches suggested for these displays in the field offices pertain to the development of the Washington PMS displays as well.

J. Amendments and Updates Prior to Implementation

25.

POST  
APPROVAL  
CPI  
REVISIONS

Washington approval of a project may be granted subject to modifications in the project, or to changes in the project reporting schedule. When notification of such modification requirements is received, the changes must be made, and instructions for update of the project's PMS displays must be developed. The Project Officer is responsible for making the basic changes in the project displays.

During the early phases of project implementation, the arrival of the project's implementation team (in cases where contractors and/or grantees will carry out the project) may suggest additional modifications in

the project plans. Where such changes affect the project's CPI reporting schedule, its purpose or outputs, or its resource level, higher management must be notified of proposed project modification. Other changes in CPIs can be communicated by cable and incorporated in the next CPI network revision without requiring higher management approval of the change.

R-25

Notification  
of  
Revision

Whenever a modification in the project affects the reporting schedule for CPI reporting, it is the responsibility of the Project Officer to draft a cable notifying Washington of such a change.

These notification cables must be approved by the Field Office Director, and should follow a consistent format. Notification of reporting changes is made through the normal cable format.

Figure II-22 provides a sample of the type of cable that might be developed by a field office in notifying the Bureau of a report schedule change or modification.

26.

CPI  
AMENDED

The Bureau Project Officer is responsible for the monitoring of the project's CPI network. When changes are made in a project, this officer is responsible for informing himself concerning the project modifications and taking the initiative in updating displays and the files that pertain to the project.

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TO: AID  
FROM: DAKAR  
SUBJ: CHANGE IN REPORTING, PROJECT NUMBER: 40-222-75: COOP/RURAL SENEGAL

A. TYPE OF CHANGE: REVISED SCHEDULE

B. CHANGE DATA:

1. ORIGINAL CPI NUMBER: 12
2. ORIGINAL REPORT DATE: 12/10/76
3. REPORT TYPE: ACHIEVEMENT
4. NEW CPI NUMBER: 12
5. NEW CPI DATE: 11/1/76
6. REPORT TYPE: ACHIEVEMENT

C. RATIONALE

COOPERATIVE DEVELOPMENT SPECIALIST INDICATES THAT UNLESS EARLIER DATE MET COOP PROPOSAL WILL NOT BE CONSIDERED FOR GOS FUNDING FOLLOWING JULY. NO OTHER PROJECT ELEMENTS ARE AFFECTED BY THIS CHANGE.

JONES

K. Field Project Implementation and Monitoring

27.

PROJECT IMPLEMEN- TATION
--------------------------------

Project implementation commences upon approval of the Project Paper. This does not, however, mean that project activity begins immediately. In a number of projects it will be some time before project activity commences, e.g., time during which the implementation team is hired and arrives, time during which the recipient fulfills a series of conditions that precede Project or Loan Agreement formalization, etc. The reporting/monitoring system will operate throughout the life of the project.

28.

PERFORMANCE MONITORING
---------------------------

Normally, the Project Officer will receive basic data on the project on a routine basis. His information gathering approach may consist of site visits, regular reports from the host country or implementing agents, telephone calls, and whatever other means are needed to assure him that (1) his project network is valid, (2) the host country or implementing agents share his view of the project and its objectives, and (3) project progress is being achieved.

The Project Officer maintains up-to-date information in order to anticipate problems in the project, and to make early assessments concerning his ability to meet the project's performance schedule. Based on this information, the Project Officer preserves an ability to make valid decisions concerning the types of action required in the project, and to appropriately define the substance of the reports he must prepare for higher levels of management.

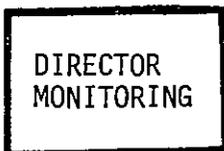
R-28



Reporting between the Project Officer and the Field Office Director will in the majority of cases be on an informal basis following the Positive reporting method. While projects, for purposes of field-to-Washington reporting will be on either the Positive reporting or Exception reporting basis, the reporting between the Project Officer and the Field Office Director need not follow the same format. That is, based on the Field Office Director's judgment, a Project Officer can be asked to report within the field office on a Positive basis, an Exception basis, or a combination of the two.

Formats are not prescribed for internal field office reporting. However, the formats for field-to-Washington reporting are prescribed in Procedure 30. The preparation of these CPI reports can be facilitated by ensuring that the internal field office reports contain at minimum the information required for field-to-Washington reporting.

29.



The Field Office Director is responsible for monitoring the progress of each project in his office. Field Office Director monitoring is based

on his earlier selection of reporting events. The Field Office Director expects to be notified of project progress--through the agreed-upon reporting system, and by maintaining contact with his projects and Project Officers. When reports are not provided as scheduled, the Field Office Director should inquire about the reporting failure and indicate that the report is expected.

Action by the Field Office Director to resolve project problems begins as soon as he is aware that they exist. The Field Officer Director depends on the Project Officer to provide the information required to begin remedial project actions.

When the Project Officer's review of project achievement indicates that there is a discrepancy between planned and actual project performance, he should alert higher management (automatically) and attempt to determine the causes of performance deviance.

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The Project Officer's focus in the analysis of project problems with AID's implementing agent and/or the host government, other donors, etc., should be on project options and the effects of current problems on future performance. Based on discussion of the problem with the key parties involved in project implementation, the Project Officer should be prepared to define and recommend options to the Field Officer Director regarding all issues that he is not able to resolve. There is no fixed structure for either the discussions between the Project Officer and the project personnel, nor is there a fixed format for defining options--both depend upon the nature of the project and the situation.

Where field actions are not successful in remedying project problems, the Field Office Director will notify the Bureau.

The progress reports transmitted to the Field Office Director, form the basis for performance reporting on Washington monitoring events/indicators included in the project's CPI network. The Director may select alternative methods to facilitate his review of project performance. He may require that their presentation be oral, as well as written. He may hold informal meetings and require Project Officers to prepare Performance Report drafts following such sessions. The form of the Director's review of project progress, and his procedures for developing field-to-Washington reports are discretionary and should be selected to complement the Field Office's management system.

30.

CPI  
REPORTING

Depending on the situation triggering a report, CPI achieved, endangered, or missed, the Director ensures the appropriate report is sent to the Bureau in Washington. These three reports are listed below and described in more detail in the following pages. This is followed by discussion of additional reports which are part of the PMS reporting requirements but are not always CPIs.

"ACHIEVEMENT" Report: These reports provide information to higher level management concerning the substantive progress of the project in terms of its plans for performance on a CPI.

"ENDANGERED" Report: These reports notify higher level management that operational network events have or may be missed such that a CPI event is endangered.

"MISSED" Report: These reports notify higher management that a CPI event has been missed.

R-30

CPI  
Reports

a. "Achievement" Report

On the Positive Reporting Basis, draft CPI Achievement Reports from the Project Officer to the Field Office Director should include the following information in cable form:

- SUBJECT PROJECT NAME, PROJECT NUMBER, CPI REPORT (achievement)
1. CPI NUMBER:  
CPI NAME:  
CPI CONDITION:
  2. SITUATION: Summary of the situation causing the report. CPI reports may simply state "achieved" or may expand on specific factors relating to the achievement as appropriate.
  3. IMPACT: Summary of the effect of the reported achievement on other project events and attainment of project purpose.
  4. ACTION: Statement of actions being taken or requested (if any) by whom and by when results of such actions are needed.

In preparing an Achievement Report cable, the Project Officer should be factual and brief. Achievement Reports will be prepared for Director review and approval prior to transmittal to the Bureau.

A sample of the project ACHIEVEMENT REPORT as it arrives in the Bureau is provided in Figure II-23. In the sample an overlay is used to call attention to the report. Cable backing sheets, such as the Action cable backing sheet, are an alternative for identifying CPI messages.

b. CPI "Endangered" Report

For projects reporting on both the Positive and Exception reporting basis, the Project Officer prepares a CPI "Endangered" report cable for the Field Office Director's review when a CPI event is likely to be missed. This

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UNCLAS MISSION 12345

SUBJ. TEHRISTAN MILLET; 64-202-78; ACHIEVEMENT REPORT

1. CPI #3

CPI NAME: 15 EXTENSION AGENTS TRAINED

CPI CONDITION: ACHIEVED

2. SITUATION: 16 AGENTS SUCCESSFULLY COMPLETED THREE WEEK TRAINING IN CULTIVATION, PLANTING, AND HARVESTING TECHNIQUES. 19 TRAINEES ORIGINALLY ENROLLED. TRAINEES DEMONSTRATED STRONG INTEREST AND PROVIDED INSIGHTS INTO FARMER MOTIVATION THAT WILL BE USED TO MODIFY FARMER CAMPAIGN. 10 TRAINEES RECEIVED 80% ON TESTS. 5 TRAINEES RECEIVED 75% ON TESTS.

3. IMPACT: PROJECT ON SCHEDULE WITH NO CHANGE IN TIMING OF FUTURE EVENTS. ASSUMPTION REGARDING FAVORABLE GOVERNMENT COOPERATIVE PURCHASE POLICIES MAY BE KEY IN ENSURING ADEQUATE LEVEL OF FIRST YEAR FARMER PARTICIPATION, DESPITE GOOD QUALITY OF AG EXTENSION AGENTS.

4. ACTION: PRESENTLY REVISING FARMER CAMPAIGN PROMOTIONAL MATERIALS TO INCORPORATE TRAINEES' SUGGESTIONS.

NO FURTHER ACTION REQUIRED.

Figure II-23: PROJECT ACHIEVEMENT REPORT

occurs when an operational network event monitored by the Project Officer has been missed, and, as a result, a CPI monitored by the Field Office Director and the Bureau is threatened.

The CPI "Endangered" Report should cover the following topics:

<p>SUBJECT PROJECT NAME, PROJECT NUMBER, CPI REPORT (missed, endangered)</p> <ol style="list-style-type: none"> <li>1. CPI NUMBER: CPI NAME: CPI CONDITION:</li> <li>2. SITUATION: Brief statement of problem, probable cause--in so far as it has been identified, and possible options for the project.</li> <li>3. IMPACT: Summary of the manner in which failure to achieve the target--time, quantity, and quality--will affect other aspects of the project, including possibility of CPI being missed, and other CPIs which will be affected.</li> <li>4. ACTION: Statement of actions being taken or requested (if any) by <u>whom</u>, and by <u>when</u> results of such actions are needed.</li> </ol>
---

When Field Office action fails to resolve the project problem and a CPI monitored by the Field Office Director is missed, Washington is notified by a CPI Missed Report.

Figure II-24 presents a sample CPI "Endangered" report cable to the Bureau.

c. CPI "Missed" Report

The CPI "Missed" Report is applicable to both the Positive and Exception reporting basis and follows the same format as the "Endangered" Report. This report is submitted when a CPI monitored by Washington has been missed. As in the "endangered" report, the situation is summarized with particular

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UNCLAS MISSION 15321

SUBJ. TEHRISTAN MILLET; 64-202-78; ENDANGERED REPORT

1. CPI #1

CPI NAME: TRAINING CURRICULUM COMPLETED

CPI CONDITION: ENDANGERED

2. SITUATION: OPERATIONAL NETWORK EVENT #2 "EXPERT HIRED" MISSED. UNABLE TO LOCATE SUITABLY QUALIFIED EXTENSION ADVISOR. CABLES TO UCLA, DEPT. OF AG. WITH NEGATIVE RESULTS. HOST COUNTRY RESOURCES EXHAUSTED.

3. IMPACT: IF TRAINING CURRICULUM NOT PREPARED BY 10/76, EXTENSION AGENTS WILL NOT BE READY TO ASSIST FARMERS AT BEGINNING OF PLANTING SEASON. COMPLETE CULTIVATION CYCLE WILL BE JEOPARDIZED AND PROJECT PURPOSE DELAYED BY SIX MONTHS.

4. ACTION: MISSION CHECKING WITH FORD FOUNDATION. EXPECT REPLY IN 2 WEEKS. AID/W CONTINUE SEARCH: ADVISOR MUST BE HIRED BY 7/76. PLEASE ASSESS POSSIBILITY OF USING EUROPEAN AND ADVISE BY 6/76.

SMITH

Figure II-24: EVENT ENDANGERED REPORT

attention being paid, in the assessment section, to the resulting impact on the project caused by the failure to meet the CPI, in terms of the project's scope, timing, and resources. The actions being taken by the Field Office are presented. The format used for the CPI "Endangered" report and the information and time for resolution including in the cable are also required in the event "Missed" report. An example of this type of report is presented in Figure II-25.

#### Additional PMS Reports

In addition to the reports described above, the PMS prescribes the following:

PROJECT FINANCIAL Reports: These provide information to higher levels of management on the project's obligations and accrued expenditures in comparison with the project obligation and expenditure plans.

PROJECT EVALUATION Reports: Project Evaluation reports provide higher levels of management with a positive report concerning the completion of an evaluation of the total project effort. This report indicates that an evaluation has been completed--whether or not the evaluation provides positive findings concerning project performance.

AUDIT FINDINGS Reports: Required in the event that a Program Management Audit presents findings concerning the project.

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UNCLAS MISSION 15555

SUBJ. TEHRISTAN MILLET; 64-202-78; MISSED REPORT

1. CPI #35

CPI NAME: BASELINE DATA GATHERED

CPI CONDITION: MISSED

2. SITUATION:

QUESTIONNAIRES SUBMITTED BY EXTENSION AGENTS ARE INCOMPLETE. AGENTS REPORT 2 HOURS REQUIRED TO GATHER ALL DATA REQUESTED ON EACH FARMER. AGENT TRAINING WAS INADEQUATE.

3. IMPACT:

PLANTING SEASON STARTS NEXT WEEK. NO TIME TO OBTAIN DATA BEFORE PROJECT INTERVENTION BIASES FARMERS. THIS WILL NOT AFFECT FIRST YEAR OF PROJECT. MAY BE POSSIBLE TO SUBSTITUTE TREND DATA FOR THE BASELINE. CONTRACTOR ESTIMATES REDESIGN OF QUESTIONNAIRE AND ADDITIONAL SURVEYS WILL COST EXTRA \$10,000.

4. ACTION:

CONTRACTOR ASKED TO REASSESS PROBLEM AND MAKE RECOMMENDATIONS INCLUDING EXTRA COSTS BY 5/10/77. WILL CABLE BUREAU WITH RESULTS BY 5/15/77. INCREASE IN FUNDS OF \$10,000 ANTICIPATED. ARE FUNDS LIKELY TO BE AVAILABLE? PLEASE INFORM BY 4/15/77.

SMITH

d. Project Financial Report

Until such time as the Agency revises its financial reporting requirements, the Bureau will continue to utilize the existing system for financial reporting. It should be noted, however, that the Agency is currently testing approaches for reporting financial data on an accrued expenditure and obligation basis by project output, and comparing such data against project expenditure and obligation forecasts (plans).

In light of this pending change in financial reporting, and based on the PMS financial planning documents described in Section II-F, it is recommended that the Field Offices experiment with the use of obligation and expenditure forecasts by output and the recording of obligation and accrued expenditure patterns in comparison with the projections. Figure II-26 shows a draft format for a Project Financial Implementation Plan currently included in the draft Functional Requirements specifications for PAIS (from report dated 11/13/75 and revised 12/30/75). Figure II-27 shows a draft Project Financial Activity Report which records cumulative expenditures for previous years and quarterly in the current year. This chart shows both input cost breakdowns and Output cost breakdowns. In the chart, the inputs are related to specific outputs by brackets and the relevant Output number. The two charts can be used together to compare projections against actuals.

To meet Bureau financial data needs that are compatible with the PMS, the Bureau envisions a quarterly field report comparing projected obligations and expenditures with actual obligations and accrued expenditures by output. If projections and actuals are close (within 10%) there would be no need for a narrative report to accompany the financial report. However, where there is a significant deviation greater than 10%, the report should be expanded to include a narrative explanation of the deviation, its causes and affect on future project costs.

Figure II-26: PROJECT FINANCIAL IMPLEMENTATION PLAN

COOPERATING COUNTRY		PROJECT NO.	PROJECT TITLE					DATE	REVISION NO
PROJECT COMMENCEMENT DATE		PLANNED COMPLETION DATE							
OUTPUT REF NO	IDENTIFICATION OF OUTPUT	PRIOR YEAR ACTUAL EXPEND.	PROJECTED EXPENDITURES					TOTAL	
			FY — 1ST HALF	FY — 2ND HALF	FY —	FY —	FY —	All Future Years	ALL YEARS
TOTALS									

APPR	LOAN GRANT	PROJECTED OBLIGATIONS FOR FY —					PROJECTED OBLIGATIONS FOR				
		1st QTR	2nd QTR	3rd QTR	JUL-AUG	SEPT	FY —	FY —	FY —	FY —	All YEARS
TOTALS											

Figure II-27: PROJECT FINANCIAL ACTIVITY REPORT

AID 7-98 A (7-69)  <b>AGENCY FOR INTERNATIONAL DEVELOPMENT</b> <b>PROJECT FINANCIAL ACTIVITY REPORT</b>	Mission  For The Period _____ Thru _____
--	--

Project Number and Title \_\_\_\_\_

Status	Start Date	Est. Comp. Date	CUMULATIVE		CURRENT YEAR					
			As Of		Appropriation		Appropriation		Appropriation	
			Obligations	Expenditures	Obligations	Expenditures	Obligations	Expenditures	Obligations	Expenditures
<b>A. TOTAL ACTIVITY</b>										
<b>B. INPUT COMPONENT BREAKDOWN</b>										
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
<b>C. ADJ. TO PRIOR YEAR OBLIGATIONS</b>										
<b>D. LOCAL CURRENCY CHARGED TO DOLLAR ACCOUNTS</b>										
<b>E. OUTPUT COMPONENT BREAKDOWN</b>										
1.										
2.										
3.										
4.										
5.										

ALL SOURCES

Remarks:

e. Project Evaluation Report

The Agency is currently reviewing the evaluation system for projects. One result of that process may be a modification of the current PAR, and the timing for evaluation. The Bureau plans to proceed with project specific evaluations timed according to project needs and not to require automatic annual evaluations. However, until such time as Agency requirements change, the PAR form AID 1020-25 is to be used in reporting evaluation results.

Where an evaluation is shown in the CPI network, it is treated as a normal CPI and its achievement, or non-achievement, will be reported to the Bureau under the rules governing the reporting procedure for the field office for all CPIs. Where appropriate, the cable message reporting the evaluation results (achieved or not achieved) should indicate whether or not a fuller description of the evaluation findings is to be transmitted by pouch. (See Figure II-28 for sample cable). The AID Project Evaluation Guidelines should be referred to in preparing the content of the evaluation report.

f. Audit Findings Report

When Agency program management audits disclose findings concerning specific projects, these findings are to be submitted and reported through the PMS. In addition to including audit findings, these audit summary reports should indicate Field Office actions in response to the audit. They should also specify whether such actions will affect the project's CPI reporting schedule, objectives, or budget. Audit reports will be sent by pouch and preceded by a summary cable, per Figure II-29.

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MISSION UNCLAS

SUBJ: TEHRISTAN MILLET; 64-202-78; EVALUATION REPORT SUMMARY

CPI #41

CONDITION: PROGRESS EVALUATION COMPLETED

KEY FINDINGS: 1. MAJOR ASSUMPTIONS CONCERNING PARTICIPATION OF LOWER  
INCOME FAMILIES PARTIALLY INVALID  
2. ADDITIONAL SKILLS TRAINING REQUIRED FOR EXTENSION  
TRAINEES

PROJECT ASSESSMENT: AFFECTS ON PROJECT NOT YET DETERMINED. AWAIT  
RESULTS OF CONTRACTOR SURVEY. WILL CABLE ESTIMA-  
TION OF AFFECT ON CPI NETWORK WITHIN 5 WEEKS.

ACTIONS: CONTRACTOR WILL SURVEY LOW INCOME GROUPS TO DETERMINE  
CAUSE OF LOW PARTICIPATION. RESULTS EXPECTED IN 3  
WEEKS. ADDING ONE WEEK TO TRAINING SESSION.

FULL EVALUATION (PAR) #2 FOLLOWS IN POUCH.

Figure II-28: CABLE REPORTING EVALUATION RESULTS

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MISSION UNCLAS

SUBJ: TEHRISTAN MILLET; 64-202-78; AUDIT REPORT SUMMARY

CONDITION: AUDIT REPORT FINDINGS NEGATIVE

KEY FINDINGS: BLACK MARKET TRADE IN MILLET IS CONSUMING ALL POTENTIAL  
REVENUE FROM PROJECT TO SMALL FARMER

PROJECT ASSESSMENT: PURPOSE ENDANGERED. FARMERS BEGINNING TO EXPRESS  
DISSATISFACTION WITH LEVEL OF BENEFITS ACTUALLY  
RECEIVED VERSUS EXPECTATIONS, AND MAY SWITCH TO  
OTHER CROPS NEXT PLANTING SEASON. ACTION OPTIONS  
AND APPROPRIATE LEVELS OF EFFORT TO COUNTERACT  
THIS DISSATISFACTION ARE BEING ANALYZED. SEE  
BELOW.

ACTION: BEGINNING DISCUSSIONS WITH MINISTRIES OF FINANCE AND AGRI-  
CULTURE RE CONTROL OF BLACKMARKET TRADE, AND/OR OTHER  
PROJECT OPTIONS TO COUNTERACT FARMER DISSATISFACTION. WILL  
CABLE BUREAU WITH RESULTS IN SIX WEEKS.

FULL AUDIT REPORT # FOLLOWS IN POUCH. SEE PAGE 29 FOR DETAILS OF THIS  
PROBLEM.

SMITH

Figure II-29: AUDIT REPORT SUMMARY CABLE

31.



The Bureau has a responsibility for an overview function of all projects and for holding bimonthly status reviews for the Assistant Administrator, and following up on outstanding issues. It will be important for the Bureau, in these reviews, to look for patterns which may start to emerge. For example, if all projects from one particular Mission have a high level of CPIs missed, this may alert the Bureau project management problem in that Mission; alternatively, if there is a high level of CPIs missed across all Missions for agriculture projects in particular, this may imply further study of the causes for missed CPIs and an assessment of why these kinds of projects have more problems than other kinds of projects.

The Bureau, through its normal communications channels, will inform the field of the status of CPIs for which the Bureau has action. The Field Mission will submit the formal CPI report, even for AID/W action CPIs, placing in perspective the effects of failing to attain the CPI has on the overall project.

Incoming CPI missed messages are sent to the project support officer. If he has not resolved the problem within 30 days, the CPI missed message is brought to the attention of the Assistant Administrator in the next bimonthly review. If the problem cannot be satisfactorily resolved within the Bureau and warrants higher management attention, then an Action/Information Memorandum for the Administrator will be prepared. The project support officer is responsible for immediately informing the field of decisions made in Washington concerning a CPI missed.

32.



The responsibility of the Bureau's project support officer in Washington includes the determination of whether the project is on schedule and is attaining

its purpose as reflected in the CPI reports of achievements. When achievement reports on the positive reporting basis are due but not received, it is the responsibility of this officer to initiate an inquiry concerning the overdue report. (Similar action would be initiated in cases where a financial or evaluation report was overdue.) The inquiry cable sent to the field should clearly identify the project, its number, the CPI number and description for which a report is missing and requesting a prompt response in the appropriate CPI reporting format (achievement, endangered, or missed).

R-32


 A rectangular box with a wavy bottom edge containing the text "Inquiry Message".
 

Inquiry  
Message

33a.


 A diamond-shaped box containing the text "ACTION REQUIRED".
 

ACTION  
REQUIRED

The Action required in the Bureau upon receipt of a project performance report depends on the type of report sent and the status of the project. When projects forward an achievement report on time showing CPIs were achieved, the project support officer should note this information and if any AID/W actions are needed.

Circulation of project achievement reports is the responsibility of the project support officer. This officer should undertake to ensure that copies of achievement reports are made available as needed to the higher levels of bureau management, as well as to the technically cognizant personnel from other bureaus, and to the Agency's Project Performance Tracking System.

In some cases the Achievement Report for a project will stimulate discussion in Washington. Where such discussion is likely to provide important feedback to the field, the project support officer should assume the responsibility for recording and transmitting to the field the substance of Washington discussions.

When performance reports indicate that project performance is threatened, the Bureau must review the situation and determine whether actions on its part could assist the Field Offices. In some cases Bureau action will be required, and in other cases the Bureau will determine that it is best to await the outcome of the efforts underway in the Field Office.

Upon receipt of an "Endangered" cable, the Bureau reviews the project status. This review parallels the Field Office Director review in that it considers what actions can be taken in order to avoid a "Missed" condition. There is no fixed format for this review. It should, however, be completed quickly in order to provide feedback to the field.

33b.

ADMINISTRATIVE REVIEW
--------------------------

When a CPI "Missed" cable is received, the project is reviewed and included on an agenda for Assistant Administrator review. As for the CPI "Endangered" review, possible courses of action will be considered that can correct the situation and put the project back on schedule. If the problem warrants higher management attention, an action/information memo will be prepared for the administrator.

33c.

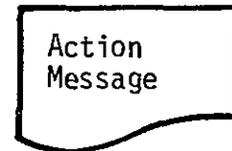
DECISION ACTION TAKEN
-----------------------------

When a decision is made on the appropriate action to take, the Bureau is responsible for ensuring that the action(s) is (are) undertaken and the Field Office informed of actions and/or decisions taken in Washington.

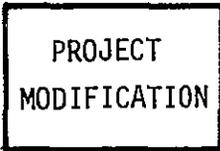
It is the responsibility of the Project Support Officer to prepare a draft cable for the field informing them of Bureau and/or Administrator

decisions and actions concerning the project. The message to the field should clearly reference the incoming project performance report, including the project name and number and the CPI addressed by the message.

R-33


 A rectangular box with a wavy bottom edge containing the text "Action Message".

34.


 A rectangular box containing the text "PROJECT MODIFICATION".

The Field Director can authorize changes in project networks provided three important items are not affected: These are

1. Project scope;
2. Timing of Critical Performance Indicators;
3. Project Resources.

Where proposed modifications to the project will affect any one of these items, revised project documentation (as per AID Project Assistance Handbook #3) must be prepared for Assistant Administrator or Administrator approval, approved by the Field Director, and submitted to the Bureau for entry into the normal approval process. This submission should include a revised CPI network.

If the revised CPI network and project submission are approved, the revised CPI network is automatically activated, both in the field and in the Bureau.

35.

MONITORING CONTINUES
-------------------------

Project monitoring continues throughout the life of the project. In the event that a missed CPI causes the entire project to stop operations, the project support officer in Washington is responsible for informing the field of the CPI resolution status. Once the problem has been resolved, normal monitoring activities begin again.

SECTION THREE

# System Products

A. SUMMARY OF SYSTEM PRODUCTS

The purpose of this section of the Manual of Operations for the Africa Bureau PMS is to summarize the system requirements for the development of products, i.e., planning formats, reporting formats, etc. In this section the system products are summarized in tabular form, and samples of formats used within the system are presented. Advisories dealing with the development of specific system products are provided in the Appendix of this manual.

B. PRODUCT LIST

Figure III-1 identifies each of the products of the system. In Section Two of the Manual, system products were identified by the code R-#, where the number used behind the dash represented the number of the process that had led to the development of the product. In Figure III-1, the R-# for each system product is repeated, as is the identification of the officer responsible for the development of the product.

C. PRODUCT FORMATS

In this section the formats for system products are presented. While available within Section Two of the Manual, these formats are presented again in this section for the convenience of the Manual user.

PRODUCT NUMBER	PRODUCT DESCRIPTION	IN AFRICA				IN WASHINGTON				
		EVALUATION OFFICER	FINANCIAL OFFICER	PROJECT OFFICER	FIELD OFFICE DIRECTOR	PROJECT SUPPORT OFFICER	GEOGRAPHIC OFFICE DIRECTOR	ASSISTANT ADMINISTRATOR	PROGRAM & POLICY (PPC)	ADMINISTRATOR
R-3	Project LogFrame			X	○	○	○	○	○	
R-5	Output LogFrame(s)			X	○	○	○			
R-6	Project Operational Network			X	○	○	○			
R-8	Output Network(s)			X	○	○	○			
R-10a	CPI Network			X	○	○	○	○	○	
R-10b	Description Chart			X	○	○	○	○	○	
R-11	Financial Plan		X	X	○	○	○	○	○	
R-12	Evaluation Plan	X		X	○	○	○	○	○	
R-15	Approved Design Products			X	X	○	○	○	○	
R-18	Issues/Recommendations Paper					X	○	○		
R-23	Approval Cable				○	X	X	X	X	X
R-25	Notification of Revision			X		○				
R-28	Project Reports			X	○					
R-30	CPI Reports			X	X		○	○		
R-32/ R-33					○	X	X	X		X

Figure III-1: SYSTEM PRODUCTS & ORIGINATING OFFICES

KEY:	
ORIGINATES =	X
RECEIVES =	○

Product formats are identified by their R-#. This allows easy reference to the procedure by which the products are produced--each R-# uses the number from the procedure that results in the product.

1. R-3: Project LogFrame

The format for this product is the Agency's Logical Framework Matrix. The matrix is a standard AID form and is available in Washington and in the Bureau's Field Offices.

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

List of Projects \_\_\_\_\_  
 Date of Submission to PI \_\_\_\_\_  
 Title of S. Funding \_\_\_\_\_  
 Date Prepared \_\_\_\_\_

Project Title: \_\_\_\_\_

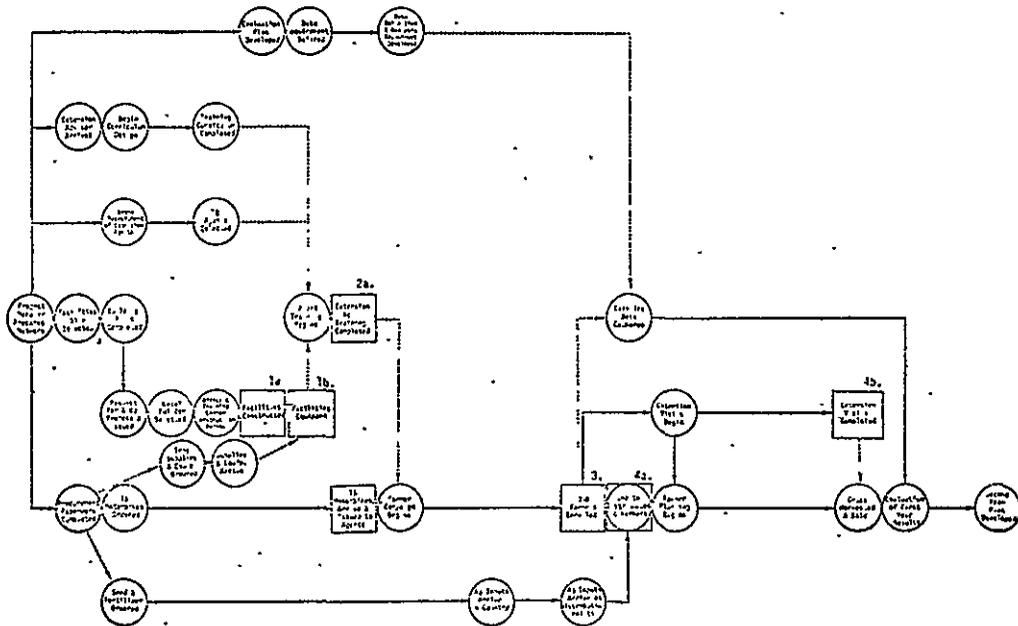
OBJECTIVE SUMMARY	EFFECTIVE INTERMEDIATE OBJECTIVES	MEANS OF VERIFICATION	INDICATORS - MEASUREMENTS
Purpose or Sector Goal. The broader objective to which this project contributes.	Intermediary Objectives of Goal Achievement.		Assumptions for achieving goal targets.
Project Purpose.	Conditions that will be met upon completion of project activities.		Assumptions for achieving purpose.
Outputs.	Magnitude of Outputs.		Assumptions for achieving outputs.
Inputs.	Magnitude of Inputs.		Assumptions for achieving inputs.

2. R-5: Output LogFrame(s)

Output LogFrames use the same format as Project LogFrames.

3. R-6: Project Operational Network

There is no standard form used for the development of an operational network. Rather, a standard set of procedures are used, and the product is produced on plain paper. A sample is reproduced below.



4. R-8: Output Network(s)

Output networks are developed in the same manner as operational networks.







10. R-18: Issues/Recommendations Paper

Although no format for this issues paper is defined, it should contain a general discussion of the key issues affecting the project and specific recommendations.

11. R-23: Approval Cable

Regular Agency cable procedures are used.

12. R-25: Notification of Revision

Regular Agency telegrams are used in communicating these messages. A sample follows:

TELEGRAM		Foreign Service of the United States of America
-INCOMING-		
UNCLASSIFIED <i>Classification</i>		
TO	AID	
FROM	DAKAR	
SUBJ:	CHANGE IN REPORTING, PROJECT NUMBER: 40-222-75. COOP/RURAL GENERAL	
A. TYPE OF CHANGE: REVISED SCHEDULE		
B. CHANGE DATA:		
1.	ORIGINAL CPI NUMBER	12
2.	ORIGINAL REPORT DATE:	12/10/76
3.	REPORT TYPE:	ACHIEVEMENT
4.	NEW CPI NUMBER:	12
5.	NEW CPI DATE	11/1/76
6.	REPORT TYPE	ACHIEVEMENT
C. RATIONALE		
COOPERATIVE DEVELOPMENT SPECIALIST INDICATES THAT UNLESS EARLIER DATE MET COOP PROPOSAL WILL NOT BE CONSIDERED FOR GDS FUNDING FOLLOWING JULY. NO OTHER PROJECT ELEMENTS ARE AFFECTED BY THIS CHANGE		
		JONES
Figure 11-22 CPI MODIFICATION NOTICE		

13. R-28: Project Reports

No format is prescribed; however, it is recommended that in developing Project Report formats within the Field Office the information requirements of the subsequent CPI Reports be considered.

14. R-30: CPI Reports

Regular Agency telegrams are used to communicate a majority of these reports. Where backup materials are needed in Washington, e.g., completed PARs, and full financial reports, these backup materials are forwarded separately by pouch. Samples of the types of Performance Reports transmitted by cable, are presented below.

TELEGRAM		Foreign Service of the United States of America
INCOMING		
UNCLASSIFIED <i>Classification</i>		
UNCLAS MISSION 12345		
SUBJ. TEHRISTAN MILLET; 64-202-78; ACHIEVEMENT REPORT		
1. CPI #3		
CPI NAME	15 EXTENSION AGENTS TRAINED	
CPI CONDITION	ACHIEVED	
2. SITUATION:	16 AGENTS SUCCESSFULLY COMPLETED THREE WEEK TRAINING IN CULTIVATION, PLANTING, AND HARVESTING TECHNIQUES 19 TRAINEES ORIGINALLY ENROLLED. TRAINEES DEMONSTRATED STRONG INTEREST AND PROVIDED INSIGHTS INTO FARMER MOTIVATION THAT WILL BE USED TO MODIFY FARMER CAMPAIGN. 10 TRAINEES RECEIVED 80% ON TESTS 5 TRAINEES RECEIVED 75% ON TESTS.	
3. IMPACT:	PROJECT ON SCHEDULE WITH NO CHANGE IN TIMING OF FUTURE EVENTS ASSUMPTION REGARDING FAVORABLE GOVERNMENT COOPERATIVE PURCHASE POLICIES MAY BE KEY IN ENSURING ADEQUATE LEVEL OF FIRST YEAR FARMER PARTICIPATION, DESPITE GOOD QUALITY OF AG EXTENSION AGENTS.	
4. ACTION:	PRESENTLY REVISING FARMER CAMPAIGN PROMOTIONAL MATERIALS TO INCORPORATE TRAINEES' SUGGESTIONS.	
NO FURTHER ACTION REQUIRED.		
Figure 11-28: <u>PROJECT ACHIEVEMENT REPORT</u>		

TELEGRAM		Foreign Service of the United States of America
INCOMING		
UNCLASSIFIED <i>Classification</i>		
UNCLAS MISSION 15555		
SUBJ. TEHRISTAN MILLET; 64-202-78, MISSED REPORT		
1. CPI #35		
CPI NAME:	BASELINE DATA GATHERED	
CPI CONDITION	MISSED	
2. SITUATION	QUESTIONNAIRES SUBMITTED BY EXTENSION AGENTS ARE INCOMPLETE. AGENTS REPORT 2 HOURS REQUIRED TO GATHER ALL DATA REQUESTED ON EACH FARMER AGENT TRAINING W-S INADEQUATE.	
3. IMPACT	PLANTING SEASON STARTS NEXT WEEK NO TIME TO OBTAIN DATA BEFORE PROJECT INTERVENTION BIASES FARMERS THIS WILL NOT AFFECT FIRST YEAR OF PROJECT MAY BE POSSIBLE TO SUBSTITUTE TYPED DATA FOR THE BASELINE CONTRACTOR ESTIMATES REDESIGN OF QUESTIONNAIRE AND ADDITIONAL SURVEYS WILL COST EXTRA \$10,000.	
4. ACTION:	CONTRACTOR ASKED TO PEASSESS PROBLEM AND MAKE RE-COMMUNICATIONS INCLUDING EXTRA CSE'S BY 5/15/77 WILL CABLE BUREAU WITH RESULTS BY 5/15/77 INCREASE IN FUNDS OF \$10,000 ANTICIPATED ARE FUNDS LIKELY TO BE AVAILABLE? PLEASE INFORM BY 4/15/77.	
SMITH		
Figure 11-27. <u>EVENT MISSED REPORT</u>		

15. R-32 & R-33: Action Message

This message is transmitted by regular cable.

## SECTION FOUR

# **System Users/Operators**

### A. SUMMARY

The users/operators of the PMS are the individuals who interact with the system either in the process of developing or using system products. In the following discussions, the key personnel who interface with the system are identified, and their responsibilities for system operations are reviewed.

### B. OVERVIEW OF ROLES AND RESPONSIBILITIES

Through a series of charts this section identifies the key participants in the PMS processes. For each of the processes identified in the system description diagram, Figures II-1 through II-3, the individual with primary responsibility is identified. In Figure IV-1 the responsibilities of these key individuals are summarized. In addition, those individuals who are expected to play supporting roles in the process are shown as participants.

### C. PROJECT OFFICER

The primary beneficiary of the PMS is the development project. Through the Project Officer, the project receives the benefits of consistent management attention and access to higher management whenever problems and/or opportunities arise.

PROCEDURE NUMBER	PROCEDURE DESCRIPTION	IN AFRICA					IN WASHINGTON				
		IMPLEMENTING AGENT OR HOST GOVERNMENT	EVALUATION OFFICER	FINANCIAL OFFICER	PROJECT OFFICER	FIELD OFFICE DIRECTOR	PROJECT SUPPORT OFFICER	GEOGRAPHIC OFFICE DIRECTOR	ASSISTANT ADMINISTRATOR	POLICY & PROGRAM (PPC)	ADMINISTRATOR
1	SCHEDULE DESIGN EFFORT	B	B	B	B	A					
2	IDENTIFY PARTICIPANTS/MATERIALS	B			A	B					
3	DEVELOP PROJECT DESIGN	B			A	B					
4	LOGFRAME OPTION				A	B					
5	CLARIFY OUTPUT PLANS	B			A						
6	DEVELOP NETWORK	B			A						
7	NETWORK OPTION				A	B					
8	SCHEDULE OUTPUT(S)	B			A						
9	SELECT REPORTING POINTS	B			A	B					
10	DEFINE PERFORMANCE POINTS	B			A						
11	IDENTIFY FINANCIAL REQUIREMENTS	B		B	A	B					
12	IDENTIFY EVALUATION REQUIREMENTS	B	B		A	B					
13	REVIEW ALL DESIGN PRODUCTS	B	B	B	B	A					
14	DESIGN APPROVAL					A					
15	FINALIZE ALL DESIGN PRODUCTS	B	B	B	A						
16	SIGN/SEND					A					
17	ENTER IN MANAGEMENT DISPLAYS					A					
18	PROJECT COMMITTEE REVIEW						A	B			
19	EXECUTIVE COMMITTEE REVIEW						B	B	A		
20	BUREAU APPROVAL								A		
21	DEVELOPMENT LOAN COMMITTEE REVIEW								B	B	A
22	ADMINISTRATOR APPROVAL										A
23	MESSAGE TO FIELD PREPARED						A	B	B		
24	PROJECT CPI NETWORK ACTIVATED						A				
25	POST APPROVAL CPI REVISIONS				A	B					
26	CPI AMENDED						A				
27	PROJECT IMPLEMENTATION	A									
28	PERFORMANCE MONITORING			B	A						
29	DIRECTOR MONITORING				B	A					
30	CPI REPORTING				B	A					
31	WASHINGTON MONITORING				B	B	A	B	B		
32	REPORT SCHEDULE MET						A				
33	ACTION REQUIRED						B	B	A		
34	PROJECT MODIFICATION	B			A	B					
35	MONITORING CONTINUES			B	A	B	B	B	B		

KEY: A= PRIMARY RESPONSIBILITY  
B= SUPPORTING RESPONSIBILITY

Figure IV-1: Summary of Responsibilities for Procedures

The Project Officer is, at any given point in the project, the AID Officer most directly responsible for the project. The individual who bears this responsibility may change during the life of the project, but at all times the role and its attendant responsibilities remain. For project design, the responsible Officer may be a Washinton-based project design team leader, or a technical officer located in close proximity to the proposed project site. During project approval, the roles and responsibilities of the Project Officer may be assumed by the individual who will be responsible for the project after approval, or by the Washington Desk Officer or project support officer for the country in which the project will be implemented.

Throughout the life of the project it is the responsibility of the individual who acts as the Project Officer to ensure that the PMS products are developed and kept up to date. Further, it is the responsibility of this Officer to ensure that the objective of the PMS -- performance-oriented management and reporting -- is a reality for his project.

To ensure that the development project for which he bears responsibility receives adequate and appropriate management attention, it is expected that the Project Officer will call on other Agency functions to support him. The functions from which the Project Officer may routinely require support include: the Financial Management Office of the Agency, the Bureau and Agency technical support functions, the evaluation function, and higher management within the Bureau structure.

Through the Project Officer, Bureau management of development projects interfaces with the development managers in the host country. Facilitating host participation in the project planning and management processes is the responsibility of the Project Officer -- a collaborative project effort depends in great part upon his efforts.

Within the PMS, the Project Officer is judged by the quality of the process he creates: submission of project performance reports when they are needed is to be positively valued -- project difficulties do not reflect negatively on the Project Officer, but failure to report such difficulties does.

D. FIELD OFFICE DIRECTOR

The pivotal operator/user of the PMS is the Field Office Director: the Mission Director, Regional Office Director or the Director of the Country Development Office. This Field Office Director is the link between the project and the larger country or regional program of which it is a part. He is also the link between the project and the Washington-based approval and funding authority that supports the project.

In each field office of the Africa Bureau, the Office Director manages the PMS. By delegation of his responsibility, the Field Office Director has the option of assigning the tasks of PMS management in part to another member of his staff. The functions which can be so designated include the responsibility for ensuring that Project Officers receive adequate support and training in the use of system concepts, the maintenance of a scheduling device that displays the status of all field office projects, the scheduling of project design activities for new project efforts, etc. The Field Office Director should not, however, delegate overview responsibility for the system and its products -- he should personally review the PMS design products and PMS reports generated by his office.

As manager of the PMS, the Field Office Director, or his designee, is responsible for ensuring that Project Officers, as well as the financial, technical, and evaluation officers who support the Project Officer, understand the PMS procedures and can and do prepare PMS products as required.

#### E. CONTROLLER

The field representative of the Controller has direct responsibilities for the preparation of project financial plans and the development of project financial reports. In order to carry out his PMS functions, it is important for the financial officer to understand the substance of the project at a level where he can provide useful insights about resource planning and monitoring to the Project Officer.

Primary responsibility for the preparation of project financial plans lies with the financial officer. In preparing these reports the system processes require that financial reports be developed as a result of interaction between the Controller's representative and the Project Officer. This interaction is designed to support a mutual teaching process, the result of which is a firmer understanding of budgeting by the Project Officer, and a clearer view of project management by the financial officer -- a process that benefits the development project with which they are both concerned. The Controller has responsibility to report against plans and comment on any deviations. He obtains necessary project information for his report from the project officer.

#### F. EVALUATION OFFICER

The Evaluation Officer plays an interface role between two systems: the Agency Evaluation System and the PMS. Within the PMS the Evaluation Officer provides support to the Project Officer as he develops the project's Logical Framework, evaluation plan and critical performance indicator network. Based on his experience with the evaluation system concepts, this officer can play an important teaching role: in many field offices he may be the individual who is currently most familiar with the basic concepts used in PMS product development during the design phase. As the project is implemented and evaluated, this officer is expected to support the Project

Officer as he defines the project's data collection requirements and proceeds to address the problems of collecting and analyzing data on project performance indicators.

G. NON-AID FIELD PERSONNEL

In this section two types of non-AID field personnel are identified, and the interfaces between these individuals and the PMS is discussed. The two types of personnel covered are:

- Host Country Personnel
- Other donors and AID intermediaries

1. HOST COUNTRY PERSONNEL

The PMS encourages active participation by the host country personnel in each of the PMS design processes. Further, Field Officers are encouraged to share the project reports concerning performance achievement, or the lack thereof, with the appropriate host country officers. To some degree, host personnel in the developing nations are themselves adopting concepts and systems similar to the Bureau PMS. Interaction with host personnel in the application of PMS concepts to field projects serves both to improve the project at hand, and also to encourage the further development of management systems in the host institutions.

2. OTHER DONORS AND AID INTERMEDIARIES

It is important to include other donors and AID intermediaries in the project design procedures of the PMS. At the point of project design, the expecta-

tions for project performance are set. In the typical project, many of these expectations will concern the performance of other donors and the AID intermediary: the contractor, PASA or grantee. While specific responsibilities are not set for the involvement of these personnel, it should be expected that the project would benefit if each donor representative, and a spokesman for the AID intermediary worked jointly with the AID Project Officer in the development of project plans and reports.

#### H. PROJECT SUPPORT OFFICER

The Bureau representative who bears the primary responsibility for ensuring that Washington is aware of project performance is the Project Support Officer. His role requires that management communications between the field and Washington be both effective and efficient. In addition, this officer may bear substantive responsibility in relation to projects carried out in the field, e.g., the responsibility for contracting for an evaluation, identifying a source of specialized technical assistance, etc.

As the Bureau officer most frequently in contact with the project, the Project Support Officer has the responsibility for maintaining up-to-date copies of the project's CPI network, and completed files of the project's PMS reports. During the project design phase, this officer may also bear the responsibilities of the Project Officer during an interim period between the completion of design team work and the appointment of a permanent Project Officer.

#### I. OFFICE DIRECTOR OF DEVELOPMENT RESOURCES (AFR/DR)

The AFR/DR Office Director is responsible for ensuring that the members of his staff understand and use the PMS. The AFR/DR Office Director is

a central figure in the PMS -- the success of the system within the Bureau depends upon his ability to make the PMS products the communication vehicle between the field and Washington. It is this officer who, in the end, will bear the responsibility for creating an environment in which performance management replaces less focused management practice.

While the AFR/DR Office Director is not assigned a large number of specific PMS responsibilities, his overall role as system manager within his office suggests the need for frequent voluntary participation in the various PMS processes.

J. ASSISTANT ADMINISTRATOR

The Assistant Administrator is the overall Director of the Bureau PMS. As Director, the PMS serves him by providing a direct channel of communication to every Bureau project. The PMS functions to ensure that project performance is monitored, and project problems are addressed by the appropriate levels of management. Reports generated by the field concerning project performance are reviewed by the Assistant Administrator in order to ensure that a quality process is in place. Project performance reports forewarn him of impending project difficulties and provide a performance-oriented basis for his management decisions.

Daily operation of the PMS is assigned by the Assistant Administrator to the Office of Development Resources. Through this office, the Assistant Administrator ensures that PMS products are being responsibly developed, and that Bureau staff are receiving training in the use of the PMS as required.

K. OTHER BUREAUS AND THE ADMINISTRATOR

The PMS provides the Bureau with the basis for systematic communications with other Bureaus and with the Agency's Administrator. In fulfilling the PMS requirements, officers of the Bureau simultaneously fulfill the project design, approval, implementation, and evaluation requirements, as well as the project performance and financial reporting requirements of the Agency as a whole.

Specific PMS roles are not assigned to those Agency bureaus and offices that operate outside the system. Rather, the PMS defines the form of the management communications with these individuals. Agency individuals and offices outside the sphere of the PMS are system users, they do not have roles as system operators. That is, these offices receive system reports, but do not themselves generate system products.

**APPENDIX**

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APPENDIX A: NETWORKING

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APPENDIX A

NETWORKING  
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## APPENDIX A

### NETWORKING

This Appendix provides basic networking definitions and instructions.

Networking, like the Logical Framework, is a tool which assists in better project planning. By clarifying the relationship of the various project activities to each other and to time, it increases realism and validity in the project design. Networking creates a bridge between design and implementation, illustrating how and when the various project objectives will be achieved. Networks can be used for allocating human and other resources to project activities. The events and activities displayed in the network become the basis for monitoring project progress. In the following pages, step by step instructions are presented for readers who wish to either learn to construct networks or to review networking techniques.

A network is a graphic representation of the sequence of activities and events required to reach a specified objective. It provides the user with an overall view of the project and the relationships of important components of the project to each other, and is a valuable tool for monitoring progress of the project over time.

There are two major elements in a network:

1. Activities
2. Events

## 1. ACTIVITIES

Activities are defined as the tasks that must be done to complete the project. They consume time and/or resources. They are indicated by arrows in the network diagram and begin at a specific point in time and end at a specific point in time. [Activity:  $\longrightarrow$  , Figure A-1].

## 2. EVENTS

Events are defined as the completion of activities, or the beginning point of other activities. They consume neither time nor resources. They are indicated by circles (nodes) in the network diagram. An event which immediately precedes an activity is called a "predecessor event" and one which immediately follows the activity is called a "successor event." [Event:  $\bigcirc$  , Figure A-1].

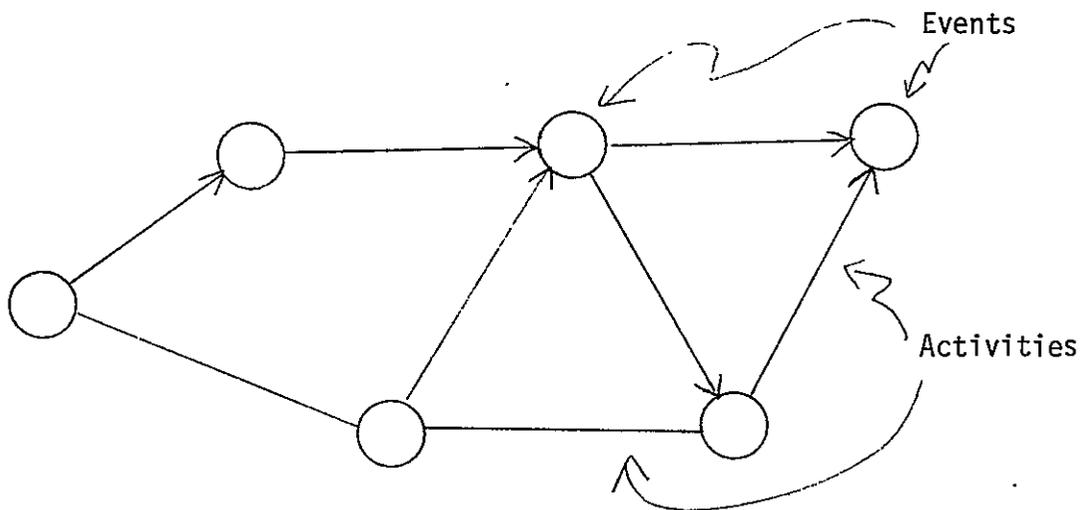


Figure A-1: A Network Diagram

## A. CONSTRUCTING THE NETWORK

There are three fundamental rules for constructing network diagrams:

1. Each activity has a single starting point and ending point
2. An event occurs when all activities leading to it are completed.
3. Activities leading from an event may begin only after that event has occurred.

To develop the network first identify the activities and events to be displayed on the network and then, using network diagramming techniques determine the sequential relationship between the activities and events. Do not be concerned with the time elements of the project until the networking diagram is complete.

### 1. Develop Activity List

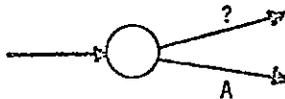
Break down the project into manageable components. Completion of the project Logical Framework (and output Logical Frameworks) will have started this process. The level of detail required is that which adequately permits monitoring the progress of the project in (a) transforming inputs to outputs, and (b) ensuring that the project is having the desired impact at purpose and goal levels. Develop a list of the activities necessary to complete each project component (outputs and suboutputs). Once the individual networks are developed they can be joined together to make up one large (composite) network for the total project. An initial list of activities may be less than comprehensive. However, as the relationships of the activities to each other are further defined, more activities will be necessary to display the sequential logic of the network. Events will normally fall naturally into place as being either the start or

completion of an activity or a series of activities. Once the initial list of activities is completed, one can display these activities in network diagram form. To do this, each activity must be examined by asking the following set of questions:

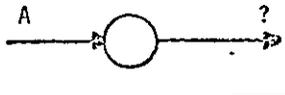
- WHAT ACTIVITY(S) MUST PRECEDE THIS ONE?



- WHAT ACTIVITY(S) MAY BE CONCURRENT WITH THIS ONE?



- WHAT ACTIVITY(S) MUST FOLLOW THIS ONE?



- ARE THERE ANY OTHER CONSTRAINTS?



#### EXAMPLE: A Rural Development Project

One component of this project is the construction of village wells. The preliminary activity list for this component is:

- Survey village and select site for well.
- Obtain digging equipment.
- Organize village labor.
- Select and train village well maintenance supervisor.

- Build protective wall around mouth of well.
- Install turning handle, bucket and rope.
- Clean up surrounding area.

Asking the activity questions from the preceding page we derived the network shown in Figure A-2. (Note: The activities were listed as they were thought of, in a general order from start to finish. However, the network diagram exercise clarified the logical order of activities and suggested two additional activities which had been omitted but were important--erecting the frame and installing crank, rope, and bucket, and digging the well! Thus the activity list is a beginning step in the process, but the network diagram does a more complete job.)

After completing the network, all activities and events should be numbered for ease of reference. An example of a numbering system is to number events sequentially from the beginning of the network to the end. Having done so, add an ending zero to each event number. This allows for a subsequent addition of other events and still retain the sequential numbering. Activities are then numbered by combining the number of the predecessor event and successor event; i.e. activity 40-50 in Figure A-2 is "Dig Well," and is between event 40 and event 50. In the case where there are multiple activities between the same two events, an additional digit must be used to uniquely number each of those activities. In Figure A-2 there are two activities between events 20 and 30. Therefore the activity "Obtain Digging Equipment" is labelled 20-30-1, and the activity "Organize Village Labor" is labelled 20-30-2. The uniquely identifying number of the activity is placed in parenthesis after the activity description. The activity is briefly described along the arrow which represents it for clarity. In the same manner, an event is described in the circle which represents that event.

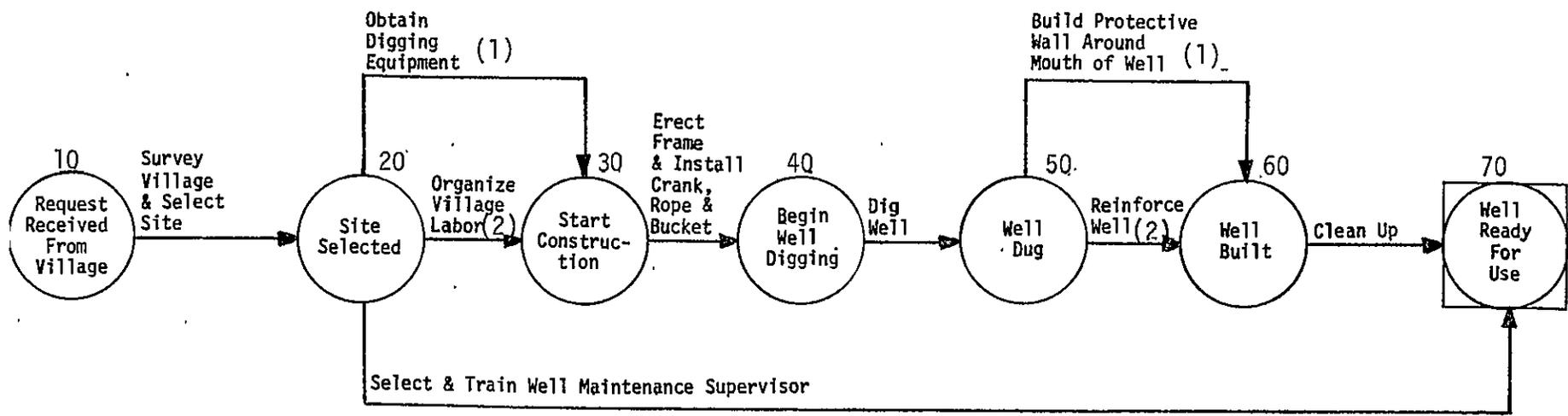


Figure A-2: NETWORK DIAGRAM: CONSTRUCTION OF VILLAGE WELL

## 2. Dummy Activities

A dummy activity is an activity that has no time duration and consumes no resources. It is used when it is necessary to show interdependency between otherwise unconnected activities, as in Figure 3 (the dummy activity is depicted by a dotted arrow):

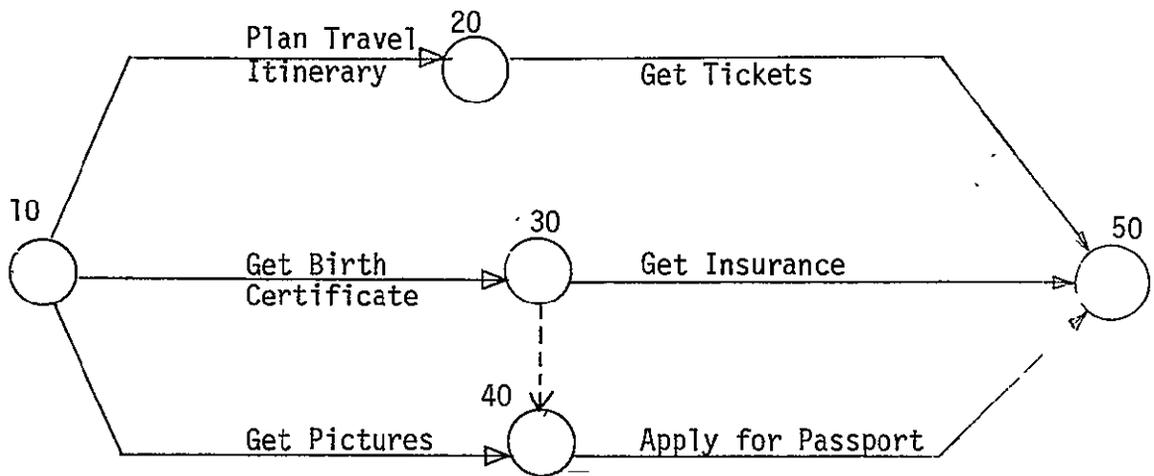


Figure A-3: Dummy Activity in a Network (Activity #30-40)

In Figure A-3, the diagram tells us that activity 40-50 (apply for passport) cannot commence until both activities 10-30 and 10-40 are completed. Activity 30-50 can commence as soon as activity 10-30 is complete.

## 3. Interface Events

Normally activities and events shown in one network are not independent of other activities and events outside the immediate area of concern. Where such dependence occurs, the coinciding events are called interface events.

These events are designated by a circle surrounded by a triangle on the network:  Interface events are used to:

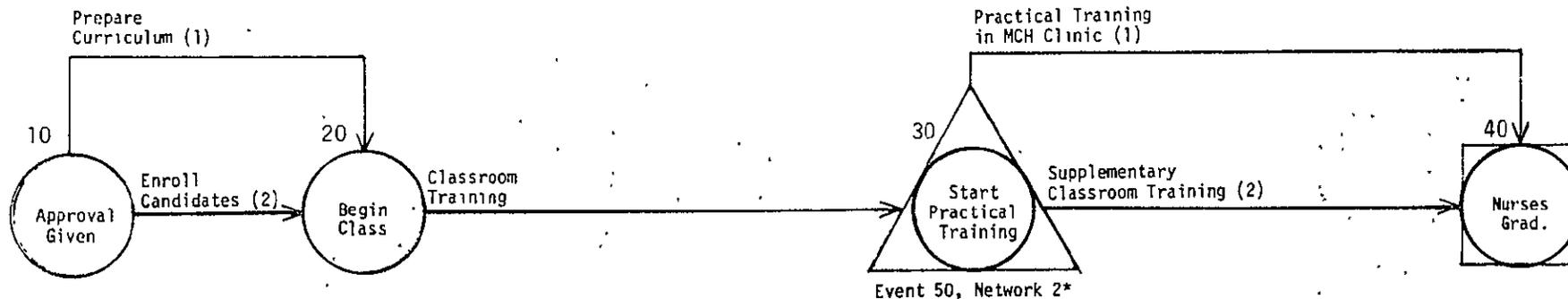
- Denote the same event appearing on more than one network.
- Illustrate dependencies between activities and events on different networks.
- Show areas where one manager is dependent on the activities of another manager or vice versa.

An example of the same event appearing on more than one network is shown in Figure A-4. In this example, the student nurses cannot begin their practical training (Activity 30-40-1 of Network 1) until the clinic is ready (Event 50 of Network 2) and has patients to treat. Thus, event number 30 in the student nurse network (1) interfaces with event number 50 in the operational clinic network (2). Conversely, the clinic cannot operate (Activities 50-60 of Network 2) without student nurses that have completed classroom training (Activity 20-30 of Network 1). Thus, there is a dependency relationship between both networks and the managers of both projects must pay attention to the progress of the other project as well as monitoring their own.

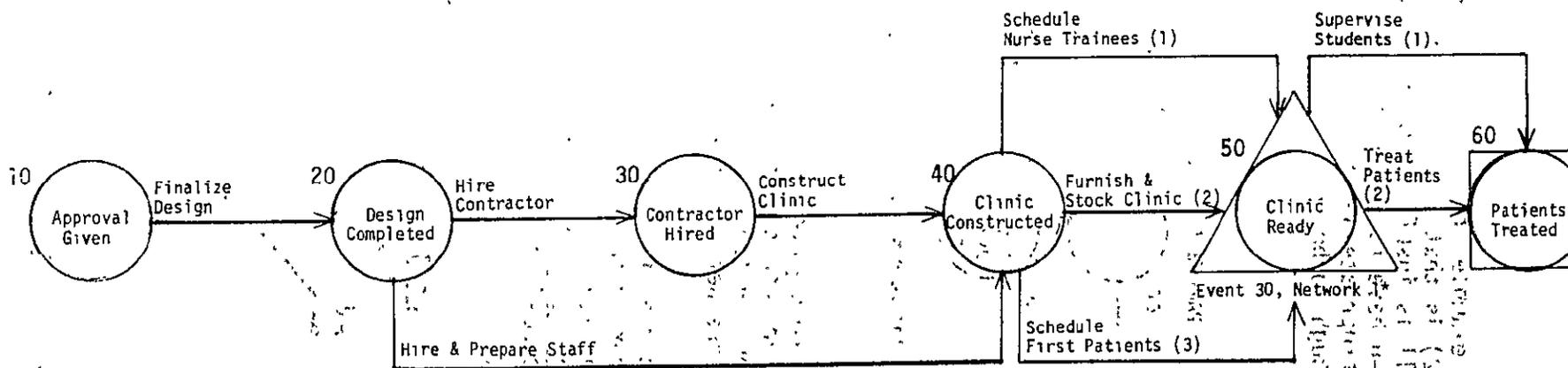
#### 4. Special Events

In addition to interface events, there are four other kinds of events to be considered in constructing the network. They are:

- a. Starting Event: An event which has no activities leading to it; e.g., the first event on a network.
- b. Terminal Event: An event which has no activities following it; e.g., the last event on a network.
- c. Constraints: These are factors outside the direct control of a project that influence the achievement of an event in the network. They are usually identified as assumptions in the Logical Framework of the project.



NETWORK 1: NURSE PRACTITIONERS TRAINING



NETWORK 2: OPERATIONAL MCH CLINIC

\* Reference of other network(s) where this interface event appears.

Figure A-4: INTERFACE EVENT

An example of a constraint in the well-digging project (Figure A-2) is that the local supply of bricks for reinforcing the well is insufficient and bricks will have to be imported. We then have to assume they will be shipped in time, and be of appropriate quality--as ordered. This constraint is important enough to be shown in the network (Event 45 in Figure A-5).

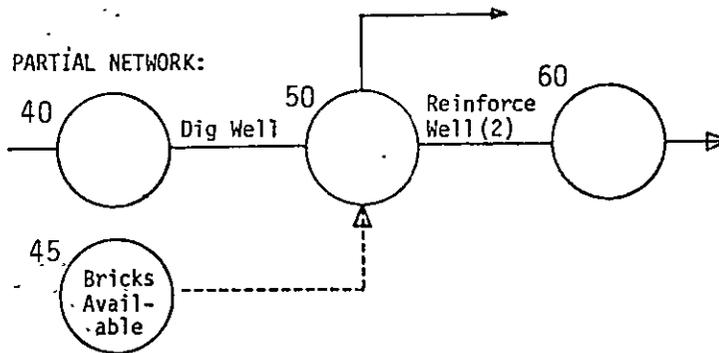
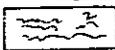


Figure A-5: SHOWING A CONSTRAINT IN A NETWORK

- d. Milestone Event: Milestone Events are "key" events of special importance that higher management would select for monitoring. These include all outputs. Milestone Events are represented on the network by a circle surrounded by a square: 

Because of the importance of these milestone events, the indicators which describe their occurrence in terms of quality, quantity, and time, are also included on the network. The indicators are written inside a rectangular symbol:  and included in the network as shown in Figure A-6.

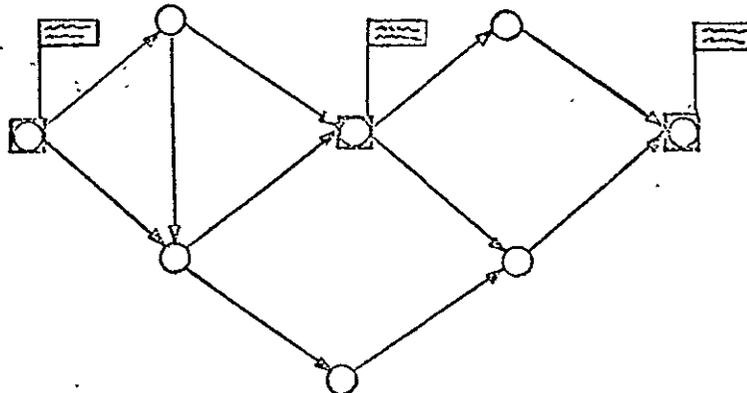


Figure A-6: NETWORK EXAMPLE WITH MILESTONES AND INDICATORS

## B. TIME AND THE NETWORK

It is not enough for a network to illustrate the sequential relationships between activities and events. A project manager must know the total time of the project and how much time is required for each of the activities to be completed. With this information, he can organize more efficiently his resources in order to meet his deadlines.

In the normal implementation of a project, there will frequently be activities and events that do not occur as scheduled. If the time of these activities and events has been calculated in advance, in terms of duration, start times, completion times, and slack times, then, when any delay occurs, or is likely to occur, the project manager can assess the implications of a delay for the subsequent events and activities on his network and see what alternatives offer him the most effective way to get back on schedule.

In networking techniques there are many time elements to be considered. The following discussion of time and the network deals with what are the minimum requirements for developing reasonable, realistic, time-based networks. AID managers will need to experiment to determine how much of the calculations will be useful to them. By breaking out the activities necessary to achieve objectives, we can more easily estimate the time necessary for each component and then add them together to find out the time required for completion of the whole.

Three key questions frequently come up during project implementation and monitoring:

1. What is the earliest time that the activities can be started or completed? What is the latest time?
2. In what area of the project will a delay cause the project duration to be extended?
3. Where is there discretionary time within the project?

The project manager can answer these questions if he knows:

1. The network dates for all activities and events.
2. The critical path of the project.
3. The slack time within the project.

1. Network Dates

The dates which should be calculated for all activities and events of a network are:

a. For Activities:

- ° Time of Earliest Start (TES): The earliest point in time that an activity can start.
- ° Time of Earliest Completion (TEC): The earliest point in time that an activity can be completed.
- ° Time of Latest Start (TLS): The latest point in time that an activity can be started without delaying its successor event.
- ° Time of Latest Completion (TLC): The latest point in time that an activity can be completed without delaying its successor event.

b. For Events:

- ° Event Earliest (EE): The earliest point in time that an event can occur.
- ° Event Latest (EL): Latest point in time that an event can occur.

2. Critical Path

The critical path of the project is the "longest chain" of activities and events from start to finish of the project and thus defines the minimum



The two forms are used in combination in developing the necessary time calculations.

ACTIVITY	ELAPSED TIME Te	EARLIEST START TES	EARLIEST COMPLETION TEC	LATEST START TLS	LATEST COMPLETION TLC	SLACK	
						ACTIVITY SA	TOTAL ST
1-2	2						
1-3	3						
1-4	4						
2-5	5						
etc.							

Figure A-7: ACTIVITY REPORT

EVENT	EARLIEST OCCURENCE EE	LATEST OCCURENCE EL	EVENT SLACK SE
1			
2			
3			
4			
etc.			

Figure A-8: EVENT REPORT

(Columns enclosed with heavy line denote those to be filled in during the forward pass computation. The remainder are filled in during the backward pass computation.)

A simplified example, Figure A-9, is used throughout the discussion to demonstrate these calculations.

a. Forward Pass Computation

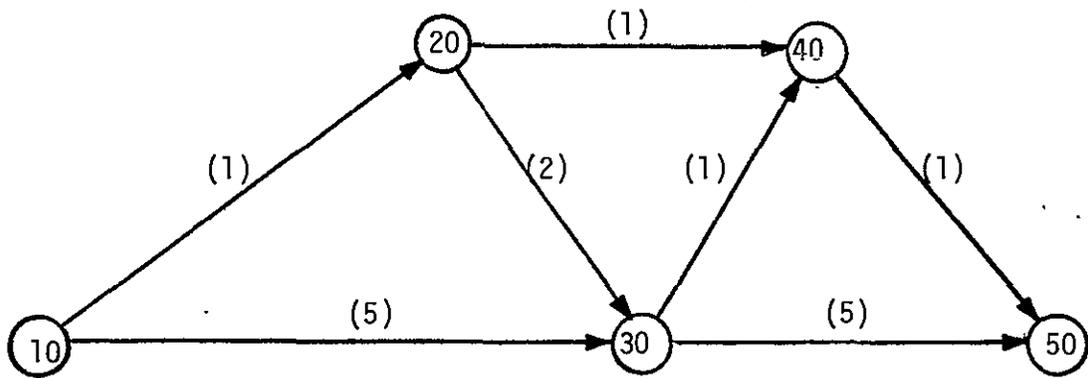
The forward pass computation determines the following:

- Time of Earliest Start (TES) and Time of Earliest Completion (TEC) for each activity.
- Point of Earliest Event occurrence (EE).
- Slack time of an Activity (SA).

(1). Time of Earliest Start (TES)

Set the EE of the beginning event equal to the specified project start date and set the EEs for all other starting events. If there is no specified start date, assume time "zero" for the start of the project.

Assume activities will start as soon as possible (i.e., as soon as their predecessor events occur). The earliest start time will in fact coincide with the earliest time the predecessor event can occur, which is when the longest of all the prior activities leading to it is completed. Thus, looking at Figure A-9, the time of earliest start (TES) for activities 10-20 and 10-30 is time "zero." As there is only one activity leading to event number 20, that event can occur at time "one" and activities 20-40 and 20-30 can immediately commence. Thus the earliest start time (TES) for activities 20-40 and 20-30 is "one." The remaining earliest start times for each activity are shown in the Activity Report in the "Earliest Start (TES)" column.



ACTIVITY REPORT

ACTIVITY	ELAPSED TIME Te	EARLIEST START TES	EARLIEST COMPLETION TEC	LATEST START TLS	LATEST COMPLETION TLC	SLACK	
						ACTIVITY SA	TOTAL ST
10-20	1	0	1			0	
10-30	5	0	5			0	
20-30	2	1	3			2	
20-40	1	1	2			4	
30-40	1	5	6			0	
30-50	5	5	10			0	
40-50	1	6	7			3	

EVENT REPORT

EVENT	EARLIEST OCCURENCE EE	LATEST OCCURENCE EL	EVENT SLACK SE
10	0		
20	1		
30	5		
40	6		
50	10		

Figure A-9: FORWARD PASS COMPUTATIONS

## 2. Earliest Completion Time (TEC)

The earliest time an activity can be completed is the sum of the earliest start time (TES) and the duration time ( $t_e$ ) of that activity. Thus,  $TEC = TES + t_e$ . In Figure A-9, TEC of activities 10-20 and 10-30 will be 1 and 5 respectively; the TEC of activities 20-40 and 20-30 will be 2 and 3 respectively.

## 3. Earliest Event Occurrence (EE)

This is the same as the earliest time (TES) an activity (or activities) leading from the event can start, or, stated differently, it is the time of earliest completion (TEC) of the longest activity leading to the event. In our example, the earliest time events 20 and 30 can occur (EE) are 1 and 5 respectively; the EE for events 40 and 50 are 6 and 10 respectively.

## 4. Activity Slack (SA)

Activity Slack is the difference between the time of earliest completion (TEC) of an activity and the earliest occurrence (EE) of its successor event. Thus  $SA (\text{activity}) = EE (\text{successor event}) - TEC (\text{activity})$ .

In our example, activity slack for activities 10-20 and 10-30 is zero. Looking at the two report forms, take the EE for an event (say event 40) and subtract from it the TEC for the longest activity leading to that event (in this case activity 30-40) to derive the amount of slack. Thus, event 40 has an EE of 6, activity 30-40 a TEC of 6; the resulting SA for activity 30-40 is then 0.

b. Backward Pass Computation

The backward pass is a process of tracing back through the network, following similar procedures as in the forward pass. First, for all terminal events, the EL is set equal to EE. Then the backward pass computation begins and determines the following:

- Latest completion time (TLC) and latest start time (TLS) for each activity.
- Point of latest allowable event occurrence (EL).
- Event slack (SE).
- Total activity slack (ST).

Backward pass computations are shown in Figure A-10.

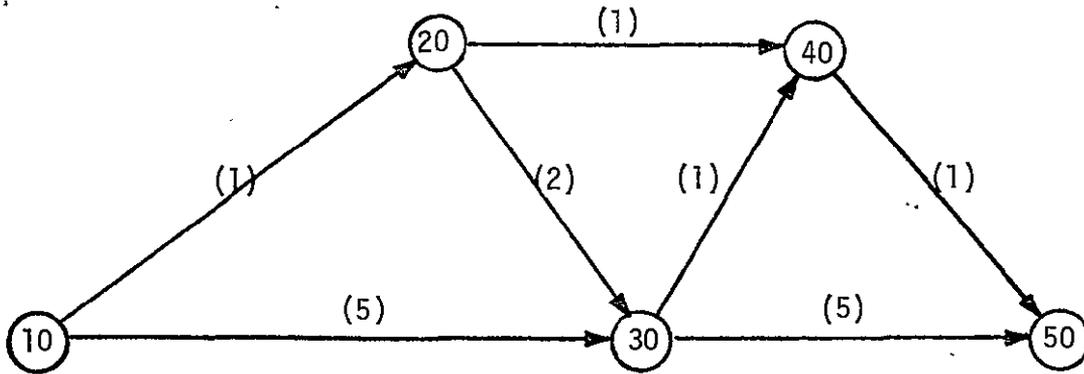
1. Latest Completion Time (TLC)

The latest allowable completion time for an activity (TLC) is equal to the latest allowable occurrence of its successor event (EL). Thus, in our example, the TLC for activities 20-40 and 30-40 are 9 and 9 respectively.

2. Latest Start Time (TLS)

The latest start time is the latest point in time that an activity can start without affecting total project duration. It is equal to the latest allowable completion time for the activity (TLC) minus the elapsed time of the activity ( $t_e$ ).

In Figure A-10, the latest allowable time for the terminal event on the network, Event #50, is 10. As the time of latest completion (TLC) of an



ACTIVITY REPORT

ACTIVITY	ELAPSED TIME Te	EARLIEST START TES	EARLIEST COMPLETION TEC	LATEST START TLS	LATEST COMPLETION TLC	SLACK	
						ACTIVITY SA	TOTAL ST
10-20	1	0	1	2	3	0	2
10-30	5	0	5	0	5	0	0
20-30	2	1	3	3	5	2	2
20-40	1	1	2	8	9	4	7
30-40	1	5	6	8	9	0	3
30-50	5	5	10	5	10	0	0
40-50	1	6	7	9	10	3	3

Quick Reference to Activities on Critical Path

EVENT REPORT

EVENT	EARLIEST OCCURENCE EE	LATEST OCCURENCE EL	EVENT SLACK SE
10	0	0	0
20	1	3	2
30	5	5	0
40	6	9	3
50	10	10	0

Figure A-10: BACKWARD PASS COMPUTATIONS

activity is coincident with the time of latest occurrence (EL) of its successor event, the time of latest start (TLS) for activities 40-50 and 30-50 becomes 9 and 5 respectively.

### 3. Latest Event Occurrence (EL)

The latest allowable occurrence of the terminal event of a network is equal to the earliest occurrence of that event. All other events have an EL that is equal to the earliest of the latest allowable start times (TLS) of the activities starting from that event. Thus  $EL(\text{event}) = \text{MINIMUM TLS of activities starting from that event.}$

In Figure A-10, the EL of events 30 and 40 are 5 and 9 respectively.

### 4. Event Slack (SE)

Event slack shows how long occurrence of a particular event may be delayed without affecting total project duration (i.e., delaying the last event on the network). Event slack is useful for determining the impact on the project of delays in the occurrence of an event. Event slack is the difference between the latest allowable (EL) and the earliest (EE) event occurrence. Thus  $SE = EL - EE$ . This calculation can be easily done using the Event Report and subtracting, for each event, the earliest occurrence (EE) from the latest occurrence (EL) times of the event.

### 5. Total Activity Slack (ST)

Total activity slack (ST) is the amount of time a particular activity may be delayed without affecting the total project duration (i.e., delaying the

last event on the network.) Total activity slack is equal to activity slack (SA) plus the event slack (SE) of its successor event. Thus:  
 $ST (\text{activity}) = SA (\text{ACTIVITY}) + SE (\text{event}).$

#### 6. Determine Critical Path

Scan the column in the Activity Report entitled Total Slack. Note which activities have zero slack; join these activities together with a heavy line to show the critical path of the project. (Note: it is possible for a project to have more than one critical path.)

#### C. DATES AND THE NETWORK

There are two methods for showing calendar time on the network. The first method calls for a calendar showing time along the top of the network diagram and therefore the events in the network must be synchronized in the right place under the time line. This format has the advantage of providing an explicit visual interpretation of the network over time but has the disadvantage of requiring frequent redrawing because of network changes in schedule and logic.

The second method involves indicating the appropriate date on each event (and activity). When revisions are necessary, these dates can be erased and a new date written in without having to redraw the network. The network would only need to be redrawn to reflect changes in the project logic. The advantage of this format is that it lends itself to constant monitoring and updating by operational project managers (with minimum effort, the project manager can re-estimate activity durations and correct the dates); it does not provide as clear a visual interpretation of the project as the first method.

In general practice, however, both methods have been found useful to reflect the different needs of top and middle-level management. The first method is more practical for top level management; top management is generally interested in fewer events than the project manager, and the calendar line network provides a useful visual summary of the project. The project manager will generally find the second method more practical and particularly suited to the day-to-day operational responsibilities with which he is concerned.

An example of the Calendar line network diagram is shown in Figure A-11; the event date approach is shown in Figure A-12.

#### SUMMARY OF TIME CALCULATION FORMULAS

Assuming events #i and #j, the formulas described in the text can be summarized as follows:

##### Forward Pass

$$TES_{i-j} = EE_j$$

$$TEC_{i-j} = TES_{i-j} + t_{e\ i-j}$$

$$EE_j = \text{MAX} [TEC_{i-j}]$$

$$SA_{i-j} = EE_j - TEC_{i-j}$$

##### Backward Pass

$$TLC_{j-j} = EL_j$$

$$TLS_{i-j} = TLC_{i-j} - t_{e\ i-j}$$

$$EL_i = \text{MIN} [TLS_{i-j}]$$

$$SE = EL - EE$$

$$ST_{i-j} = SA_{i-j} + SE_j$$

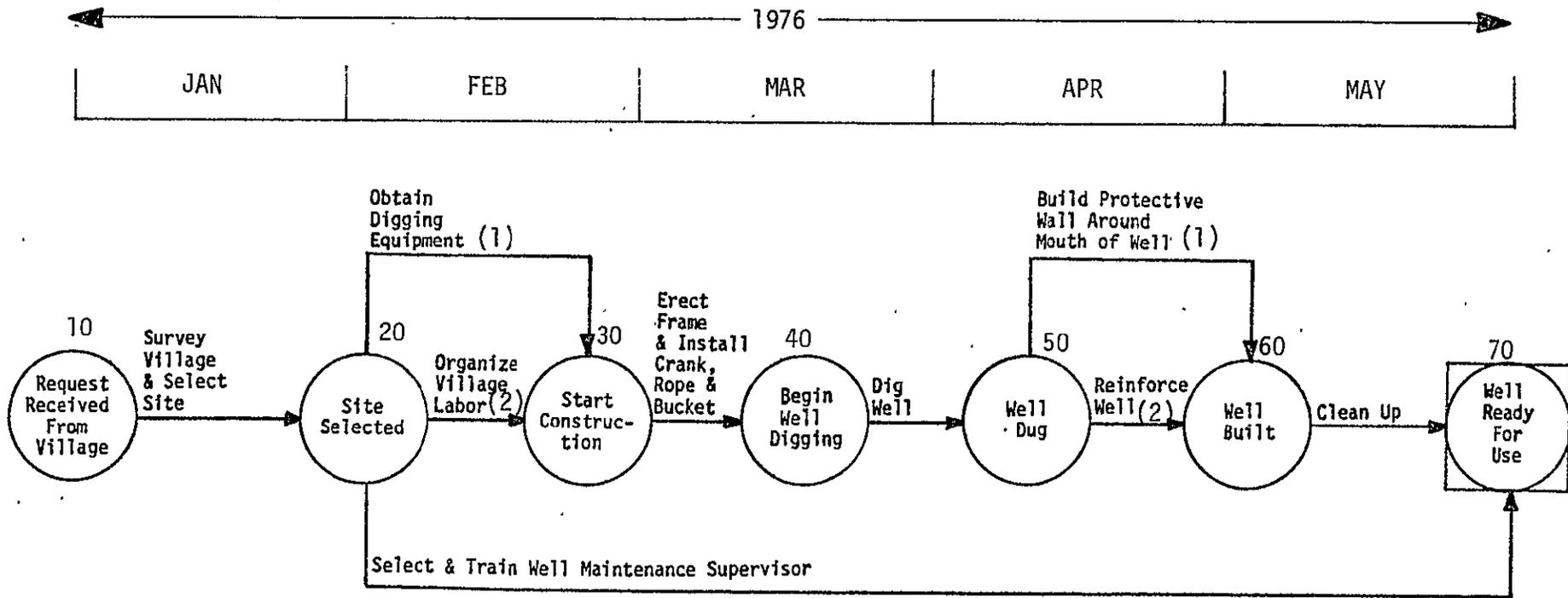
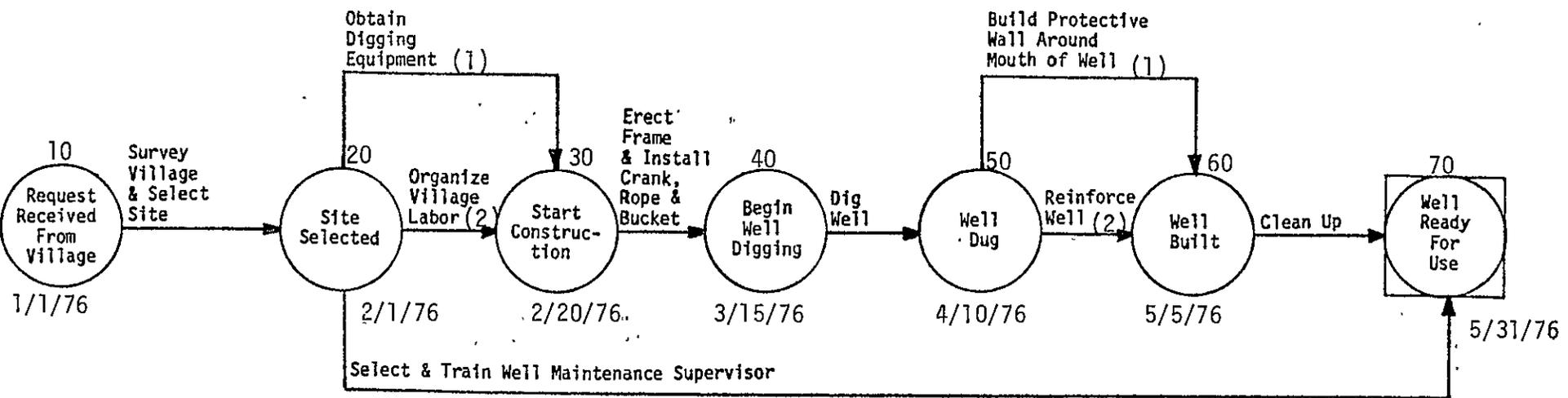


Figure A-11: CALENDAR APPROACH TO DEFINING TIME



A-24

NOTE: All activity and event dates can be shown on network. As a general rule, include those that are most meaningful. In this example only the EEs are shown:

Figure A-12: EVENT DATE APPROACH TO DEFINING TIME

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APPENDIX B: FINANCIAL PLANNING AND ACCOUNTING FOR PROJECTS

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## APPENDIX B

### FINANCIAL PLANNING AND ACCOUNTING FOR PROJECTS

The Agency is currently reviewing its financial planning and accounting procedures in the process of determining the functional requirements for the Project Accounting and Information System (PAIS). The PAIS requirements will be coordinated with the requirements for the PPT system.

The PBAR Task Force has been experimenting with output costing, but is not yet ready to make specific recommendations. It is expected that guidelines will be issued at the end of the Fiscal Year and will include information on developing output costs. Current thinking in the Task Force is that Field Offices will be free to develop internal systems that best answer their project financial management needs, as well as providing appropriate information to Washington.

The Africa Bureau is encouraging field offices to adopt the output costing approach in developing the financial management plans for their projects. AID Handbook #3: Project Assistance, gives brief guidance and suggested formats for output costs. This guidance is included here for convenience. In addition, more detailed instructions on developing project costs are included in Chapter 5, AID Handbook #3, pages 5D.1 through 5D.17.

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## APPENDIX 5B

BUDGET TABLES FOR THE PRP(1) Summary Cost Estimate and Financial Plan

This table is found on page 2 of this appendix. It should be used to depict the source and application of all project resources -- both financial and in-kind. Information on this table will be used in refined or summary form in the following tables.

(2) Summary Budget Data

Summary budget data will be presented on the PRP Facesheet Part I, found on page 2 of Appendix 1 to Chapter 6.

(3) Costing of Project Outputs

This form (found on page 3 of this appendix) is intended to relate total project inputs to project outputs, primarily as a test of project design to see if particular outputs are proportionate to the importance of the purpose to be achieved. The principal inputs to be financed should be listed in the left hand column and their costs apportioned (prorated if appropriate) to the project outputs listed in the Logical Framework. The inputs should be presented in a manner that makes them most meaningful for understanding the project -- standardized components are not recommended.

(4) Incrementally Funded Project Data

The PBAR Task Force has recommended that the use of standardized cost components be discontinued once certain of its other recommendations regarding the use of financial data have been institutionalized. However, until the PBAR recommendation is adopted and modification of the Congressional Presentation accepted by the appropriate Congressional authorities, it will be necessary to continue to present project budget data by standardized cost components. The table on page 4 of this appendix is required with the PRP until further notice.

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(This is a proto-type form; it can be modified to suit particular projects.)

PRP

SUMMARY COST ESTIMATE AND FINANCIAL PLAN  
( US \$ 000 )

Source →	AID**		Host Country		Other(s)+		Total
	FX	LC	FX	LC	FX	LC	
Use* ↓							
Inflation factor Contingency							
Total							

\* List major project elements (inputs).

\*\*Under AID separately list in columns loans & grants; in all cases have a column showing Total AID.

+ May be used for non-AID; e.g., HIG, P.L. 480 Title II, etc., furnished by the United States outside of AID appropriated funds. Where other donors are involved a separate column should be added for each significant donor.

Part I

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COSTING OF PROJECT OUTPUTS/INPUTS  
(In \$000 or equivalent)  
-- PRP --

\_\_\_\_ New  
\_\_\_\_ Rev # \_\_\_\_

Project # \_\_\_\_\_ Title \_\_\_\_\_

Project Inputs	Project Outputs				TOTAL
	# 1	# 2	#3	#4	
Summary of Total Project Costs					
Total					

PAGE NO. 5B-4	EFFECTIVE DATE September 1, 1975	TRANS. MEMO NO. 3:1	AID HANDBOOK 3, App 5B
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## INCREMENTALLY FUNDED PROJECTS

## PROJECT SUMMARY—AID APPROPRIATED FUNDS

(in \$000 or equivalent)

Country \_\_\_\_\_ PRP New \_\_\_\_\_ Rev. # \_\_\_\_\_

Project # \_\_\_\_\_ Title \_\_\_\_\_

	BUDGET YEAR		
	Direct Aid	Contract Other Agency	Total
<u>Cost Components</u>			
US Technicians			
Participants			
Commodities			
Other Costs			
Total			

NOTE: This table is required for the Congressional Presentation.  
Enter projected obligations for all cost components proposed  
for funding from AID appropriated funds for the budget year.

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APPENDIX C: GLOSSARY OF TERMS

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## GLOSSARY OF TERMS

### ACHIEVEMENT REPORTING

Reporting from one level of management to the next higher level on the accomplishment (in terms of quality, quantity, and timeliness) of previously determined performance targets.

### ACTIVITY (Represented by )

Tasks or actions that must be undertaken to reach project objectives. Activities require resources (money, Manpower, Materials) and consume time. An Activity begins at a specific point in time, is preceded by an event, ends at a later point in time, and terminates in the occurrence of an event. If more than one activity occurs at the same time, they are said to be in parallel.

### ASSUMPTIONS

Something that must happen if the project is to succeed, but which is not directly controlled by the Project Team. (For example, if our purpose is to increase agricultural productivity and our goal is to increase farm income, then we must assume that there are sufficient roads, markets, etc., to translate agricultural produce into real income.) At each level in the project design (GPOI), the sum of the objective(s) and the assumptions represent the necessary and sufficient set of conditions to achieve the next higher level.

### BASELINE DATA

Indicates the prevailing preconditions in the area of the project, prior to or at the starting point of the project against which the amount of change (if any) caused by the project can be measured.

### CONSTRAINTS

Factors that limit or otherwise adversely affect the achievement of an event or objective. For example, the supply of trainers may constrain achievement or delay start of a training seminar. Constraints on project success should be assessed before a project is executed and may require explication as an Assumption.

COSTS TO THE PROJECT

Those things that are consumed in the completion of project activities (time, money, manpower, and materials) together with any adverse effects (social disruption, lost earnings of trainees who fail to return to their country, pollution, etc.).

CRITICAL PERFORMANCE INDICATORS (CPIs)

Key events in a project which are critical to successful attainment of project purpose and which have been agreed to in advance of project implementation as the reporting events from the field to Washington. These events are defined in terms of the critical performance levels for time, quality, and quantity. Critical time is the latest date an event can occur without jeopardizing the project. Critical quality and quantity are minimum performance levels that can be achieved without affecting attainment of project objectives.

Milestone events which correspond to outputs on the Logical Framework or to major occurrences which contribute to these outputs are almost always of interest and reported to the next higher level of management. When critical performance levels are defined for these events, they become CPIs.

CRITICAL PATH

The critical path is the minimum time required to reach an objective or complete a set of activities given the level of effort or amount of resources devoted to these activities. The sequence of activities that consumes the most time from the beginning to the end of the project. A delay in any activity along the critical path will result in at least an equal delay in the completion date of the project.

DECISION POINTS  
(Represented by



) Pre-determined points in time in the life of a project. At these points, key decisions that affect the future course of the project must be made.

DEPENDENCY

A logical relationship which is indicated by a causal or temporal precedence (e.g., if an activity cannot begin until an event occurs, which is the result of one or more preceding activities, then it is dependent on those pre-conditions).

DEVELOPMENT HYPOTHESIS

A project or program hypothesis where the expected result is impact on development. "If outputs, then purpose" is called the project hypothesis. The hypothesis that purpose will lead to goal is called the program hypothesis. These are hypotheses because we are not certain of the causal relationship between the "if" statement and the "then" statement. Projects should be supported only if informed judgment, based on the best available evidence, provides reasonable confidence that the "then" statement will be achieved. The degree of confidence required should be a function of the value of achieving the intended purpose.

DUMMY ACTIVITY  
(Represented by ---->)

The dummy activity arrow indicates dependence of one activity on the completion of another when the two cannot be otherwise linked on a network. Dummy activities consume neither time nor resources.

ELAPSED TIME

The minimum amount of time required to complete an activity given the level of effort and the amount of resources devoted to the activity.

END-OF-PROJECT STATUS  
(EOPS)

The minimum set of objectively verifiable indicators that will signal the successful completion of the project purpose. Indicators, to be objectively verifiable, must be targeted (time, quantity, quality).

EPISODIC REPORTING

Reporting on the level of achievement of pre-determined key events in the life of a project. The timing of the reports is keyed to project events or dates rather than a priori periods or dates.

EXCEPTION REPORTING

Reporting to the next higher level of management that a planned event did not occur or is in danger of not occurring on time and/or in the same manner as was planned (i.e., with respect to the quantity and quality of performance). Reports are action oriented giving higher management an assessment of the problem and recommending corrective action.

EVALUATION

An assessment and comparison of progress at each of four level of objectives (GPOI). Examines validity of hypotheses, challenges relevance of objectives, assesses project design, and normally results in redesign and replanning actions. Evaluation is oriented more to the output-to-purpose and purpose-to-goal linkages, in contrast to monitoring which is oriented more to the input-to-output linkage.

EVENT

(Represented by



)

A condition, state, or point in time which represents the end of one or more activities or the beginning of one or more activities. An event consumes no time or resources.

FOCUS

Concentrating on the "main thrust" or truly important issues and avoiding the less important. Focus is particularly relevant when considering project purpose. Project purpose should be limited to the single "main thrust" of the project, stated as concisely as possible.

GOAL

The higher level objective immediately above project purpose. That is, the "then" statement for which the project purpose (plus purpose-level assumptions) must provide a plausible "if." Also, higher order objectives beyond the project goal.

GPOI

An acronym for: Goal, Purpose, Outputs, Intputs -- the vertical logic of the LogFrame (see Logical Framework).

HYPOTHESIS

A predictive statement based on a causal relationship involving a degree of uncertainty.

INDICATOR

Conditions that are so strictly associated with certain other conditions that presence of or variation in the former indicates presence of or variation in the latter. Indicators demonstrate results; they are not conditions necessary to achieve those results. For example, a meter deflection of 2 cm may indicate, but is not itself, one volt. A good indicator makes the bridge between important intent and means of verifying that the intent has been realized.

Indicators are targeted by measures of quantity and/or quality and include a time frame for achievement. (See Objectively Verifiable Indicators.)

INPUTS

The activities to be undertaken and resources available in order to produce the outputs. The project manager commits himself and is held accountable to produce the outputs by effective management of the inputs.

INTERFACE EVENTS  )  
(Represented by

An event that occurs in one network upon which the commencement of an activity in one or more other networks is dependent.

KEY EVENTS

Events which are crucial to the successful implementation of the project and of interest to higher management but not necessarily on the critical path.

LEADING INDICATORS

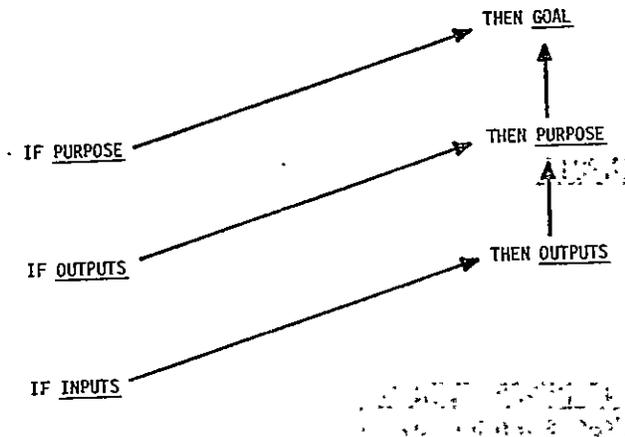
Indicators that are observable now and are useful predictors of future success. A statement of intent is a leading indicator of behavior, etc.

LEVELS OF MANAGEMENT

Management levels are hierarchical. They comprise those involved in day-to-day management of individual projects (Project Managers) and, at the highest levels, those responsible for policy decisions affecting many types of projects and programs (top management). The information needs at these various levels are essentially different. The PMS operational network, providing detailed information about an individual project, responds to the Project Manager's information needs. The critical performance indicator (CPI) network--critical events from the operational network--provides top management with sufficient information to monitor the most important aspects of several projects at a time.

LINKED HYPOTHESES

Represent a prediction that if the expected results at each level of the GPOI hierarchy are achieved and if the assumptions at each level are valid, then the expected results at the next higher level will be achieved. This is illustrated as follows:



LOGICAL FRAMEWORK

A set of interlocking concepts which help project teams clearly, logically, and explicitly state why a project is undertaken, how the project will be undertaken, what exogenous factors make project success uncertain, and what the project will look like when it has been successfully completed. The concepts are summarized in a 4 by 4 matrix, also called the LogFrame.

MANAGEABLE INTEREST

Defines the area of concern--and responsibility--of the Project Manager. The Project Manager commits to deliver outputs if the requested inputs are put at his disposal. It is within his "Manageable Interest" to reallocate or otherwise modify inputs and do whatever else is necessary to produce outputs aimed at achieving an agreed-upon purpose.

MATRIX FOR THE LOGICAL FRAMEWORK (LOGFRAME)

A 4 by 4 matrix that displays the interrelationships of the design and evaluation components of a development project. The matrix is displayed on a worksheet divided into four rows (for goal, purpose, outputs, and inputs) and four columns (for narrative, objectively verifiable indicators, means of verification, and important assumptions).

MEANS OF VERIFICATION

The actual type and source of data which will be used to verify an indicator. (e.g., analysis of birth records from Ministry of Health or a family planning survey in target area conducted by University of X). The usefulness of an indicator is limited by the availability of data.

CONFIDENTIAL

MILESTONE EVENTS

Events which correspond to outputs on the Logical Framework or to major occurrences which contribute to these outputs. Milestones are almost always of interest and reported to the next higher level of management.

MONITORING

The management function of following the progress and overseeing the operations of a project from its inception to its completion. Monitoring is oriented more to the input-to-output linkage of GPOI in contrast to evaluation which is oriented more to the output-to-purpose and purpose-to-goal linkages. Monitoring is concerned with work activities and the procurement and use of resources.

NETWORK

A graphic representation of the sequence of activities and events required to reach a specified objective.

OBJECTIVELY VERIFIABLE INDICATORS

Indicators (see definition) that have quantity, quality, and time targets and are stated in terms such that both an informed skeptic and a proponent of the project would agree that progress has or has not been as planned. Objectively verifiable indicators, initially established during the design phase of a project, focus discussion on evidence rather than opinions.

OPERATIONAL NETWORK

The network developed in the Field Office during the project design phase and subsequently used for project monitoring by the project officer. It can be derived from the Project LogFrame, or from summarizing detailed networks developed for the project outputs.

OUTPUTS

The specifically intended results that can be expected from good management of the inputs provided. A project manager is accountable for producing outputs; the project manager, line supervisors, and program staff share responsibility for the judgment that producing these outputs will result in achieving purpose.

PARALLEL ACTIVITIES

Two or more activities in a network that are undertaken at the same time.

PERIODIC REPORTING

Reporting on the degree of achievement of activities and events from one level of management to the next higher level based on a pre-defined time schedule.

POINTER

(Represented by



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A symbol that cross-references two events in a network (or between networks) which are interdependent. The pointer can be used to replace dummy activities which represent only a time dependency (but consume no time or resources) or to replace a normal activity. In the latter case, the pointer should be carefully labeled in addition to being coded. In both cases, the pointer is used only to avoid over-complicated crossing of arrows.

PROJECT

A set of interrelated activities oriented to achieving a specific purpose. A planned undertaking that clearly specifies what will be accomplished, over what period of time, and at what cost.

PROJECT DESIGN

A summary of what the project is expected to achieve (purpose) and how it will be achieved with the inputs and time available. The key elements of project design may be summarized in the Logical Framework format.

PROJECT MANAGER

The individual who holds himself personally accountable for the success of a project. More specifically, the individual who is charged with producing the agreed-upon outputs within the specified time and cost constraints.

PROJECT  
PERFORMANCE  
TRACKING (PPT)  
SYSTEM

A systematic approach to project implementation that facilitates the achievement of project objectives. It includes both implementation planning and implementation monitoring/reporting elements. The PPT system is an Agency requirement applicable to all projects for which AID has responsibility through funding and guarantees.

There are two PPT planning documents: The Critical Performance Indicator (CPI) Network Chart graphically summarizes critical project points over time, shows evaluation points, and identifies cumulative accrued expenditures. The Critical Performance Indicator Description form further explains critical project points on the network charts in terms of quality, quantity, and time of achievement. It also identifies action agents.

The PPT system constitutes the minimum level of Agency-wide project reporting requirements. Field Office reporting to Washington is against the CPIs on either a positive or an exception reporting basis.

PURPOSE

The essential result that motivates undertaking the project. The result hypothesized if the required outputs are produced.

REPORTING

Providing the necessary information to appropriate people for timely decision-making regarding the successful implementation of projects. Includes both formal and informal communications; i.e., a formal (fixed format) report may be the stimulus for personal discussions.

SLACK

The time that an activity can be delayed without delaying the targeted completion of a project

TARGET

The specific quantity, quality, and time measures of an indicator that give detailed definition to an objective.