ANALYSIS AND DESIGN FOR A PILOT TRAINING SEMINAR IN PROJECT MANAGEMENT FOR THE GOVERNMENT OF HAITI

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EXECUTIVE SUMMARY

The goal of the ICMI project was to provide the basis for improvement in project management by the Government of Haiti through needs assessment and training design. The principal objective of the project was creation of a pilot training seminar design and curriculum for upgrading and reinforcement of the skills of individuals in the Secrétairerie d'Etat du Plan and other GOH organizations involved in the project management process. The skills in question are the practical skills of project management (rather than general academic or technical skills) and the training needs are requisites of the actual project management process -- not of a hypothetical or formally prescribed system.

Method

The first step was development of a schematic model of the GOH project management process. ICMI constructed the schematic model from data acquired in interviews with a number of officials in the SEP and technical ministries. The interview process is discussed in Section II of the report, and the schematic model is treated in detail in Section III.

The schematic model was analyzed by the ICMI team. Project management roles and tasks were defined and the skill requirements of these roles detailed. Analysis of skill requirements and current skill levels provided the operational basis for training design. These analytical processes are treated in Section IV.

Finally, a pilot training seminar was designed. The methodology, scheduling, and draft of the curriculum were developed by the ICMI team and assembled into a modular design. The pilot seminar is described in Section V and the appropriate steps to implementation are discussed in Section VI.

Results

The project produced a number of results, including the analysis of the project management process. However, the major result is a needs-based modular training design for upgrading project management skills in the GOH. The pilot seminar has several important features:

- It is based on actual management needs. The seminar is grounded in the reality of the project management process, not in an abstract or formal prescription of organizational design.
- It is flexible. The seminar will be tailored to individual needs based on the skill requirements of the job, the critical status of the job in the project management process, and the current skills of the individual.

- It is integrated into the work of participants. Individuals will work during training, thus minimizing disruption and providing for rapid transfer of skills to the workplace.

- It is designed with intercultural sensitivity. The seminar is designed to meet the needs of the Haitian setting. At all points, the design and implementation reflect the Haitian context of project management. This can make a vital contribution to ensuring training effectiveness and GOH support.

The training seminar can show concrete results within a year of implementation. It provides a rapid, effective approach to improvement of project management in the Government of Haiti.

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APPENDICES

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SECTION ONE

PROJECT SCOPE AND ACTIVITY

The primary purpose of this project has been to design a pilot training seminar to improve project management in the Secrétairerie d'Etat du Plan and in other agencies of the Government of Haiti that are involved in the project management process. The pilot seminar is intended to provide a basic training design and curriculum which, if implemented, could augment the skills of individuals involved in all aspects of the project management process, from initial project conceptualization to ex post evaluation.

The focus of this project has been entirely practical. Its objective is to improve project management in the existing system within the GOH, not to redesign the project management system. We did not start from a theory of project management or a formal, legal prescription for the Haitian project management system; we began by formulating a behavioral description of the project management process as it is understood by its participants.

The project management process was examined without evaluative judgement. Just as this is not an exercise in organizational design, it also is not an evaluation study. The scope of judgment exercised by ICMI in analyzing project management processes was confined to questions of management effectiveness within the existing system.

This does not imply uncritical acceptance of the status quo. The support given to this project by the SEP is ample evidence of GOH concern about

management improvement, and this concern was echoed by many of the individuals interviewed. In responding to this concern, ICMI chose a conservative approach: management improvement through training to improve skills within existing systems. The approach is conservative, but well chosen for the Haitian context. It allows sensitivity and adaptability to the social and cultural setting, thereby increasing the likelihood of the continuing support of GOH and the acceptance of the training regime by the participants. We believe that this approach enjoys a substantial possibility of success where a less sensitive one would be likely to fail.

The decision to base training design in existing project management processes imposed a significant research component upon the project. Before a pilot seminar could be designed, project management processes in the GOH had to be charted and analyzed, key tasks defined, and skill requirements elaborated. ICMI accomplished these tasks by conducting a series of interviews with management personnel in the SEP and technical ministries and analyzing those interviews to provide information on the project management process. The interviews and analysis served as the foundation for training design and curriculum development.

The research and analysis carried out on GOH project management processes offers an ancillary benefit. It can provide important insights into the process for USAID. This benefits both USAID and the GOH. Any increase in mutual knowledge and understanding pays dividends in the ability of USAID to provide effective assistance to Haiti.

BACKGROUND AND SETTING

The Haitian setting makes concern with improvement in the capacity to formulate and manage development projects particularly compelling. Haiti is among the nations with the lowest per capita GNP in the world today.[1] It is a rural and agricultural country, beset by persistent problems in nutrition, health, education, and productivity. Domestic human and capital resources are severely limited, and initiatives from foreign donor agencies play an important part in development planning.[2]

The availability of donor funds has not, in recent years, been a primary constraint upon the formulation of projects. Limitations in the absorptive capacity of Haiti present continuing problems for the identification and presentation of attractive projects for external financing. Although basic factors such as the shortage of qualified personnel and domestic capital will continue to limit absorptive capacity, improvement in project management offers important opportunities as a point of intervention to increase absorptive capacity.

These opportunities are particularly great at this time. Project management processes are currently undergoing formalization and organization under the auspices of a relatively recent agency, the Secrétairerie d'Etat du Plan. Organization and staffing at the SEP and counterpart programming units in the technical ministries are taking place on a continuing basis. The situation

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[1]"The Haiti Country Development Strategy Statement, FY82", United States International Development Cooperation Agency, Washington, DC 1980

[2]Ibid.

offers important opportunities for secondary leverage as well as direct impact on the project management process.

THE PROJECT APPROACH

The project included three major phases, some of which took place concurrently:

1. Field interviews with individuals involved in the project management process at SEP and in the programming units of two technical ministries: Agriculture and Public Works, Transportation and Communication.
2. Analysis preparatory to training design. This included:
   - Analysis of the field interviews
   - Formulation of a schematic model of the project management process
   - Identification of key management functions within that process.
   - Definition of relevant generic project management skills
   - Analysis of the skill requirements for all key functions in the project management process
3. Curriculum development and training design to meet skill requirements.

MAJOR RESULTS

The major result of the research and analytical work carried out by ICMI was identification of the project management process. A significant number of cases appear to deviate from this process (as discussed below, Section III) but there are definite operational norms for how the process should be carried through. It is an operational system that directs project management from initial conceptualization to ex post evaluation and feedback to

project identification. Individuals from a variety of agencies of the GOH are involved, as well as external donor and international organizations.

A schematic model of this process is presented in some detail in Section III. However, this model must be interpreted and used with due caution. Although it grew out of interviews with management personnel on several levels of a variety of organizations, it is no more than an approximation of the real process, combining elements of actual project management with functions that are only partially fulfilled.

The rigor of the schematic model is limited primarily by the scope of the ICMI project. The schematic serves the purposes of the training design without the precision of a full model. An exacting model of the project management process would have required a rigorous organizational analysis--something substantially outside the scope of this project. However, the schematic model elaborated in Section III does provide an ample basis for analysis of skill requirements for curriculum design.

The other major product of the project is the pilot training seminar. The seminar offers a needs-based design for a training program that is sufficiently flexible to serve the full range of requirements of the GOH. It offers options for tailoring training to the individual job, its position in the project management process, and the current skills of the incumbent. Above all, the seminar is designed to be practical, to deliver skills directly applicable to project management with a minimal level of disruption of normal management activities.

SECTION TWO

FIELD WORK

Field work involved interviews with individuals on several levels of management in three directorates of the SEP and in the programming units of two technical ministries: The Ministry of Agriculture and the Ministry of Public Works, Transportation and Communication. The field work began with meetings of the ICMI team and various SEP senior officials including the Secrétaire d'Etat du Plan, M. Pierre D. Sam, and the Directeur General, M. Claude Veil. M. Emile Toussaint, Conseiller auprès du Cabinet, SEP, provided invaluable service as liaison with the ICMI team throughout the process, arranging interviews and performing introductions inside and outside SEP. M. Claude Veil also gave generously of his time, reviewing the schematic model of the project management process after it was completed.

Interviews were conducted by two ICMI groups, each composed of a group leader who was a native French speaker and one or two specialists in management analysis and training design. All members of the teams possessed some French proficiency, and interviewing was conducted completely in French.

Most interviews involved more than one respondent, with the result that in ten sessions, a total of 22 members of the GOH and two technical advisors from OAS and UN were interviewed. Appendix B contains the distribution of personnel interviewed.

The initial one of the ten interviews was conducted by the full five-person ICMI project team. This was done in order to provide a common orientation

for the team and to permit the full team to carry out some of the operations normally associated with the pretest of an interview. After the first interview, the ICMI team split into two groups lead by the two native francophones. The groups completed the remaining nine interviews over a period of three days, for a total of ten interviews, including the initial full team session.

The SEP interviews included the following sessions:

1. Direction de Promotion des Projets. This was the initial, full team interview.
2. Direction de la Coopération Externe.
3. Direction de Contrôle et Evaluation.
4. Direction de la Coopération Externe. Additional interview.
5. Direction de Contrôle et Evaluation. Additional interview.
6. Direction de Promotion des Projets. Additional interview.

Interviews conducted in the technical ministries included:

1. Unité de Programmation of the Ministry of Agriculture
2. Unité de Programmation of the Ministry of Agriculture. Additional interview.
3. Unité de Programmation of the TPTC (Public Works).
4. Unité de Programmation of the TPTC. Additional interview

Additional interviews generally involved personnel not previously interviewed. The effort was made to include individuals from both senior and junior management among the interviewees in each agency.

INTERVIEW ISSUES

The interviews were relatively unstructured. They were conducted with a general outline of major issues rather than a structured questionnaire. This approach was dictated by the circumstances and purposes of the interviews. A limited number of management personnel were to be interviewed on a broad range of issues, rather than a large sample surveyed on a smaller number of questions. The use of a structured questionnaire would have obstructed the interview process, and any pretense of quantitative analysis would be misleading.

The interview dealt with three major areas:

- A general overview of the project management process as it actually operates in the GOH. The definition of the process and the implications of that definition are discussed below in Section III. The interview dealt with the internal processes of the organizational unit of the respondent and with inter-unit project management processes.
- The skills necessary to carry out the project management functions of the organizational unit. This often included discussion of the skills required by other related units.
- Areas where skills were in need of reinforcement. This, again involved discussion of skill requirements within both the organizational unit of the respondent and other related units.

The project management process was construed in its most general form. The description began with sources of the initial idea for a project and followed it through project identification, design, implementation, evaluation, and feedback to the conceptualization of new projects. Emphasis was placed upon description of the actual project management process rather than any legally or ideally defined system. In the description of that system, however, the attempt was made to elicit a characterization of how the functions

ought to be carried out as well as how they are executed. The results is a schematic model which is in one sense a "prescriptive" outline of the project management process--it attempts to chart what the actual process would look like if it were working close to potential.

The prescribed process implies a set of necessary functions and tasks. These were the object of the second part of the interview. The skills examined were ones that are directly linked to the project management process, not the more general (although vitally important) ones acquired in university or technical education. The distinction is important for two reasons. A training seminar cannot hope to impart those general skills; it requires university education to learn economics or engineering. And while general and technical skills may be vital to job performance, they are not sufficient to ensure effective project management. Specific project management skills are required as well.

Finally, the interview covered shortfalls in human resources available to meet those skill requirements and examined means of bringing performance close to optimum standards. Again, the skills at issue were the practical means of project management, not more general articles of individual technical or educational background. A number of issues emerged in this part of the interview, including the need for additional skilled staff, as well as the requisites for upgrading skills of existing staff.

ANALYSIS -

The analysis began with careful examination of the information gleaned during interviews, in order to identify the actual project management process and the type of activities to which it applies. The latter issue proved particularly problematic.

Definition of "Project" Activities

The use of the term "project" is ambiguous within the GOH. A number of activities viewed as "projects" by the Haitian personnel only partially followed the project management process outlined in the schematic model. These activities lay outside the project management process model for the following reasons:

- They were on-going activities that were referred to as "projects" but that did not follow the normal management process despite nominal reformulation on a periodic basis.
- Activities that have sources of funding outside the normal budgetary process. Parastatal organizations are an example; they enjoy considerable autonomy with regard to usual management processes.
- Activities managed under the independent control of policy-making bodies.

Despite the existence of these exceptions, there is a project management process which apparently touches a large enough number of projects to give it practical importance.

Some additional disclaimers about the scope of the analysis are appropriate. As pointed out above, the project was not primarily a research study in organizational analysis. The scope precluded collection of the type and

quantity of data that would have been necessary for a rigorous analysis and the formulation of a complete model of the project management process. Although some supplementary information was gathered in pre- and post-project interviews, the research lacked a real pretest and follow-up was confined to the Director General's review of the schematic model. In many regards, ICMI would now be very well prepared to design and mount a rigorous organizational analysis of the GOH project management process, but the present project cannot pretend to supply one.

The scope of this project also precluded a number of other potentially valuable pieces of research. The Direction de la Programmation Economique et Sociale of the SEP was not interviewed, despite its role in formulating long-term development plans and in providing input to other units of the SEP. The Finance Ministry also was not included, despite its critical role in the processes of implementation. All information about the activities of these two organizations that was used by ICMI was acquired secondhand from interviews in other agencies. ICMI also did not have the opportunity to carry out case study of any field projects or interview any project managers. Had this been possible, it might have provided useful insight into project implementation and administrative coordination within the technical ministries.

Finally, foreign donors were not interviewed--except in the informal sense that USAID provided feedback. Valuable information on the problems faced by donors in identifying viable projects might have emerged from such contacts, but they too did not fall within the scope of the project.

SECTION THREE

THE CONCEPTUAL BASIS OF THE SCHEMATIC MODEL

As indicated above, the schematic model of project management processes that is presented in Figure 1 combines a behavioral approach to identification of management functions with prescriptive elements of their definition. The key management functions identified in the model are not intended to describe the full organizational roles of the units which perform them. They are functions carried out at points in a process, and a single organizational unit may appear at more than one point in the diagram. The key conceptual features of the schematic model are:

- It is a schematic model of the project management process. It cross-cuts the organizational structure of the SEP and other organizations inside and outside the GOH. Unlike an organizational chart, it is a process diagram that denotes a series of steps flowing from left to right. It has no vertical logic; organizational authority enters only incidentally, in the routing of project flow. No static hierarchical structure is intended or implied.

- It is a behavioral model. Based on interview data, the schematic model identifies the actual project management process, not an abstract or theoretical design for one. For this reason, it was constructed inductively and empirically, from information provided by interviews.

- It is a prescriptive model. The schematic model identifies the functions of the existing system as respondents indicate that they ought to be performed. Deviations from prescribed activity are discussed in the text below.

- It is a model of project management. The schematic model deals only with management processes, not activities carried out through routine organizational channels. As indicated above, a variety of on-going activities are defined as "projects" by GOH agencies. The schematic model deals primarily with projects constituted in a more restrictive sense, i.e., ones that follow a full progress from a priori identification through implementation. Activities defined midstream as projects, or activities that are only partially

integrated into the project management process, cannot be fully desribed with the schematic model.

MAJOR STEPS IN THE PROJECT MANAGEMENT PROCESS AND RELATED ORGANIZATIONAL FUNCTIONS

The material that follows provides a brief "walk" through the schematic model, with a stage by stage commentary on the process, major actors, and key functions performed at each stage. Portions of the process described are speculative or based on second-hand information, and these are couched in very general terms. For example, the internal organization of the technical ministries was not studied in any detail. In consequence, the internal units charged with organizing implementation activities were simply designated "functional units." We can infer their overall roles in the implementation process, but we are not in a position to discuss the internal organization of the units in any but the most general terms.

The Project Management Process

1. Provision of ideas for potential projects to the technical ministries.

While the first formal initiative in the project management process originates in the technical ministry, the stimulus for that initiative may come from any one of a number of formal and informal sources. The Direction de Programmation Economique et Sociale consults with the technical ministries on the implications that the national plan has for development priorities. Regional planning bodies may serve a similar function, indicating local priorities to the technical ministries and helping to prompt project identification. Foreign donor and other external agencies also may help to seed

the project identification process. The manner in which any of these activities occurs can vary widely, ranging from formal consultation to informal personal suggestion.

2. Priorities identified within the technical ministry

At this point, it is the role of the Unité de Programmation to identify project priorities to the functional units within the technical ministries. The functional units, in turn, formulate a proposed project design which is passed on to the SEP. It appears that, in some cases, the input of the Unité de Programmation into the design process may be minimal.

3. Formulation of a proposed project design and transmission to SEP

This occurs in the functional units of the technical ministries, which originate the project proposals received by SEP. The nature and completeness of these proposals vary widely, as does the quality of accompanying documentation. A number of "projects" formulated in this way are, in fact, on-going activities within the technical ministries.

4. Receipt at SEP and ex ante evaluation.

Project submissions are received first by the Director General of SEP, but the function of his office at this stage is primarily formal. The proposed project designs are passed on to DPP, where ex ante evaluation is undertaken prior to submission of the project to DPES. A number of respondents suggested that some projects skip SEP altogether and move ahead to the

funding process in cooperation with the Ministry of Finance or donor agencies.

5. Determination of consistency with national plans.

Projects that do go through the prescribed SEP operations are then studied by DPES to determine their consistency with national one-year and five-year economic plans. The precise division between this activity and other SEP assessments is not clear, and there is some possibility of redundancy among SEP activities or between this assessment and advisory roles performed by DPES prior to project submission to SEP.

6. Project consistency with regional plans assessed.

At this point, the project may be passed on to the DATPE for assessment of its consistency with regional operations. However, some projects may bypass this step and be routed to the DCEx, if external funding is involved, or to the DCEv for assessment of suitability for internal funding.

7. Liaison established and negotiation undertaken with donor agencies.

Projects that are routed to the DCEx then begin the process of funding negotiation with donor agencies. Liaison functions and negotiation between DCEx and donor agencies usually are integrated into the ongoing relationship between donors and the GOH, so liaison may not be, in the strict sense "established" at this point.

The project then may be referred to the DATPE for assessment of consistency with regional operations or moved on to the DCEv. Some projects will have passed through DATPE prior to or concurrent with DCEx activities, but others appear to bypass the DATPE altogether.

8. Funding request assessed relative to project and budgetary constraints.

The DCEv makes an assessment of the fundability of the project and, if appropriate, passes it on to the Finance Ministry for funding. The criteria applied by DCEv apparently include both overall budgetary constraints and the degree to which proposed project activity supports the level of resources requested. In cases where DCEv cannot recommend funding, the project may be redesigned by the technical ministry and submitted to SEP again.

9. Final determination of project funding and disbursement of funds (as appropriate)

The Ministry of Finance receives the recommendation of the SEP and takes final action in determining funding. The description offered by respondents of the role of the Ministry of Finance varied substantially, ranging from the indication that the ministry had a strong critical role to suggestion that it automatically approved requests. The fact that ICMI did not study the Ministry of Finance directly leaves substantial uncertainty about the degree of discretion that it actually exercises.

Availability of funds may constrain the capacity of Finance to approve projects or to provide approved levels of support. Respondents indicated

that approved projects sometimes were not funded due to lack of resources and that on-going projects had been interrupted for the same reason.

10. Project implementation initiated.

The Unité de Programmation of the technical ministry receives project funding approval from the Ministry of Finance and takes the first steps to begin project implementation. The appropriate functional unit within the technical ministry is identified, and liaison between the programming unit and the functional unit is established. In cases where the relationship between technical ministry and sources of funding has bypassed other parts of the project management process, the role of the Unité de Programmation may be bypassed as well.

11. Project team and resources assembled.

This is the point at which disbursed funds begin to be transformed into an operational project by the technical ministry. The functional unit within the technical ministry that will be responsible for the project either designates a project manager and assembles a team, or hires a contractor for the work. The necessary resources (funds, materials) are made available to the team and a system for monitoring and control of project activities is established by the functional unit. While the execution of these procedures is an intrinsic part of project implementation and may be reasonably inferred, ICMI did not study the operation of functional units in the technical ministries, and the description therefore is general and inferential.

12. Project implementation.

This description again is inferential. Successful execution of the project necessarily involves intermittent update and modification of the design to meet technical conditions as well as routine administration and control. The established reporting systems in the technical ministries require preparation and submission of periodic reports to the Unité de Programmation.

12A. Reports received, reviewed, acted upon.

The Unité de Programmation of the technical ministry receives, reviews and compiles quarterly and annual reports of project activity and submits them to the SEP. In theory, the programming unit should be able to take corrective action when necessary to improve project performance, with the supporting authority to recommend alteration or termination of financing. In practice, the unit can do little substantive work. Shortages of personnel and resources restrict its function to the review of reports and correction of deficiences in the formal reporting system.

12B. Quarterly and annual reports evaluated by SEP

The DCEv of the SEP receives and reviews the quarterly and annual reports submitted by the technical ministries. The DCEv prepares recommendations on project performance which are then transmitted to the technical ministries for action.

12C. Project monitoring and control

In the Ministry of Agriculture, this function is constituted separately under the Direction de Suivi et Contrôle. It is not clear whether similar units exist in the other technical ministries to carry out parallel monitoring and control operations. Again, the degree of practical control that the unit can exert is constrained by limited resources.

13. Ex post evaluation within the technical ministry.

The Unité de Programmation is charged with the conduct of ex post evaluations of project performance which are reported within the technical ministry. Again, extreme limitations on available resources reduce this to a nominal function. No field study can be carried out by the programming unit.

13A. Ex post evaluation outside the technical ministry: SEP

The DCEv also conducts ex post evaluation of projects. Again, resources for field study are limited and the ex post evaluation is largely a review of reports prepared during the implementation process.

13B. Ex post evaluation carried out under mixed auspices

Donor and international agencies sometimes carry out ex post evaluations in cooperation with the technical ministries. Our conjecture is that the majority of externally supported evaluations are of this variety. These studies may have substantial resources at their disposal and be carried out with some rigor.

13C. Ex post evaluation by donor and international agencies alone.

The remarks above apply to this type of evaluation as well. It is our impression that evaluation without the participation of technical ministries is uncommon.

14. Report of evaluation results received by SEP and made available to other concerned agencies.

The DCEv carries out this function, serving as a clearing-house for information on project results. Ideally, this should produce direct feedback to project initiating agencies; however, the actual use of evaluation information in generating and refining new project ideas is uncertain.

A Final Word On Process

The schematic model illustrates a complex project management process in linear fashion, with indications of major feedback processes and the influence of agencies (higher administrative bodies, donor agencies) that lie outside the process itself. The linear progression of these management functions is not absolute. Specific functions that are shown to follow in sequence may, in fact, be contemporaneous, depending on the type of linkage among them. A major example is the process of establishing external sources of funding. Liaison and negotiation of funding may take place from the earliest stages of project formulation, while the project nonetheless follows the project management process. However, the lines of contingency that do exist in the project management process are mapped by the schematic model.

SECTION FOUR

ANALYTICAL PROCESS

The objective of the remainder of the analytical work was to move from the identification of key project management functions in the schematic model to a detailed basis for curriculum design. This process involved four major steps:

1. Definition of key tasks/roles necessary to support the management functions identified in the schematic model. The result of this work was the List of Key Project Management Process Roles that is displayed in Appendix C.

2. Definition of primary project management skills. The list of generic skills is identified as the Inventory of Primary Project Management Skills and is displayed in Appendix D.

3. Formation of a matrix cross classifying specific tasks and generic management skills. The necessary skill level for each task was rated and an ordinal measure entered in each cell formed by the cross classification. The matrix is titled Skill Requirements for Specific Roles/Tasks and is displayed in Appendix E.

4. Analysis of the matrix to arrive at operating assumptions necessary to design the pilot training seminar.

STEPS IN THE ANALYTICAL PROCESS

1. Definition of the Key Tasks/Roles

The elaboration of key tasks was carried out by analysis of the schematic model of the project management process in the light of information gleaned from the interviews. The ICMI team reviewed this information relative to their experience in management and organizational analysis to formulate a minimal list of key roles. Each of the stages in the project management process was broken down into the roles of the organizational unit director and deputies (if any) and of the professional staff. The elaboration of these roles was confined to the primary tasks involved in successful execution of the unit's project management functions. The tasks were defined directly in terms of the management process; basic academic or technical abilities were not included. The result of this operation, the List of Key Project Management Process Roles and Tasks, is cross referenced directly to the schematic model.

2. Definition of Primary Project Management Skills

This part of the work relied upon the ICMI team experience in management and organizational analysis. The team identified six major areas of management skill necessary to project management and elaborated five or six more specific management skills within each area. The resultant list of 32 management skills represents the least sensitive classification that ICMI could recommend for training design, despite the complexity it lends to the matrix. The six major areas of management skill are:

- Human factors skills
- Project identification skills
- Feasibility analysis skills
- Project design skills
- Project implementation skills
- Project evaluation skills

The detailed outline is presented in Appendix D, Inventory of Primary Project Management Skills.

Once again, these skill areas pertain directly to the project management process. A seminar cannot hope to provide training in areas such as economics or accounting; those skills require a university setting and far greater time commitments.

3. Formation of the Matrix of Skills and Tasks

The ICMI team then went to work on cross-classifying specific GOH project management tasks and general project management skills. The resultant matrix, which contains in excess of 2,000 cells, was completed by rating the importance of each identified management skill to each project management task. A simple ordinal rating system was employed:

0 = Skill unrelated to task

1 = Conceptual knowledge of the skill is required to perform the task

2 = Ability to execute the skill is necessary to perform the task

3 = Ability to train and supervise others in the skill is necessary to perform the task.

4. Interpretation of the Matrix

The matrix yielded imformation on the skill requirements of the various jobs in the project management process and on the level of training capability required by the process as a whole. Together with data from the interviews--both our impressions of respondents and their testimony about the skills of others--this formed the substantial basis of the training design.

The training design required answers to three basic questions:

- What is the maximum competence level required in each management skill at any point in the project management process?
- What are the general skill requirements in most parts of the process?
- What skill levels prevail at the moment?

The answer to the first question sets the standard for curriculum development. The highest number across any row of the matrix is the highest competence level required for that skill. Quick survey of the matrix confirms the fact that the seminar must be capable of delivering high level skills in all areas.

The other two questions make it possible to form expectations about the intensity of training that generally will be delivered. Taken together, the answers to those two questions give some indication of the disparity between existing skills and required skills. They do not alter the implications of the answer to the first question; the training seminar curriculum must have the capacity to deliver training to high skill levels. But they do facilitate design of the seminar program.

No clear-cut relationship between existing skills and skill requirements emerged. Our impression is that current skills generally do not exceed Level 1 in most areas. There are conspicious exceptions to this generalization scattered among the personnel involved in the project management process. However, we could not identify a pattern of skills from the information gleaned out of the interviews.

At the same time, a great many tasks require performance capacity (Level 2) and most require at least Level 1 skill. The seminar, therefore, must be able to deliver training that will raise individual skills at least two levels in many cases and one in the others.

While this may result in excess capacity for the training of some specific individuals, it is the only approach that will guarantee resources adequate to meet the needs of all. In most cases, ICMI anticipates the necessity of raising individuals two levels, from 0 to 2, or from 1 to 3. A significant number of individuals may require training from Level 0 to 1 or from 1 to 2. Level 3 competence will become particularly salient in the effort to generate indigenous training capability.

SECTION FIVE

OBJECTIVES OF THE TRAINING SEMINAR

The primary purpose of the training seminars would be to have all personnel whose project management roles required at least Level 2 competence in specific skills brought up to that level within a year of the first training sessions. In addition, all individuals who lacked required Level 1 competencies would be brought up to Level 1 on the requisite skills in the same period. Longer term objectives may require imparting Level 3 competence in certain areas, but the first year objective is a minimum of Level 2 where it is required.

The ultimate objective of generating the capability within the GOH to carry out the training program without expatriate assistance will require Level 3 competence in a greater number of instances. Potential trainers would be identified in the course of the regular seminar program and, where necessary, singled out for additional in-country training.

There are a number of immediate objectives related to the design and delivery of the training seminars. These primarily are features intended to contribute to effectiveness of the seminars, not ends in themselves. But they are key elements of the seminar and we see them as essential to training success. They include:

- Training tailored to individual needs. The design presented here offers the capacity necessary to meet all individual needs, but the actual needs of individuals must be assessed in the implementation of the training seminar. The pilot seminar is designed to offer flexibility sufficient to allow training to be matched to individual needs.

- Training concurrent with regular job performance. The divorce between training and work must be minimized. One of the primary reasons for the failure of training programs is the removal of individuals from their normal work situations. Reintegration often is difficult and may involve compromise in job performance or in the utilization of newly acquired skills. The pilot seminar design involves only intermittent interruption of normal work and provides for maximum integration of skills acquired in training.

- Intercultural approach. Another major reason for the failure of training programs is the importation of systems that may be ill-suited to local social and cultural circumstances. The pilot seminar is designed to fit the Haitian setting, proceeding at all points from the reality of project management in the GOH. Implementation will require similar cultural sensitivity and flexibility to produce effective results.

BASIC DESIGN FEATURES

The Target Population

The target population for the training seminars will include professional staff (general and technical) and all levels of management involved in the project management process. This includes personnel from the SEP, the technical ministries (programming units and project managers), and from any other organizations involved in the project management process. Newly recruited personnel should receive training as well as incumbents. Special programs would be mounted for senior management, whose needs differ from those of intermediate management and professional staff.

Scheduling

In order to meet the objective of training the target population within one year of the first sessions, the training cycle should begin every two months, for a total of six sessions per year. All seminars would be offered in each

session, and each participant would be trained in every skill area. Courses would be taught at two levels: Basic Intensive Courses and Orientation Courses. Each individual would take a mixture of the two.

Training seminars would run for six weeks, with a two week break between sessions. After completion of the six week program, an individual would return to his regular job. During the six week session, course attendance would not be full-time, and participants would spend some part of the period at work.

Participation

The intensity and scheduling of an individual's training would be determined by three variables:

1. Level of current competence in the management skill area (rated 0-3).

2. Critical status of the individual's role in the project management process. Some roles occupy more critical positions in the project management process than others. This is particularly important because application of skills acquired in training may be difficult or impossible if performance in other, critical roles remains below standard.

3. Competence levels required by the roles fulfilled in the project management process.

METHOD

Courses would be offered in all six project management skill areas at two levels of intensity: The Basic Intensive Course, and the Orientation Course. Placement into either the Basic Intensive Course or the Orientation Course in a given area would be determined on an individual basis at the beginning

of the implementation process. The courses include the following features:

Basic Intensive Course

This would be a five-day intensive course including workshops and practical exercises dealing with actual projects. It is designed to raise individual competence two levels. The Basic Intensive Course would occupy a full work-week. Each participant would attend no fewer than two and no more than four Basic Intensive Courses during the six-week period, the precise number depending on assessment of need (as described above). Examples of the Basic Intensive Course curriculum are included in Appendix E.

Orientation Course

This would be a two-day program that concentrated on lecture teaching. It is designed to provide a broad conceptual indoctrination in project management skills rather than an intensive practicing experience. It would be suitable for raising participant skills to the first level. Each participant would attend no more than four and no fewer than two Orientation Courses, depending upon placement.

The total time spent in training during the six-week session therefore would vary from 18 to 24 of the 30 work days during the cycle, depending upon individual placement. During weeks when an individual was attending an Orientation Course, he would be free to work normally for three out of every five days. Weeks of Basic Intensive Course work would require full-time seminar attendance. However, every individual would be free to work in his regular job at least twenty (20%) percent of the training period.

The Senior Management Seminars would be held during the two-week break between training sessions. This course would cover the full range of project management skills from the standpoint of the senior executive. The Senior Management Seminar would run for five days. Curriculum for the Senior Management Seminar was not developed as part of this project, but it would be a suitable topic for exploration and design in the early stages of implementation.

ICMI recommends that no more than 30 participants be included in any course. Simultaneous administration of more than one course during the training cycle should provide a training capacity well in excess of GOH needs.

The members of an organizational unit should not all train together. By training no more than one-sixth (1/6) of the personnel of any unit at one time, disruption of normal operations can be minimized. Moreover, this approach will create greater interchange among personnel from a variety of units and promote subsequent cooperation on the job.

The structure of the training cycle is intended to produce maximum interaction among participants. Groups do not go through the training program together. Individual placement results in individual paths through the course work. In some instances, individuals may follow the same routine, but the majority of participants should make contact with a wide range of individuals involved in project management.

SUMMARY: STRENGTHS OF THE APPROACH

There are five major features that give this approach particular promise:

- All training would be carried out in Haiti.
- Training combined with normal work activity.
- Progressive development of a "critical mass" of trained personnel
- Involvement of individuals from a variety of organizational units in the GOH
- The program can be progressively transferred to GOH

In-Country Training

Training carried out in the Haitian setting is important for a number of reasons. It provides for the greatest integration of skills into the GOH organizational setting. The training program can be adapted to immediate management needs, and trainees can avoid a type of divorce from their jobs that frequently accompanies overseas training. Foreign training programs may create a gap between the trainee and the entire system within which he works without providing the means to bridge the gap. A seminar conducted in Haiti and rooted in Haitian project management can avoid these pitfalls.

Training Combined with Work

This carries the advantages of in-country training still further. It minimizes disruption of work and maximizes the utilization of skills imparted in the training seminars. Newly acquired knowledge is taken directly to the office and applied, and the trainee returns to the classroom with focused and refined concerns. Moreover, this approach provides for the most rapid transfer of skills into the work place. But the greatest benefit of this approach

may be the reinforcement it provides for motivation. Nothing makes a greater contribution to the motivation to learn than an immediate opportunity to apply new skills.

Development of a "Critical Mass" of Trained Personnel

Rapid transfer of skills and of skilled personnel into the work place produces another benefit that can accelerate change and increase the impact of the training program. When a significant portion of the individuals in an organization have acquired a common set of skills and are applying them on the job, the workplace becomes a training workshop. After this "critical mass" has been reached, routine activities will be carried out using concepts and techniques from the training system. This reinforces the skills of trained personnel and provides substantial on-the-job training to others.

Multiple Agency Involvement in Training

In certain regards, this is the most powerful tool of all. The training seminar brings individuals from various jobs in a variety of agencies together and gives them a common set of tools for the project management process. This has an immediate effect on the training program that could be achieved in no other way; it provides a concrete focus on critical organizational problems. The exchange of ideas and comparison of perspectives creates a process for the discovery and refinement of important issues that may never have been clearly formulated.

Moreover, the process does not end with completion of the seminar. Lines of communication opened during training can continue to serve on the job.

Participants leave with new contacts and with a set of shared concepts and procedures that allow project management problems to be communicated effectively within and among organizational units.

Progressive Transfer to GOH

The ultimate objective of all development efforts is to increase the autonomous capability of the host country to ensure the well being of its population. Continuing dependence on expatriate assistance precludes this goal. The training seminar is a practical exercize that can be integrated into GOH operations and that can meet the goal of contributing to domestic systems for self improvement.

SEMINAR IMPLEMENTATION: NEXT STEPS

SECTION SIX

REVIEW

The training seminar is designed as a year-long operation involving 36 weeks of training courses and an additional six weeks of Senior Management Seminars. The training cycle begins every two months and runs for six weeks, allowing a two-week break. The Senior Management Seminar is scheduled during the break. Each training cycle offers course work on all areas of project management. An individual participant attends the seminar through only one training cycle.

The needs of each participant are assessed on an individual basis, and placement is based on a combination of current skills, the critical status of management roles, and the skill levels required for the individual's project management roles. The duration and intensity of training is determined by individual placement as well.

Involvement of upper-level management in the seminars is very important. It serves two functions: it generates a sense of "ownership" and commitment to the program, and it increases discourse among levels of management. It provides a valuable opportunity for professional staff and management to better understand the needs of the various participants in the project management process.

IMPLEMENTATION PROCESS

Refinement and Update of the Pilot

The first stage of implementation involves refinement and update of the training design. Further elaboration of the project management process and changes that have occurred prior to implementation must be incorporated into the design.

The process of refinement and elaboration of the seminar also involves its update. Additional attention to the project management process undoubtedly will produce more information on the portions of it already charted, as well as information on recent changes. This information should be incorporated as refinement of the design. As indicated above, the data used by ICMI to arrive at the analysis and design might be refined in the framework of a wider project, although we believe it is more than sufficient to the task. The research provided for in the scope of work of the project was not exhaustive and improvement of the quality of the data undoubtedly is possible.

Materials for teaching also must be elaborated and textual material procured and produced. Because the training seminar is designed around the Haitian project management process--not a standard model of project management--standard materials are likely to require adaptation, and the choice of materials must be made with care and cultural sensitivity. Instructors, of course, must be well indoctrinated in the nature and use of the teaching materials.

Selection of Trainees and Skill Assessment

The next step in implementation is selection of trainees, assessment of their individual skills, and analysis of their roles in the project management pro-

cess. This process is designed to allow accurate placement in terms of current skills, critical status of the job, and skill requirements. Assessment of individual skill is the most difficult of these tasks; fortunately it also is least critical to the initial phase of implementation. Some adjustment of classes to arrive at a common denominator must be possible in any case, if teaching is to succeed. A priori analysis of critical status and of required skills therefore will play a greater part in initial placement. The assumption that a substantial number of the individuals will not possess skills in excess of Level 1 seems generally sound, and it relieves some of the uncertainty in the placement process. Once these assessments are completed, and the training program is laid out for each individual, the course work can begin.

Implementation Objectives

As indicated above, short-term objectives include the rapid introduction of new management skills into the project management process through formation of a growing "core" of trained individuals in the GOH. Impact on the project management process should begin to be evident before one hundred (100%) percent of personnel involved in it have been trained. As changes begin to appear, the rate of change also can be expected to accelerate due to the development of informal training and skills reinforcement in service.

The long-term implementation objective is development of training capability within GOH and transfer of the the training functions to domestic personnel Turnover, job transfers, and alterations in the project management process inevitably create a continuing need for training. Host country training

capability is the only alternative to permanent dependence on foreign participation. While full transfer of the program to GOH probably cannot be effected in the first year, by the end of that year there should be significant involvement of Haitian personnel as trainers and visible progress toward autonomy.

LIST OF ORGANIZATIONAL NAMES AND ABBREVIATIONS

APPENDIX A

SEP	Secrétairerie d'Etat du Plan
DPES	Direction de la Programmation Economique et Sociale
DAPTE	Direction de l'Aménagement du Territoire et de la Protection de l'Environnement
DPP	Direction de la Promotion des Projets
DCEx	Direction de la Coopération Externe
DCEv	Direction du Contrôle et de l'Evaluation

DISTRIBUTION OF PERSONNEL INTERVIEWED

APPENDICE B

SECRETAIRERIE D'ETAT DU PLAN

Direction de la Promotion des Projets:

Two interviews:

1. Interview with Director, Sub-Director, Project Analyst and two external (OAS and UN) technical Advisors.

2. Interview with three professional staff members and reinterview of the Director.

Direction de la Coopération Externe:

Deux interviews:

1. Interview with the Director.

2. Interview with Sub-Director and one professional staff member.

Direction du Contrôle et de l'Evaluation:

Deux interviews:

1. Interview with Director and Sub-Director.

2. Interview with three professional staff members.

TPTC (PUBLIC WORKS, TRANSPORTATION AND COMMUNICATION MINISTRY)

Unité de Programmation:

Deux interviews:

1. Interview with Director.

2. Interview with one professional staff member.

MINISTRY OF AGRICULTURE

Unité de Programmation:

Two interviews:

1. Interview with two senior managers
2. Interview with four members of the professional staff

LIST OF PROJECT MANAGEMENT PROCESS KEY ROLES AND TASKS

APPENDIX C

1. Identification of areas of priority consistent with national plans.

Director and Deputies

1.1.1 Supervise and control activities of professional staff described below.

Professional Staff

1.2.1 Maintain liaison with policy-making bodies.

1.2.2 Translation of national plans into priorities and potential sectoral objectives.

1.2.3 Maintenance of contact/communication with technical ministry personnel.

2. Identification of areas of project priority to functional units.

Director and Deputies

2.1.1 Supervision and coordination of staff activities.

2.1.2 Perform liaison functions with minister, SEP and other technical ministries.

Professional Staff

2.2.1 Identify project needs consistent with sectoral or subsectoral situation.

2.2.2 Provide informal technical assistance to functional units for project preparation.

2.2.3 Conduct special studies as appropriate.

3. Formulation of proposed project design.

Unit management

3.1.1 Supervision and coordination of unit activities.

3.1.2 Development of project design and justification.

Technical Staff

3.2.1 Provide technical inputs to design process.

4. Performance of ex ante evaluation and analysis

Director and Deputies

4.1.1 Supervise and coordinate staff activities.

4.1.2 Participate in evaluation on a selective basis.

4.1.3 Review evaluation results.

4.1.4 Maintain liaison with Director General, other SEP directors, and technical ministries.

Professional Staff

4.2.1 Perform ex ante evaluations of projects in assigned sectors.

4.2.2 Make recommendations for revision and disposition of project proposal based on findings.

5. Assessment of project consistency with national plans.

Director and Deputies

5.1.1 Supervise and coordinate staff activities.

5.1.2 Participate in assessments on a selective basis.

5.1.3 Review all assessments made by Directorate.

Professional Staff

5.2.1 Perform assessments of project consistency with national plans.

6. Project design coordination with regional plans (as appropriate).

Director and Deputies

6.1.1 Supervise and coordinate staff activity.

6.1.2 Participate in assessments of project compatibility with regional plans on a selective basis.

6.1.3 Review all assessments.

Professional Staff

6.2.1 Perform assessments.

7. Establishment of liaison and negotiation with external donor agencies.

Director and Deputies

7.1.1 Supervise and coordinate staff activities.

7.1.2 Establish and maintain linkage with donor agencies.

8. Assessment of project funding request relative to project requirements and budget constraints.

Director and Deputies

8.1.1 Supervise and coordinate staff activities.

8.1.2 Participate in assessments on a selective basis.

8.1.3 Review all assessments.

8.1.4 Make recommendations for project revision based on assessment findings.

8.1.5 Transmission of approved projects to Finance Ministry.

Professional Staff

8.2.1 Perform assessments and prepare recommendations for designated sectors.

9. Final determination of project funding made and disbursed as appropriate.

Internal processes in Finance Ministry not analyzed.

10. Initiation of project implementation.

Director and Deputies

10.1.1 Approval of project received and transmitted to appropriate functional units.

10.1.2 Establishment of procedures for liaison with functional unit and project team.

Professional Staff

10.2.1 Assist director in preparation of materials for functional units and liaison procedures.

11. Assembly of project team and resources.

Functional Unit Management

11.1.1 Designate project manager or contractor.

11.1.2 Arrange provision of resources to project team.

11.1.3 Establish system for monitoring and control of project inside functional unit.

Functional Unit Staff

11.2.1 Support tasks of management (above).

12. Project implementation

Project Manager/Team Leader

12.1.1 Update project design

12.1.2 Control of implementation activities.

12.1.3 Submits necessary progress reports.

12.1.4 Cooperates in project evaluation

Project Team

12.2.1 Execution of project tasks.

12A. Reports received, reviewed, and appropriate actions taken on quarterly and annual bases.

Director and Deputies

12A.1.1 Supervision of monitoring and reporting system.

12A.1.2 Acts upon reports

12A.1.3 Transmits reports to SEP

Professional Staff

12A.2.1 Supports management functions (above).

12B. Quarterly reports reviewed and "formative" evaluations performed.

Director and Deputies

12B.1.1 Reports received and reviewed

12B.1.2 "Formative" evaluations reviewed and recommendations made.

Professional Staff

12B.2.1 Review of reports and conduct of "formative" evaluations on a sectoral basis.

12C. Project monitoring and control

Director and Deputies

12C.1.1 Project monitoring as required.

12C.1.2 Appropriate actions based on monitoring.

Professional Staff

12C.1.1 Supports management functions (above).

13 Ex post evaluation conducted internally

Director and Deputies

13.1.1 Supervision of ex post evaluation activity

13.1.2 Review of evaluation findings and preparation of recommendations based on findings.

Professional Staff

13.2.1 Conducts ex post evaluations.

13.2.2 Prepares findings and recommendations.

13A. Ex post evaluation conducted externally by SEP

Director and Deputies

13A.1.1 Supervision of ex post evaluation activity.

13A.1.2 Reviews findings and reports recommendations to minister, technical ministries and policy making bodies.

Professional Staff

13A.2.1 Conducts ex post evaluations on a sectoral basis.

13A.2.2 Prepares findings and recommendations (sectoral basis).

13B. Not analyzed in the scope of this project.

13C. Not analyzed in the scope of this project.

14. Not analyzed in the scope of this project.

INVENTORY OF PRIMARY PROJECT MANAGEMENT SKILLS

APPENDIX D

A. Human Factors Skills

A.1 Leadership and motivation.

A.2 Team building

A.3 Negotiation

A.4 Communication

A.5 Training

A.6 Facilitation of group creativity (e.g., "brainstorming")

B. Project Identification Skills

B.1 Needs recognition and identification.

B.2 Draft "projectizing"

B.3 Problems/objectives hierarchy ("tree") analysis

B.4 Needs priority identification

B.5 Pre-feasibility analysis (rapid feasibility estimation)

C. Feasibility Analysis Skills

C.1 Resource availability projection

C.2 Financial and economic analysis

C.3 Social and cultural feasibility analyses

C.4 Technical feasibility analysis

C.5 "Spread effects" analysis

D. Project Design Skills

D.1 Objectives classification and causal hierarchies (linkage and hypotheses formation)

D.2 Choice of indicators of objectives

D.3 Identification of key assumptions

D.4 Identification of required input resources

D.5 Design critique and revision skills

E. Project Implementation Skills

E.1 Work organization structure (activity networks)

E.2 Responsibility charting

E.3 Resource allocation

E.4 Project scheduling

E.5 Reporting, monitoring, and control systems

E.6 Contingency planning

F. Project Evaluation Skills

F.1 Establishing evaluation priorities

F.2 Evaluation design

F.3 Evaluation implementation

F.4 Interpretation and formative use of results

F.5 Analysis and use of results (feedback) for future projects

APPENDIX E

SKILL SET #1: HUMAN FACTORS

Module 1A: Basic Intensive Course

Day 1:

- Overview of module
- Interaction Exercises: "Seal Hunt"
- Analysis of Learning Points: "Seal Hunt"
- Core Concepts: Teambuilding and Group Dynamics

Day 2:

- Leadership and Motivation: Key Principles
- Leadership Roles, Styles, and Effectiveness in Situations
- Workshop on Leadership Role Playing
- Perception Exercises and Conflict Resolution Process

Day 3:

- Human Communication: Key Principles
- Communication Processes in Project Teams and Organizations
- Communication "Pathologies": Avoidance and Remedies
- Workshop on Communication Process and Problems
- Training: Major Concepts and Techniques

Day 4:

- Facilitating Group Creativity: Overview
- "Brainstorming" Techniques: Workshop
- Negotiation and Intergroup Bargaining Techniques/Skills
- Negotiating Game Workshop
- Discussion of Game Learning Points

Day 5:

- Informal Group Relations in Formal Organizations: Their Management
- Optimizing the Management of Human Resources: Key Techniques
- Feedback Session
- Weekly Review and Wrap-up

Module 1B: Orientation Course

Day 1:

- Core Concepts: Team Building and Group Dynamics
- Leadership and Motivation: Key Principles
- Conflict and Conflict Resolution Techniques
- Fundamentals of Human Communication

Day 2:

- Effective Communication in Project Teams and Organizations
- Group Creativity: Processes and their Management
- Training Techniques: Formal and Informal
- Negotiation and Bargaining: Core Concepts
- Human Resource Management: Key Techniques

SKILL SET #2: PROJECT IDENTIFICATION

Module 2A

Day 1:

- Core Concepts: Development Problems and Objectives
- Alternative Criteria for Recognition of Needs: Plans and other Standards
- Substance of Current 1 and 5 Year Plans
- Background Survey of the National Plan Process
- Derivation of Sectoral Problems/Objectives from National Plans (case studies)

Day 3:

- Trees Analysis: Introduction
- Problem Trees
- Problem Tree Workshop
- Objective Trees
- Objective Tree Workshop
- Alternative Trees

Day 3:

- From Trees to a Project Concept: Introduction
- Core Concepts: Nature of a Project; Elements of Good and Bad Projects
- The Process of Provisional "Projectizing"
- Case Study Workshop

Day 4:

- "Pre-feasibility" Analyses: Introduction
- Elements of Pre-feasibility Assessments
- Rapid Comparative Assessments of Relative Economic and Socio-Cultural Feasibility
- Rapid Comparative Assessments of Relative Technical Feasibility

Day 5:

- Case Study in Project Identification: Tools Applied
- Group Presentations and Staff Critique of Products
- Feedback Discussion
- Week in Review and Wrap-up

Module 2B

Day 1:

- Core Concepts: Development Problems and Objectives
- National Plan Guidelines
- "Trees" Analysis - Overview
- Problem Trees
- Objectives and Alternatives Trees

Day 2:

- Projects and Projectizing
- Elements of "Pre-Feasibility" Analysis
- Rapid Comparative Assessments of "Economic" Feasibility
- Rapid Comparative Assessments of Social/Cultural Feasibility
- Rapid Comparative Assessments of Technical Feasibility

SKILL SET #3: FEASIBILITY AND "EX ANTE EVALUATION" ANALYSIS

Module 3A

Day 1:

- Overview of Module
- Core Concepts: A Project Management Approach to Feasibility Studies
- Major Questions: Will the Project Succeed? Is There a Better Way?
- Assessing Probability of Success: Assumptions and Hypotheses
- Workshop on Outcome Probability

Day 2:

- Economic Feasibility - Overview of Concepts and Data Requirements
- Benefit/Cost Analysis for One Project
- Comparative Benefit/Cost Analysis for Two or More Projects
- Opportunity Cost and Shadow Pricing Analysis
- Workshop on Opportunity Cost

Day 3:

- Expected Value Analysis
- Discounting and Net Present Value Analysis
- Discounting Workshop
- "Technical" Feasibility - Core Concepts
- Technical Feasibility - Project Design Requirements and Analytical Procedures

Day 4:

- Social/Cultural Feasibility Analysis: Core Concepts
- Identifying Beneficiaries and the Distribution and Magnitude of Benefits
- Assessing the Sociological and Anthropological Premises of Projects.
- Assessing Organization Feasibility Premises

Day 5:

- "Spread Effects" Analysis: Core Concepts
- Spread Effects in Distribution of Benefits
- Spread Effects in Continuing Social Change Processes
- Predicting/Managing Unintended Consequences of Projects
- Feedback and Discussion
- Week in Review and Wrap-up

Module 3B

Day 1:

- Core Concepts - Types of Feasibility Analysis
- Major Questions: Will the Project Succeed? Is There a Better Way?
- Estimating Success Probability
- Economic Feasibility - Overview
- Benefit/Cost Analysis

Day 2:

- Technical Feasibility - Basic Concepts and Procedures
- Social/Cultural Feasibility - Overview
- Estimating Benefits Distribution in Social Systems
- Sociological/Anthropological Premises of Project
- "Spread Effects" Assessments

SKILL SET #4: PROJECT DESIGN

Module 4A

Day 1:

- System Approach
  - -concept of systems
  - -concept of activities and results
- Definition and Characteristics of Objectives
- Objective Hierarchy Linkage Analysis
  - -causality
  - -objectives clarification
- Objectives Formulation and Writing

Day 2:

- Identification of Indicators
  - -concept of an indicator
  - -characteristics of indicators
  - -choice of indicators of achievement
  - -means of verification of achievement
- Identification of key assumptions

Day 3:

- Identification of Project Inputs
  - -key activities/activity structure
  - -human resources
  - -materials and financial resources
- Budget Preparation
- Case Project Design

Day 4:

- Design Critique and Revision
- Design for Evaluation
- Real Projects Data Collection and Design

Day 5:

- Real Project Design
- Project Design Critique
- Project Design Revisions
- Feedback Discussion
- Week in review and Wrap-up

Module 4B

Day 1:

- Objectives Clarification
- Objectives hierarchy linkage analysis
- Identification of indicators of success
- Identification of key assumptions

Day 2:

- Identification of inputs
  ¬activities and resources
- Budget considerations
- Design critique and revision

SKILL SET #5: PROJECT IMPLEMENTATION

Module 5A

Day 1:

- Organization for Project Management
  - -functional organization structure
  - -project organization structure
  - -matrix organization structure
- Project Variables/Time, Cost, Quality
- Project Management Cycle for Planning and Control

Day 2:

- Planning cycle
  - -process flow diagram
  - -work breakdown structure
  - -responsibility charting
  - -performance level definition

Day 3:

- -account role structure
- -milestones charts
- -Gantt charts
- -Networking/PERT-CPM

Day 4:

- Control Cycle
  - -Management Information Systems
  - -level of information/cost of information
  - -status evaluation
  - -progress reporting/report content
  - -report writing

Day 5:

- Project Manager Profile/Team Profile
- Contract Writing/Contract Management
- Consultant/Contractor Management
- Management of Time
- Contingency Planning

Module 5B

Day 1:

- Organization Structures for Project Management
- The Project Cycle
- Planning, Analysis, and Control Tools

Day 2:

- Direction and Control of Project
- Monitoring and Reporting System
- Project Manager and Project Team Profile

SKILL SET #6: PROJECT EVALUATION

Module 6A

Day 1:

- Core Concepts of Evaluation: Management Use of Information, Formative and Summative
- Project Suitability for Evaluation
- Key Steps in the Evaluation Process
- Review of Formative Evaluation Uses in Technical Ministry, SEP
- Review of Summative Evaluation Uses, SEP

Day 2:

- Information Model of Evaluation
- Definition of Hypotheses, Testing
- Basic Problems of Inference
- Basic Decision Theory for Management
- Workshop on Evaluation-Based Decision Making

Day 3:

- Review of Evaluation Processes
- Data Collection and Use
- When is a Statistician Necessary?
- Evaluation Design Workshop
- Evaluation Analysis Workshop

Day 4:

- Management of Evaluation Activities
- Budgeting (time/cost) for an Evaluation
- Data Quality: Control and Implications
- Workshop on Developing an Evaluation Plan
- Workshop Critique of an Evaluation

Day 5:

- Making Evaluation Work
- Effective Management Feedback Systems
- Building a Useful Information Base
- Choosing Evaluation Priorities
- Workshop on Establishing and Maintaining Evaluation Systems
- Feedback Discussion
- Week in Review and Wrap-up

Module 6B

Day 1:

- Core concepts of Evaluation: Management Use of Information, Formative and summative
- Project Suitability for Evaluation
- Hypothesis Definition, Inference
- Information Model of Evaluation
- Evaluation Based Decision-Making

Day 2:

- Key Steps in the Evaluation Process
- Management of Evaluation Activities
- Making Evaluation Work
- Effective Management Feedback Systems
- Choosing Evaluation Priorities

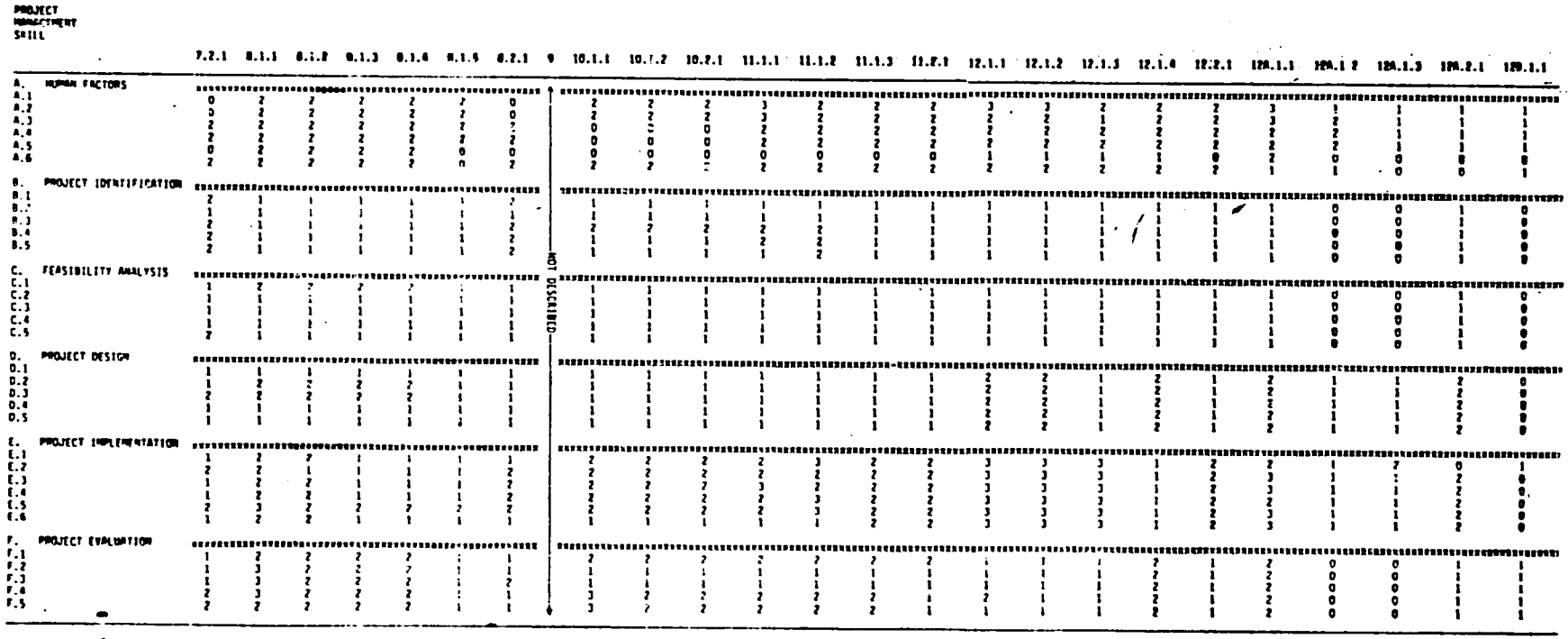
APPENDIX F

WORKSHEET: SKILL REQUIREMENT MATRIX

PROJECT MANAGEMENT SKILL	1.1.1	1.2.1	1.2.2	1.2.3	2.1.1	2.1.2	2.2.1	2.2.2	2.2.3	3.1.1	3.1.2	3.2.1	4.1.1	4.1.2	4.1.3	4.1.4	4.2.1	4.2.2	5.1.1	5.1.3	5.2.1	6.1.1	6.1.2	6.2.1	7.1.1	7.1.2
A. HUMAN FACTORS																										
A.1	3	0	0	1	1	1	0	1	0	1	1	1	2	2	1	1	1	0	2	3	0	0	2	2	1	2
A.2	3	1	0	1	1	1	1	2	1	2	2	2	2	2	1	1	1	0	2	2	0	1	2	2	1	2
A.3	2	3	1	2	1	1	0	1	1	1	0	2	2	0	0	1	1	0	2	2	0	1	2	1	1	2
A.4	3	2	1	2	1	1	1	2	1	2	1	2	2	2	1	1	1	0	2	2	0	1	2	1	1	2
A.5	2	0	0	0	1	1	0	1	0	1	0	2	2	1	1	1	1	0	2	2	0	1	2	1	2	2
A.6	3	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	1	2	2
B. PROJECT IDENTIFICATION																										
B.1	3	3	2	2	1	1	2	3	2	3	2	2	2	1	2	1	2	1	1	1	2	2	2	1	2	2
B.2	1	1	1	1	1	1	1	3	1	3	2	2	2	1	2	1	2	1	0	0	1	1	2	1	1	1
B.3	3	2	2	2	1	1	2	3	2	3	2	2	2	1	2	1	2	1	2	1	2	2	2	1	1	2
B.4	3	3	2	3	3	1	2	3	2	3	2	2	3	2	2	1	2	1	2	1	2	2	2	1	2	2
B.5	3	1	1	2	3	3	2	3	2	3	2	2	3	2	2	1	2	1	1	1	2	1	2	1	2	2
C. FEASIBILITY ANALYSIS																										
C.1	1	1	1	1	1	1	2	3	2	3	2	2	3	2	2	1	2	1	1	1	1	1	1	1	1	1
C.2	1	1	1	1	1	1	2	3	2	3	2	2	3	1	2	1	2	1	1	1	1	1	1	1	1	1
C.3	2	1	1	2	1	1	2	3	2	3	2	2	3	1	2	1	2	1	1	1	1	1	1	1	1	1
C.4	1	1	1	1	1	1	1	3	2	3	2	2	3	1	2	1	2	1	1	1	1	1	1	1	1	1
C.5	3	1	1	2	1	1	2	3	2	3	2	2	3	1	2	1	2	1	1	1	1	1	1	1	1	2
D. PROJECT DESIGN																										
D.1	3	2	2	2	1	1	2	3	2	3	2	2	3	2	2	1	2	1	1	1	1	1	2	1	1	1
D.2	1	1	1	1	1	1	1	3	2	3	2	2	3	2	2	1	2	1	1	0	0	1	3	2	1	1
D.3	2	2	2	2	2	2	2	3	2	3	2	2	3	2	2	1	2	1	1	0	2	1	3	2	1	1
D.4	1	1	1	1	1	1	2	3	2	3	2	2	3	2	2	1	2	1	1	0	2	2	3	2	1	1
D.5	1	1	1	1	1	1	1	3	1	3	2	2	3	2	2	1	2	1	1	1	1	1	3	2	1	1
E. PROJECT IMPLEMENTATION																										
E.1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1
E.2	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1
E.3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1
E.4	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1
E.5	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1
E.6	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1
F. PROJECT EVALUATION																										
F.1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	1
F.2	1	0	0	0	0	0	0	0	0	0	0	0	2	2	2	1	2	1	0	0	1	0	1	1	1	2
F.3	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	1	0	1	1	1	2
F.4	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	0	1	2	2	2	2	2	2
F.5	2	1	1	1	1	1	1	3	2	2	2	2	3	2	2	1	2	2	1	2	2	2	2	2	2	2

Skill level coding: 1=Conceptual Knowledge
2=Performance Capability
3=Training Skills

WORKSHEET: SKILL REQUIREMENT MATRIX



Skill-level coding: 1=Conceptual Knowledge
2=Performance Capability
3=Training Skills

WORKSHEET: SKILL REQUIREMENT MATRIX

PROJECT MANAGEMENT SKILL

		12B.1.2	12B.2.1	12C.1.1	12C.1.2	12C.2.1	13.1.1	13.1.2	13.2.1	13.2.2	13A.1.1	13A.1.2	13A.2.1	13A.2.2	14
A.	HUMAN FACTORS														
A.1		1	1	1	2	1	1	0	1	0	2	2	2	2	
A.2		1	1	0	1	1	1	0	1	0	1	1	1	1	
A.3		1	1	1	2	1	1	0	1	0	2	2	2	2	
A.4		1	1	1	2	1	1	0	1	0	2	2	2	2	
A.5		0	0	0	0	0	0	0	0	0	0	0	0	0	
A.6		1	1	0	1	1	1	0	1	0	1	1	1	1	
B.	PROJECT IDENTIFICATION														
B.1		1	0	0	0	0	0	1	0	0	0	1	0	0	
B.2		1	0	0	0	0	0	1	0	0	0	1	0	0	
B.3		1	0	0	0	0	0	1	0	0	0	1	0	0	
B.4		1	0	0	0	0	0	1	0	0	0	1	0	0	
B.5		1	0	0	0	0	0	1	0	0	0	1	0	0	
C.	FEASIBILITY ANALYSIS														
C.1		1	0	1	1	1	1	2	0	1	0	1	1	1	
C.2		1	0	0	0	0	1	2	0	1	0	1	1	1	
C.3		1	0	0	0	0	1	1	0	0	0	1	1	1	
C.4		1	0	0	1	1	1	2	0	1	0	1	1	1	
C.5		1	0	1	1	1	1	2	0	1	0	1	1	1	
D.	PROJECT DESIGN														
D.1		1	1	1	1	1	1	1	1	0	0	1	0	1	
D.2		1	1	1	1	1	1	1	1	0	0	1	0	1	
D.3		1	1	1	1	1	1	1	1	0	0	1	0	1	
D.4		1	1	1	1	1	1	1	1	0	0	1	0	1	
D.5		1	1	1	1	1	1	1	1	0	0	1	0	1	
E.	PROJECT IMPLEMENTATION														
E.1		1	1	2	2	2	1	1	1	1	2	2	2	2	
E.2		1	1	1	2	2	1	1	1	1	2	2	2	2	
E.3		1	1	1	2	2	1	1	1	1	2	2	2	2	
E.4		1	1	1	2	2	1	1	1	1	2	2	2	2	
E.5		1	1	1	2	2	1	1	1	1	2	2	2	2	
E.6		1	1	1											
F.	PROJECT EVALUATION														
F.1		2	2	0	1	0	3	2	2	1	3	2	2	2	
F.2		2	2	0	1	0	3	2	2	1	3	2	2	2	
F.3		2	2	0	1	0	3	2	2	1	3	2	2	2	
F.4		2	2	0	1	0	3	2	2	1	3	2	2	2	
F.5		2	2	0	1	0	3	2	2	1	3	2	2	2	

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