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IMPROVING PROJECT MONITORING  
AND IMPLEMENTATION SYSTEMS:

A Strategy and Implementation Plan  
for a Project Management Information  
System (PMIS) for USAID/Thailand

Final Report

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## EXECUTIVE SUMMARY

### PROJECT PURPOSE AND ACTIVITIES

The primary purpose of this project is to develop a comprehensive strategy and implementation plan for a Project Monitoring and Information System (PMIS) which provides decision-making information to USAID/Thailand and RTG (Royal Thai Government) managers. The recommended system is applicable to the entire USAID/T project portfolio, and adapts to the special needs of individual projects.

System development activities undertaken in Thailand included interviewing USAID/T staff; identifying information needs; applying these appropriate PMIS concepts to "sample" mission projects; analyzing the results; and developing an implementation plan. The process included close collaboration with USAID/T staff.

### PROJECT BACKGROUND

Since the FY 78 "turnaround" year, USAID/Thailand has emphasized project design to rebuild its portfolio. The increased project portfolio now demands greater implementation attention. A major implementation constraint in USAID/T (and many USAIDs worldwide) is lack of reliable information for project monitoring and decision-making. This consulting project addresses that constraint.

The decision for this project emerged following evaluation workshops in Thailand conducted by Asia/DP staff in the Spring of 1981. Two consultants from the USDA's Development Project Management Center (DPMC) designed a PMIS and implementation plan for USAID/Thailand in the Fall of 1981.

This effort has received strong support from the Asia Bureau as well as USAID/Thailand. The need for improved project monitoring and information systems is not unique to Thailand, and the recommended strategies can benefit other USAID missions.

#### KEY FINDINGS AND CONCLUSIONS

Key findings and conclusions which guided the development of the recommended strategy are summarized:

1. Reporting from the projects to USAID or the RTG (Royal Thai Government) is not standardized and systematic. Lack of reliable information limits USAID staff ability to accurately monitor project performance, anticipate/correct problems, and reliably report to AID/W.
2. USAID/T is serious about improving implementation, monitoring, and management. This commitment will facilitate success in the several related steps already undertaken in this direction.
3. Numerous management, administrative, and planning deficiencies (many correctable) were noted in field project start-up and early implementation activities. Such deficiencies, if not corrected, will cause continuing project delays and problems, and threaten purpose/goal achievement.

4. The transfer of project "ownership" from design by USAID to implementation by RTG project teams has been incomplete. There is no clear strategy (with associated management methodologies) to assist this transfer. This leaves a vacuum and promotes ad hoc, individualistic approaches to implementation and monitoring. Appropriate methodologies can help resolve implementation problems if applied in the post-authorization period of project development.
5. The "climate of support" necessary to make PMIS succeed exists in USAID and the RTG. The Director's Office, O/PPD, O/FIN, and O/ARD (the largest technical division) strongly support the concept. Both USAID and RTG project staff were highly receptive to the methodologies for strengthening implementation/operation plans.
6. The implementation plans of the Project Paper are not adequate for actual project implementation. These plans must be "re-created" by those responsible for running the project.
7. Some immediate improvements can be made to strengthen USAID use of information already available, but more extensive improvements require creating a valid flow of information from the projects.
8. Some elements required for the USAID PMIS are already in place, and form the basis for building a more comprehensive, integrated PMIS. The recommended strategy builds on existing practices, procedures, and systems.
9. The "action training" and implementation planning approaches tested with sample projects is appropriate for establishing a sound foundation at the project level for successful implementation, periodic evaluation, and reliable reporting.

#### SUMMARY OF STRATEGY AND RECOMMENDATIONS

The recommended PMIS strategy emphasizes both performance-oriented management and useful, timely management information. The strategy has three distinct features: meeting USAID's information needs by a "bottom-up" flow of reliable information from the projects,

concentrating on effective transitions from project design to implementation, and focusing on the project officer as the "linking pin" between the project-level and USAID-internal PMIS.

Our basic recommendations are to (1) improve information systems within USAID, and (2) improve information "foundations" at the project level. Both are necessary. USAID-internal information systems are unreliable without valid information from the project level. Strong project-level systems without complementary USAID internal systems do not receive effective management problem solving and support.

The first recommendation is to establish common basic approaches to project implementation and management information within USAID.

Standard monitoring and analytic frameworks tested during this consultancy are proposed to improve performance and monitoring within USAID. Use of these flexible frameworks serves mission management, project officers, and support staffs through more informed and focused internal monitoring, progress reviews, and analytical reporting.

The second recommendation is to establish the necessary project-level foundations for successful project implementation management reporting. Following a proven methodology for implementation/operations planning, capability is created on the front-lines of

implementation to identify, collect, analyze, and report monitoring and evaluation information to other managerial levels in USAID and the RTG.

#### SUMMARY OF THE PMIS DESIGN

The proposed design consists of twelve integrated components. Four of these are "located" in the projects; eight are within USAID. Operation of the project PMIS provides information which "drives" the USAID PMIS.

The four project-based components develop the foundations for improved project implementation. They are:

1. System development workshops with USAID-RTG project to prepare realistic implementation plans and set up project-level PMIS.
2. Action-focused project reporting from project teams to USAID and RTG.
3. Follow-up sessions with project reporting from project teams to USAID and RTG.
4. Integrate evaluation plans with PMIS, with focus on formative evaluations as well as summative evaluations.

The USAID-based components establish common approaches to project implementation and management within USAID. These are:

5. Project Officer's implementation monitoring plans.
6. Analytically-focused quarterly USAID Directors PIR meetings.
7. Mid-cycle project reviews at technical office level.

8. Project milestone events monitoring displays.
9. Documentation of USAID and RTG administrative sub-routines.
10. Training workshops for USAID and RTG in implementation monitoring and PMIS.
11. Automation of cost-effective PMIS applications.
12. Project implementation handbook and PMIS guidelines.

#### IMPLEMENTATION STEPS

A two-phase implementation approach is recommended. Phase I provides a significant improvement in the use of information currently available to USAID. Phase I implementation of components 5, 6, 7, and 8 has already been initiated and can be completed during the first quarter of 1982. Phase I resource requirements are modest; implementation can be accomplished by current mission staff.

Phase II builds on the interim improvements of Phase I. Phase II implementation installs the remaining 4 USAID-internal components, and establishes comprehensive PMIS's for at least five high-priority mission projects. Phase II requires additional resources in the form of short and long-term technical assistance over a 12 month period.

## SPECIFIC BENEFITS

When implemented, the recommended PMIS will produce the following specific benefits:

- o Detailed, field-level management, an implementation and reporting systems operating plan for five high priority USAID/T projects.
- o Summary monitoring and milestone tracking plans for other projects in the portfolio.
- o Strengthened reporting formats to AID/W based on more reliable project information in the missions.
- o Documented administrative sub-routines for USAID and RTG projects.
- o A proven methodology for improving project implementation and integrating evaluation with project monitoring and management.
- o Project implementation handbooks to assist USAID personnel and RTG.
- o "How-to" materials prepared for replicating PMIS implementation in other USAID missions.

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**SECTION ONE: OVERVIEW AND RECOMMENDATIONS**

CHAPTER 1:  
INTRODUCTION AND PERSPECTIVES

THE IMPORTANCE OF USAID/THAILAND'S INITIATIVE

Project implementation in USAIDs throughout the world is constrained by the lack of quality information for project monitoring and decision-making.

USAID/Thailand undertook this consultancy to overcome this key constraint. The primary purpose is to develop a comprehensive strategy and implementation plan for a project monitoring and information (PMIS) system which provides decision-making information to USAID and RTG managers.

The PMIS strategy developed for USAID/Thailand has three distinct features: meeting USAIDs information needs by a "bottom-up" flow of reliable information starting at the project level, concentrating on effective transitions from project design to implementation, and focusing on the project officer as the "linking pin" between project-level and USAID-internal PMIS.

This approach has high potential for solving a critical issue confronting AID missions worldwide, not just in Thailand. That issue is how to better generate and use information to improve implementation so that USAID-funded projects achieve their development objectives.

THE OBSTACLES TO PROJECT IMPLEMENTATION

Improved information is essential for overcoming the obstacles to successful project/program implementation. Major obstacles stem from three sources: the complexity of the development process itself, factors within the host country, and factors within USAID.

Development projects, by their very nature, are adventures of uncertainty. Development projects are characterized by severe time and resource constraints, high visibility, unrealistic expectations, risk, and uncertainty. They require changing culturally-embedded individual and institutional behavior -- a tough task even in the so-called "developed" countries. The causal factors in development hypotheses are not well understood; not all the important variables can be controlled; the environment is dynamic and unpredictable; the indicators of success or failure may not emerge for a long time.

Host country organization and institutional factors further complicate implementation. Ministries which implement projects are seldom equipped for rapid decision-making and flexibility of approach. Absorptive capacities are limited; management skills at a premium; personal resource and finance systems are strained.

Development projects require carving out new organization units with cut across department lines. But the Thai government is

highly centralized and is characterized by a reluctance to delegate authority and share power.

Budgeting and decision-making is several layers removed from operations. Thai project managers have authority over the various entities who must be coordinated. In addition, they are technically qualified but seldom equipped for their most important role: managing.

Typically, the project manager gains few rewards but assumes big risks. Successful implementation requires adopting entrepreneurial-oriented management behavior required to cut across organization lines and influence cooperation where formal authority is limited.

The AID institutional structure does little to encourage effective project implementation. It is generally acknowledged that institutional rewards go for designing projects and obligating funds, not for implementation. Project papers are essentially marketing documents written to win approval; they promise results which are seldom possible to deliver and their implementation plan is not suitable for actual implementation. Individual accountability is low -- persons are seldom rewarded or penalized based on the outcome of their projects. Personnel rotation policies don't allow staff to "live through" a project from design through completion. Personnel shortages, shifts in AID/W policy, and

funding uncertainty further complicate the job of managing implementation.

In the past, much attention in AID has been given to improving and to standardizing project planning. There has been extensive training in accepted procedures, processes and documentation. Considerably less attention has been given to developing effective implementation strategies, procedures and documentation. This consultancy represents a significant concern with effective implementation. It is part of a new thrust within the agency as evidenced by concerns about project pipelines and implementation training courses. Certainly execution and implementation will become more central to the agency's program in the immediate future.

The days when USAID funded "simple" projects are gone; as are the days of sufficient U.S. manpower to directly manage those projects. AID's role has changed in today's environment of greater activity by other donors. In Thailand, the USAID/program strategy is geared more toward qualitative than quantitative contribution. This qualitative role implies innovative, complex projects which are management-intensive and difficult to implement.

USAID/Thailand's emphasis has shifted from program design to implementation. The mission has completed its portfolio rebuilding effort, from the FY '78 "turnaround" year of only 8

projects and 18 USDH staff, to the September 81 level of 27 active projects and 25 USDH staff. At a recent staff conference, FY '83 was termed "the year of implementation" for USAID/Thailand. This consultancy is directly supports the mission's implementation emphasis.

#### PROJECT PURPOSE AND BACKGROUND

The purpose of this consultation (as stated in the scope of work) is to develop a comprehensive strategy and implementation plan for establishing a monitoring and information system for USAID/Thailand-supported development projects. The core system should apply to the entire USAID/Thailand project portfolio while remaining adaptable to the special needs of individual projects.

The need for this effort became apparent in discussions between mission and AID/W during evaluation workshops conducted by ASIA/DP staff in the Spring of 1981. The USDA's Development Project Management Center (DPMC) was selected to carry out the project. Two consultants (Dr. Merlyn Kettering and Terry Schmidt) spent a total of 16 person-weeks in Thailand on the assignment (September 14 through November 28, 1981). Extensive discussions were held with Asia Bureau Staff prior to on-site work.

The need for improved project monitoring and information systems is not unique to Thailand. Many USAID development efforts worldwide are hampered by inabilities to systematically identify, collect, analyze, and utilize, project/program information. This consultation

received strong Asia Bureau support because inadequate prior attention has been given this topic. While this project is specifically for USAID/Thailand, the results suggest approaches which may benefit other USAID missions in Asia and worldwide.

#### WORK SCOPE AND METHODOLOGY

The detailed scope of work and on-site work plan is included in the Appendices. The work plan was developed in late August through mid-September in collaboration with ASIA/DP (specifically with Maureen Norton who backstopped this effort) with guidance from a DPMC Advisor (Dr. Marcus Ingle). The work plan developed in Washington was reviewed with USAID/T at the beginning of the effort.

Key activities included the following:

- \* interview USAID senior management, project officers and directors of USAID's technical divisions and staff offices to determine information needs and clarify PMIS objectives.
- \* meet with selected RTG representatives, constructors, field workers, and others with useful perspectives or potential involvement in the system.
- \* identify basic planning and monitoring concepts on which the PMIS would be based.
- \* define the nature of the PMIS, including its intended users, information elements required, formats and procedures.
- \* demonstrate the value of the PMIS concepts by applying them electively to "sample" projects of high priority to the mission (Mae Chaem Watershed Development and North East Rainfed Agriculture Development). This involved participation by the RTG implementation team and USAID project officers in on-site action-focused workshops to develop PMIS elements.

- \* analyze the results of these applications.
- \* estimate time and resource requirements to fully implement and maintain the system.
- \* develop an implementation plan and identify the "next steps" required.

The consultants maintained close contact with USAID staff for information sharing and testing of ideas. Several working sessions and interim briefings were held with mission staff. Suggestions and comments were used for design refinement. Dr. Kettering made a presentation at the USAID/Thailand "Implementation Workshop" held in late October. These close contacts, briefings, and working sessions were important to develop a common understanding within the mission of PMIS concepts and approach.

Several important decisions on the nature and scope of PMIS were made by USAID management during this project. Many recommended "action steps" have already been initiated.

We believe the active participation and interest by USAID staff and management indicates support of the PMIS strategy and a serious commitment to the objective of better project implementation.

#### ORGANIZATION OF THIS EFFORT

This report is addressed to those responsible for making the USAID/Thailand PMIS succeed -- mission management, project staff, and ASIA/DP. The authors have chosen a practical, descriptive

approach along with theoretical and or academic approaches. Because the reader backgrounds and PMIS experience vary, a major report section is devoted to key PMIS concepts.

Our findings, observations, and recommendations are presented in Chapter 2.

Section II, the next four chapters, discuss and apply concepts of management and information to the USAID/Thailand and RTG context. Chapter 3 introduces basic concepts; 4 analyzes information uses and users; 5 explores monitoring and reporting considerations; 6 describes the PMIS from a project perspective.

Section III, the next three chapters, discuss the PMIS and the implementation strategy. Chapter 7 describes the PMIS; Chapter 8 describes the implementation Phase I plan, designed to produce immediate improvements. Chapter 9 describes the Phase II, "full" system implementation.

The appendices include the scope of work, work plan, list of project participants, and guidelines for preparing monitoring plans.

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CHAPTER 2:  
SUMMARY OF OBSERVATIONS, CONCLUSIONS, AND RECOMMENDATIONS

OVERVIEW

This Chapter summarizes our observations and conclusions, and follows with the central PMIS strategy recommendations. The benefits are then discussed, and PMIS design elements and implementation strategy are briefly described.

The observations and conclusions which are stated briefly under three topical headings are developed more fully in later chapters.

OBSERVATIONS AND CONCLUSIONS

USAID Information Needs, Staffing, and Management

1. USAID/Thailand is serious about closing the implementation gap and improving portfolio performance; the mission has initiated several steps toward this objective. The timing is "ripe" for the PMIS initiative.
2. Lack of reliable information reported from the projects is the major constraint in USAID staff ability to monitor project implementation. There is no consistent project reporting from RTG agencies to USAID. Written progress reports are received sporadically and on too few projects. These reports tend to be descriptive rather than analytic, and are not timed or formatted to highlight key issues, problems, opportunities, or action items.
3. USAID/Thailand's primary project review and reporting system is the Directors Quarterly Project Review (with semi-annual PIR reporting to Washington). The value of these reviews can be immediately improved, and they are an important building block of the full PMIS.
4. The highest priority mission information need is for project monitoring and evaluation; other needs (with lower priority) are for project design and long-term program impact information.

5. The "climate of support" for PMIS varies by office and correlates with need. The strongest technical office support (and need) is in O/ARD, with some 80% of the portfolio. O/PPD support and need is also high. Support from the Director's office -- vital for PMIS success -- is strong. O/FIN interest is high, but the need is less -- this office has already initiated steps to provide structured and reliable information for decision-making.
6. At the beginning of this consultation, opinions differed as to whether the PMIS should focus on projects or on USAID-internal administrative operations. At the conclusion, a consensus emerged that project-based PMIS was necessary to underpin USAID's internal PMIS.
7. There is some ambiguity concerning roles and procedures within the mission (especially between PPD and technical office staff), leading to some items which "fall between the cracks". The responsibility handoff from project design (PPD) to implementation (technical divisions) provides a key opportunity for improvement. The specific steps are best determined on a project-by-project basis within standardized guidelines.
8. USAID/Thailand staff is relatively "new"; 9 professionals (out of 24) have arrived since May, 1981. Workload remains high in both technical and staff offices, but recent staff increases have reduced the project to officer ratio from 2.3 in FY '81 to about 1.5 now. There is "breathing space" to permit attention to MIS; six months ago this was not true.

The Project Transition From Design To Implementation

1. USAID/Thailand can enhance the chances for project implementation success by providing the greater support in helping the Thais initiate project implementation. Numerous management, administrative, and planning deficiencies (many correctable) were found in project start-up and early implementation activities.
2. The crucial "window of opportunity" for management attention to implementation planning is the 90 - 120 day period from signing of loan agreement through implementation start-up. Delays in meeting the CPs, completing the PILs, and initiating long-lead items (e.g., contracting) during this period generate continuing problems. The recommended PMIS strategy concentrates on establishing a solid project implementation foundation during this start-up period.
3. AID/W can perform an important role by authorizing the use of PDS funds for continuation of pre-implementation activity after the project has been signed but before actual implementation begins.
4. The implementation plan of the Project Paper is not adequate for actual project implementation. Project plans must be "re-created" by those responsible for running the project.

PROJECT SPECIFIC OBSERVATIONS (BASED ON WORK WITH THE MAE CHAEM  
AND NERAD PROJECTS)

1. There was little shared understanding of the project objectives and strategy by the RTG project implementation team. Most team members had not read the English language project paper; Thai language project papers or summaries were not available for many projects.
2. Project conditions were noted which created later implementation problems, including:
  - RTG project staff were technically skilled but deficient in management experience and training.
  - A shortage of personnel to carry out the project created vacancies in key slots.
  - lack of administrative back-up from parent ministry hinders resource availability and activity scheduling.
  - Difficulties in gaining cooperation from parallel agencies with project responsibilities led to significant delays, confusion and conflicts.
3. There were serious deficiencies in the project operations/implementations plans. These included:
  - Physical plans not integrated with financial plans.
  - Lack of understanding of information needs or methods for monitoring.
  - Inadequate clarification of who was responsible for what.
  - Implementation plans not at sufficient level of detail, lacking milestone required for on-going control, monitoring, and evaluation.
4. RTG project staff were highly receptive to our technical assistance efforts to help develop thorough implementation/operations plans.

(1)

5. The "action training" technical assistance methods applied to these sample projects is appropriate, and necessary to establish a sound foundation for successful implementation and project reporting.

THE CENTRAL RECOMMENDATIONS: DUAL THRUST AT USAID AND PROJECTS LEVELS

Our recommendations into two basic categories -- (a) those for improving information within USAID and (b) those for improving the information foundation and utilization at the project level. An effective information system must concentrate on both. A strong USAID-internal information system without good information "bubbling up" from the project has weak and unstable foundations. Strong project-level information systems without complementary USAID systems do not receive effective management problem-solving and support.

Within USAID there are many varied approaches to the collection, generation and use of information. The lack of standardized processes, procedures or expectations about implementation and management information leads to conflicts about how USAID personnel (as well as RTG personnel) are carrying out their responsibilities. An acceptable standardization of approach to management information is absolutely essential. Without this, communication will be difficult, information will not be readily available, and implementation problem-solving will remain at crisis-oriented level at all times.

Thus, the first central recommendation is to establish a common basic approaches to project implementation information within USAID. These approaches will guide USAID information generation, collection and use. They establish common expectations and guidelines familiar to all mission staff. Specific frameworks are proposed in this document for all aspects of project monitoring and implementation.

(2)

USAID receives little useful information from RTG project teams on a routine basis. Most teams lack the ability to provide management information essential to decision-making. There can be no "system" serving USAID without solid, "information foundations" which first serve the project team at the front lines of implementation.

Without such foundations, the best-designed reporting formats will go unused, ideal information flows will not be followed, there will be no reliable management information reported to RTG or USAID.

Therefore, the second central recommendation for an PMIS strategy is to establish the necessary foundations for successful project management and reporting, beginning at the project-level, and creating a "bottom-up" capability to identify, collect, analyze, and report information at all managerial levels in the RTG and USAID.

This can be accomplished using the "operations/implementation planning" and action-training methodology demonstrated during this consultancy.

Improved reporting is a desirable by-product of this strategy. But perhaps the more important benefit is that it strengthens the project design, builds project team commitment, clarifies responsibilities, and builds realism into the project. This reduces project problems and delays, and increases the probability of smooth and successful project implementation.

BENEFITS OF THE PMIS STRATEGY

The benefits of the strategy recommended for USAID and RTG, are to:

- \* Strengthen ability of project to succeed, by developing realistic implementation plans, clarifying project strategies and objectives, agreeing on responsibilities, and identifying milestones.
- \* Create the capability in the project to report valid, meaningful, information to RTG and USAID, based on comparison with realistic implementation plans updated annually.
- \* Permit earlier identification of upcoming problems (and their means of resolution).
- \* Provide more responsive reporting to USAID/ Washington, both in the PIR process and in response to ad-hoc requests for project information.
- \* Link financial with physical plans, to permit more realistic expenditure projections.
- \* Link evaluation directly with implementation, by identifying, collecting, and analyzing data related to project objectives, and by conducting more frequent reviews and refinements of project strategy
- \* Allow better utilization of USAID executive and managerial staff by reducing the preventable "crisis" and identifying earlier potential problems.
- \* Enhance the "performance-orientation" of both RTG and USAID staff, by providing the information to make better decisions.
- \* Reduce the difficulties caused by USAID personnel rotation, by developing an information base which "accelerates the learning curve" in transferring project understanding to new staff.

## SUMMARY OF THE PMIS DESIGN

The recommended PMIS design consists of twelve integrated components. Four of these components are based within the RTG project environment; eight are based within USAID. Operation of the project MIS provides information which "drives" the USAID MIS.

The four project-based components establish project team ability to collect, use, and report valid and reliable project information to RTG agencies and to USAID. Development of these components requires on-site work with the project teams to prepare thoroughly operations/implementation plans (of which MIS is one element.) These plans are the basis for implementing the project and reporting progress.

The reporting system is custom-configured to the organizations involved in the project, to meet all relevant USAID and RTG decision needs. This process also produces an evaluation plan, so that data required for periodic evaluations is identified early, routinely gathered, and periodically analyzed.

This comprehensive "bottom-up" methodology will be applied to the highest priority most complex, USAID-funded projects. A simpler methodology will be applied to the remaining projects.

The eight USAID components establish the mission's ability to track project implementation and take appropriate actions. These components include monitoring plans for all projects, protocols for project reviews, display boards for portfolio progress tracking, implementation guidance materials, standardization of USAID administrative "sub-routines" (e.g., procurement), project officer training in implementation management, and automation of selected portions.

Chapter 7 describes the system in further detail.

IMPLEMENTATION STRATEGY

Implementation is divided into two Phases. Phase I implementation puts in place three USAID components and provides an immediate improvement in the use of information now available to USAID. These three components are to develop monitoring plans for all projects, strengthen the quarterly PIR meetings, and institute mid-cycle reviews at the office level. Phase I implementation was initiated during this consultancy and will be completed by February 15, 1982. While Phase I will provide an immediate incremental improvement, the full benefits await Phase II. Phase II puts in place the four project-based components and the remaining USAID components. Phase II requires additional resource commitment (some 18 man-months of full-time and/or TDY) to establish and operate the system. Phase II installation begins the first quarter of 1982 and requires 9-12 months of elapsed time.

Chapter 8 describes Phase I implementation; Chapter 9 describes Phase II.

SECTION TWO: PRINCIPLES OF MANAGEMENT INFORMATION, REPORTING, AND DECISION-MAKING
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CHAPTER 3:  
KEY CONCEPTS OF MANAGEMENT AND INFORMATION

OVERVIEW

This chapter describes some basic concepts of management and information as they apply to PMIS in the USAID/Thailand and RTG environment. The purpose is to: define key terms, identify the full range of actions needed to achieve for effective implementation, clarify what improved information can -- and cannot -- do to improve management decision-making, describe performance-oriented management, and discuss principles for project MIS design.

SOME BASIC TERMS AND CONCEPTS

Confusion often exists among concepts involving the words systems, projects, and or information. So we all sing from the same hymnal, let's clarify our use of some key terms. With the help of a diagram (Figure 3-1), we can see the forms of PMIS more clearly.

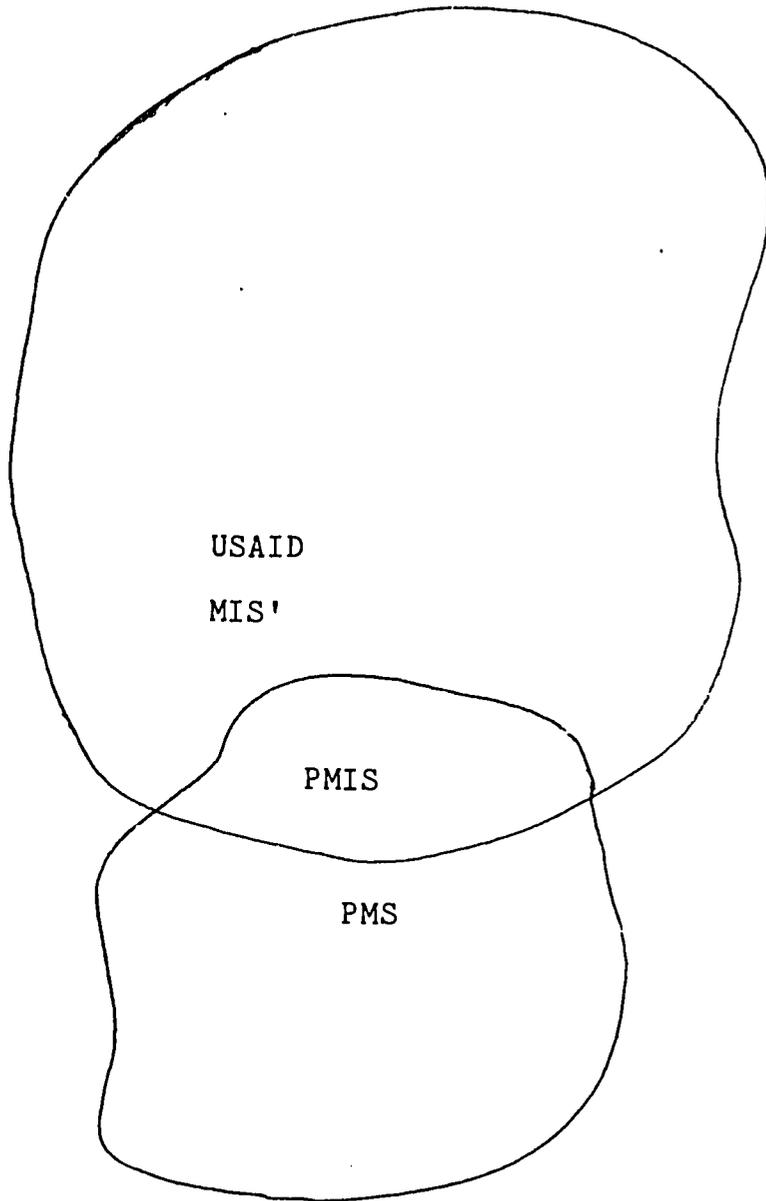
MIS (Management Information Systems) is a broad and sweeping generalization. Within USAID, MIS can refer to everything from inventory control procedures to the PIR sent to Washington.

There are scores of "systems" in USAID/Thailand; some highly systematized and automated (e.g., Financial Reporting); others more ad hoc (e.g., the TDY visitor's log); some informal and even whimsical (e.g., cartoons on the bulletin board).

PMS (Project Management Systems) constitute the full range of systems and procedures to plan, control, monitor, implement, and evaluate projects. These are generally unique to each project, though similar PMS elements can be found in all projects.

At the intersection of PMS and MIS is the focus of this consultancy: PMIS (Project Management Information System or, as stated in the work scope Project Monitoring and Information System). PMIS encompass the actions to collect, organize, analyze, and report project-related information to decision-makers for management and control.

FIGURE 3-1: CLARIFICATION OF PMIS TERMS



THE INTERSECTION OF MIS (MANAGEMENT INFORMATION SYSTEMS) WITH PMS (PROJECT MANAGEMENT SYSTEMS) YIELDS THE FOCUS OF THIS CONSULTANCY: PMIS (PROJECT MANAGEMENT INFORMATION SYSTEMS)

A PMIS is only one dimension of a sound PMS; but it is a critical component. It provides (or is supposed to) information for making decisions: timely, accurate and reliable. PMIS utility can be measured by how well it contributes to such decision-making.

The central purpose of a PMIS is to improve decision-making. If it doesn't (or if management can't or won't make different decisions with better information), PMIS isn't worth the effort of installation and maintenance.

The information dilemma is not lack of information; it is the lack of the right kind of information at the right time and place. Project managers, officers and other monitoring projects often receive more information than they can use; but because they receive the wrong information at the wrong times, they do not have the information needed for making their decisions.

Clear definitions of responsibility and understanding of managerial "decision latitudes" are needed to establish useful reporting.

The design of management information system begins with agreement on project roles and divisions of management responsibilities.

Structures, flows, formats, and frequency of information can then be developed accordingly.

Authority and decisional latitude are critical factors to effective information for improved project implementation. Adequate authority and responsibility must be delegated to operational managers at the

"front lines" to actually be able to use information to influence the directions of projects. Given the innovative and complex nature of many USAID projects, it is critical that the decisional latitudes of actual in-the-field personnel are broad enough for them to make quick responses to problems and opportunities as they arise.

Several other terms warrant definitions, as they are frequently used differently. Thus we suggest the following definitions for data collections, monitoring, reporting, analysis, and evaluation for the purposes of the report.

Data Collection is the foundation process of an information system. It is sometimes erroneously equated solely with surveys or collection of operational data. Comprehensive data collection, however, goes beyond field-specific project data to encompass various environmental and organizational factors that affect project accomplishment. Data about changes in external conditions, project assumptions, the structure of a cooperating organization, and other variables in the project context can be as important as data about the field operations and situation. Therefore, data collection must be holistic, involving a broad range of areas for the alert project officer to monitor. It demands that the project team first ask the right questions to identify what data should be collected.

Analysis is the art of mentally sorting, sifting, selecting, summarizing and interpreting data, so that it becomes understand-

dable information. The mass of data must be put into useful categories and summarized to make meaningful interpretations.

Analysis frequently involves actual performance data with intended accomplishments.

An important analytic task is trends analysis and projection, determining from past and current conditions the likely future project consequences. Inability to analyze information is usually a key constraint to organization decision-making, more than the lack of information.

Monitoring is the review of actual activities and accomplishments. Monitoring helps one react quickly to project opportunities and nip undesirable trends in the bud.

Monitoring looks at physical, financial, and impact data and addressess two questions: are project activities being implemented according to design (or redesign) specifications, and are the activities achieving the anticipated results. In logical framework terms, monitoring is concerned with input consumption, output production, the input-to-output conversion process, and input-to-output linking assumptions.

The most useful monitoring is "real-time" and "on-line". "Real-time" refers to the measurement being available soon enough to do something about it. "On-line" means the measurement is available to those who can take appropriate action. Seeing the barn-door

is open before the cow escapes is real-time monitoring; having someone close enough to shut the door is on-line. Generally, it is the front-line people who have important information and who can effect action in time. Unfortunately, they usually lack the authority or decisional latitude to take early decisive action.

Monitoring requires realistic and detailed implementation plans, with milestone, targets, and critical indicators. The current lack of adequate plans in the RTG environment is a key obstacle constraining RTG and USAID staff ability to monitor effectively.

Evaluation is a rigorous sequential examination of the project design, based on evidence and aimed at improvement. As opposed to monitoring which is a continuous process, evaluation is a periodic process undertaken at key points in the project.

Evaluation asks why things happened the way they did (was it because of the project or in spite of it?). In logical framework terms, evaluation examines the output-to-purpose and purpose-to-goal hypotheses, as well as linking assumptions.

Evaluation should be a constructive process aimed at strengthening the project. Too often it becomes an adversary process of fault-finding and finger-pointing -- hence its lack of popularity.

Another reason for evaluation's unpopularity is that it usually requires a special data collection and analysis effort. But by paying attention to evaluation needs early in the project, such data can be collected on an ongoing basis, permitting formative

"mini-evaluations" and simplifying major summative evaluations. The recommended methodology explicitly builds evaluation needs into ongoing data collection.

Evaluation must be properly timed to ask the right questions at the right time. Too early assessments can unduly pressure performances; too late can mean there are few options for changing projects. Each project has natural points to evaluate different aspects -- at key decisions points, at the end of a cropping cycle, and so forth. Complex or experimental projects require heavier investments in evaluation. These issues are addressed as part of the recommended PMIS development approach, as further discussed in later chapters.

Reporting means communicating project information (from monitoring or evaluation activities) to operational personnel and decision-makers so they can better perform their responsibilities. Good reporting requires a two-way movement of information, even though it is usually thought of as a flow to decision-makers.

Reporting systems must be tailored to a project's organization configuration. The purpose, formats and uses of reports must be clarified at various management levels. For example, operational level reports are not pushed to the executive levels where extensive details bury the important information and overload decision-makers.

BETTER INFORMATION: NECESSARY BUT NOT SUFFICIENT FOR BETTER MANAGEMENT

The purpose of this consultancy is to develop a comprehensive a comprehensive strategy and implementation plan for establishing a monitoring and information system for USAID/Thailand-support projects. The purpose of the system is to provide useful, timely management information. The higher objective is to improve decision-making, which in turn improves project implementation.

A "strategy" has several implicit characteristics: common purpose, agreement on objectives, assessment of obstacles, definition of means, and assignment of responsibilities. In addition, a strategy requires knowledge of one's own capabilities and specification of how the environment will probably influence actions, so that an effective "drive" toward strategic objectives can be mounted within realistic assessments of the constraints and forces to be encountered.

In this report, we have used a broad understanding of strategy. Objectives are identified, as well as the means for achieving these objectives. Information is not an end in itself, but part of a means toward higher strategic objectives -- improved project implementation.\*

\*

The basic framework here is adapted from Data, Decisions, and Development: Strategy and Issues of Information Management in the Public Sector by John Romagna, published by AID, Washington, D.C. 1979.

Better information is necessary, but not sufficient for better management. Improved decision-making requires more than better information. The recommended PMIS strategy builds information systems in a comprehensive way that simultaneously addresses other components essential for successful implementation. We examine all the activity components below, beginning with the PMIS structures and then examining complementary management development components necessary to achieve the higher level objectives.

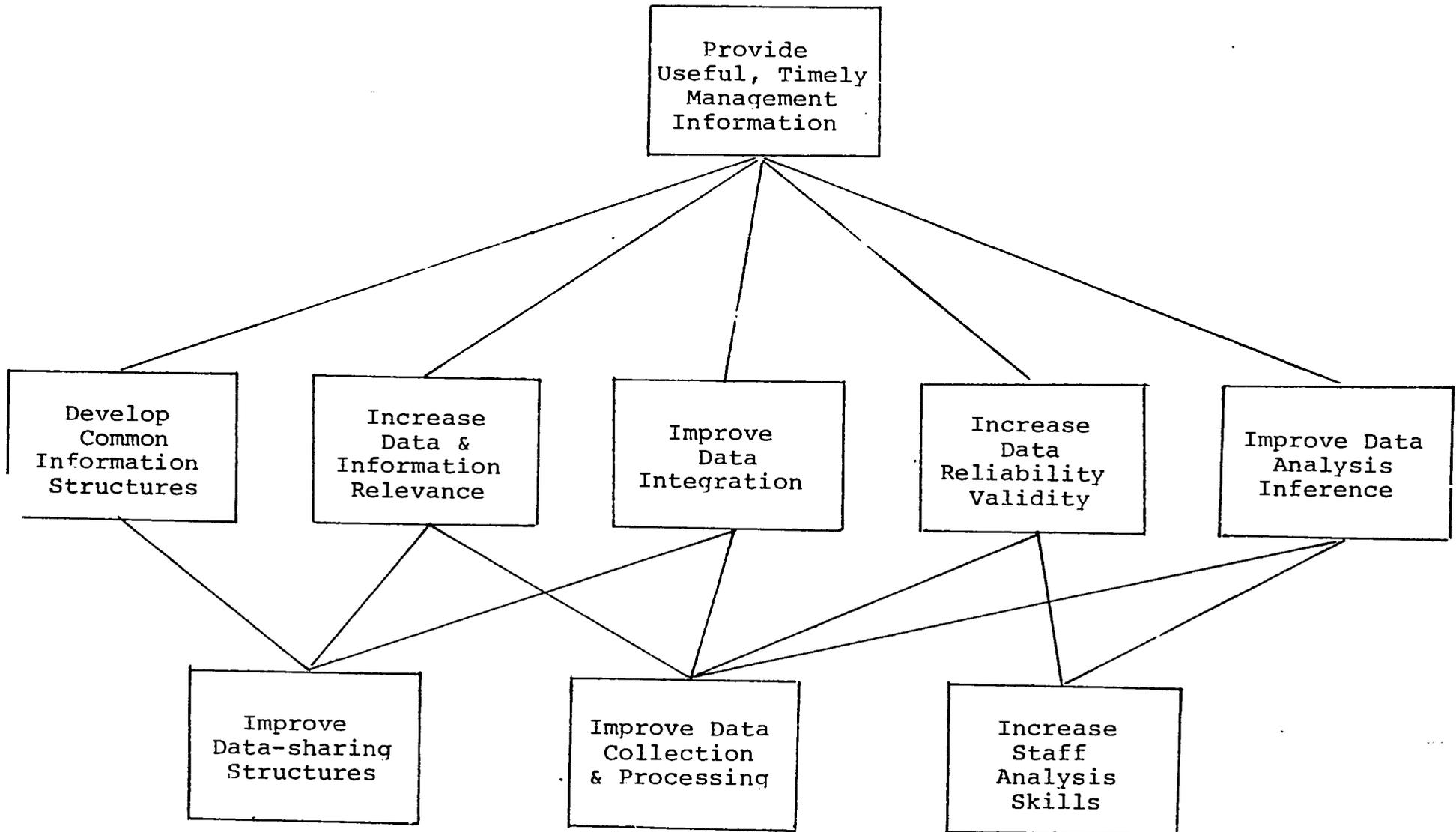
### DEVELOPING PMIS STRUCTURES

More traditional strategies of PMIS development focus upon information structures. The structural approach to PMIS development focuses primarily upon two aspects of:

- \* establishing or improving data collection and processing capabilities by developing reporting formats and analytic procedures; and
- \* establishing or improving structures for data utilization and sharing.

The immediate objectives of this structural approach are to develop common information structures, improve data integration and increase data and information relevance. However, structural limitations, though severe, are seldom the primary limiting constraints to useful, timely management information. The most severe limitation

Figure 3-2 OBJECTIVES OF A STRUCTURAL APPROACH TO PMIS



3-11

frequently is organizational capacity to analyze and utilize the data that is available. Thus, the structural approach must be complemented by a third set of activities which improve staff capacity to analyze and use data and information. This broadens the intermediate objectives to also improve data analysis and inference and to increase information reliability and validity.

A comprehensive approach to providing useful, timely management information requires, at a minimum, three basic activity components as shown in Figure 3-2. Staff analysis development component complements the structural approach for more effective PMIS development. Together, these contribute to the improved information payoff through the several intermediate objectives and form an integrated, comprehensive and coherent approach to improved management information. The recommended strategy is based on this conceptual approach to achieve practical improvements.

#### IMPROVING MANAGEMENT PRACTICES TO USE PMIS

The technical strength of PMIS comes from its structures and staff analytical capabilities. But the development of PMIS structures and analytical capability, and even the flow of reliable and valid information, does not by itself improve management and implementation. To develop more effective management decision-making so that project implementation is improved, we recommend that the PMIS strategy and systems be developed parallel to "performance-oriented" management practices.

Performance-oriented management practices emphasize experience-proven, situationally appropriate practices and techniques for accomplishing development goals. These practices can be promoted through:

- \* Increasing understanding and use of information for management;
- \* Developing and clarifying decision responsibilities and latitudes;
- \* Developing clearly defined and shared goals and methods; and
- \* Developing common frames of reference, structures and procedures.

These intermediate objectives promoting performance-oriented management practices can be achieved through three related activity components, which we call the management development components:

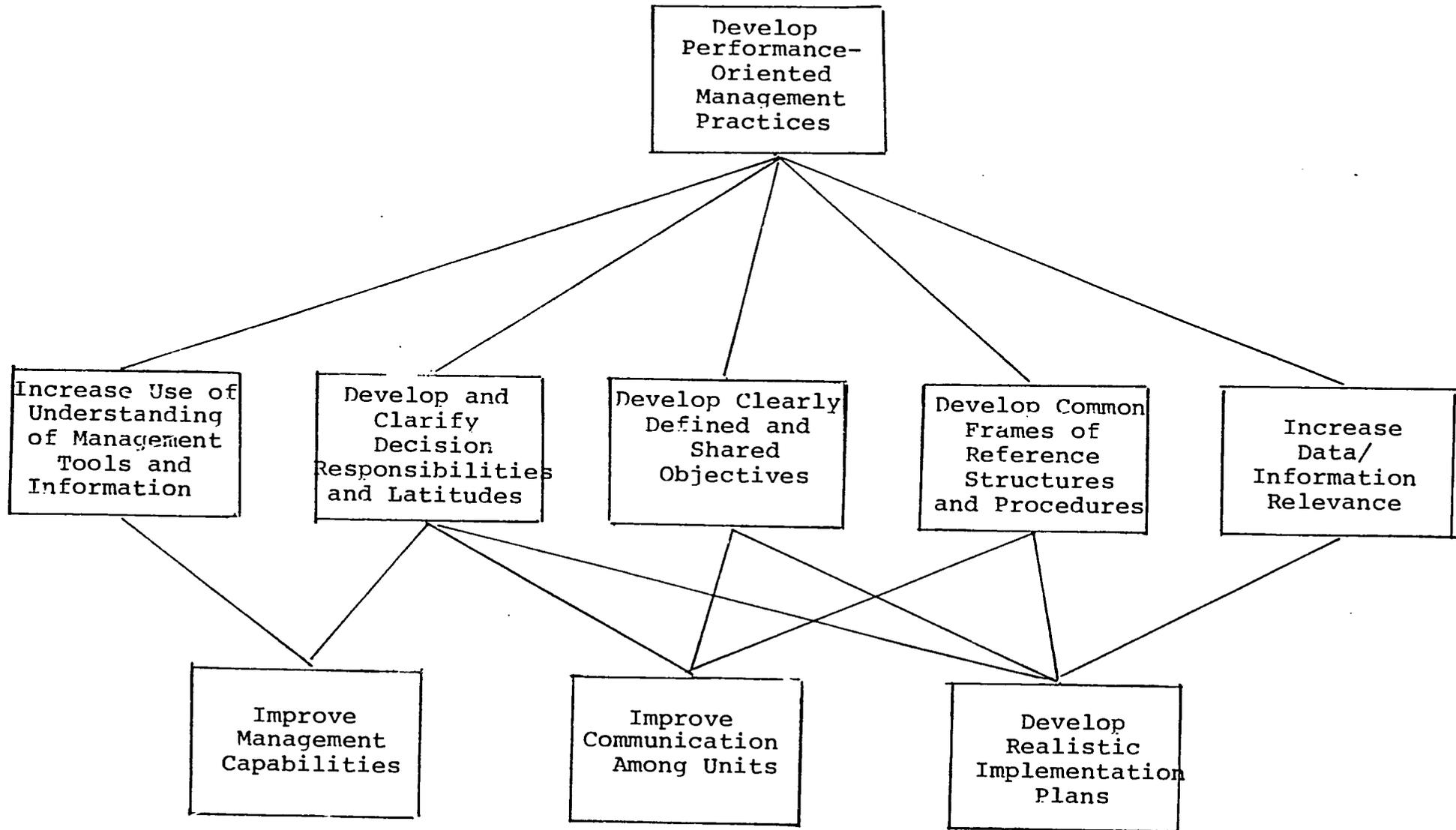
- \* Improving management capabilities
- \* Improving communication among units
- \* Developing realistic implementation plans

The relationships of the intermediate objectives of "performance-oriented" management practices and the three recommended action components are illustrated in Figure 3-3. The development of a performance orientation to management is essential to achieve the Mission's goals of improved implementation. It is also essential to developing front-line operational capability to use PMIS and to handle the complex tasks of project implementation.

#### PARALLEL THURSTS OF THE PMIS

As discussed above, the recommended strategy combines two thrusts -- performance-oriented management and useful, timely management informa-

Figure 3-3 PERFORMANCE-ORIENTED MANAGEMENT OBJECTIVES



tion -- to produce more effective management decision-making. These two thrusts are linked through intermediate objectives which integrate the activity components to the higher level objectives, as illustrated in Figure 3-4. They are complementary and together comprise a comprehensive conceptual approach with practical implications for improving project implementation.

The "action-training" methodology used on the sample projects simultaneously contributes to the multiple intermediate objectives when combined with the models and tools associated with the strategy. The relevant, practical applicability of action-training, implementation/operations planning model and specific management tools was demonstrated by the acceptance of the project teams and the requests for further assistance from the RTG host institutions.

Finally, PMIS development must be undertaken in an organizational development mode. The active participation of those who will be most closely associated with the PMIS and who will use the PMIS is required for effective PMIS design and implementation. This was demonstrated by the approach developed and used during this consultancy for project-level and USAID-internal activities. A continuous learning stance is important on the part of all so that there is an openness and a process of development and growing toward organizational effectiveness.

PMIS PURPOSE: ASSIST MANAGEMENT PERFORM KEY FUNCTIONS

In simple terms, a PMIS should provide "the right people with the right information at the right time".

The right people are:

- project staff and executive personnel both in the RTG and USAID, with operational and policy responsibilities during project implementation; and
- project managers, administrative and liaison personnel who must integrate project activities with other complementary efforts to achieve intended project accomplishments.

The right information is:

- at a level of detail appropriate for the "right people" to carry out their responsibilities within the defined decisional latitude of their positions; and

The right time is when:

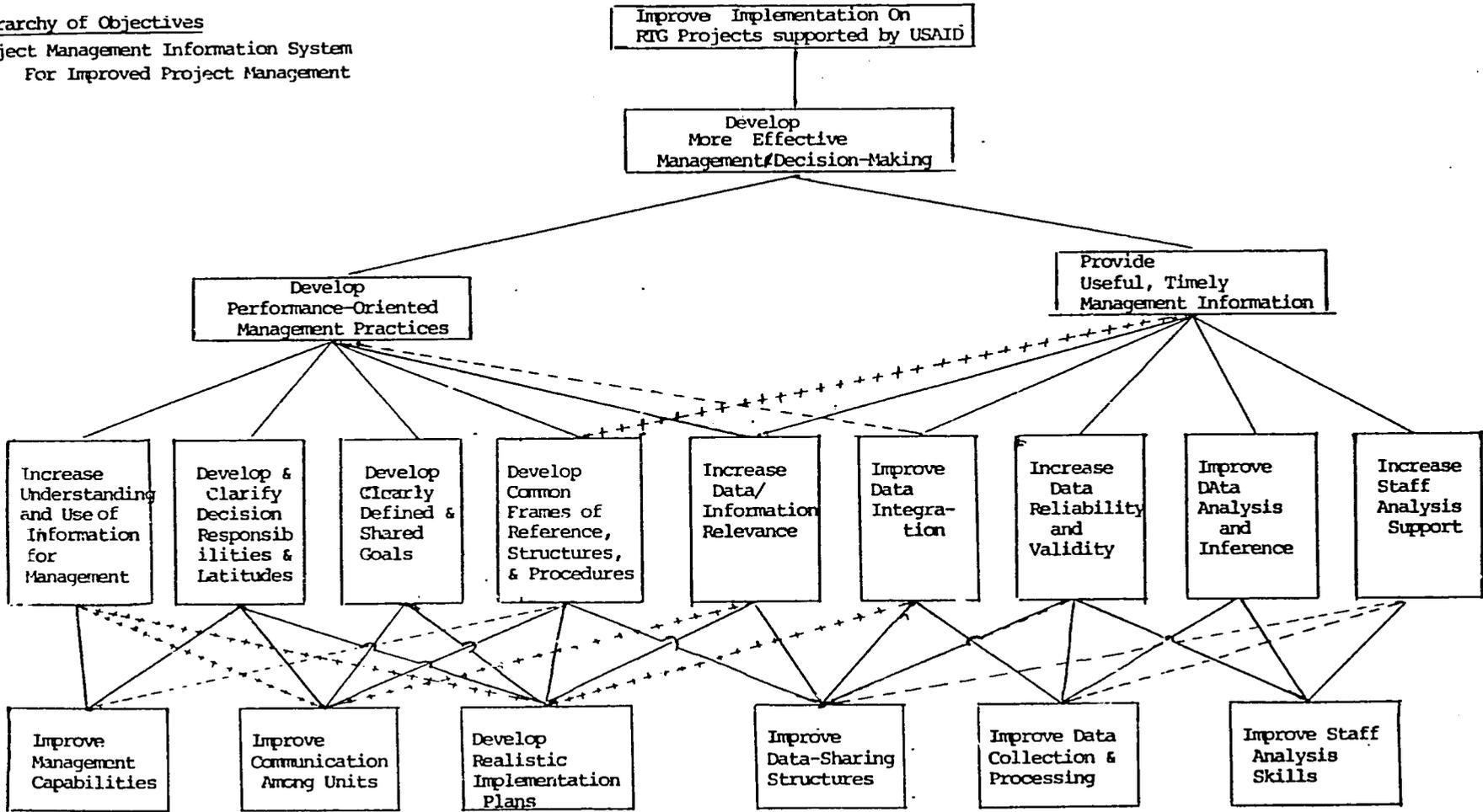
- opportunities and problems are identified before or soon after they occur in order to consider responsive and corrective actions.

It requires two-way flows of information from, to, and among project decision-makers, and other responsible personnel and activity centers. Good information helps perform four types of functions:

- \* Problem Clarification, for better definition and understandings of the problem needs and changes to them;

Hierarchy of Objectives  
 Project Management Information System  
 For Improved Project Management

3-17



Code:  
 Direct Linkages —————  
 Strong Linkages +++++++  
 Indirect Linkages - - - - -

Figure 3-4

- \* Design and Redesign, as a basis for developing more effective actions to solve problems and needs;
- \* Implementation and Control or the monitoring guiding of implementation activities and work execution; and
- \* Evaluation and modification of project progress and impacts so that changes can be made in response to the uncertain dynamics of development.

These functions form an ongoing cycle of management activity for the total project (and for any of its components). The cycle moves from general problem clarification, to design, to implementation, to evaluation for the total project, or for specific activities once a project is initiated. The process is cyclical and interative; for example, evaluation can result in new problem clarification, followed by project redesign and implementation.

We identify three generic types of staff functions -- executive, managerial, and operational. These do not strictly equate with organization positions. Rather, the category of the decision is what determines level of the decision, not the organizational position, per se.

This is easily seen in the case of O/PPD responsibilities, some of which are executive responsibilities, some management responsibilities and some operational level responsibilities. The same is true for USAID Project Officers, the USAID director, DTEC, the RTG project director, the field managers, and many others.

All project-management personnel are involved in a complex matrix in which they hold some responsibility for the various levels of

management functions. A later chapter describes a tailored PMIS design approach to get information to these various personnel.

### LINKAGES OF PMIS AND EVALUATION

Evaluation is critical for maximizing the payoff from the USAID investment in developing assistance. This is especially true for unique, innovative projects such as USAID is undertaking to make a qualitative contribution to Thailand's development program. The results of well-conducted evaluations can improve the project strategy, and the "lessons-learned" can benefit future projects. Evaluations address such important issues as:

- \* Does the project rationale remain appropriate in light of changing circumstances;
- \* Is the project design (including the basic hypotheses, strategy technologies, and assumptions about internal and external conditions) still valid;
- \* What planned and unplanned impacts have occurred; why or why not;
- \* What changes in the project design are required to improve future performance; and
- \* What has been learned to date and what are the implications?

But evaluation, as commonly practiced, generally falls far short of delivering its full potential for improving projects. The primary reasons for the limited payoff from evaluation include:

- \* Failure of the implementing agencies to consider evaluation as a critical function of the project;
- \* Failure to identify key evaluation issues early enough to collect the data to support subsequent evaluation;

- \* Inadequate involvement, participation, and understanding of evaluation purposes and procedures by those who understand the project best i.e., the project team who are closest to operations; and
- \* Evaluation is viewed as an adversary process conducted by "outsiders", rather than a cooperative process aimed at improving the project.

The recommended PMIS development approach simultaneously addresses these evaluation constraints. Our work with the sample projects demonstrated the value of a planning methodology which regards evaluation as a critical function of project management.

Some insights from the NERAD project workshop illustrates how evaluation can be integrated into the thinking of the project team. The team developed a shared understanding of the project strategy, the underlying hypotheses, and the critical project assumptions. A consensus emerged regarding the project design, approaches and possible problems. The team identified the basic questions they would like to be able to answer, and the data which would answer those questions. For example, the foundations for evaluations were laid by identifying various technical strategies, such as native chicken production and uses of rice hybrids, and clarifying criteria for the selection, application and evaluation of these to specific situations.

Early definition of evaluation issues and data requirements means that the data to support later evaluations can be identified and collected as an ongoing part of project implementation. This

supports the objective of improving projects in two ways -- it permits periodic formative "micro-evaluations", and ensures that some basic data required for major evaluations have been collected. It also supports the development of project-level, front-line capability for quick, decisive, effective response to project/program problems and opportunities to.

Our brief work with this team "de-mystified" the evaluation process. Participants view it as a process which helps them and improves the project, one in which they are involved and understand.

When the full implementation/operations planning process is applied to project, evaluation is given more emphasis than we were able to in these brief sessions. The team will itself identify the major evaluation issues, the most useful timing for formative evaluations, the data requirements, means of collection, and procedures for analysis. The team will understand the value of major evaluations with outside technical assistance, and a "climate of support" will be established to actively assist in the evaluation process. The processes of integrated ongoing management is closely linked to team and management decision. When a major evaluation is scheduled, the evaluation team's job will be easier as many of the evaluation start-up issues have been accomplished.

## CHAPTER 4: PMIS USERS AND USES

### OVERVIEW

There are many PMIS users within USAID and the RTG. This chapter discusses system users and uses, and relates information requirements to the level of management and the category of decision.

It begins by examining the multiple RTG users, then discusses management functions and categories of decisions. Overall USAID information requirements are then discussed, followed with an office-by-office description of needs and PMIS implications.

### RTG: A MULTIPLICITY OF USERS

Our field work with two sample projects resulted in an important conclusion: PMIS users must be identified on a project-specific basis. They are many for each project configuration; there is no "standard" set of RTG users. A single USAID-funded project may involve:

- \* the on-site Thai project manager, project team, and all immediate staff,
- \* the Project director, coordinator and superiors in the parent Bangkok ministry,
- \* regional or provincial representatives from other project supporting ministries and departments, and their superiors,
- \* a single or (more frequently) multiple contractors and contracting teams, both Thai and expatriate,

- \* central ministries with project interests and concerns, such as DTEC, BOB, and NESDB,
- \* other organizations with special data interests, such as the National Statistics Office, the planning departments of ministries, universities, NIDA, etc.,
- \* cross-cutting policy councils and coordinating bodies at the national level,
- \* provincial and lower level local government government authorities,
- \* various (and multiple) project-specific committees at the provincial, district, sub-district, and local-levels,
- \* formal and ad-hoc groups of project beneficiaries,
- \* all field teams involved with front-line project activities and service delivery.

The nature, detail, and content of information needed varies with the project roles each performs.

There is perceived to be, for example, greater interest in evaluation and project-impact data by central ministries than by the project manager and his parent organizations. There is greater interest by coordinating bodies with the policy issues raised during implementation than with the actual implementation progress data.

Information needs vary in detail, too. The project manager needs moderately detailed information on all project components; the director needs summary information on these same components; the activity manager needs highly detailed information on a single component.

There is no "standard" set of information elements to fit every project. PMIS development requires a project-by-project, tailored approach to: define the key users; analyze their information needs; identify the data which would supply that information; design data collection instruments; develop reporting formats, processes, and flows; determine methods for collecting, analyzing, synthesizing, and reporting information; and so forth.

Ideally, the information required by various users would spring automatically from the project. But information collection, analysis, and dissemination has a cost -- a real cost of getting and using the information, and an opportunity cost in that the time and effort invested in data-collection is at the expense of other activities such as service delivery and implementation. Thus, key users must be selected from the constellation of possible RTG users, with the PMIS effort focused on them.

We believe the most important Thai PMIS users are the project manager and the project team.

The recommended strategy concentrates on building project team capacity to generate, use, collect, analyze, and forward information needed for project decision-making.

This does not mean that other RTG "actors" are ignored. It simply means that various users are prioritized. PMIS development clarifies

the project involvement and information need of all key users, and then specifies the information sets and formats to meet such needs.

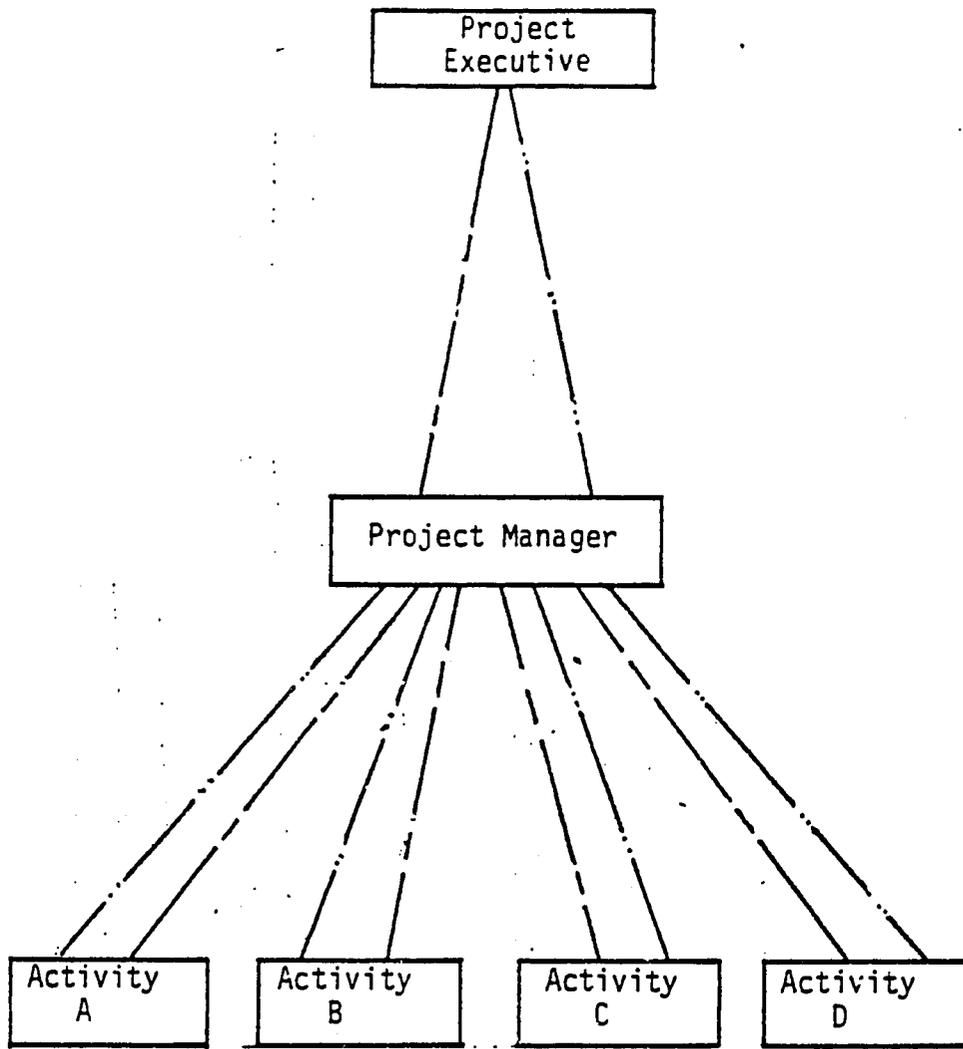
Different user needs require PMIS designers to link information requirements to management functions and levels. The next session presents a useful model for such clarification.

### MANAGEMENT FUNCTIONS AND LEVELS

Three general "levels" of project management and decision-making usually exist for each project (though each level may have sub-levels). These levels are categories of responsibility which differ in their project roles, functions, and information requirements. The three levels are shown in Figure 4-1; there are:

- \* executive level -- dealing with strategic planning, policy making, priority setting, and overall resource allocation. USAID senior management, DTEC, parent ministries, and project policy committees generally comprise this level.
- \* managerial level -- dealing with project control, resource allocation among project components, scheduling, conflict resolution, and day-to-day implementation. The RTG project team (manager and key staff) and the USAID project officer are generally at the managerial level.
- \* activity level -- dealing with individual project components (outputs), and responsible for getting them produced. These include at different times, Project Manager, Central Agencies, USAID O/PPD, USAID Project Officers, Contractors, Project Team, Implementing Agencies, Committees and so on.

Figure 4-1: Levels/Categories of Management Information



Executive Level Information  
Summaries of project financial and physical progress. (e.g., monthly and quarterly reports)

Project Management Information  
*periodic monitoring and measurement in summary form of performance on activities to detect significant deviations from plans.* (e.g., weekly and bi-weekly reports).

Activity Level Information  
*continuous and detailed data about direct use and control of resources and outputs.*

Activity Manager

- — — — = Financial Information Links
- - - - = Physical Information Links

The frequency, detail, and information format shifts by level. The project's activity managers may monitor, say, 500 separate activities, and require daily information in a detailed form (see Figure 4-1). The project manager may monitor 150 of those aggregated activities and require weekly information of moderate detail. The project director (executive level) may only monitor some 40 key events, using monthly, highly summarized information.

The definition of activity, managerial, and executive levels is not fixed. These are categories that depend on the item of interest and responsibility, not on the organization position of individuals. The same person may have all three responsibilities -- executive, managerial, and activity -- for different aspects of the project. Who is at the activity, managerial, or executive levels is not always clear: it varies according to the item and responsibilities involved.

Figure 4-2 illustrates how monitoring responsibility shifts with each item for the Mae Chaem project. The IF (Interface) Team Chief monitors IF team performance at a managerial level; the IF supervisor monitors team performance at an activity level.

Figure 4-2  
ILLUSTRATION OF MATRIX OF MONITORING RESPONSIBILITIES

(from Mae Chaem Project)

<u>Item Monitored</u>	<u>Activity</u>	<u>Managerial</u>	<u>Executive</u>
Village Needs Defined	IF Chief	POU Manager	US PO, MOAC/SPD
IF Team Performance	IF Super- visor	IF Chief	POU Manager
Materials Procurement	DTEC/USAID Procurement	DTEC/USAID Chief	US PO
Field Team Performance	Department Field Team Chiefs	Department Regional Reps	POU Manager
USAID Evaluation	US PPD	US PO POU Manager	US Project Committee, DTEC
Administrative Performance of POU	POU Manager	Projects Division	US PO RTG Project Committees
Administrative Performance of Departments	Department Regional Reps	Central Offices of Departments	Special Projects Division POU Manager, US PO
Project Assets and Materials	POU Project Team	POU Manager	MOAC, DTEC
USAID Performance	US PO	US Committee POU Manager	US Director
Organizational Interface	POU Manager	Project Director	Under-Secretary US PO
Implementation Operations Planning	US PO POU Manager	US Committee Project Division	DTEC
CP's	US PO POU Manager	US Committee DTEC	US Director Projects Division

The lack of direct correspondence between organization position and monitoring level requires custom design of PMIS, with reporting flows, formats, and content closely configured to the project organization structure.

There is not simple answer to the question of who really controls a project or who is responsible for its success. In addition to the project team, there are steering committees, department heads, financial controllers, and liaison agencies who exercise some degree of control. Figure 4-3 is an illustrative distribution plan for a specific project. Though incomplete, the broad patterns of systematic information sharing are shown.

Such separation of power requires coherent reporting and control systems to coordinate the work, so that the "right information at the right time to the right people" is generated, collected, analyzed and transformed into appropriate decisions to benefit the project.

#### CATEGORIES OF MANAGEMENT DECISIONS

The purpose of a PMIS is to improve decision-making by channeling useful information to those responsible for such decisions. This entails first examining the categories of management decisions; second identifying who fits each category; third defining specific information elements.

FIGURE 4-3 SOME ILLUSTRATIVE REPORTS AND INFORMATION FLOWS  
FOR THE MAE CHAEM PROJECT\*

Report (Frequency)	Interface (I-F Team)	I-F Chief	Technical Advisor	Field Manager	NADC	Department Field Representative	Provincial Committee	MOPC Projects Division	MCAC Departments	DTEC	USAID	Other
Activity Diary (Continuous)	Orig	Action										
I-F Team Reports (Weekly)	Orig	Action	Info	Info								
I-F Progress Reports (Monthly)	(Info)	Orig	Info	Action								Tambon and Amphoc Officials & Committees
Activity Progress Reports (Monthly)				Action	Info	Orig	Info	Info	Action			Tambon and Amphoc Officials & Committees
Project Progress Reports (Monthly)		(Info)	(Info)	Orig	Info	Info	Action	Info	Action	Info	Info	Supporting or Cooperating Institutions
Technical Advisor Report (Quarterly)		(Info)	Orig	Action	Info	Info	Info	Action	Info	Info	Info	Supporting or Cooperating Institutions
Provincial Committee Minutes			Info	Orig	Info	Info	Action	Info	Info		Info	Tambon and Amphoc Officials and Committee
USAID Project Officer Report			(Info)	(Info)	(Info)			(Info)	(Info)	(Info)	Orig	USAID DIRECTOR

Orig = Originator of Report  
 Action = for "first line" action  
 Info = for information  
 (Info) = copies or summaries useful  
 for operating levels

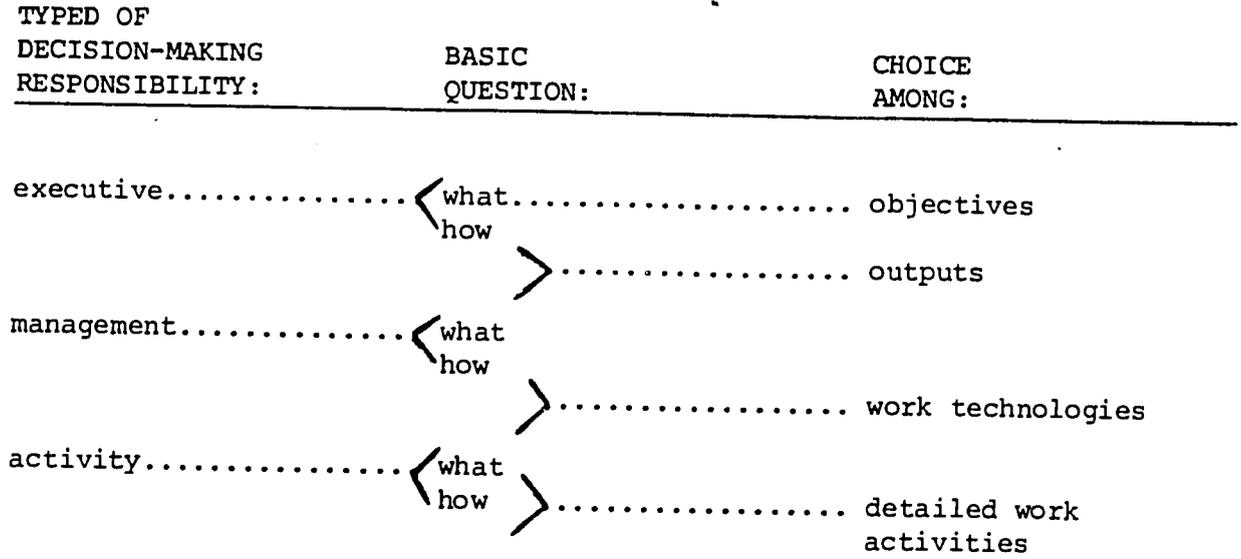
\*This chart shows a few useful progress reports, but none of the financial reports or flows. It is not descriptive, but demonstrative of a useful reporting system. Although most reports are constructed for "upward" reporting, those information copies (Info) show where it may be useful to send copies or summaries to operational levels.

The decision responsibilities of both USAID and RTG officials fit four broad categories of project decisions:

- \* Objectives and Purposes: Decisions concerning whether the basic objectives of a project (or a project component) are being achieved, whether the desired impacts are being achieved and testing the continuing validity of objectives over time.
- \* Outputs: Decisions related to the quantity and quality of outputs needed and any modified or alternative outputs needed to achieve the project purposes.
- \* Work Technology: Decision related to the methods, processes and technologies for producing those outputs.
- \* Work Execution: Basic decisions concerning actual work execution -- cost, performance and resource utilization.

The correspondence between decision-making responsibility and nature of decision is shown in Figure 4-4. Again, the question of who makes executive, management, and activity decisions depends on the item of interest and responsibility. Because such variations are not always predictable, managers at all levels must adopt a performance-orientation -- focused on accomplishing important project objectives -- rather than an input-orientation that views their job as a series of narrow fixed tasks.

Figure 4-4  
LINKED CATEGORIES OF MANAGEMENT DECISIONS



## A SUMMARY OF USAID INFORMATION REQUIREMENTS

There is a broad range of felt needs for improved information in USAID. These can be organized into three categories: (a) project performance information; (b) program performance and design information, and (c) information to support long-term strategy formulation.

- (a) Project-level information monitors the status of individual projects. This information tracks the status of project inputs, outputs, and purposes. Information is compared with plans and schedules. Actual and potential problems and opportunities are identified, appropriate parties are alerted to take action. All activities associated with project monitoring are integrated.

The principal USAID users of such information are the technical divisions. Subsets of this information are of interest to other parts of the mission. The PMIS consultancy is primarily concerned with providing project level monitoring information.

- (b) Program-level information addresses the entire portfolio of mission projects. This category includes selected elements of project information but has a broader focus. This category looks at across-the-board-indicators of effectiveness and collects a broader range of social-economic and environmental data. Project-information asks "is our project on track"; program-level information asks "are we on the right track" and addresses whether USAID strategy, as reflected in the total program is appropriate and being carried out effectively.

The PMIS design can collect some program-level information, primarily through the "mini-evaluation" feature. But such information is difficult to provide routinely, and usually requires special data-gathering and analytic effort.

- (c) A third category of information concerns centers around AID's areas of long-term focus -- poverty, and related issues of fertility, employment, migration, and so forth. This data would be used for strategy information and program design by RTG agencies, USAID, and other donors.

The appropriate location of such a system is outside AID, perhaps affiliated with the National Statistics Office, NESDB, or Thai universities. Developing such information is clearly a massive program all of its own, and the present PMIS consultancy does not address this area (but this may be a possible area of USAID support in future years).

An additional, localized need was identified for a manpower tracking system which indicates cumulative workload and timing of demands on mission personnel. Such information would identify peak workloads and help to schedule backstop requirements for procurement, contracting, evaluation, and so forth. Though our effort may give some insights into this question, our methodology was not aimed at this problem. This should be the topic of a separate analytic effort.

These information categories were identified from our interviews and analysis of each USAID office. The next section examines the needs of key USAID offices.

#### USAID/THAILAND PMIS USERS

Within USAID/Thailand, four distant user categories were identified: the Director's Office, the Office of Program and Project Development (O/PPD),

the Office of Financial Management (O/Fin) and the technical office. Each of these categories has somewhat different needs, interests and expectations from a PMIS. To the extent possible, the recommended PMIS addresses the major needs of each group, as discussed below.

THE TECHNICAL OFFICES: PROJECT OFFICER AND OFFICE DIRECTORS NEEDS

"I don't get any project reports; my ability to inform others in the mission about projects is severely limited. If you're doing something to help the Thai project manager, that helps me and the entire mission to get better information".

This comment sums up the common difficulty project officers face in keeping informed. Little formal reporting is received; site visits and close counterpart contact are regarded as the only reliable ways to find out what's going on. But the Bangkok workload limits the frequency and depth of such visits.

Project officers felt that if the Thai project manager were adequately supported by a PMIS, their own information needs could be satisfied through reports generated by the PMIS.

An interesting role perception was apparent among the project officers. They frequently called themselves "project managers" though this term is no longer appropriate for USAID employees who are officially called project officers.

The official role of project officers in USAID-funded projects, is most fully described AID Project Handbook 3. Host country projects are clearly to be managed by host country ministries, contractors, and implementing institutions. The AID officer's role is largely limited to "running our bureaucratic machinery" that delivers financial and technical support to the project.

However, and we believe to their credit, USAID/Thailand's project officers view themselves as "shadow managers", a role that includes ombudsman and trouble-shooter.

USAID officers often have better access to the central Thai government bureaucracy than does the project manager and can provide "push" when needed. Several situations were cited where USAID project officers got needed action from central ministries which the Thai project manager could not. The leverage and influence of the USAID Project Officer (and others in the Mission) are often necessary to get action and resolve issues that bear on successful and timely project implementation.

But there is also a danger in a pro-active project officer role. That danger is in undercutting and short-circuiting the Thai project manager and limiting the project team's ability to function as a team. An RTG sense of "project ownership" is vital for team and individual commitment to project success. A USAID role that is too active diminishes this commitment, and inhibits transfer of project ownership to Thai institutions.

There is another danger of the project officer who is far ahead of his Thai counterparts on the "learning curve". He may unconsciously assume the project team has a shared understanding and view of the project. In several cases we observed, the teams did not have shared understandings and USAID officers tended to make unwarranted assumptions on this matter.

The PMIS helps Project Officers to better monitor project activities by improving RTG project team ability to plan, monitor, and report on project progress. Project Officer participation in preparing the project-specific PMIS increases project officer understanding of project problems and ways USAID can provide appropriate support. It also promotes better relationships with the RTG team. USAID staff who participated in our work with the projects (Messrs. Blacks, Wood, Grandstaff, Atisai, Det, Tenant, and Alton) strongly endorsed the importance of this approach and the value of USAID participation.

All office directors, project officers and most assistant project officers were included in the initial interviews, project briefings, and work sessions. But the bulk of our contact was with O/ARD, the office responsible for our two test projects. PMIS support in this office was strong, and with some 80% of the project portfolio, the need is greatest.

The project needs, personal styles, and portfolio sizes of technical offices vary dramatically. Technical officer directors should be

given autonomy to set up monitoring and review systems internal to their division which complements the overall system.

The only limitation to division autonomy is that each should have a standard way of information sharing and linkages with the USAID Director and staff offices.

A recommended system -- the mid-cycle project reviews -- is designed to provide better division control of complex projects. This element should accomplish the O/ARD Director's objectives of more frequent and useful project reviews.

Implications for the PMIS are as follows:

- \* the PMIS will help the project officer know the information expectations of top management project reviews so that he/she can be better prepared for these reviews.
- \* the PMIS will provide more action-focused information from the RTG project level and this information should be as timely as possible, but in an analytic, not a descriptive form.
- \* the PMIS will permit earlier identification of project problems and opportunities for appropriate resolution and action at the project and office level.
- \* the PMIS will help designate responsibilities for specific project support activities which must be monitored, and sometimes managed, by the project officer.
- \* the PMIS will provide the project officer with a systematic way of approaching monitoring and analysis.
- \* the PMIS will strengthen communication between relevant USAID persons regarding specific implementation, monitoring, and evaluation responsibilities.

OFFICE OF FINANCIAL MANAGEMENT

The information requirements of the O/Fin have been closely examined, and the past and present Controller have taken definite steps to improve financial information and its use. For example, there will be an attempt to show more realistic pipeline information through the use of administrative certification of expenditures which have not yet moved through the administrative channels.

The major need of O/Fin is to ensure adequate and appropriate RTG disbursement and financial procedures, track project expenditures against obligations, ensure that project funds are used in accordance with statutory requirements, identify and resolve pipeline problems, and ensure that funding is adequate and committed.

The major impact of the PMIS on O/Fin will be the provision of more realistic and timely information related to implementation. This will permit better budgeting financial and cash management.

The automation possibilities provide a good opportunity for O/Fin to integrate financial information with status information for more complete and accurate reporting. Finally, the clarification of administrative sub-routines will provide O/Fin with clearer sense of roles and responsibilities related to such processes as allocation and drawdown procedures. This will permit earlier problem identification and more focused problem resolution activity.

OFFICE OF PROGRAM AND PROJECT DEVELOPMENT

The program office's responsibility span across the entire portfolio of projects. They include managing administrative sub-routines of procurement and contracting, program strategy development, monitoring conformance with AID policy and regulations, managing project reviews, and organizing reporting to Washington.

Many demands on the program office are ad-hoc and unpredictable -- considering the need for waivers and extensions and project specific AID policy and procedural requirements.

O/PPD responsibilities with individual projects begin at pre-project and early conceptual stages. These responsibilities include shepharding the project through the design process. After a project agreement is signed, major project responsibility rests with technical project offices, but O/PPD continues to provide strategic support services and is delegated some management functions by the Director's Office. Specifically, O/PPD usually ensures that all actions conform to AID procedures and regulations, ensures that Conditions Precedent are met, drafts Letters of Implementation, reviews (and often writes) PIO's to procure necessary hardware and technical support, sets up financial and disbursing arrangements, and so forth.

The need for smooth and timely management during the early implementation period is apparent. Delays at this stage, or items which "slip through the cracks", often multiply downstream delays and problems.

During this critical start-up period, O/PPD bears important responsibility until the shift to the project officer is complete and the RTG management structures are firm and functional.

We detected some ambiguity and confusion in the roles of O/PPD and the technical offices vis a vis the detailed steps for procurement, contracting, evaluation, and pre-implementation planning. The difficulty occurs because responsibilities are, necessarily, shared.

From one perspective, the primary responsibility for these bureaucratic actions rests with the project officer. But the procedural requirements are often highly detailed and require a level of knowledge and experience which some project officers lack and which rests in O/PPD.

Thus, there are logical arguments for concentrating these functions in O/PPD, where there is a higher degree of procedural expertise. But this should be a guideline, not a rule. The recommended way to treat these ambiguities is to use "implementation planning checklists" to clarify individual roles and responsibilities on a project specific basis. This was tested on the NERAD project and found useful by Project Officers, O/PPD and the RTG team.

Evaluations are a primary responsibility of O/PPD where the evaluation officer is assigned. The evaluation officer is responsible to coordinate and schedule evaluations. Too often, evaluations have not contributed directly to management or have

come too late in a project. Many project decisions and commitments become quickly irreversible. As noted in an earlier section, the recommendations of this report permit a better integration of evaluations into ongoing management and implementation processes. This facilitates more targeted and useful evaluation exercises which can provide more timely information and which can be formative to project reshaping.

A major O/PPD need is to keep track of scores of details concerning individual project actions, particularly related to such Mission support functions as contracting, procurement, and training.

Fortunately, a large part of O/PPD work load involves detailed but repetitive performance of similar activities. The steps involved can be clarified and made more effective by defining "administrative sub-routines" for these.

Many of the sub-routine actions can be monitored and tracked by computer (A later section discusses automation options).

We reiterate the point made earlier: The formal PMIS procedures must be complemented by informal coordination and communication. The mutual objective shared by all mission staff is to make projects succeed. The purpose of both formal and informal coordination methods is to ensure clear understanding of roles and to build accountability for taking specific actions.

To summarize the O/PPD implications for the PMIS:

- \* many of O/PPD's most time-consuming and difficult to monitor actions fall into detailed "administrative sub-routines" which can be standardized, documented and improved.
- \* sub-routines action and other O/PPD mission upcoming key events are easily tracked and document by existing mission capabilities and can be later computerized.
- \* a quarterly O/PPD coordination meeting with each project officer (preceding the Directors quarterly review) is recommended to validate upcoming "bureaucratic" mission actions.
- \* the degree of detail to which O/PPD should also track field level project events must be determined on a project-by-project basis.

We believe the best means of achieving O/PPD's objectives is to concentrate system development at the project level. Information which helps the Thai Project Manager and USAID project officer to influence events, or report these to higher level for action, will support O/PPD and have strong links to O/PPD evaluation responsibilities.

It bears repeating that the major problems which haunt projects can be traced to inadequate pre and early implementation planning, and to failure to periodically review and revise those plans.

It also bears repeating that even the best PMIS cannot prevent all problems, for the simple reason that the project environment is dynamic. But a good process can reduce those problems and provide earlier identification of problems.

OFFICE OF THE DIRECTOR

The Director noted as one of his three major tasks, the establishment of priorities and the identification of problems and situations which require his intervention. On a project level, this is difficult to determine because project officers must be permitted autonomy in discharging their responsibilities for problem-resolution. Yet, the Director needs to know when his assistance can be beneficial. "I want a bell to ring when the project is at a point where the financial or implementation situation is threatened". This comment by the Mission Director summarizes a key PMIS requirement -- to alert top mission management to issues requiring involvement by the Director's Office.

The Mission Director's description of needs is strikingly similar to the PPT (Project Performance Tracking) System AID initiated in the early 70's. That system required the project officer to define key planned events which are critical to project success and to define CPI's (critical performance indicators) -- minimum quality/quantity and timeliness indicators. Reports were required whenever a CPI was in jeopardy. The key difference is that with PPT, the report would go to AID/W. In this case, the Director is to be alerted.

The Mission Director's primary formal mechanism for keeping informed is the Director's Quarterly Review. A primary weakness of this

forum (as we observed and interpret) stems from lack of systematically communicated and analyzed project information from the field, and from lack of standardized expectations, questions or analytical frameworks to organize information that is available.

These weaknesses will be addressed by strengthening project officer monitoring plans, and by increasing the information available to the project officer, and hence the mission. The USAID project officer participates in the PMIS Five Step Implementation Planning workshops which develop frameworks for project monitoring and analysis.

This improves the project officer's ability to "ring the bell" in three ways. First, he acquires an in-depth understanding of the project, its potential trouble spots, and related issues. Second, these sessions produce implementation and monitoring plans for tracking project progress and problems. Third, he will receive regular (monthly or quarterly) action-focused reports to keep apprised on project status and relevant action assignments. A project-focused PMIS (coupled with off-cycle coordination meetings with O/PPD) should meet the Mission Director's needs.

To summarize, the implications for the PMIS:

- \* special mechanisms are needed, including monitoring and analysis frameworks, so that QPIRs can be more directed and project officers can be better prepared to discuss project status;

- \* the Director's office needs to encourage information-sharing processes and feedback so that there are reciprocal flows of information and shared responsibilities which highlight the project officers responsibilities.
- \* specific actions and follow-up strategies should be emphasized to provide more continuity and promote more effective management.
- \* the PMIS will produce summarized information for executive levels which can be displayed for improved analysis and communication.

## CHAPTER 5: MONITORING AND REPORTING CONCEPTS

### OVERVIEW:

The most visible aspects of a PMIS are its monitoring plans and written reports. This chapter explores concepts in establishing a monitoring and reporting system and selecting indicators for management control. Several illustrative reports are discussed.

### THE MEANING OF PROJECT CONTROL

Very few development projects can be implemented with a "blueprint" mentality, i.e., rigid conformity to a strict and unalterable plan. This is unrealistic because of the dynamic project environment, the unique and innovative nature of projects, and the high degrees of uncertainty and ignorance which are never eliminated during planning.

Good implementation requires both operational flexibility and project control. While control does not mean tight conformity to a predetermined course of action, performance control is essential. Control which is performance-oriented is flexible, not rigid and machine-like. It focuses on project accomplishments.

Performance-oriented control involves collecting and analyzing data on key project indicators to highlight problems or oppor-

tunities and taking corrective action. Performance-oriented management information includes measurement, review, diagnosis and decision-making to anticipate and identify both problems and opportunities which require management action.

This approach to information and control naturally affects the nature of the PMIS. Project teams cannot be bound by rigid plans, but must use their experience and the remaining resources to accomplish the project objectives as they take on new meanings. This is the basis of a performance-orientation. In USAID projects with a high learning component inherent in the strategy (e.g., NERAD and Mae Chaem), this orientation is absolutely necessary.

There are two control methods: positive control and control by exception. Positive control systems say "let me know as our planned activities happen". Exception control says "let me know only if they don't happen as planned". Positive control requires continuous observation of the project and interaction with the project team. It also requires managers to understand the technical aspects of a project (or be assisted by someone who does). Positive control is highly directive and entails high involvement in the daily workings of a project. This style often leads to confusion of management functions with the technical functions of professional staff. Certain types of projects, however, benefit from this approach -- particularly risky undertakings of those with unique technology.

Control by exception requires frequent, periodic monitoring, rather than continuous involvement in technical details. Technical standards and performance standards are established and management becomes involved only when alerted that performance deviations have exceeded established limits or standards (for better or worse). Then management responsibilities are to investigate, analyze, and take corrective action.

Performance-oriented project control focusses most sharply on the immediate and short-term project and activity objectives which can be influenced, e.g., ensuring that project inputs are adequate and available when needed, project outputs are on target, operational purposes are being achieved, and problems are resolved. However, as noted above in the linkages to evaluation, strategy and effectiveness issues and questions are programmed into a realistic operations plan. This promotes evaluative decisions during the early, still formative, stages of project implementation. Effective control is a continuous process of monitoring, analysis and decision-making based on information systematically generated collected analyzed from all levels and components of the project.

#### INFORMATION NEEDS FOR PROJECT MONITORING

Performance-oriented project management and control requires realistic plans. It also assumes there is adequate organizational/managerial flexibility (or decisional latitude at the operational level) to

reshape the plan as it is implemented. The plan becomes the project "base line" from which all measurements and analysis will be made. Plans are not definitive in a final sense, but in a beginning sense. Plans define the project starting boundaries which must be reshaped as the project unfolds. Most projects, and project management processes, permit flexible changes within defined guidelines so they can be responsive to a dynamic context and lessons learned. A summary of recent AID changes, taken from Front Lines is shown in Figure 5-1.

Several baselines are required -- impact baselines, work baselines, schedule baselines, financial baselines, manpower baselines, and so forth. Each has its own purpose. For example, impact baselines are necessary to measure the changes in the target area and populations, financial baselines to audit performance in relation to expenditures, and so on. These must be realistically defined during the process on implementation operations planing to be useful.

The following information baselines are important to project management.

#### Project Scope Information

The objectives of a project must be clearly defined and broken into outputs (intermediate and final) to establish what a project is to achieve, and to test when and if it has been done.

Figure 5-1

### Administrator OKs programming and implementation changes

**BEFORE** Rewrite the country development strategy statement annually.

**AFTER** Rewrite every four years or when the mission director or regional assistant administrator determines necessary.

**BEFORE** Assistant administrators could authorize projects and redelegate this authority to mission directors with life of project and non-project funding up to \$10 million.

**AFTER** The amount is increased to \$20 million.

**BEFORE** Assistant administrators could authorize a life of project up to five years.

**AFTER** The time is increased to 10 years.

**BEFORE** Assistant administrators could authorize \$500,000 in waivers per transaction.

**AFTER** The level is increased to \$3 million.

**BEFORE** A board reviewed all proposed non-competitive and unsolicited procurements over \$100,000.

**AFTER** The board no longer reviews unsolicited proposals and will review only proposed non-competitive procurements over \$250,000; the Contracts Management Office will review non-competitive procurements under \$250,000.

**BEFORE** Area contracting officers had a \$1 million contracting authority; single mission contracting officers, \$300,000; and principal officers, \$25,000.

**AFTER** Senior officers have a \$5 million authority; single mission officers, \$1 million; principal officers, \$100,000.

**BEFORE** Mission directors had the authority to make operational program grants up to \$500,000 to private and voluntary organizations.

**AFTER** The authority is increased to \$1 million.

**BEFORE** AID direct contractors provided their own administrative and logistics support.

**AFTER** Where such support impedes project implementation, field missions have the option to provide such support.

**BEFORE** Assistant administrators could make non-substantive amendments to projects authorized by the Administrator.

**AFTER** Authority to amend project authorizations executed by any AID official, if the amendment does not result in a total life of project funding of more than \$30 million.

### Project Work and Action Plans Information

The objectives of a project and its output are achieved by performing distinct tasks and activities which form the "work breakdown" of the project. These activities are planned on a master project schedule which shows the relationships between the project activities, major milestones, and project achievement and time. Different levels of detail may be used by various levels of management.

### Project Organization Information

It is important that every project team member or contributor fully understand the total project scope and his/her specific responsibility in relation to other persons and organization units on the project. A systematic way of showing how all organization units and project elements relate to each other makes it possible for the project manager to coordinate these organizational units. The "Linear Responsibility Chart" developed for sample projects is a tool which gives this clarity.

### Project Financing Information

Financial plans must be developed (and periodically revised) to identify and co-ordinate the various sources of funds, indicate how each category of funds is to be used, and describe the means of processing payments. Procedures to obtain the release of funds and to control their movement and disbursement must be standardized

and consistently used.

#### Resources Planning and Budgeting Information

A plan showing the flow of all resources (e.g., funds, equipment, manpower and materials) ensures that these resources are available to the project when needed.

#### Contracting, Work Authorization and Resources Control Information

Work order and contracts are standardized formats that authorize expenditure of funds, labour, materials and other resources required to accomplish specific tasks. When properly used, they avoid confusion about responsibility as well as authorization.

#### Project Production Information

Every output expected from the project should be clearly identified with specifications for measuring performance. The "specs" may be in terms of social service as well as engineering-type descriptions.

#### Project Monitoring and Information

A PMIS generates data for comparing actual project performance against expectations or plans. This requires a standardized, regular, flow of information to all decision-makers. The information flow should provide only useful information and minimize unnecessary or irrelevant information.

### Project Environment Information

This refers to all available information from outside the project which affects project performance, and is the information category least capable of being standardized and defined. It may, for example, relate to information from and about the Ministries, supplies, markets, or even weather conditions. If other categories of information are available, managers can better put information from this category into perspective to judge impacts and implications for the project.

### Project Impact Information

This refers to information regarding the impact of the project in terms of achieving its purposes and objectives among the intended beneficiaries. Although many of the impacts cannot be determined until late in the project, it is possible to gather "leading indicators" which can guide project implementation and redesign very early. Impact information should be routinely collected as part of the on-going implementation and monitoring processes.

### CONTROL AND PROJECT INDICATORS

Project implementation/operations plans are the foundation for identifying the key progress indicators to be monitored. The indicators will vary between projects, but a monitoring plan will include a wide range of different performance, technical and

maintenance indicators. For the purpose of this report, we have identified five basic sets of indicators which are critical components of a good monitoring plan and can be established in the project officer monitoring plans in Phase I of the implementation plan.

- (i) project work progress and outputs;
- (ii) project cost estimates and expenditures;
- (iii) resource availability and utilization;
- (iv) schedule realism and adaptability; and
- (v) administrative and organizational accomplishment and events.

These are explained in more detail in a later section of this report.

Within these categories, specific indicators are selected on a project by project basis. The monitoring plan developed by the project officer is updated as necessary and becomes the basis for project reports and reviews.

As full implementation/operations plans are prepared for projects, using an adaptation of the model described in Chapter 6, the indicators in the five categories will be clearly identified, as well as a broader set of indicators falling in the range of categories discussed above. Of special interest will be the extent to which evaluation can be programmed into implementation plans from the beginning so that it plays a more formative rather than an after-the-fact summarizing role in project management and development.

## THE IMPORTANCE OF INFORMATION ANALYSIS

Project information is not particularly useful if it is collected on an ad-hoc basis, or if it is collected only once and cannot compare performance over time. Continuous and comparative information must be generated to identify both deviations and trends.

Analysis of project information to show trends is essential to understanding the significance of deviations, the urgency of decisions, and the impact of corrective actions. A single point of information may highlight a trouble spot, but corrective decision-making requires trends analysis of deviations and the impacts of decisions on the project .

Continuous information collection and analysis systems must be established. For some types of project information (e.g., measuring impact), it is necessary to establish baseline data before project initiation. Baselines permit measuring changes in key performance indicators over the life of the project.

Trends Analysis measures performance against the baselines and forecasts the implications for the future of the project. Major policy changes or modifications in the original designs must sometimes be made in light of project performance. The information system is the link which makes certain that problems can be anticipated and corrective decision made by project management.

PMIS REPORT TYPES AND FORMATS

This section is illustrative of reporting concepts for USAID/Thailand, not definitive. Specific reporting formats must be established in each project following the guidelines of this section and specific project needs and abilities. This section describes basic principles of reporting and the rationale for various projects. Specific formats for USAID/Thailand will be developed from these principles.

Project reports are the communication links between project actions and actors and serve many purposes. They keep personnel informed of the status of the overall project, or of singular activities. They pass along information and directives which generate decisions and action. Reports document completion of project activities and identify opportunities or deviations from plans. They are official documents for collecting, collating, analyzing and communicating information on project performance. They link project work execution and management decisions among various levels. Reports provide a project history and capture "lessons learned", useful both for the current project and for future endeavours. Project reports can be designed and scheduled to ensure that required management information reaches appropriate management levels on a timely basis. This is particularly important for policy and executive committees which meet regularly but infrequently.

But project reports have limitations as well. They tend to focus on pre-determined categories of information which may not adequately reflect the specifics of a particular activity. Standardized formats may inhibit reporting the special information which doesn't "fit" but which is important. Another limitation is their emphasis on problems rather than opportunities. But identifying possibilities for positive change or unexpected opportunities can be as critical to achieving project success as identifying deviations from the project plans.

In the Thai culture (and many other cultures), people often withhold problem information rather than to readily admit or even anticipate performance difficulties. For this reason, reports must be supplemented by on-the-spot observations and data obtained informally. But informal information should be verified before depending on it for decision-making. The best information comes not through formal reports, but through developing solid working relationships with counterparts in which there is trust and willingness to share the "real" story.

Informal monitoring is best in the context of continuous consciousness-raising of goals, purposes and outputs. This requires a climate of learning, looking for and clarifying expectations, especially those related to changes to achieve outputs, purposes, and goals.



Figure 5-2: Framework For Project Report Content

Categories of Analysis	Compare		Identify	Analyse	Recommend
	(a) Planned	(b) Actual	(c) Deviations From Plan	(d) Issues, Causes and Problems (or Opportunities)	(e) Alternative Actions and Their Implications
1. Work					
2. Costs					
3. Schedules					
4. Resources					
5. Technical Performance					
6. Organization Performance					
7. Project Impact & Participation					

TYPES OF REPORTS NEEDED

Four types of reports are generally needed to meet the hierarchy of management decision needs.

- . activity progress reports (from the project activity to the manager level on single project components)
- . monthly Project Progress Reports (from the project manager to higher Executives on the entire project)
- . Project Executive Summary Reports (from the manager level to executive and liaison levels)
- . a Critical or Flash Report (for crisis situations to signal problems requiring immediate action, generated where the problem occurs)

ACTIVITY PROGRESS REPORTS

The project manager controls the project scope, costs, schedules, progress and performance. To do this, he must devise standardized formats for activity managers to report appropriate data to him, so he can analyze the overall project and coordinate project components and activities. Activity Reports may be required on a weekly, bi-weekly or monthly basis. They are analyzed with salient elements included in the Monthly Project Progress Reports.

Normal data requirements in Activity Reports include:

- \* Progress to date -- completed tasks and task-in-progress,
- \* Estimates of remaining work with time to complete tasks and any task re-scheduling as necessary,

- \* Activity completion estimates and plans,
- \* Critical tasks or activities impacting activity progress,
- \* Costs of completed tasks,
- \* Costs of task-in-progress and estimates of cost-for-completion,
- \* Total cost estimates for the activity,
- \* Comparison of actual to planned time for tasks completed,
- \* Estimates and plans of time for completion and activity,
- \* Technical performance measurement and indicators for meeting output specifications,
- \* Problems, issues and/or opportunities arising from the above data on progress, costs, schedules, resources and technical performance, and
- \* Alternative corrective actions and implications for planning.

Note that reports describe both accomplishments completed and accomplishments-in-progress, with estimates of requirements-to-completion. This is the critical link in knowing if resources allocated to the activity are sufficient to complete the project.

#### MONTHLY PROJECT PROGRESS REPORTS

There is normally a flow of Monthly Project Reports throughout the project management hierarchy. These will vary in format, but a suggested outline for monthly reports from the project manager could be as follows:

1. Summary status -- brief paragraph highlighting current status of the project.

2. Red flag items -- previous and new red flag items, corrective actions taken, with prediction about resolution and further action required.
3. Project manpower plan -- showing key or limited resources.
4. Major achievements and future schedule -- describing actual accomplishments during current reporting period and significant changes in future schedule.
5. Current and future problem areas -- stating major problems, actions required, and possible impact on the project.
6. Project cost performance -- commenting on current project cost situation with reference to current cost performance reports.
7. Exhibits -- summary master schedule, revised project schedule(s), and project cost performance report.

This report goes from the Thai field project manager to the project director in Bangkok, and to the USAID project officer. USAID should receive these reports (formally or informally) when sent by the project manager and not wait for the information to flow through the RTG bureaucracy.

#### PROJECT EXECUTIVE SUMMARY REPORTS

At the highest levels of the information chain, summary information highlights salient features of progress and serious problems. Reports at this level, give an overview of the performance on the full project. Too much detail is confusing. The executive departments or ministries usually perform a moni-

toring function requiring both general cost and physical performance information. Their concerns are generally

- . keeping an up-dated inventory of major project components with key data on each for the information and evaluation of high-level management officials;
- . identifying the functioning of the project organizational structures that are in place;
- . requesting actions of other departments and ministries, and
- . identifying project areas with potential for problems and risk to focus management attention on these.

Executive reports are brief, orienting the information to the interests of the particular executive group. They are normally sent by the project director to higher levels -- policy coordinating bodies, department heads and ministers, and so forth.

#### CRISIS ALERT REPORTS

The three report types discussed are positive control reports which an operating PMIS produces on a regular basis. But sometimes project events cannot await the next reporting period. The Crisis alert Report short-circuits the normal reporting chains and schedules to gain immediate attention.

The crisis alert is brief and action-oriented; there's no time for lengthy narrative when a problem is critical. It includes:

- . a short statement of the problem
- . an assessment of the problems impact on the project
- . a discussion of possible courses of actions, and the recommended approach to problem resolution
- . a specific action request -- what, by whom and when needed

The crisis alert is a useful tool in the reporting arsenal.

However, if used too often, it loses its effectiveness and precipitates a management by crisis atmosphere. If overused or abused, its usefulness diminishes.

Crisis alerts demand prompt feedback, not exceeding 3-5 days. It is with crisis alerts that the USAID "push" function can ensure action is indeed taken swiftly.

CHAPTER 6:  
DEVELOPING PMIS AT THE PROJECT LEVEL

OVERVIEW:

The unique feature of Thailand PMIS strategy is the building of project level implementations operations foundations. PMIS is a natural by-product of a methodology which equips the project team to continuously plan, control, implement, evaluate -- and report.

This chapter summarizes a methodology successfully demonstrated during this consultancy. Applying this methodology to field projects in the sets up the basis for meaningful reporting to USAID and RTG agencies, and thus "drives" the entire PMIS.

The methodology follows five major steps, each with several sub-steps. The fifth major step is establishing the PMIS -- best done only when the four logically precedent implementation/operations planning steps are completed.

IMPLEMENTATION: COMMITMENT AND REALISM

Detailed implementation planning establishes realistic management and technical information baselines. The action-training process also effectively transfer project responsibility from USAID to the implementating agency. This is very important. USAID has been responsible for much of the front-end design work and without transfer, the projects remain USAID projects, not Thai.

Without detailed, realistic implementation/operations planning, project teams have insufficient understanding to properly manage the projects. They feel limited commitment to the project and its objectives. They also lack shared definition of responsibility and decisional latitude. They do not understand the project, or the flexibility of design and procedures, to effectively reshape the project for success.

Implementation planning establishes the organizational structures for coordinated planning and control and creates management capability at the front-line operations levels. This is vital for projects which cut across traditional departmental boundaries and disperse project authority in a matrix management situation. Organization structures must be mutually agreed upon to meet the fundamental requirements for good project management:

- (i) a central point of responsibility for coordination and
- (ii) integrated planning, implementation and control.

Implementation/operations planning achieves a realistic structural base and broaden project understanding when combined with action-training, organization development and participative systems design. This leads to:

- \* joint understanding of project objectives and goals by key project contributors and supporters;
- \* joint planning, scheduling, and budgeting of project activities and resources;

- \* joint agreement on procedures for authorizing work, controlling work scope and changes in assignments, and control of schedules and costs;
- \* common measures and evaluations of costs, schedules and productivity performance, to identify current and future variances from plans and analyze the significance of these; and
- \* coordinated procedures to initiate appropriate corrective actions and revisions of project plans.

Finally, the implementation planning methodology shifts the narrow attention of project team members to the total scope of their work. Most project team members are selected for their technical competence, not their managerial experience. Unfortunately, this places persons with high expectations and commitment in positions for which they have limited understanding and few tools. Because the complexity of project management is seldom acknowledged, this practice is seldom challenged. Properly guided implementation planning in action-training workshops gives the team a better perspective of their management responsibilities and broadens understanding of the project strategy and objectives.

The practices of Implementation Planning were demonstrated by experience with the NERAD project. The predominant picture held

by the project team was based upon the final, technical outputs of the project and the impact upon beneficiaries. Their project perspective contained only limited reference to the whole "process" of implementation and the multiple institutions which needed to be coordinated and organized.

Closely examining their views of the project deepened their appreciation of their management tasks as the core project team deepened their understanding of the project. After only a few days, the team members better appreciated their tasks, understood the project objectives and methodology, and agreed on some common basic goals, approaches and management tools.

A METHODOLOGY FOR IMPLEMENTATION PLANNING

USAID should promote common framework for implementation. The framework for implementation/operations planning is especially critical, but has been noticeably neglected. Although there is some use of bar charts and other management tools, there is no commonly shared model which is sufficiently comprehensive to detail different levels of project management and administration, and logically construct integrated sets of information necessary for project management.

A powerful basis for developing PMIS on specific projects is the five-step implementation planning approach tested during the consultancy. The five-step model builds implementation/information/management "baselines", in five key areas:

- (1) project scope, purposes and outputs
- (2) project action plans and schedules
- (3) project organization, structures and responsibilities
- (4) procedures, responsibilities and plans for procurements, manpower and finances; and
- (5) information systems for reporting, planning and control

The overall model, illustrated in Figure 6-1 constructs a sound foundation for project implementation. Tools and techniques associated with each step are useful, and in many instances vital, to constructing a PMIS sound project management. The five steps, summarized below, develop the project information foundation needed to help ensure successful project accomplishment.\*

The ideal time for fully applying these methods is pre-implementation. For projects which have begun implementation, gaps in the informational base are easily filled through selective use of the methodology. It is a useful model for management auditing and evaluation.

\* This is explained in detail in the Project Implementation Planning Manual (Manual I) by Merlyn Kettering published as part of The Project Planning and Management Series by the Ministry of Finance of the Government of Jamaica, 1980.

**FIVE STEPS  
OF  
PROJECT IMPLEMENTATION PLANNING**

<b>FIVE STEPS OF PROJECT IMPLEMENTATION PLANNING</b>							<b>PROJECT IMPLEMENTATION</b>	
						<b>STEP 5: ESTABLISHING INFORMATION SYSTEM</b>	<b>5: PROJECT CONTROL SYSTEM</b>	
						<b>STEP 4: OBTAINING PROJECT RESOURCES</b>	<b>4: PROJECT RESOURCES</b>	
						<b>STEP 3: CLARIFYING AUTHORITY &amp; RESPONSIBILITIES</b>	<b>3: PROJECT ORGANIZATION</b>	
						<b>STEP 2: SPECIFYING &amp; SCHEDULING THE WORK</b>	<b>2: PROJECT ACTIVITIES &amp; SCHEDULE</b>	
						<b>STEP 1: ACTIVATING THE PROJECT</b>	<b>1: PROJECT ACTIVATION</b>	
						<b>STEP 0: PROJECT IDENTIFIED &amp; APPROVED</b>	<b>0: PROGRAMME POLICIES &amp; PROJECT APPROVAL</b>	
<b>MAJOR TYPES OF PROJECT INFORMATION NEEDED AND GENERATED</b>	<ul style="list-style-type: none"> <li>- Programme Policies</li> <li>- Approval &amp; Guidelines</li> </ul>	<ul style="list-style-type: none"> <li>- Project Scope</li> <li>- Project Purposes &amp; Outputs</li> </ul>	<ul style="list-style-type: none"> <li>- Project Action Plans</li> <li>- Project Schedules</li> </ul>	<ul style="list-style-type: none"> <li>- Project Structure &amp; Organization</li> </ul>	<ul style="list-style-type: none"> <li>- Procedures &amp; Plans for: Resource, Finances &amp; Manpower</li> </ul>	<ul style="list-style-type: none"> <li>- Reporting Plans &amp; Control Systems</li> </ul>	<ul style="list-style-type: none"> <li>- Management Information</li> <li>- Environmental Information</li> </ul>	
	<b>PROJECT IMPLEMENTATION PLANNING</b>							

PLANNING FOR PROJECT IMPLEMENTATION: FIVE STEPS

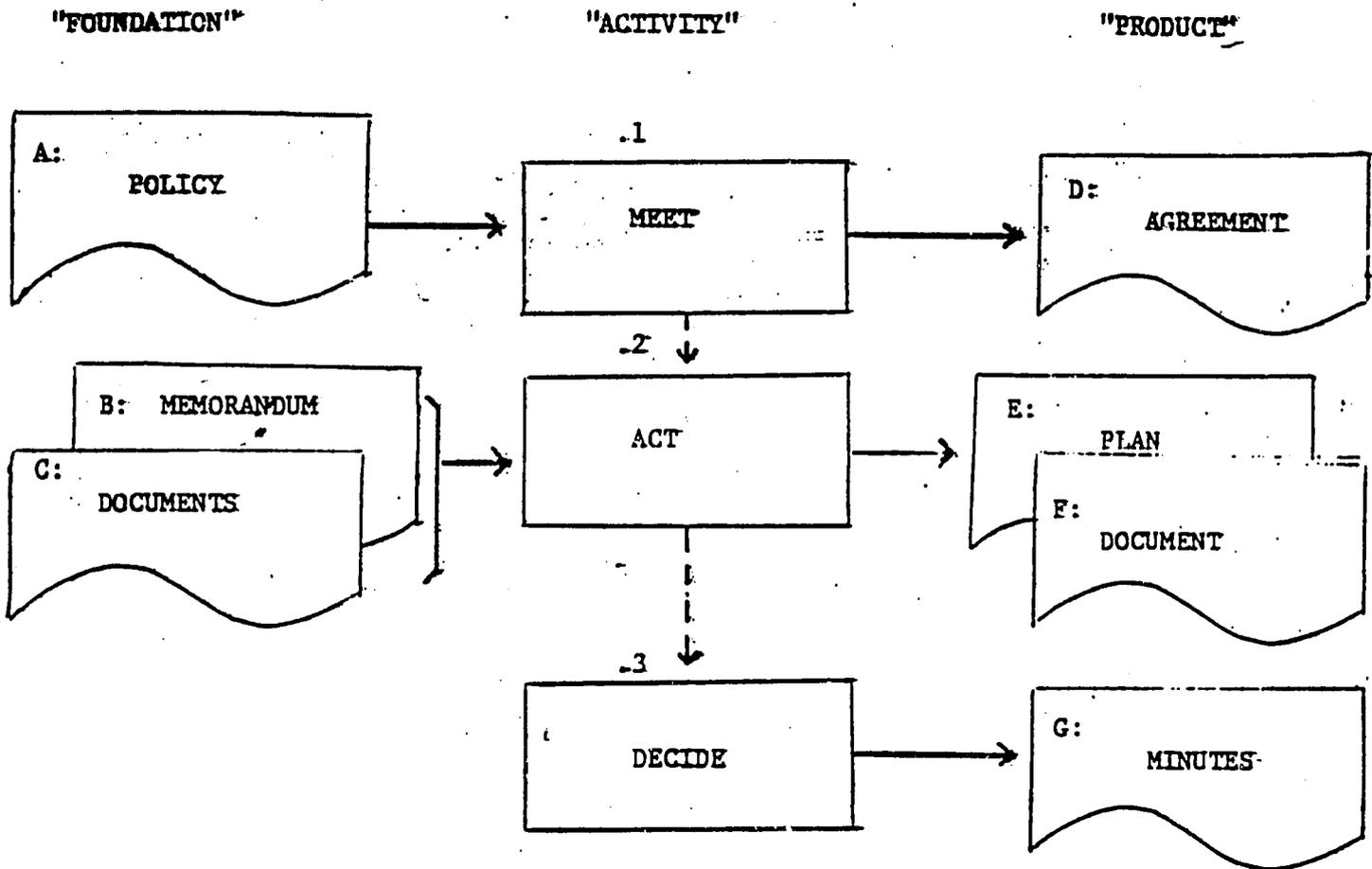
Project implementation planning requires establishing realistic managerial and technical baselines and frameworks. Project baselines together with PMIS systems are necessary for a management capability to collect, analyze and act upon the updated information in relation to the baselines.

Planning for project implementation simply means laying out the managerial and technical framework necessary for actual implementation work on a project. It is most effective when done with the team on the front-lines management level. In managerial terms, the informational foundations and systems for project execution are established. The information needs for project management were discussed above. These information "blocks" are related to each other logical and if properly developed can assist project administrators and manager to carry out projects successfully. The logical relationships between the "information blocks" permits a structured five steps of planning approach to project implementation. These five steps are:

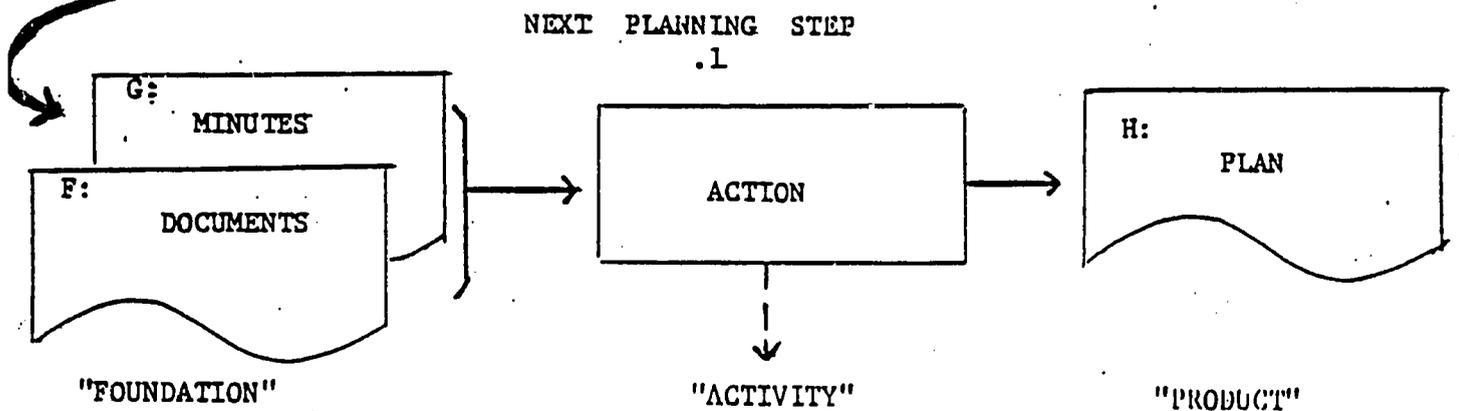
- (1) Project Activation;
- (2) Specifying and Scheduling the Project Work;
- (3) Clarifying Project Authority, Responsibilities & Relationships;
- (4) Obtaining Project Resources; and
- (5) Establishing Project Information and Control Systems.

Figure 6-2

The Construction of A Planning Step



Each planning step has a "foundation" from some previous planning stages such as policies, and documents which when complete permit that step to begin. Within each planning step there are a number of "activities" or substeps, involving the work in term of actions, meetings and decisions, which result in the output or "products" of that planning step. These products in turn become the "foundation" for subsequent steps. In this way the five planning steps logically build a solid base for realistic project implementation.



(Documents & Data required to begin each planning step)

(Actions, meetings, and Decisions: the work of the step)

(Documents, Decisions Data as Output become foundation for subsequent steps)

These five steps build the project foundation for successful project accomplishment or can be used highlight gaps in project already into implementation.

Each step establishes particular information baselines and management systems necessary for project implementations and basic to PMIS. The "Five Steps" sequentially create a basis for actual execution of project work. For projects which are particularly innovative, unique or complex, implementation planning must be phased and iterative. The results of project execution of the early activities, and the lessons learned make implementation/operations plans increasingly realistic and effective overtime. These five steps are planning activities which precede the actual work or execution of the project. The five steps of implementation planning are related sequentially as shown in Illustration 6.2.

One feature of this approach is the rigorous logical sequence of implementation planning steps.

The steps are sequential and the information generated by one step is used in the subsequent steps. Each step has distinct products or outputs which provide information inputs for subsequent steps. When the stages are completed they form a comprehensive PMIS foundation for project monitoring and management.

Each planning step is composed of set of activities, actions and decisions which result some distinct "product". These "products"

are actually the "pieces and blocks of information" which build for a sound foundation for project management.

If any planning step or sub-step is neglected, a project can become stalled. Delays are costly. They often result in frustration and disappointment for the beneficiaries, the administrators and the technical staff. This sabotages motivation and performance.

None of the steps should be neglected or overlooked. But strict adherence to this step-sequence is not possible or even desirable. This approach is a model which requires adjustment to realities which are encountered in each project specific situation.

In FIGURE 6.1, the Five Steps of Implementation Planning are shown in sequence with the types of baseline information generated or systems established by each step along the bottom horizontal row of the diagram.

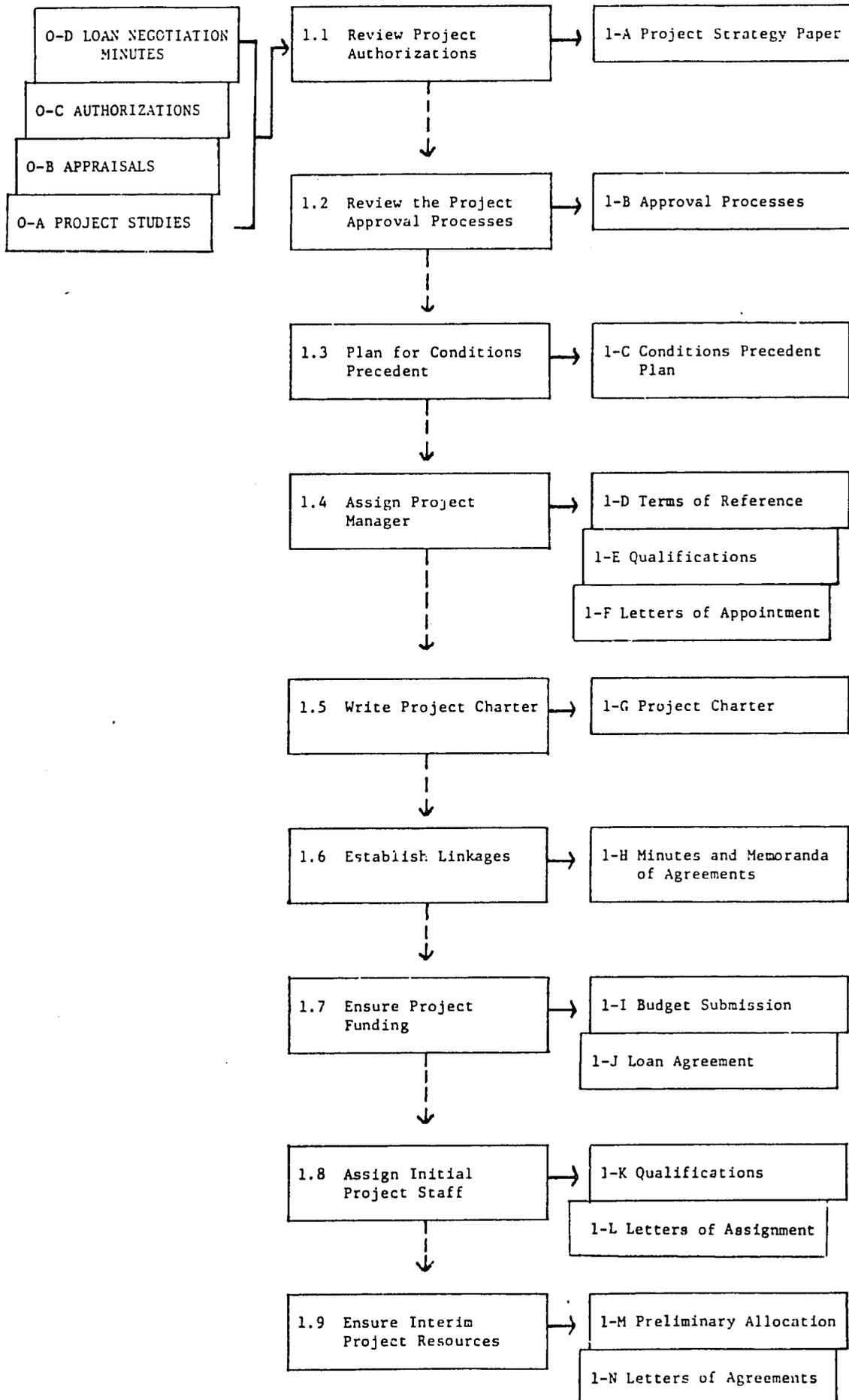
The following brief description illustrates each step in more detail. The figures are illustrative and taken from Planning for Project Implementation of the Jamaican Project Planning and Management Series. Our recommendation is to adapt the methodology to the Thai context and to meet specific project needs.

Step One: Project Activation\*

Project Activation involves obtaining commitments and agreements from all contributing and associated organizations and departments regarding the nature of the project, the respective project strategies, the tentative inputs and the organizational structures. Major products of this step for project are the Project Strategy Paper, the Project Approval Process, and a "CP Plan" to specify terms and times for conditions precedent. The Project Strategy Paper summarizes all necessary decisions for implementation by reviewing the guidelines and conditions established during project authorization (e.g., agreements on the project, sources and levels of funding, project administration, etc.). The Approval Process establishes the initial structures approval and decision-making, identifying decisional latitude at different project levels. The C.P. Plan ensures that all host country requirements for getting project support are clear along with the actual steps necessary to meet to C.Ps.

A well-developed project begins to meet the requirements of Step One through the results of project planning, financial negotiations and the project agreement. However, these sub-steps should be reviewed on all projects.

STEP ONE: PROJECT ACTIVATION



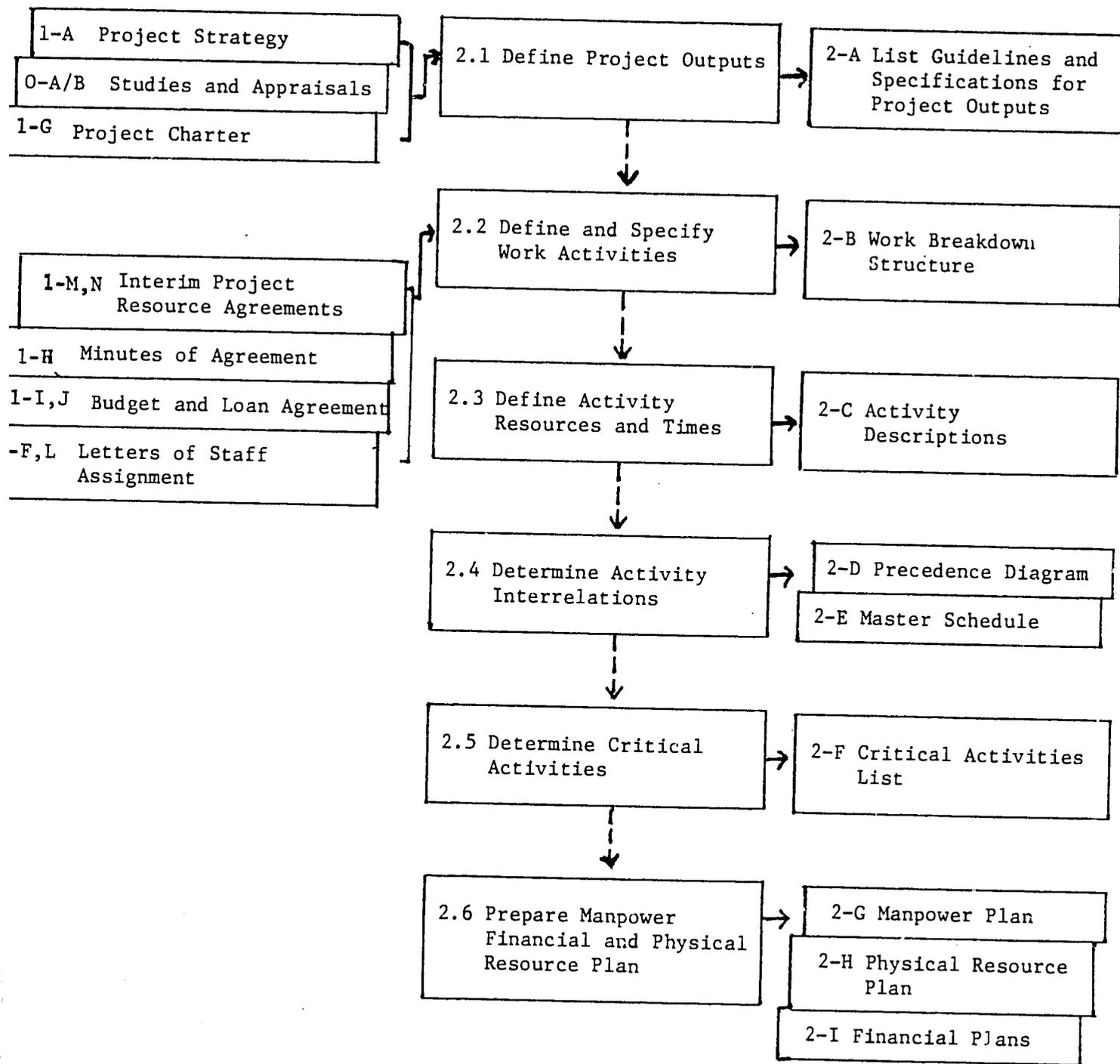
Step Two: Specifying and Scheduling the Work\*

The purpose of Step Two is to produce the detailed realistic work plans describing activities necessary to carry out the project. Each major activity is specified -- when, where and how each activity is to be done, and what the outputs are. These are put into a Project Master Schedule which is complemented by -- manpower, financial, and physical resource plans. The plans constructed at this point will naturally be revised throughout the project. They form the base lines for a PMIS and are the key to effective project management. The schedules are critical to coordination because of dispersed project resources and authority. Many implementation problems can be traced directly to deficiencies in work specification and scheduling.

The plans prepared here should be as detailed and as accurate as possible so that project implementation expectations are realistic. However, plans must be periodically revised. It is common to overlook even relatively important items, and changes in performance and commitments will demand adjustments in original plans. Therefore, they will require updating as the project moves forward and as new or updated information is available. These plans are the basis for monitoring and must be realistic within the actual project context.

Figure 6-4

STEP TWO: SPECIFYING AND SCHEDULING PROJECT WORK



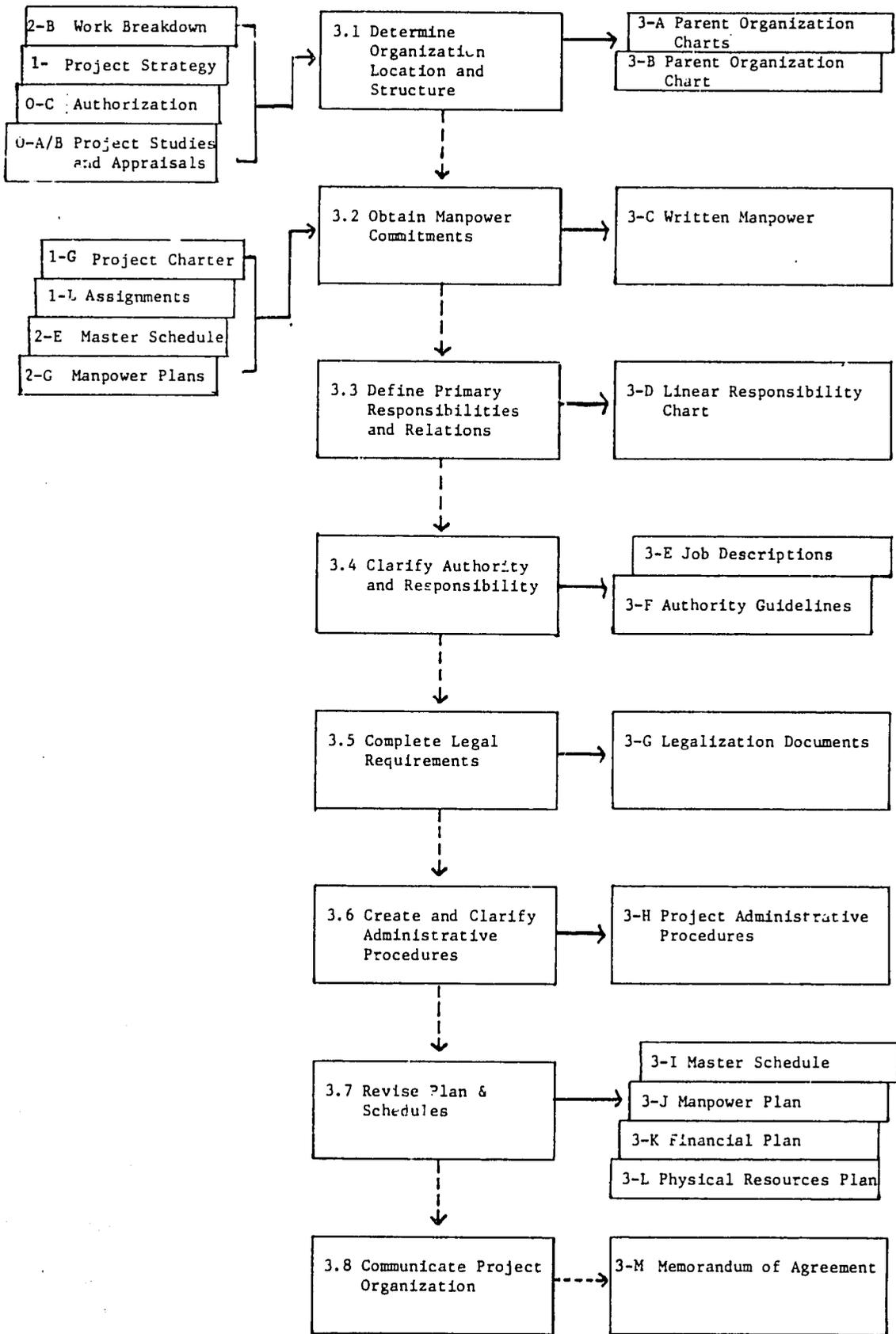
Step Three: Charifying the Project Organization\*

Apart from its technical and economic merits, the success of a project depends largely on the effectiveness of the organization responsible for its execution. Without an efficient organizational form, a sound and viable project may fail. The purpose of this step is to clarify and document all aspects of project authority, responsibilities and relationships. The need for this is often great because of the dispersed organizational authority of the project management situation.

Without clear organizational plans, there is likely to be confusion, duplication and overlapping of effort, areas of neglected responsibility, lack of effective coordination and communication and, potential or actual conflict. All of these can negatively affect project performance. Many of the common pitfall of projects can be avoided by getting the project well organized.

Figure 6-5

STEP THREE: CLARIFYING PROJECT ORGANIZATION



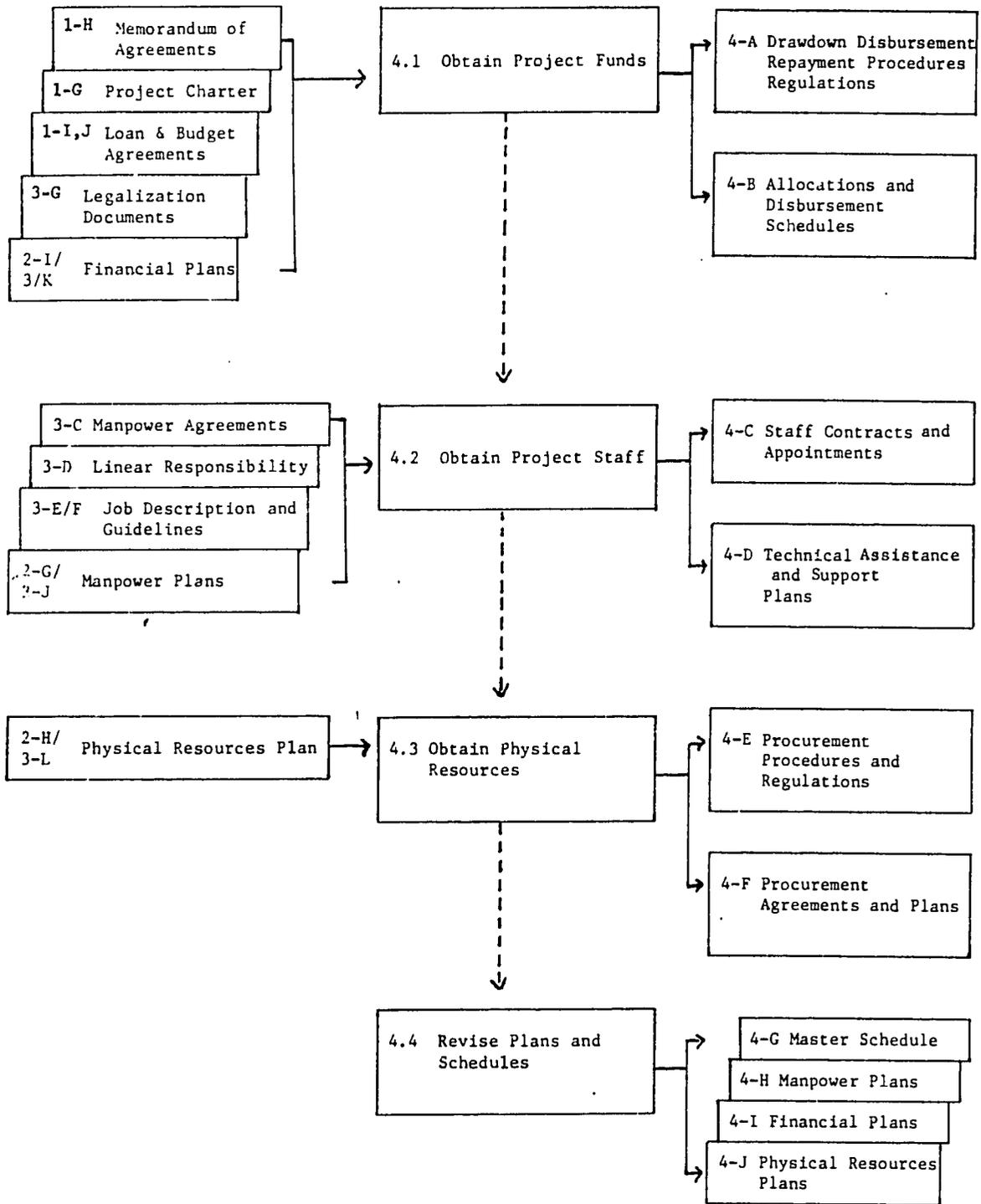
#### Step Four: Obtaining Project Resources\*

The purpose of this step is to provide necessary guidance and establish systems so that the kinds and quantities of project resources required are available at the appropriate places and times as needed. The project manager must be acquainted with the processes of procurement, drawdown procedures and requirements, and contract arrangements. The manager must monitor these processes to ensure that resources are available when needed and realistic time-tables for obtaining resources are worked out.

Obtaining resources continues throughout project implementation. It must be planned, well-understood and monitored so that, to the extent possible, activities become routine rather than crisis events. The inability to coordinate all project resources into an integrated schedule is a common project problem leading to ineffective resource use and consequent disappointments. Many delays are associated with administrative sub-routines which are not well understood, not standardized and not documented. Knowing the sub-routines is critical to good management. Maintaining liaison with administrators responsible for these processes and formulating contingency plans is a major part of the project manager's job.

Figure 6-6

STEP FOUR: OBTAINING PROJECT RESOURCES

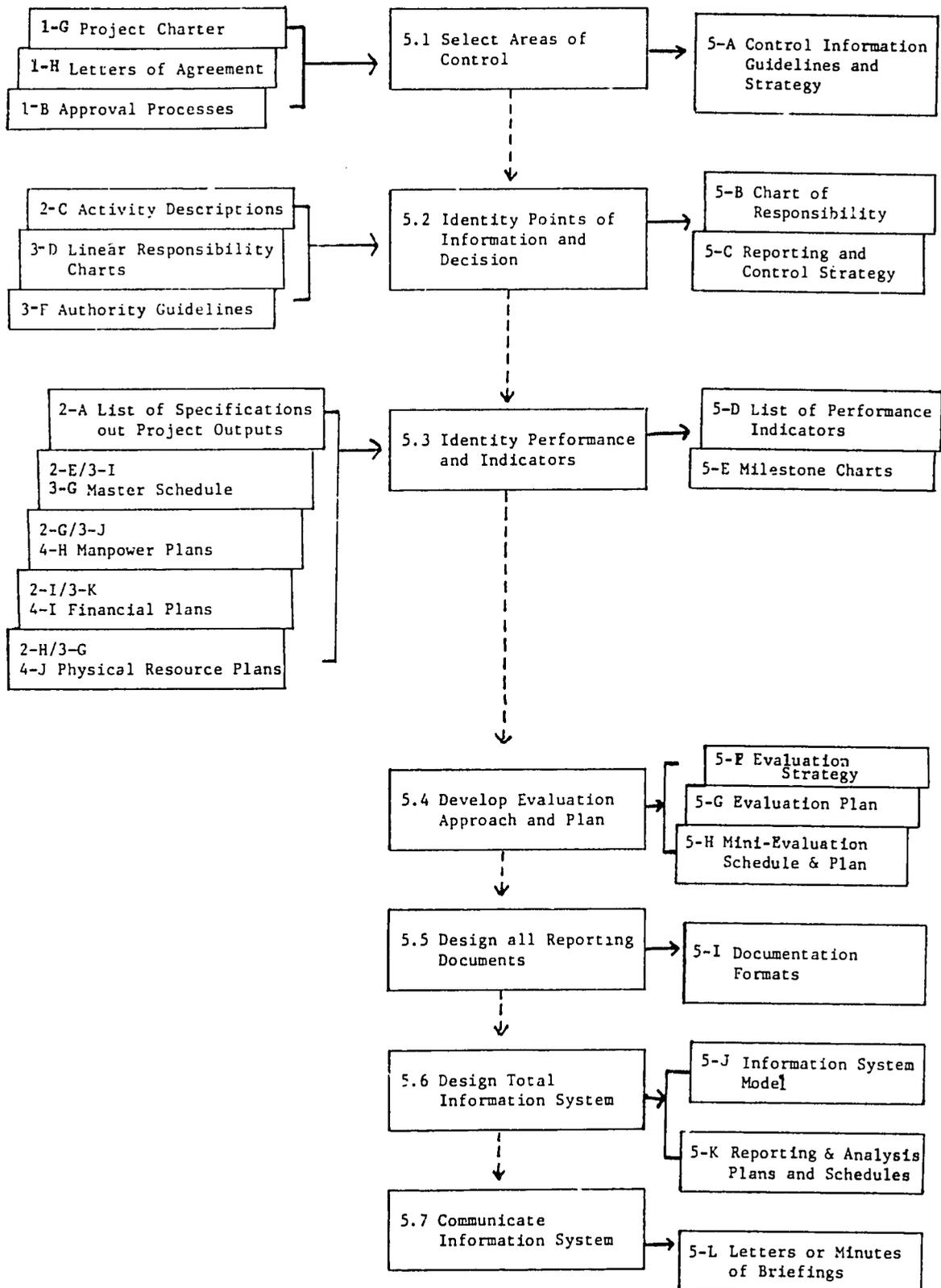


Step Five: Establishing the Information and Control System\*

The purpose of this step is to establish a project-level PMIS for project control to formulate the managerial function of keeping the project on its targets and within tolerable limits. The PMIS provides continuous project monitoring information for managerial decision-making. This is a necessary precondition for good performance-oriented management. Information provides evidence as input for corrective decisions, including rescheduling, rebudgeting, reassigning staff and so on. The products of Step Five establish the systems and the base lines to facilitate decision-making for project control.

The PMIS components produced from the Five Steps of Planning for Project Implementation are illustrative. These provide a checklist of the information and systems which should be in place when the project is ready to begin. This model illustrates the preparation needed to create a PMIS and to ensure that a project is really ready for implementation. With a good PMIS, the project manager and the project team are better prepared for their challenging task.

STEP FIVE: ESTABLISH INFORMATION AND CONTROL SYSTEM



The importance of planning for implementation cannot be overemphasized. If any of the significant items on the checklist have been missed or omitted, it is likely to cause trouble at some point. Delays on projects can be traced to avoidable management oversights. Often conflict or misunderstanding can be resolved when the appropriate "information block" is put in place so that the project can proceed. It is better to do this early, rather than wait until the need or problem emerges.

Project work execution is ready to begin based upon the project management foundation -- basic agreements, contracts, information, and systems which the project manager will need to control and direct a project. Through action-training, an important aspect of project management is also introduced, i.e., re planning. Already implementation planning has required the iterative development of manpower and financial plans as part of its process. Together, these five steps dramatically improve the project probability for success.

#### Integrating Evaluations in the PMIS -- The Mini-Evaluation Approach

An important component of to the model is the integration of evaluation with the PMIS created in Step Five of the Model.

Formative evaluation can be undertaken by the project team and organization as part of its ongoing management and monitoring responsibility. This promotes early testing of basic project hypotheses, assumptions and strategies. As management information

is gathered, strategic evaluative indicators should also be collected and used to judge the effectiveness and appropriateness of specific project components and characteristics. We refer to this as the Mini-Evaluation Approach.

The Mini-Evaluation Approach begins by formulating an Evaluation Focus with the project team during Implementation Planning.\* (as illustrated in Figure 6-7). The evaluation focus produces team decisions on the aspects or dimensions of the project which are most critical to project success and which have the most uncertainty, risk or innovation. An Evaluation Strategy identifies the critical indicators relative to the focus and formulates a methodology for collecting data on the indicators. An Evaluation Plan must be created for carrying out the strategy. This involves the focusing and phasing of mini-evaluations from early in the project so that the effectiveness of the project and its related strategies are tested early enough to permit responsive refinement. Finally, a Mini-Evaluation Schedule is established, say two a year for early project years. This can be related to the AID Evaluation Plan. Guideline Questions to formulate mini-evaluation are shown in Figure 6-8.

## Figure 6-8: Guideline Questions For Mini-evaluations

How do we understand the problem better now than when the project was initiated? Has the nature of the problem, or our understanding of the problem changed? What are the implications for the project design, reshaping or policy formulation?

Are the specific objectives and performance targets of the project still valid? Are these fully agreed upon and supported? Has there been a recent review to sharpen focus, understanding and commitment?

What has been the response to the project? Who are the key actors and what has been their contribution to date? What is the support of the beneficiaries and how is this indicated by participation?

How is the project organization performing? Is it properly located and supported? Are all roles and responsibilities being carried out effectively? What is being neglected or what is weak?

What has been the role of USAID in the project? Has this been effective? What can USAID do to provide "push" or to promote better support for the project?

Are the management systems working well? Is there reciprocal and effective communication on the project among key actors? Are plans realistic, detailed and revised/refined to reflect actual project conditions? Is this done in a participative manner? Are they workable?

Are resources available on a timely basis in the capacity and capability required to carry out the project? Have costs been reasonable and within established boundaries? What adjustments must be made regarding resource and cost projections and plans?

What has been learned regarding the basic assumptions made about the project and the development hypotheses upon which the project is based? What is the status of key assumptions? What is the weakest link in the project?

If the project could "start over", what could be done differently? How can we make corrective adjustments for a more effective project without undermining the momentum of the project and yet build upon project experience constructively?

The viability of this to mini-evaluations approach to evaluation was observed with respect to the NERAD project. For example, as part of operations planning, the NERAD team identified improved technologies for farmers. They identified approaches and management decisions about the appropriateness of different technologies at different stages of the project, e.g., depending upon the degrees of changes required by the farmer, the anticipated size of the impact, the scope of the effort, and so on. As the different technologies are initiated, information will be collected on their acceptance, impact and appropriateness. This will be used to support management decision-making and for early "mini-evaluations". Evaluation sessions will be held systematically throughout the early stages of the project, say every six months, to review formal and informal evaluation information and to assess the impact of experience to date and implications for the future.

With such "mini-evaluations" built into PMIS operations, the reshaping of a project is a more gradual, effective, timely, and a less painful experience than the summative evaluations. The project team see evaluation as part of their responsibility one in which they participate -- rather than a police-action through which they are judged. Their attitude shifts from defensiveness to support as the usefulness of evaluation is demonstrated. The key as front-line people are intimately involved in the process.

Mini-evaluations scheduled throughout the project use readily available information and directly involve the project team. They do not replace systematic summative evaluations, but complement them and make them easier and more effective. Summative evaluations are still necessary and can be more useful if based upon the experiences and information generated by mini-evaluations.

7-1

CHAPTER 7:  
CREATING A PROJECT-SPECIFIC PMIS

OVERVIEW

This chapter summarizes the primary observations made on the two sample projects on which the methodologies for the PMIS strategy and implementation plan were tested -- the Mae Chaem Project and the NERAD project. The relationship of the implementation planning steps is shown to common project problem areas. Specific principles for creating a project-level PMIS, as they emerged from work on the projects are discussed. Finally, the role of informal information is shown as supportive and complementary to the formal PMIS.

REVIEWING THE PROJECT MANAGEMENT SYSTEM

An essential function of a project manager is to examine the management foundations of a project. To do this, the manager must understand the information requirements for sound project management -- the PMIS data bases and systems for generating and analyzing the project information. The PMIS is crucial for performance monitoring, management decision-making, and conflict resolution. The major conflict areas are priorities, schedules, work, performance, technical issues, manpower, costs, authority and personalities. The project manager must be able to create an information system which quickly alerts attention to problems. A strong formal PMIS can do this and can release managers for management tasks and for the sensitive work of informal monitoring as well.

The PMIS provides systematic analyses of performance indicators. Managers can isolate problem areas. Regular monitoring of indicators, structured analysis, and reporting to management eliminates much of the guesswork of project management.

Management energies can be directed to significant areas, problems and policies. A good system does not guarantee effective management; but with a poor system, a project manager can waste a lot of energy rushing in crisis management, perhaps losing sight of important issues.

The Five Steps of Implementation/operations Planning provides a framework of the management information required during project implementation. It is very effective when applied at the beginning of project implementation. However, it is also useful for projects already in the implementation process and can be used to identify, solve and avoid implementation problems. Sub-steps can be selectively applied.

Several potential problem areas are illustrated in Figure 7.1, along with the related planning steps which can be applied to identify, solve or avoid specific implementation problems.

The Five Step methodology is an excellent tool to help a project team understand and systematically address management and implementation problems.

## Illustrated Relation Between Problem Areas and Implementation Steps

Information ComponentsRelated Planning Steps

## Organization

- Step Two—integration of work planning by activity and integrated financial and manpower and resource plans
- Step Three—Clarification of Project organization, authorities, responsibilities and agreements on administrative procedures
- Step Four—Clarification of administrative support subroutines for obtaining project resources and assignment of responsibilities and liaison persons
- Step One—Creation of concise project strategy statements and Project Charter to facilitate understanding acceptance and commitment for the project
- Step Five—creates information flows consistent with decision-making responsibilities to complement normal organization information systems.

## Work Planning and Performance

- Step One—provides interim resources until project funds are released
- Step Two—provides realistic, detailed schedules and plans with related resource and financial plans along with critical activities list for monitoring. Also provides detail specifications for major project outputs—or progresses for defining same.
- Step Three—defines responsibilities and gets agreement upon roles and authority for actual work execution
- Step Four—establishes the administrative support to get the resources in timely basis to support work performance
- Step Five—provides relationships, schedules, and information network on work and performance for decision-making for more effective management

Information ComponentRElated Planning Steps

Organizational Interface  
and Environmental Information

- Step One: Creation of Strategy Statement and Project Charter facilitates communication and understanding of project
- Step Three—clarified organization highlights primary organizational linkages
- Step Two—highlights the timing of critical interorganizational events and activities
- Step Four—facilitates administrative functioning between organizations on support such as procurement by clarifying sub-routines and responsibilities
- Step Five—prepares evaluation plan on a phased basis to take readings of environment and integrates key environmental information into routinized reporting system

Financing, Planning,  
Budgeting and work  
Authorization

- Step One—assures interim resources to initiate the project  
establishes plan for meeting CP's
- Step Two—establishes schedules for activities and resources so timing is realistic and clear
- Step Three—establishes responsibilities and authorities
- Step Four—creates administrative support system for work activities and indicates administrative sign-off and liaison relationships
- Step Five—creates a system for revising plans and monitoring performance

CREATING A PROJECT-SPECIFIC PMIS: OBSERVATIONS ON TWO USAID-RTG PROJECTS

Each project needs to develop a PMIS unique to its own management needs and structures. Two sample projects were identified for testing the applicability of the recommended PMIS strategy. In working with these project teams, specific principles for a project-based PMIS became relevant and are based on the following observations.

1. Some elements of a PMIS are partially in place and form a useful basis for building a more comprehensive and integrated PMIS. On the Mae Chaem Project(MCP), the field manager has recently initiated an internal system of monthly reporting for the units under his control, specifically with the IF teams. An "integrated activity and financial plan" for the coming year had also been prepared. These plans were not, however, linked with Activity Sheets which provide the management with more detailed, realistic tools for analysis of performance and deviations from plans. The MCP contractor is required to submit quarterly reports. But the purpose and distribution of these reports were in question, but can easily be made more effective management tools. Together, all of these provide a basis for an improved PMIS.

Finally, there are reporting systems being developed within USAID, e.g., by the Director's Office and by OARD, which seek

useful USAID management information. These beginnings of a USAID-internal PMIS provide a basis by building up on the lessons of previous efforts.

Principle: To the extent possible, a PMIS should be built upon existing practices and procedures and should be congruent with the information systems which have already been initiated.

2. The flow of information to decision-makers and operational levels must be timely to facilitate decisions and actions. Most reports on MCP were all due on the last day of the calendar month. This exaggerated the delay of information between project management levels. Activity reports could not be included in management reports, and so on. Attention to the timing of reports improves management information.

Principle: The timeliness of the flow of information can be as important as the information itself. The PMIS should stagger the flows so that they can be incorporated as quickly as possible into subsequent management reports at higher levels.

3. Both MCP and NERAD lack realistic, detailed implementation plans. There is a tendency to see plans and specifications in the Project Papers as definitive and rigid. This tendency is exacerbated by the "status" of donor agencies and the dominance

of donor agency representatives, who often are more committed to and familiar with the overall project design. Even when implementation plans were created, they still lacked the detail and realism to be useful for integration and coordination. Bar charts, for example, lacked key milestones of accomplishments for activities extending four, six, eight and twelve months. Common frameworks for project-specific implementation planning can overcome some implementation difficulties and facilitate the earlier identification of others. They provide the basis for project activation and communication for cooperating agencies and departments.

Principle: A commonly shared, practical approach for implementation planning must be adopted to lay a solid foundation for implementation and PMIS.

4. There is no clear distribution plan for project information and project reports. Since decisional responsibilities and latitude are not clearly defined or negotiated and since the project organization is confusing. Information tends to be diffused among several key actors. Consequently, that information is not effective for management decision-making. Reports and other information are not well used for management and are not action oriented. The contractor's report on MCP, for example, was given wide distribution, but there was no clear plan for its use as a management tool.

There was no plan for seeing that the report had been received at appropriate places, that key issues and inferences were drawn out for management purposes, or that it was summarized and specific messages distributed.

Principle: The PMIS must include a clear plan for the flow of information and the use of information for management purposes. Otherwise, project reports tend to float, get buried, or get lost.

5. Much important information is gathered and shared informally but does not become part of the record. This is exemplified by the continuous monitoring (even called "shadow-managing") of the projects by USAID project officers. Such information is gathered and shared through meetings, informal conversations and over the telephone where there is no record of agreements, events, assignments or issues. This lack of recording and reporting can limit project "hand-off" to new personnel. When important decision and events are "lost", there can be divergent interpretations and misunderstandings on agreements and assignments, and so on. There needs to be better capturing of all important information.

Principle: All efforts should be made to capture crucial informally obtained data and information as well as the formalized information. This includes

important personal and telephone conversations, agreements and decisions at meetings, and other informally gathered information.

6. Although there are a number of existing reports, even these tend to have limited value. Some do not have the support of persons who are preparing them which further decreases their validity and usefulness. This is especially true when they are not seen as valuable by front-line operating personnel. Their validity and usefulness are questioned as well as their format. Some reports examined were not comparative. They did not cite anticipated or projected plans, nor report on follow-up actions. Often, they tended to be singularly focused upon the reporting period. The reports also tended to be more narrative and descriptive rather than action-oriented. Often they were characterized by a stronger technical focus rather than a management focus. Recommendations, action plans and schedules were often missing.

Principle: Reports and reporting formats need to be revised to provide comparative and analytic interpretation of their information. The need to have a clear focus and use and should be more oriented to management needs of the primary receiving and sending decision-makers.

7. Project documents tend to be either in English or in Thai. This severely limits the audiences for key documents and tends to polarize between USAID uses and RTG uses, especially at the project level. Much of the "language" of certain documents and communications is further obstructed. There is a limited capability for quickly translating documents for use in either USAID or the RTG agencies. The result is limited attention to or delays in response to important reports and communications which are not in the "dominant" language of the receiving agency.

Principle: Important communications should follow basic, clear communication principles and should use simple direct language. Critical documents should be translated (or summaries thereof) for use in both languages. Likewise, for verbal communications, where there are many misunderstandings, a deliberate attempt should be made by all to ascertain that the messages are clear and shared.

8. The lack of systematic two-way communications seriously limits the validity and usefulness of existing reports. There was a feeling that project reports go into the "black hole" of the bureaucracies, both in RTG and USAID. This reinforces the impressions that reporting is only a mandatory requirement with no real value, that reporting is essentially a "policing" by top-level management. The lack of "top-down" communication

and horizontal communication to complement the "project-up" reports reflects the lack of timely and effective decision-making and communication which is required for coherent project management.

Principle: The PMIS must be developed in such a way that it promotes timely and useful two-way communications throughout the project organization. Special attention must to given to the flow of communication from decision to operation levels. This promotes more effective management and strenghtens the use of reporting and information for both decision-making and operations.

9. Limited effort is given to the testing data reliability or to systematically analyzing data to provide a longitudinal information basis for decision-making. Much information is analyzed quite informally. Analytic processes and filters are not clear or shared but are individually used to select, sort and interpret the data. Consequently, it is difficult to determine the relative importance of different data and information. This results in biases, both in information interpretation and management interventions, and has not been particularly effective for performance. The result is a confused history of what really happened on projects and disagreement on what the problems really are and how they can be addressed.

Principle: There needs to be a common framework shared among principle project personnel, and within the cooperating agencies, on the use and interpretation of data and information, on the relative importance of different types of data, and on responsibilities with respect to data and information management.

10. Much concern is expressed both in USAID and at the project level with meeting of administrative requirements of both host agencies and donors. Because there is no action plan with detailed assignment of responsibilities, some administrative matters tend to fall through the gaps, others are ineffectively shared between offices, some are neglected, and some are over-monitored.

Principle: The implementation methodology requires that administrative procedures be carefully planned at project initiation. The administrative processes can, to some degree, be standardized in models of sub-routines. These form the basis for monitoring, influencing and ensuring that administrative requirements are met for smoother project implementation.

11. The lack of definition of roles, responsibilities, authority and decisional latitude results in a "scrambling" to get scraps and bits of data and information. The result may be much information and sharing but it is not particularly productive. It does not support effective decision-making and can actually further confuse the already complex organizational functioning of projects. The energy lost in seeking control over or access to information is so exhausting that there is little time left for the actual management and decision-making, even when certain persons have a relatively clear idea of their particular roles.

Principle: Roles, authority, responsibilities and decisional latitudes need to be carefully defined. An information plan can be prepared which gets information to appropriate points in a two-way, reciprocal communication flow for effective management.

GETTING AND USING MORE OF THE AVAILABLE INFORMATION

The Five Step methodology creates a PMIS with capability for capturing important information for controlling a project and keeping it in line. The structures of the PMIS must establish reciprocal flows of information so that project level persons have information and authority to manage the project. Too often, it is assumed that information must flow to the top of an organization. There must be a reciprocal flow from the top to operational units as well. Within USAID and on projects, mechanisms must be agreed upon for the systematic return from information.

A common complaint is that information goes into the proverbial "black hole" and no one ever knows what is done with it -- in fact it is often true that much information is gathered and transmitted which just sits. Even when it is used, there is little attention to adequate feedback to those who supply information. This undermines their motivation and ultimately the validity and reliability of the information, making it less useful. Yet the information structures stay in place, and data is stacked up in files and on desks--unused.

Establishing reciprocal (two-way or multiple) flows of information is necessary to creating an effective monitoring and management information system. Without this commitment, without a participative process or without feedback, PMIS is viewed primarily as a "policing" tool primarily for the benefit of someone higher

in the bureaucracy, someone who is seeking control. It is not seen as useful for operations. In this case, there will be limited cooperation.

Involvement and participation is important at all levels for an effective PMIS and for effective project implementation. A deliberate goal must be to get all persons with important information to share and to have commitment to achieving project objectives. Informal information complements the formal. Much important information is not structured. It is carried informally --e.g., between peasant and extension officers, secretaries and field assistants, PPD and the Director's Office, and so on. The process of creating a PMIS should build interpersonal relationships and commitments so that this information is tapped. The action-training and organization development methodologies promote processes which tap this information source and management strength.

It is important that local and operation personnel are brought into the formal and informal information processes. From experience, we know that there is never a sufficient quantity of all relevant information available to planners and administrators. We also know that information, when available does not lead to the design of programs and projects which substantially change social characteristics such as distribution or levels of income, wealth, power or influence. In many cases, it is not reasonable to assume that rational or even conscious information supports social actions.

The problem with information may rest in the innate inexplicitness of relevant information, information which is embedded in local social processes passed upon systems of both feelings and actions and which cannot be articulated or explained in any open or scientific sense. These may be the result of feelings and interpretations of past as well as current events or experience. These are primarily sub-conscious, yet more powerful than the explicit, formal data or information readily available.

All too often externally formulated plans ignore local realities. Information is simply not available to planners who are brought in temporarily for the design. It is achieved only incrementally and through valid participation. Attempts to circumvent local leadership and operational level personnel by excluding them from communication, planning and decision-making often builds resistance, as well as ignorance. It certainly reduces the availability of information and resources. Yet this is the most important source of informal information.

The importance of the "process" of creating a PMIS cannot be overemphasized. Expanded, active participation in a task-oriented mode best characterized this process. The process is as important as the technical and structural characteristics of the PMIS.

The PMIS must be created by a process which encourages review and reshaping over time. Excessive reliance upon technocratic, highly deterministic approach to PMIS are unrealistic. The assumptions

about the predictability of human systems are not justified in practice -- indeed, the unpredictability of such is perhaps most predictable.

A sound PMIS strategy is based upon commitment to participation and to a process of involvement and reshaping as more and different types of information comes to light. Participation and commitment require a broadened distribution of authority for planning, implementation and evaluation. Action-training begins this process. But it is effective, only if adequate latitude is given to define and distribute authority. Top-level management must be actively committed to delegation and decentralization if a PMIS is to help achieve development program and project objectives.

The "process" of establishing and maintaining the PMIS is a critical issue. Through participation and influence persons agree on and become committed to basic objectives and assumptions. The foundations for information systems dealing with "real" information and power can be laid and are a necessary complement to formal PMIS. By acknowledging the role of the informal as well as the formal, a PMIS becomes fully effective and useful.

8-1

**SECTION THREE: IMPLEMENTATION PLAN**

**CHAPTER 8:  
SYSTEM DESCRIPTION**

OVERVIEW

The recommended PMIS applies sound principles of project management and control to the USAID/Thailand context. The system is designed to improve the reliability of project decision-making information available both to RTG and to USAID.

This chapter describes the key principles of USAID's PMIS and its twelve components.

DESIGN CONCEPTS FOR THE USAID/THAILAND SYSTEM

The design and operation of the USAID/Thailand PMIS is based on the following concepts:

- \* The primary purpose is to improve project implementation decision-making. It will monitor the execution of project activities and track key indicators of progress (physical, financial, organizational, etc.)
- \* The basis for information monitoring, control, and decision-making is a realistic implementation/operations plan for each project. These will be periodically updated and revised to maintain their validity.
- \* The implementation/operations plans of the RTG project team will provide USAID with the primary foundation for its PMIS. USAID's PMIS will draw from information primarily generated by RTG PMIS.
- \* The Project Officer is the "linking pin" between the project and USAID. He/She has primary responsibility for tracking project events, managing USAID responsibilities, and coordinating project-specific requirements with USAID staff offices.

- \* Standard procedures for "administrative sub-routines" will be developed and communicated, to simplify these complex but repetitive activities and better identify long lead-time requirements.
- \* A USAID/Thailand Project Implementation Handbook will be developed which defines implementation approaches, procedures and responsibilities. It will describe USAID/Thailand policy, and contain practical guidance (checklists for implementation monitoring, standardized reporting formats, administrative sub-routines, etc.)
- \* The full PMIS process will be applied to priority projects in the portfolio (based on size, complexity, importance to USAID strategy, and potential for management problems). An abbreviated version of the process will be applied to other projects. Small, and simple, or old projects may be exempted by the Mission Director.
- \* Office directors have discussion to add additional elements beyond the standard system requirements, to provide additional project control as required.
- \* System operations must be accompanied by good informal communications, "cross-talk", and coordination at all levels.
- \* Selected portions of the PMIS will be automated as the need and cost-effectiveness is demonstrated.
- \* Continued commitment and support at all organization levels is required for success.
- \* The system will be phased in gradually, and expanded as additional components and projects are put into the system. USAID and RTG system users will actively participate in the installation process.
- \* System installation occurs in two phases: Phase I will be completed during the first quarter of 1982, and will operate until the full system is installed. Phase II installation begins the same quarter and will be completed in one year.

### SYSTEM COMPONENTS

The twelve components have been organized into "project-based" and "USAID-based" components. This distinction is somewhat artificial

in that all 12 components are part of the same overall system. But the location where each component is developed and operates is either within USAID or in the field.

Figure 8-1 lists these components and identifies when each can be implemented. Three of the USAID-based components will be implemented during Phase I, the remaining nine USAID components and the four project-based components during Phase II.

The flow diagram in Figure 8-2 illustrates how these components relate to each other. The solid blocks are Phase I components; the dashed blocks, Phase II.

The key linkage between USAID and project components is action-focused reporting from the project. These reports "drive" the USAID system by providing validity to the USAID project officer's monitoring plan and to the mission milestone displays.

The full potential of USAID/Thailand's PMIS can be reached only when the project level information and reporting systems are put into place. Until a PMIS is developed for each project, the quality of information available to USAID is constrained by the lack of reality-grounded project information.

Figure 8-1: USAID/Thailand PMIS Elements

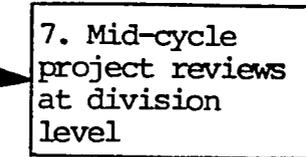
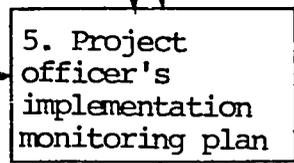
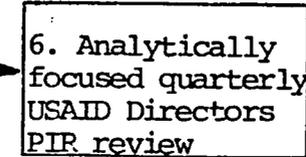
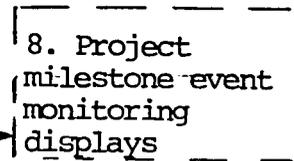
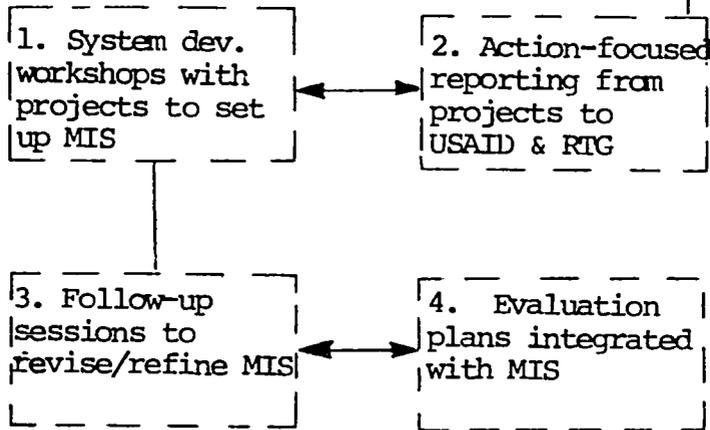
SYSTEM COMPONENT AND LOCUS	PHASE I (INTERIM SYSTEM)	PHASE II (FULL SYSTEM)
<b>PROJECT-BASED COMPONENTS</b>		
1. System development workshops with high priority projects to prepare realistic implementation plans and set up project MIS		X
2. Action-focused project reporting from project teams to USAID & RTG		X
3. Follow up sessions with projects to revise/refine implementation plans and MIS		X
4. Evaluation plans integrated with MIS		X
<b>USAID-BASED COMPONENTS</b>		
5. Project officer's implementation monitoring plans	X	X
6. Analytically-focused quarterly USAID Director's PIR reviews	X	X
7. Mid-cycle project reviews at Technical Office level	X	X
8. Project milestone events monitoring displays		X
9. Documentation of USAID administrative sub-routines		X
10. Training workshops for USAID & RTG in implementation monitoring and MIS		X
11. Automation of cost-effective MIS applications		X
12. Project implementation handbooks and PMIS guidelines		X

Figure 8-2: Relationships Of Systems Components

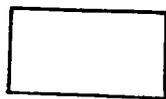
USAID-BASED COMPONENTS

The USAID/Thailand MIS consists of 12 integrated components which support and reinforce each other. The key "linkage" between project-based and USAID-based components is strengthened "action-reporting" by the project teams

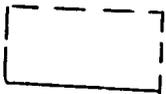
PROJECT-BASED COMPONENTS



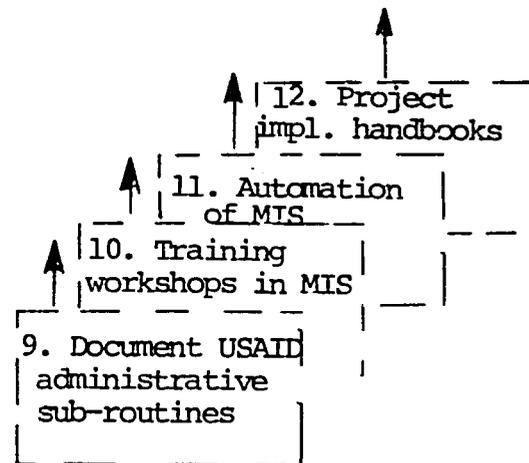
LEGEND



= Phase I system component



= Phase II system component



## PROJECT-BASED COMPONENTS

Component 1, system development workshops with the project teams to build the PMIS, was described at length in Chapter 6. Intensive workshops will be held for 5 high priority projects; an abbreviated process will be applied to the others.

Component 2, action-focused reporting from the projects, begin after the PMIS has been installed. Both RTG and USAID managers receive these reports.

Component 3, periodic follow-up sessions, are used to revise and refine, the implementation plans for priority projects. One or two brief workshops will be held for these projects in the three months following the intensive workshops.

Component 4, evaluation linked with project monitoring, builds evaluation directly into the project. Evaluation issues and requirements are specified during the initial workshops, to ensure the team collects the data to support formative evaluation. These sessions are "mini-evaluations" on an annual (or semi-annual) basis to review the data, refine the project design, and adjust the strategy.

All four project-based components will be implemented in Phase II.

## USAID-BASED COMPONENTS

Components 5-7 will be implemented in Phase I, the remaining components during Phase II.

Component 5, project officer's implementation monitoring plans, provide an interim method for tracking progress. These plans (described at length in Chapter 7) identify critical project indicators. The reliability of these plans will increase substantially after implementation of project components 1 and 2.

Component 6, analytically-focused quarterly PIR Director's meetings strengthens this existing process through more thorough preparation and presentation by the project officer, and more structured discussion among attendees.

Component 7, mid-cycle reviews at the technical office level, strengthen project control by providing more frequent review of issues not adequately addressed during quarterly PIR reviews.

Component 8, project milestone events displays, combines key indicators across the project portfolio into a single monitoring display. These indicators are drawn from the project officer's monitoring plan, component 5.

Component 9, documentation of administrative sub-routines, identifies and simplifies standard procedures for complex but repetitive mission responsibilities (such as contracting).

Component 10, training workshops for USAID and RTG, equips project staff to make better use of project information. Workshop topics include methods for data collection, monitoring, and analysis, as well as MIS use and maintenance.

Component 11, automation of PMIS elements, will examine cost-effective applications of mission computer equipment. Automation of the milestone tracking system is a high potential application; others will be explored.

Component 12, project implementation handbooks and MIS guidelines, documents PMIS procedures and provide practical guidance to USAID staff.

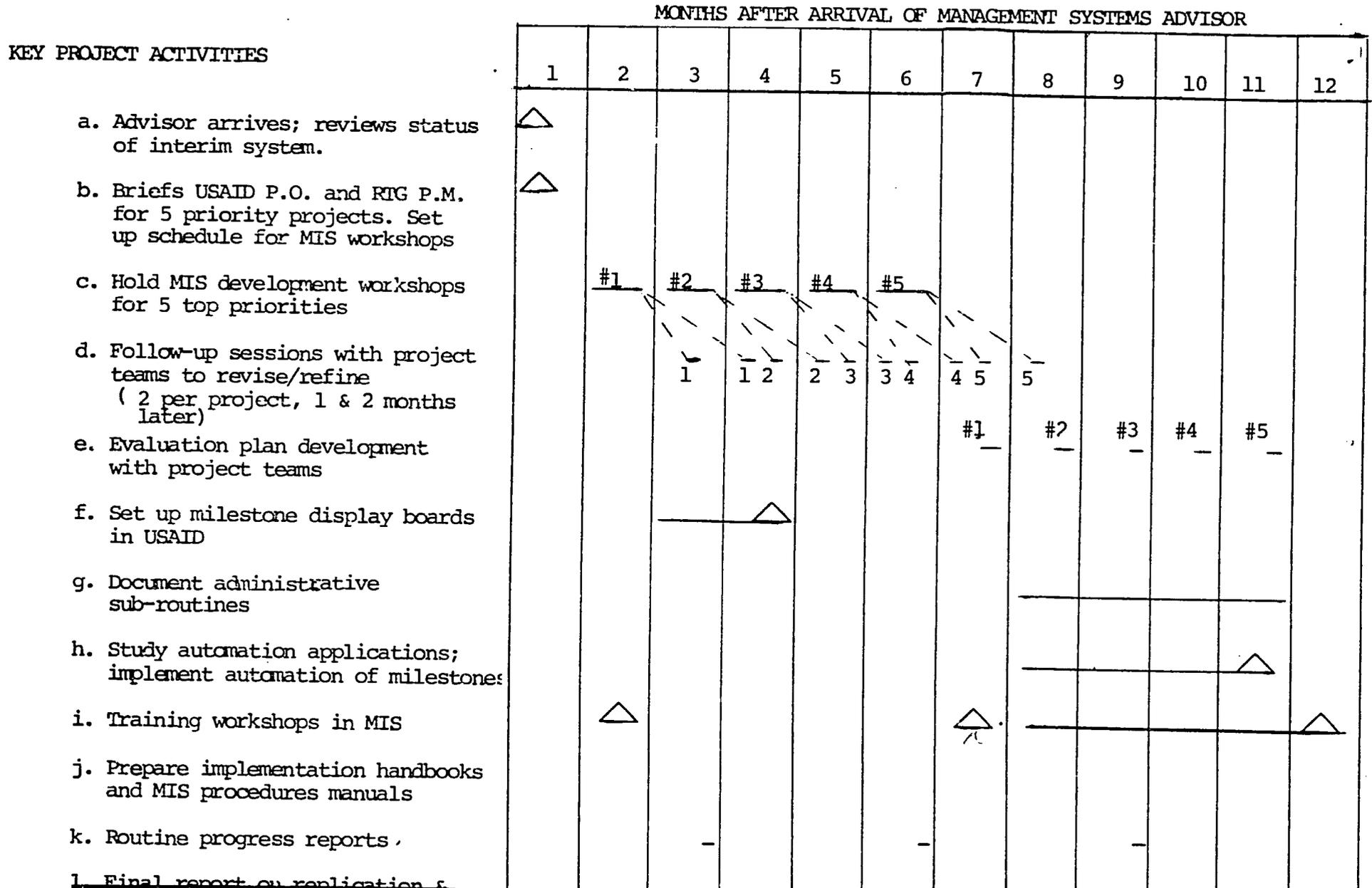
The twelve components are integrated; they reinforce each other and operate together to provide the benefit of improved implementation decision-making.

### IMPLEMENTATION AND RESOURCE REQUIREMENTS AND SCHEDULE

Phase I components are designed to add immediate value while minimizing time demands on project staff. The three components impose very modest time requirements. These time requirements should be viewed as an investment of time which will pay subsequent dividends in terms of more timely implementation and reduced problems. We estimate that 1-2 days of project officer time are required to prepare project monitoring plans, and 1-2 hours of office director time to review the draft plan and recommend revisions.

Minimum time is required in preparing for the quarterly PIR meetings. The questions for this review (in next Chapter) can substitute for the present methods used for project officer preparation. We estimate 2-4 hours are required for each mid-cycle project review. Phase I components can easily be implemented with existing staff resources. However, Phase II implementation requires an additional resource commitment, estimated at 18 man-months over a twelve month period. Given the already heavy workload on USAID

Figure 8-3  
SCHEDULE FOR PHASE II FULL SYSTEM IMPLEMENTATION



staff, it is unrealistic to expect that existing staff resources can be made available for Phase II implementation without a serious impact on current project responsibilities.

We recommend that USAID hire a full-time management systems advisor (consultant) for 12 months, supplemented by 6 months of TDY support.

Phase II implementation schedule in Figure 8-3 presumes one full-time advisor for 12 months with TDY support during peak periods (project workshops).

Alternatively, two full-time advisors for 9 months could implement the system within the same resource level. With two advisors for 9 months, earlier benefits could be expected. Two people simplify the project scheduling difficulties and permit tasks to be carried out in parallel. (For example, the evaluation designs could be prepared much easier, and a handbook preparation could begin in month 3)

Figure 8-4 shows the workday requirements for Phase II installation. The workday estimates for each component are divided between full-time and TDY resources. The management system advisor's time is equally split between project-based and USAID-based components, with 50% devoted to each. The TDY support emphasis is on project-based components -- 80% of the time is devoted to that.

Two components have somewhat lower priority to the success of the overall effort: documenting administrative sub-routines, and automation

(Estimates)

SYSTEM COMPONENT	RESOURCES (mandays)		COMMENTS
	management systems advisor	TDY support	
<u>Project-based components</u>			
1. System development workshops with 5 projects to prepare solid implementation plans and define project MIS	5x15=75	5x15=75	Develop project-based MIS for 5 highest priority projects at rate of 1 per month. All completed within first 6 months.
2. Action-focused reporting from projects to USAID & RTG	--	--	No additional time requirements. Included in #1 above.
3. Follow-up sessions to revise/refine	5x5 = 25	5x5 =25	Hold follow-ups to system development workshops, to revise/refine, test viability and relevance. For each project, have two 2-3 day follow-ups, within 2 months of step #1.
4. Evaluation plans integrated with MIS	5x5 =25	5x5=25	Additional workshops to develop evaluation plans for each project. May split into two parts -- first to define evaluation questions and data needs, second to analyze collected data. Complete during last 6 months.
<u>USAID-based components</u>			
5. Project officer's implementation monitoring plan	10	--	Monitoring plans for 5 priority projects developed in step #1. This item supports project officer to refine and update plans prepared during interim system.
6. Quarterly Director's PIR review	--	--	
7. Mid-cycle project reviews at division level	--	--	

Figure 8-4  
 MANPOWER REQUIREMENTS FOR FULL SYSTEMS INSTALLATION (continued)

SYSTEM COMPONENT	RESOURCES (mandays)		COMMENTS
	management systems advisor	TDY support	
8. Project milestone event monitoring displays	20	—	Select from project officers monitoring plan, display milestones on visual displays. Requires some administrative support from FSN staff. Do in month 3-4
9. Document USAID administrative sub-routines	20	—	Time depends on complexity and number. 20 days sufficient to document 2 sub-routines of medium complexity. To be done during last 6 months. Lower priority.
10. Training workshops in monitoring and MIS maintenance	20	10	Workshops for USAID & RTG on data collection, processing, and analysis; project implementation; operating the MIS. Hold in months 2, 7 & 12.
11. Automation of cost-effective PMIS applications	10	10	Project milestone tracking most likely application. Requires Wang upgrade to VS capability, link to embassy mini-computer, or purchase of inexpensive micro-computer. Do in last 6 months.
12. Project implementation handbooks and PHIS guidelines	25	—	Document MIS procedures for internal list. Compile all implementation-related materials for mission use.
Managing PMIS implementation and evaluating success; report writing.	25	—	Ad hoc functions connected with MIS implementation. Develop and use evaluation, to modify/improve MIS implementation. Document transferable findings in final report.
	260 days (12 mos.)	145 days (7 months)	

8-12

of cost-effective MIS applications. These should be reconsidered if a higher payoff use of resources becomes apparent during the project.

#### Implementation Guidelines for USAID

Many management systems which look sound in concept fail during implementation and execution. The reasons for such failures are seldom due to the technical deficiencies in the MIS. Rather, the reason is found in the psychology of how human beings respond to change.

When change is forced from without, people resist; when they are part of the change process, they are committed to making it work. Therefore, as much attention must be given to the human dynamics of system operations as to the rational mechanics of systems design.

Those required to invest time and energy to make the system work must see a benefit to them. Without perceived benefits, the response will be pro forma at best, compliance with the letter of the requirements but not the spirit.

AID's experience with PPT provides a case in point. Most project officers appreciated the PPTs simplicity and its ability to clarify complex projects. But the beneficiary was perceived to be Washington, not the project officers. When PPT use was made optional, it quickly fell into dis-use. The system, despite its merits "was owned" by AID/W, not by the missions. To gain user

commitment to operate the system, they must feel the system design reflects their ideas and perspectives. Such commitment is achieved through a participation designed implementation process. Without participation, the system is likely to be viewed as a "policing" tool for the benefit of higher management or someone who is competing for project control.

During this consultancy, we were particularly sensitive to involving USAID staff in all offices. We actively solicited their opinions, held several interim briefings, and reflected their ideas in our final product. We attempted to build a consensus behind the final recommendations and a shared understanding of how they were developed, both of which pave the way for acceptance and use. Those responsible for full system implementation must continue to give attention to this critical human dynamic.

Here are some experience-tested principles for guiding system implementation:

1. Effective implementation is congruent with existing practices and systems, and builds on and strengthens those systems. For this reason, we have built Phase I improvements around the mission's primary monitoring system -- the quarterly review.
2. Its development is incremental; it allows flexibility for evolution and modification based upon experience, the changing organization situation, and resource availability. For this reason, the implementation plan is comprehensive but flexible in the sequence of projects put in the system, the degree of automation, selection of administrative sub-routines, etc.
3. It includes all relevant persons in PMIS formulation. For this reason, the field project work should include

the full RTG project team and responsible USAID project staff.

4. It complements other organization management improvement objectives, because better information is only one of many factors which affect the quality of decision-making. Thus, the implementation approach includes workshops in managing implementation and utilizes performance-oriented management tools with wide application to other tasks.
5. It is based upon the principles of, and reinforces, good project management. Because of this, the approach does more than create a reporting system; it promotes clear and shared objectives, consensus on roles and responsibilities, realistic plans, feedback systems for review and modification, etc.
6. System implementation must be managed, with specific individuals assigned the job of setting it up and keeping it working. The person with overall responsibility must have sufficient stature in the organization and be supported with sufficient resources to get the job done. He should actively involve the project officers and staff whose projects benefit from the process. The suggested responsibilities actively involve mission staff in implementation.

#### ROLES AND RESPONSIBILITIES FOR THE SYSTEM

Building and maintaining the PMIS requires serious attention to the roles of persons who will be involved. The experience of the consultation demonstrated that specific activity roles and responsibilities are best clarified and defined on a project-by-project basis.

However, it is also necessary to clarify responsibility for initiating and sustaining the recommended PMIS effort. As a new USAID undertaking, the ultimate responsibility rests with the Director's Office. Because of the intricacy of relationships in the Mission, and to retain the priority of this effort, it is

recommended that this effort be directed from the Director's Office, with substantial delegation to the expected management systems advisor and TA support.

For each component, it is possible to designate general points of responsibility. The following is an attempt to illustrate how responsibility would be allocated for the related system components.

1. System development workshops: These would be primarily executed by a technical assistance consultancy staff in close collaboration with the USAID project officer and the RTG project leadership. For the projects designated by the Director, the TA would work with the project officer of each project in the design and conducting of the workshops. Other USAID personnel would be involved on an as-needed basis. This was the manner in which the sample workshops were conducted during the consultancy. With, for example, C. Alton and the RTG team working with NERAD the TAs to plan for the sessions and requesting the participation of persons like T. Grandstaff when this is judged useful.
2. Action-focused reporting from RTG projects: The execution responsibility will be the RTG project manager, but the USAID project officer is responsible to identify an expected pattern of reports and an action-focussed format. This can be based upon the terms of the project agreement and implementation letters, with the frequency and types of reports agreed to by the RTG project team and the project officer. The TA can provide guidance to project officers on reporting formats, frequency, and uses. For the projects included in the workshops, this will be one of the natural outputs of the workshops. For other projects, existing practices should be reviewed and modifications should be made to meet minimal AID reporting requirements while maintaining the usefulness of the reporting exercise for the RTG team.
3. Follow-up sessions to revise and refine the MIS: These sessions will be the responsibility of the TA consultants, in collaboration with the project officers. (The comments of #1 above are relevant to this component.)

4. Evaluation plans integrated with PMIS: The evaluation plans are the responsibility of the project officer and will emerge from the planning done in project workshops (#1 above). For other projects, special working sessions can be held to establish evaluation plans involving mini and periodic evaluations to complement the AID-mandated evaluations conducted through the O/PPD evaluation officer. The evaluation officer would assist with the development of these plans and would provide backstopping and support services in managing the major evaluations.
5. Project officer's implementation monitoring plan: Each project officer is responsible for developing an annual monitoring plan consisting of a list of indicators and an analysis workplan, as specified in Chapter 8. This plan should be reviewed with the head of each office or with working partners in the smaller divisions. The project officer is expected to update the plan periodically to meet the emerging needs of the project and the mission reporting system.
6. Analytically focused quarterly USAID Directors PIR meetings: These are obviously the responsibility of the Director's Office, though the schedule is coordinated by O/PPD. To establish the focus requires the mission-wide adoption of a standardized analytical framework based upon the analysis and monitoring plans of the project officer's implementation monitoring plan.
7. Mid-cycle project reviews: These will be the responsibility of the head of each technical office and should be seen as a follow-through of the previous PIR and as a preparation for the upcoming PIR. Unless otherwise indicated by the office director, they will involve the project officer and other persons relevant to immediate actions and issues.
8. Project milestone event monitoring displays: These will be prepared and managed by project officers, though technical offices may decide to have unified display areas and assign responsibility for charts maintenance to particular persons in the division.
9. Document project administrative sub-routines: This will be the primary responsibility of O/PPD with some assistance from the TAs and knowledgeable project officers who can show deviations particular to specific Ministries and Departments. O/PPD should be the major coordinator of this effort.

10. Training workshops in PMIS: These workshops will provide the best opportunity to get spread effect for system initiation from the five core projects and will be the responsibility of the TA consultancy team.
11. Automation of the PMIS: This will be the primary responsibility of the TA team, but will involve all sections of the mission in its use and maintenance. It is probably necessary to assign someone from a support office, either O/Fin or O/PPD to maintain the system when it is installed.
12. Project Implementation Handbooks: These should be prepared by the TAs in conjunction with project officers, O/PPD, EXO and O/Fin. However, in preparing these handbooks, a number of major decisions will have to be made regarding procedures and processes which will require the guidance of the Director's Office.

CHAPTER 9:  
PHASE I SYSTEM IMPLEMENTATION

OVERVIEW

PMIS success depends in part on how it is implemented. Many well-designed systems fail during implementation for lack of a sound implementation strategy.

Sound PMIS implementation strategy is time-phased. It does not introduce everything at once, but adds new elements incrementally and builds upon prior steps. Sound implementation strategy involves those who will use the system to build ownership and commitment at each implementation stage. Systems cannot be imposed by mandate; they must grow from the personal involvement of key users who derive benefits from participation. Implementation success requires as much attention to the principles of human and organizational psychology as to the principles of systems design.

Three of the twelve recommended system components constitute the Phase I "Interim System". The Phase I system can be fully installed and operating during the first quarter of 1982. Phase I provides an immediate payoff to USAID with little resource investment and builds a base for Phase II activities. Phase I implementation steps were initiated during this consultancy effort.

SYSTEM OBJECTIVES

The USAID interim system provides an immediate, incremental improvement in mission management, and is complementary with the broader strategy.

The interim system will be installed during the first quarter of 1982 and is designed to improve decision-making through better utilization of existing data. The interim system will help USAID staff at all levels to:

- \* Identify operational data requirements;
- \* Improve the analysis of readily available operational data;
- \* Detect significant information in terms of deviations and opportunities;
- \* Provide a basis for determining the implications and importance of information;
- \* Provide a basis for judging the impacts of modifications and corrective actions; and
- \* Identify needed actions on the part of USAID and RTG managers.

The Phase I interim system becomes fully operational during the first quarter of 1982. Phase I consists of three elements:

1. USAID project officers' implementation monitoring plans for all projects.
2. Analytically focused Quarterly PIRs.
3. Mid-cycle project reviews at the office level.

IMPLEMENTATION MONITORING PLANS FOR PROJECTS

Each project officer shall prepare and maintain a list of upcoming milestones/indicators on projects for which he/she is responsible. This applies to all projects, unless specifically exempted by the Mission Director. Such plans are to be reviewed in draft by the office manager by January 31, 1982 and finalized by February 28.

While the monitoring plans may be rough and imperfect, even the most elementary plan is better than none. The full system will build more substantial plans for key projects. In the interim, these monitoring plans will be used by the Project Officer to track major project milestones and to report to the Project Committee, and Office Director.

The Project Officer's plan has two dimensions. These can be compared to someone watching a sports event between two teams. The first question is, "What is the score?" The second question is, "How well are the teams playing?" The first question takes a reading on the present status on one dimension and looks for easily identified indicators, milestones or events which summarize development to date. This is done by identifying distinct timing, quality and quantity for major indicators, milestones and events being monitored.

The second question attempts to analyze performance seeking cues for causes of the present status and influences and predictions on future performance.

This is done by analyzing the performance on critical factors, looking for good or poor performance, opportunities as well as problems and judging the significance of these on future action.

Figure 9-1 -- Areas for Project Monitoring Focus and Attention

"What is the score?"

Indicators, milestones and events can be identified for:

- (i) Project Outputs and Work Progress
- (ii) Project Cost Estimates and Expenditures
- (iii) Resource Availability and Utilization
- (iv) Schedule Realism and Adaptability
- (v) Administrative and Organizational Accomplishments and Events

"How well is the team playing?"

Analysis of performance, potential and problems can be done for:

- (i) Project Personnel and Team Competence
- (ii) Commitment to Project and Objectives
- (iii) Strategy Effectiveness and Technical Performance
- (iv) Management Authority and Performance
- (v) Problem Identification and Solving Performance

MILESTONES AND INDICATORS

Every project has critical indicators related to ongoing project efficiency and effectiveness. These may be discrete events to be achieved by a certain date, e.g., advisor in place, seed distribution begins, evaluation plan developed, credit system operating, etc. Or they may be activities of continuing importance, e.g., advisor relationship with counterparts, effectiveness of project team, adequacy of resources, etc. In either case, targets and indicators can be set for each, using qualitative, quantitative and time measures. Deviations indicate potential problems and the need for managerial attention. Some examples of targets and indicators:

- \* Thai speaking extension advisor with 3 years rural development experience hired and in place by July 1982.
- \* Distribution of HYV rice seeds completed in 3 tambons. 1500 metric tons distributed to target population by April 1982.
- \* Credit system capitalized at 50,000 Baht operating in Uttradit project area. Mechanisms established for repayment in cash or rice. Interest rate not to exceed 7%. System staffed and operating by March 1982.
- \* Tambon organization plan required as CP developed and approved by April 1982.
- \* Farmer training completed by December 1982. 250 farmers trained at cost of \$15,000.

Important project indicators, milestones and events generally

fall into five categories:

- \* Project Outputs and Work Progress
- \* Project Cost Estimates and Expenditures
- \* Resource Availability and Utilization
- \* Schedule Realism and Adaptability
- \* Administrative and Organizational Accomplishments and Events.

The balance between these will vary with type and stage of project. The examples seen in Figure 9-2 are illustrative and for discussion purposes.

#### DEVELOPING THE PLAN

Developing these milestones and indicators is a process of thinking through what is important about the project. Good project officers intuitively do this as a matter of course. This step merely formalizes the process and facilitates better communication.

The completed monitoring plan will specify several important indicators in each of the five categories. Figure 9-3 is a format for developing the monitoring indicators.

This format is designed to be a useful tool for the project officer in working with the RTG project team, as well as a means for his/her own monitoring. Column One is for a brief description of the milestone, using quantity and quality descriptions as appropriate.

Figure 9-2: "What is the score?"

Identify distinct characteristics such as timing, quality, and quantity for the major indicators, milestones and events being monitored.

(i) Project Outputs and Work Progress

What are the key outputs and accomplishments for the period? What are the specific characteristics of the outputs?

Examples:

Building Constructed; dimensions and specifications; planned dates for major phases of construction; work to be performed by what person or agency.

Training Courses Conducted; subject areas covered; number of participants; timing and duration; performed by what person or agency.

(ii) Project Cost Estimates and Expenditures

What are the major variable cost items and to what extent are costs being maintained within tolerable limits?

Examples:

Are construction costs relatively consistent with bids tendered?  
Are travel costs and per diem being monitored to not exceed limits yet are being adequately used?

(iii) Resource Availability and Utilization

Are basic material and human resources being provided on a timely basis?  
Are these the right persons and materials for the prescribed tasks?

Examples:

Are the right persons at the right places at the right times? Are required equipment, materials and other resources in place in time? These may include training materials, equipment and supplies, etc. Personnel requirements are usually well specified in project plans and timing must be matched with project schedules.

(iv) Schedule Realism and Adaptability

Are key events identified and being met on the project schedule?  
Are major streams of activities on line for the period?

Examples:

Construction activities and materials procurement must be coordinated. Training plans and recruitment along with participant selection must be aligned.

(v) Administrative and Organizational Accomplishments and Events

Are critical administrative deadlines being met? Are administrative and organizational structures in place and functioning according to required sets of activities? Are key decisions being made on time?

Examples:

Are procurement and contracting processes on time? Are committee meetings being organized and conducted? Are decisions being made, recorded and transmitted for action?

Figure 9-3: Project Officer Monitoring Plan

Project \_\_\_\_\_  
 Project Officer(s) \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_  
 Date Prepared \_\_\_\_\_  
 Reviewed By \_\_\_\_\_  
 Covers Period From \_\_\_\_\_  
 To \_\_\_\_\_

9-6

1 Milestone Description	2 Action Agent	3 Timing			4 Comments/Implications for Project
		Planned	Latest	Actual	

Column Two identifies the action agent and is useful for separating USAID support actions as well as the multiple RTG actors. Column Three indicates timing -- the planned date, the latest in can occur without jeopardizing the project, and a blank space for indicating the actual date. Column Four provides space for explanatory notes.

This simple format has obvious value in working with RTG counterparts, especially if multiple agencies are involved. The roles/responsibilities can be easily clarified; the allowable "slippage" is shown, as are the implications of the event for the project. Figure 9-4 is a preliminary example on a similar chart developed during the consultancy with a project officer.

The best way to develop the plan is in conjunction with the RGT project manager, borrowing from the latest project networks and bar charts as well as your joint understanding of current project outlook. If detailed (and valid) implementation plans are available, many of the milestones can be picked up from these. The project officer may convene relevant project committee members to prepare or review the plans.

The monitoring plan should "look ahead" at least one year, with greater detail in the upcoming six months. At least, three or four events should be identified in each category for the next 6 months, with at least two or three for the following six months.

Figure 9-4: Project Officer Monitoring Plan\*

Project Mae Chaem Project Date Prepared \_\_\_\_\_

Project Officer Mr. Flaspholer/Atisai Reviewed by Chief \_\_\_\_\_

	MILESTONES/EVENTS	TIMING		COMMENTS/IMPLICATIONS
		plan	tolerance	
1.	Community indicator Ag extension agents in field and begin work	Dec. 81		
2.	Research committee operating HAD Committee appointed and meeting.	Dec. 81	Jan. 15, 81	Get Grandstaff candidates
3.	Survey equipment obtained.	Dec. 81		Survey period is Jan - April
4.	Second IF Teams Trained	Dec. 81		
5.	Training Center construction initiated	Dec. 81		Must complete before rainy season.
6.	Headquarters construction initiated.	"		" " " " "
7.	Extension Center construction initiated	"		" " " " "
8.	Land development 1st 1500 rai	Start in Jan. 82		
9.	Evaluation Scope of Work developed Includes questions & methodology	"		Send to AID/W. Requires.
10.	Research plan for shifting culti- vation developed. Advisor hired, develops plan, initiates work	Hire Mar. do plan- ing May	April	Hire to benefit from this rainy season.
11.	Training advisor in place. Advisor skilled in "training trainers" from Mins. who will train IF & farmers	Mar. 1 82	April 1, 82	Farmer training in May, trainer training in April. Must make decision on candidate in Jan. <del>Rewrite scope of work</del>
12.	Road rehabilitated 30 km. of roads with culverts, bridges, etc.	April 1	May 1, 82	Road completion vital for getting crops to market in Nov. 82.
13.	Land resettlement: 100 target groups families hold certificates to 1500 acres and ready to cultivate.	May 82	June	Rainy season starts May/June. Must plans then.
14.	Waterworks development, completed.	May, 82		
15.	Credit system established	May 82		
16.	Trucks on-site. 5 dumptrucks & 4 flatbeds obtained & delivered to site	May 15,	Oct. 82	Can accelerate to Mar. if DTEC pro- cures locally. If don't meet May target, not needed.
17.	Fire lighting equipment on-site	Jun. 82		Must find out if equipment is local available.

\* This working paper was developed by Mr. Flashpoler. Though still incomplete (persons responsible are not identified), it illustrates a monitoring plan expected on USAID projects.

This plan should be updated as necessary. The project officer may choose to update it at least every six months following the PIR submission to Washington or more often -- quarterly or monthly -- to provide a "rolling view".

A summary of the original and revised plans are submitted to project committee members and to the Mission Director. Events for the current period are the primary focus for discussion at the quarterly PIR sessions.

The indicators and milestones can be directly associated with the Five Step Implementation/Operations Planning methodology explained in Chapter Six. Figure 9-5 selects several indicators and relates these to the appropriate operations planning step. Comments and observations illustrate how the methodology and monitoring plan can be useful for management.

#### Responsibilities and Timing

The project officer is responsible for preparing the draft plan for his/her project. Such plans shall be prepared and reviewed with the office director by February 1, 1982. Copies of final plans will be submitted to the USAID director by February 28.

The Office Director is responsible for ensuring this requirement is met for all projects in his division.

Figure 9-5: Illustrative Indicators Related to Implementation Operations Planning  
(Specific Reference to Nae Chaen Project)

INFORMATION COMPONENT	INDICATOR	TYPE	RELATED OPERATIONS PLANNING STEP	COMMENT/OBSERVATION
Project Scope and Strategy	Project Strategy Statement Complete	E	Step 1: Project Strategy Paper	None prepared by project team, no Thai version of project paper so strategy not well accepted or understood at present, as seen by conflicts and delays, especially with R/D and D/LD.
	Reviews/Assessments of Strategy and its effectiveness (If team approach) Documented Approval of and/or modification of strategy - every 6-12 months	P	Step 5. Preparing Evaluation Plan Step 5. Preparing Performance Indicators Step 5. Communications and Meeting Plan	Presently being carried out by project team, with special attention of field manager and advisor through monthly meetings with IF teams. Information used for planning training sessions for new IF teams and for sharing experiences between IF teams
	Reviews/Assessments of Strategy and its effectiveness (Departmental Coordination at Field Delivery Level) Informal and Formal Coordination Meetings Result in Field Level Integrated Delivery of Outputs	P	Step 1.4 Prepare Project Charter  Step 2.3-4 Integrated Activities and Schedules  Step 3.2-4 Written Manpower Agreements, Responsibility Charts, authority Guidelines  Step 4 (all) Obtaining Resources	No Project Charter, Very late summary of major project components, limited understanding and commitment from Departments. Presently being addressed through field level monthly meetings coordinated by field manager.  Project not organized by activities and not yet integrated at field level. Attempt for integrated financial plan still not operational and not accepted by cooperating Departments  Project Manager has not mechanisms to coordinate project or to guide project resources, except those directly under his control (eg IF teams, advisor).  The lack of clarity on administrative procedures and sub-routines and responsibilities has led to confusion and lack of integration of resources (such as Health kit supplies) with IF team mobilization.

Figure 9-5 Continued

INFORMATION COMPONENT	INDICATOR	TYPE	RELATED OPERATIONS PLANNING STEP	COMMENT/OBSERVATIONS
Project Outputs and Impact	Output Specifications Defined in Operational Detail for Initiating Project	E	Step 2.1 Output Guidelines and Specifications	These are related to outputs of specific activities carried out by departments at the village level. The lack of discussion regarding guidelines has resulted in lack of agreement regarding participation of some implementing agencies, such as PFD who do not yet see the outputs as different from their traditional activities.
	Schedules in detail for immediate period with projections for future periods	E/P	Step 2 Work Planning and Scheduling	Initial projections become the basis for budgeting, planning, coordination. But detailed schedules must be created by the IF teams relative to their village development activities. This means a rolling plan must be kept if the schedules are to be responsive to emerging needs and processes
	Outputs Meeting Needs Identified by Villages	P	Step 5 PMIS	This will require IF teams to prepare their reports on a comparative and historic basis so a record of needs can be matched to the outputs of the department teams, the IF teams and the villagers themselves
	Project Purpose being achieved	P/E	Step 5 Evaluation Plan	Besides the mandatory evaluation by USAID, early mini-evaluations by the team and external persons can help shape the project and strategies at critical times as well as help build support for the project. This should be planned early so that the problem of irreversibility of actions is countered at early implementation stages.

These monitoring plans support the Director's Quarterly Reviews and are thus part of the PIR process. Responsibility for scheduling and follow-up of PIR meetings is delegated by the Director to O/PPD. O/PPD has similar responsibilities for assisting each office preparing these plans as needed.

#### PROJECT ANALYSIS PLAN

A monitoring plan focusing on indicators and milestones needs to be complemented by an analytic framework which helps to diagnosis the basis of problems (or excellence) in performance. The analytic framework focuses on critical factors, looking for good performance and opportunities as well as problems or difficulties. Many project officers are already asking the right kinds of questions about project performance. In Figure 9-6, we suggest five categories with illustrative questions and examples which are among the most critical areas for project performance analysis.

There is no formal paperwork requirement associated with analysis at this point for Phase I. It will be important, however, that USAID agree upon a general framework as a basis for project analysis and to guide project review meetings.

#### IMPROVE THE QUALITY OF DIRECTOR'S QUARTERLY REVIEW MEETINGS

An important system design principle is to strengthen and build from existing organization procedures. The mission's primary

Figure 9-6: Project Analysis Categories

Analyze the performance on critical factors, looking for good performance and opportunities as well as problems so that opportunities as well as difficulties are identified in the analysis.

(i) Project Personnel and Team Competence

Who are the key actors in moving the project? What skills and competence are required in relation to the project? How can I know how persons are performing? What are the deficiencies and implications; what are the strengths and implications?

Example:

Project management (e.g., Directors and Assistant Directors) must have management skills as well as technical skills. Field personnel must have relational skills as well as technical skills.

(ii) Commitment to Project and Objectives

To what extent is the project receiving priority attention at the appropriate administrative levels? Are adequate resources being given to the project? Do key people want it to succeed? How is it perceived in the environment? What are the deficiencies and strengths and the implications?

Example:

What is the level of interest in committee meetings and who attends? Are persons being shifted to solve problems quickly? To what extent is the project receiving attention in public and private discussions in the project area? Who is involved in project activities and who is closely watching the project?

(iii) Strategy Effectiveness and Technical Performance

How clear is the strategy and statements of the strategy? How is the project strategy related to technical decisions? Are central principles of the strategy being discussed and evaluated? Is the strategy being related to administrative and technical reviews? To what extent has the strategy or the technology been adapted to meet changing circumstances? What are the implications of the present level of understanding of the project strategy?

Example:

Is there an easily understandable, concise document explaining the project strategy? How widely is this distributed and is it referenced by the supporting and cooperating agencies? Is there a basis for examining the effectiveness of the innovative aspects of the strategy? Are key persons learning anything new about the application of new technologies introduced by the project--vaccination, participation, training methods, health habits, etc.

(iv) Management Authority and Performance

How clear is the management and administrative structures? To what extent have authorities, roles and responsibilities been agreed upon? To what extent are necessary actions being carried out by the proper persons? What is the record of administrative support? What are the administrative and organizational efficiencies and inefficiencies and the implications of these?

Example:

Are decisions being made on a rigid, autocratic and deterministic basis or are they being made developmentally and based upon project objectives? Is there good coordination and passing of information between key persons and agencies? Are there conflicts over roles and authority? Are key functions being neglected or delayed?

(v) Problem Identification and Solving

What types of problems are perceived--and at what project levels? How informed is the discussion of problems and is new information and analysis sought? How adequately is information being summarized and channeled to appropriate decision-makers and influential persons? How is information passed around? Who is trying to solve problems, and with what authority and resources? What are the implications of present approaches to problem identification and solving?

Example:

Are highly detailed problems being solved by managers who could delegate these? Are policy level problems the primary concern of executive agencies, such as AID and national level committees and agencies, or are they very involved in highly detailed activity-level problems? Are problems not discussed widely beyond the immediate project team? Are perceived problems discussed with the project team? What differences in problems are being perceived at the field level versus the central levels of the project?

on-going project review mechanism is the Director's Quarterly Project Review. These review meetings are the basis for submitting PIR reports to AID/W. They provide an important opportunity for project officers to bring issues to top mission management attention, and for top management to be informed of project status.

We recommend that the mission continue to follow its three part "meeting protocol".

The meeting consists of three segments. It starts by reviewing the status of action items agreed to at the last meeting (using as the follow-up memo prepared after every meeting.)

This is followed by brief Project Officer presentation and an open discussion of the projects -- its current status, problems and future prospects. This discussion includes progress of events on the monitoring plan.

The meeting comes to a close by summarizing the action items agreed upon and who has responsibility for each. Following the meeting, O/PPD prepares and distributes a memo summarizing these action items (which becomes the first part of the subsequent meeting.) If the PIR is due in Washington, this is prepared as well, using the standard format.

The most important improvement is to ensure comprehensive treatment of all issues. The Project Officer takes initiative here

by carefully analyzing the project and presenting key items to the group.

The questions in Figure 9-7 help focus thinking on critical project issues. These questions should be used by Project Officers as a management tool on an ongoing basis. They can also be used by office directors for ad hoc reviews, and by staff attending the Quarterly Reviews.

The Project Officer should be prepared to make a brief presentation on the project status, based on his/her prior preparation and analysis of the project. This gets the discussion off to a good start and guides the meeting. Figure 9-8 shows a good way to organize this presentation.

We recommend that the Director's Office ensure that the Project Officer is informed quickly on any decisions or actions taken with regard to assigned projects. This return flow of information from the Director's Office is as important as the flow to the Director's Office.

#### MID-CYCLE PROJECT REVIEWS

Project implementation requires issues-oriented reviews more often than quarterly. This project component strengthens management implementation control by addressing key issues mid-way between

Figure 9-7

(AUTHORS COMMENT: THESE QUESTIONS TO BE SUBSTANTIALLY REVISED TO TRACK WITH CATEGORIES OF MONITORING PLAN AND INDICATORS)

GUIDELINE QUESTIONS FOR QUARTERLY PROJECT REVIEWS

- \* What are the major progress indicators that you are monitoring at this time and what is the progress on these indicators?
- \* What have been the most significant events of the past quarter and what is their significance?
- \* What were the key events of the past reporting period?
- \* How frequently have the project committees met this quarter, and what was on their agenda? Was anything on the agenda -- mission? Why?
- \* Who is RTG providing the major leadership on the project time? What are their relations with other key project officials?
- \* How much of the intended physical progress has been achieved?
- \* What must be done by USAID in the next quarter to help this project?
- \* What was done the past quarter and how was the performance?
- \* What have been the actions on outstanding issues and assignments from the last report?
- \* What has happened on those actions and administrative sub-routines for which USAID has primary responsibilities during the past quarter?
- \* What is the planned physical and financial progress for this quarter?
- \* What are the projects plans for the coming quarter (including progress and finance details)?
- \* What are your own plans for the coming quarter?
- \* What are the most pressing problems on the project? (A minimum of four would be required -- regardless of how minimal -- and a maximum of ten -- more would be impossible or too detailed for executive levels)
- \* What are the alternative actions regarding these problems and the implications of the alternatives? How will the decisions be made? By whom?
- \* What actions are required by USAID staff -- Project Officer, O/FIN, O/PPD, Director? By when? What actions have already been taken?
- \* What do you anticipate will be the most significant events of the next quarter? Who will be responsible to ensure that these events can be turned to the advantage of the project?
- \* Have any of our key project assumptions changed? What are the implications for the project?
- \* What conflicts are outstanding, arising or anticipated on the project at this time? What are the implications of these?
- \* What is the weakest aspect of the entire project?
- \* What is your estimate of probable project performance, compared with the most recent implementation plans? Are any revisions necessary?
- \* Are there any project implications regarding Washington concerns (e.g., TDD threatened)?
- \* What were the key technical questions or issues of the past quarter/year and how were they resolved?
- \* What will be the key technical issues of the coming quarter/year?
- \* What are the major management issues at this time? What can/should USAID do? What are the implications of USAID interventions?

Figure 9-8

GUIDELINES FOR ORGANIZING PROJECT STATUS  
PRESENTATION AND DISCUSSION

- \* IMPLEMENTATION PROGRESS SINCE LAST REVIEW (activities started/completed, outputs produced, etc., based on monitoring plan. Discuss additional important progress not included in this plan.)
- \* CURRENT OR POTENTIAL PROBLEMS (and steps being taken or needed to resolve problems)
- \* STATUS OF PROBLEMS REPORTED EARLIER (whether or not resolved)
- \* ACTIONS REQUIRED AND REQUESTED FOR THE PROJECT (by staff Include officers, RTG actors, USAID director, AID/W, etc. long-lead time actions on distant future items.)

<u>Action Required</u>	<u>By Whom</u>	<u>Date to be taken</u>
------------------------	----------------	-------------------------

- \* CHANGES TO PROJECT APPROACH TAKEN OR RECOMMENDED (discuss any changes to most recent project design implementation plan.)
- \* IMPLEMENTATION TARGETS OR ACTIONS PLANNED FOR NEXT SIX MONTHS

<u>Planned action or target</u>	<u>Date expected</u>
---------------------------------	----------------------

- \* OTHER ISSUES OF INTEREST OR IMPORTANCE (unexpected)

the Director's quarterly reviews.

Mid-cycle project reviews will be held in each office for each project beginning the first quarter of 1982. These "nuts and bolts" reviews examine key issues and problems and ensure that each project is reviewed frequently. They provide a more in-depth discussion on issues not surfaced during the limited time of the director's reviews. Items from these meetings may be brought up at the next PIR meeting.

While the focus of these meetings is on problem resolution and action steps, they also can be used to:

- identify coordination actions with other individuals in the division and other offices in USAID.
- define recommended interventions with the RTG, AID/W and other donors.

The guideline questions in Figure 9-7 will assist these mid-cycle reviews. But they should focus more on follow-up and internal coordination actions from the Director's review, emphasizing project status and monitoring issues.

For complex projects or those in early implementation stages, these reviews should be held monthly. For others, a review every six weeks is sufficient. Office Directors may add additional guidelines and requirements for mid-cycle reviews. Because of the large number of O/ARD projects, we recommend the continued use of

the summary project status form which has been used for internal reviews. Completion of these forms (hand written or typed) by the Project Officer prior to the meeting makes these reviews more efficient.

#### CRISIS ALERT SYSTEM

Finally, we recommend that each office initiate a Crisis Alert System. The Crisis Alert System will be focused in each office, where the decision can be made whether it is necessary to involve others at any point between scheduled Director's Review meetings, e.g., Project Committee, O/PPD, O/Fin, or Director's office.

This amendment to existing practices in USAID can promote more effective, systematic approaches to crisis management. A Crisis Alert Report format is suggested in Chapter Six. This report, with designated channels for distribution and appropriate follow-up, can provide a better approach to handling the many crisis situations which cannot be anticipated and which arise between project reviews. The Crisis Alert Report should begin a file and is supplemented by Action Follow-up reports and other management tools such as records of telephone conversations and meetings. The crisis file is held by the project officer and is open until the crisis is resolved.

The crisis alert system is an important part of the PMIS. It strengthens management and prepares offices for the inevitable task of meeting crisis situations.

10-1

CHAPTER 10:  
PHASE II SYSTEM IMPLEMENTATION

OVERVIEW

The three components of Phase I establish the base for the nine Phase II components. Phase II implementation begins the first quarter of 1982, and can be completed in 9-12 calendar months. It requires an estimated 18 man-months of full-time and TDY resources.

This chapter describes how the remaining components will be implemented. It begins with the project-based components and follows with USAID components. Responsibilities and qualifications of the management systems advisor are then discussed.

PROJECT-LEVEL PMIS DEVELOPMENT

The implementation/planning process described in Chapter 6 will be applied to priority mission projects. This process builds a solid implementation foundation (including clear roles and responsibilities, realistic implementation plans, project-level PMIS) and makes possible reliable reporting from the projects to USAID and the RTG.

Members of the RTG project team and others with project roles and responsibilities (the USAID project officer, representatives of other agencies, etc.) would participate. Approximately 10 working days are required. These can be spread out over 3 to 4

weeks, to permit additional data collection between work sessions. Two skilled trainers are required (the management systems advisor and a TDY consultant) as well as relevant USAID personnel. The process may involve simultaneous work with subgroups.

The recommended installation schedule is one project per month, with priority to large, complex, projects. The mission has tentatively identified 5 high priority projects -- NERAD, Mae Chaem, NESSI, DDMP, and Non-conventional Energy Resources.

The remaining projects will not undergo the full methodology. However, individual project officers may wish to develop some of the system "tools" for these other projects. The management systems advisor will conduct a workshop for USAID and RTG staff interested in learning how to use these methodologies.

Follow-ups with each team will revise/refine the PMIS. Such 2-3 day follow-ups will be conducted within 2 months of the intensive workshops. Methodological lessons learned during the initial and follow-up workshops will provide the TA team with valuable insights for refining the process and developing replication of guidelines.

Evaluation issues and data needs are identified as part of these sessions. During the last six months, evaluation workshops will

be held with priority projects to analyze the data and refine the project strategy. (Specific timing of these workshops will depend on the most useful period for the project.)

#### PROJECT MILESTONE MONITORING DISPLAY BOARDS

Milestone events for all projects will be selected and displayed (centrally or in each technical office) to highlight project progress and problems. They provide an overview of the entire portfolio and focus attention on key issues. Project officers will select milestones to put on display boards. Each project will display some 20 to 30 critical events during a 12 month period. The displays will be periodically updated, say, following the Quarterly Reviews.

The display boards will be established during month 3 of Phase II. Initially, the displays will be of a simple manual "technology", (such as a grease-pencil board to permit easy updating or revision).

The milestone displays can be automated later during Phase II. (assuming Wang system upgrade to VS capability, adequate links to the embassy system, or purchase of an inexpensive micro-computer).

With automated project milestone events, users could easily "look ahead" at events upcoming for the period of interest (a single month or several months) for individual projects or groups of projects.

As milestones are achieved, delayed, or missed, additional narrative could be entered to record such actions. This provides a cumulative project history extremely useful for evaluation.

A simple variation is to add a responsibility code for key activities (including RTG action agents, individuals in USAID or AID/W etc.). One could "pull" the action items by responsible person or organization entity, for a single project, groups of projects, or the entire portfolio. Action items and responsibilities could be pulled by other codes; such as type of action or timeframe. Tracking action responsibilities by individual and target date ensures that critical actions don't slip through the cracks.

#### DOCUMENTATION OF ADMINISTRATIVE SUB-ROUTINES

Much of USAID's internal activity is devoted to administrative complex and detailed but essentially repetitive "administrative sub-routines", such as for various types of procurement loan/grant, commodity/services, and direct/host combinations.

Documenting these would clarify the steps involved, increase understanding among mission staff, and save time in executing them.

Documenting these is important because much of this knowledge is in the minds of individuals. Unless captured, this knowledge is lost when they leave.

USAID/Thailand has recently taken an important step in this direction. During the period of this consultancy, Khun Opath of

O/PPD developed detailed flow charts explaining the actions and actors involved in host country grant-financed contracting, and presented this information to technical offices. (See Appendix 3)

Documentation of other important sub-routines can begin at any time but is expected to have TA attention in Month 7. Mission staff will identify the most useful areas for documentation. Prime candidates include the project implementation start-up process, and various O/FIN functions.

#### TRAINING WORKSHOPS

Training workshops for USAID and RTG staff are planned during months 2, 7 and 12 to equip project staff to better use project information. Topics will include project monitoring, data collection methods, and evaluation design, as well as PMIS use and maintenance.

#### AUTOMATION OF MIS APPLICATION

Phase II will examine automation potential and identify cost-effective applications.

But first, a couple of caveats: Automation is too often regarded as a panacea to management information problems. Information seems to have more "authority" when it appears on a CRT or computer printout. But computers are essentially idiots, with one saving grace: they are good at storing, organizing, manipulating, and presenting the information put in them. But the old programming expression "GIGO -- garbage in, garbage out" warns that the quality

of information the computer puts out is no better than the information put into the system.

Second, an automated system must be updated and maintained. The more sophisticated the application, the more resources required to maintain the quality of information.

The following paragraphs suggest some possible applications. It is intended to stimulate mission staff thinking about the most useful applications.

#### Mission Milestone Events

Tracking milestone events is a relatively simple and useful application. Off-the-shelf software for such applications is readily available (standard software from Wang includes MAPPS -- Management and Project Planning System, and CM-4 -- Construction Management System.)

#### Master Mission Calendar

This application provides a thorough overview of all upcoming events and ongoing activities in the mission. Such items as contractor TDY arrivals, evaluation activities, project design and special analytic activities, reports and documents due in Washington, staff travel dates, and similar information of both a management and administration administrative nature could be included on this "master calendar". It would identify periods of peak workload and assist in redistributing discretionary activities and identify when TDY assistance is required.

The master mission calendar could also include key items of interest in the RTG and AID/W planning cycle.

#### analytic applications

Numerous possibilities exist for analytic applications, using statistical and data-base manipulation software. Regression analysis, correlations, and other statistical work could provide insights into cost effectiveness, project impact, spread effect, etc. Such applications are of obvious value for project/program design.

#### IMPLEMENTATION HANDBOOKS AND PMIS GUIDELINES

These practical products guide USAID staff in managing project implementation and "running" the PMIS. They will describe USAID/Thailand procedures and responsibilities, and include monitoring checklists, reporting formats, administrative sub-routines, etc.

Data for writing these will be collected during the system installation efforts. They are of particular value for continuing system use after the advisors job is complete, and are useful for orienting new staff.

#### ROLE OF THE MANAGEMENT SYSTEMS ADVISOR

Implementing the full system requires the dedicated effort of qualified technical experts. The mission explored several alternative approaches for getting this expertise -- short-term TDYers, institutional or PSC contracts, drawing on in-house staff, local resources, etc.

The recommended approach is to contract with a full-time management systems advisor (consultant), for a period of 12 months, with six months of TDY support.

The management systems advisor(s) must have at least 5 years experience in international development and management training.

Additional qualifications include:

- experience in implementing and maintaining multi-level project management and reporting systems
- significant "action-training" experience assisting project team develop project plans and implementation documents for rural development and agriculture projects
- experience in developing or implementing management systems for AID/W or field missions
- experience in writing support documentation and training materials for both USAID and host country audiences
- understanding of USAID planning and management systems, both in AID/W and in the field missions
- project-level training experience in Thailand, an understanding of the Thai bureaucratic and administrative system, and demonstrated ability to operate effectively in that environment.

Specific responsibilities (described in language appropriate for a scope of work) are to:

1. Implement, by month 6 of the project, field-based implementation, monitoring, and reporting plans for the following USAID/Thailand projects: Mae Chem, NERAD, NESSI, DDMP, and Non-conventional energy. Such

plans shall be prepared with the active participation of RTG and USAID officials responsible for project implementation.

2. Establish, by month 4, an internal key event milestone tracking system which displays milestone events for all mission projects. Maintain and update the tracking system on a regular basis.
3. Develop and conduct training programs for USAID and RTG staff on the following topics: project monitoring, information analysis, evaluation design, and data collection. Such training programs will be delivered 3 times during the 12 month period, with the first program during month 2. Prepare all training materials, including workbooks and visual aids.
4. Develop and standardize mission-internal "sub-routines" and assist in streamlining the handling of these procedures. This task is to be accomplished by month 12 of the contract period.
5. Develop specific recommendations and formats for meeting AID/W needs by integrating the PMIS with the PIR system.
6. Prepare a Project Implementation Handbook by month 8 of the project, working closely with USAID staff. The handbook will describe implementation responsibilities and procedures, and provide practical monitoring guidelines, checklists, and formats.
7. Identify cost-effective automation applications, and assist in automating selected portions of the PMIS. This task is to be completed by month 11.
8. Manage overall PMIS implementation, and advise mission staff on other needed improvements.
9. Identify and recommend the best means of institutionalizing the PMIS process in the USAID and RTG environment. This task will be completed by month 12.
10. Define practical methods to evaluate the success of the PMIS implementation effort, and evaluate the status not less than quarterly.
11. Prepare quarterly progress reports to the USAID Director. Document the experience of installing PMIS in USAID in a final report designed to assist in replication elsewhere.

The last three tasks are of particular importance. USAID/Thailand is undertaking an important and innovative effort aimed at resolving a critical constraint to successful project implementation. The current consultancy effort has demonstrated the potential payoff, and developed a logical implementation strategy.

The full payoff from this investment will occur not just in Thailand, but in the lessons gained that can assist USAID missions worldwide address similar concerns.

A P P E N D I X 1  
Contract and Scope of Work

A P P E N D I X 3  
Examples of Administrative  
Sub - Routine

PROCESS CHART FOR PROCUREMENT OF COMMODITY UNDER GRANT FUNDED PROJECT

