CHAPTER 8,
PLANNING THE PROJECT
8. Planning the Project

Inputs
- objectives and operational targets
- strategy descriptions, 7.5

Steps
- Define Project Objectives
- List Changes & Activities
- List Project Products
- Review Obstacles to Implement
- Create Activity Schedule
- Design Approach to Implementation
- Define Project Resource Requirements

Products
- Project Objectives
- List of Project Activities
- Project Products
- Activity Schedule
- Project Org. & Procedures
- Project Budget

Points of Use
- Writing the Project Proposal
- Specifying and Scheduling the Work
- Writing the Project Proposal
- Specifying and Scheduling the Work
- Writing the Project Proposal
- Initiating the Project
- Specifying and Scheduling the Work
What is the purpose of this step?

In this step the team decides on and designs an organizational and managerial approach that will maximize the chances that the proposed strategies will be successfully implemented. It is at this stage that the team's thinking shifts from "what is to be developed" to "how is it to be developed".

What are the products of this step?

(a) Statements of project objectives.
(b) A list of project activities and their expected products.
(c) A description of the managerial approach being recommended, including its organization and control procedures.
(d) A general project schedule showing the major activity clusters.
(e) The budget of project administration costs.

What difficulties may be encountered?

(a) The primary difficulty lies in convincing decision-makers that the management of implementation is, in most cases, a full-time job and not simply a task that can be added on to the duties of an existing staff member or unit.
(b) It may also be difficult to decide how big the full-time project team should be, and how many of the project activities can be performed by existing units.
(c) It is tempting to break the schedule down into very detailed activities when performing step 8. All that is needed is a general phasing of the project activities plus the detailed scheduling of the first few months of the project. Anything more will have to be revised considerably by the project manager.

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8.1 DEFINE PROJECT OBJECTIVES

Defining and listing the project objectives is the first step in actually planning the project: its purpose is to orient the planning.

The team reviews the strategies designed in step 7 and attempts to determine what will have to be created or otherwise accomplished by the project to implement those strategies. In other words, the team summarizes the most important end-products desired from the project. One project objective might be to produce new or revised health centres, additional and/or retrained service staff, or revised and expanded supply systems. Another objective might be to generate necessary changes in policy to support the new health system, such as revised public payment policies or legal authority for certain technical procedures to be done by a new type of staff. Yet another very important type of objective might be to increase public awareness of, say, malaria by means of health education activities.

The list should be limited to the central, most important achievements required for successful strategy implementation.

8.2 LIST REQUIRED CHANGES AND CORRESPONDING PROJECT ACTIVITIES

Armed with the general project objectives, the team must now begin to plan the project in detail. The first step is to specify what activities will need to be carried out in order to make the necessary "changes" in the existing system. This is done, again, by means of a matrix (see Fig. 2, page 152). One change/activity matrix is constructed for each strategy designed in step 7.

It will be recalled that necessary changes were decided on and listed in step 7.2. The changes covered by each strategy, still grouped in the categories of "technology", "staff", "procedures" and "facilities", should be entered alongside one axis of the matrix. Along the other axis the team should list a number of column headings representing different possible types of project activity, such as design, training, promotion, facility construction, implementation, support, and project administration.

Taking up the categories of change in the same sequence as followed in step 7.2 (first technology, then staff, then procedures, etc.), the team now examines the individual changes listed in each category and decides what corresponding activities (in each of the columns) will have to be done to put that change into effect. The activities considered to be necessary are then entered into the appropriate cell of the matrix. For a "staff" change of "create community health worker", for example, there may need to be a corresponding "design" activity of writing the job description, a "training" activity of conducting the necessary training courses, a "promotion" activity of changing existing legislation to permit these workers to carry out the necessary technical procedures, and an "implementation" activity of actually recruiting people for these posts.

The types of activities that might be included under the column headings shown in Fig. 2, page 152, are the following:

1. **Design** - incorporating strategy specifications into detailed plans and outlines of techniques, staff functions, training curricula, procedures for delivering strategies and service facilities.
(2) **Training** - conducting basic and on-the-job training for service staff as necessary, and other personnel-related activities.

(3) **Promotion** - the activities necessary to make needed changes in legislation, policies, and the attitudes of government agencies, state and community governments, service staff, groups of health professionals, and the general public.

(4) **Facility construction** - the activities necessary to modify or construct service facilities.

(5) **Implementation** - critical preparatory activities not listed elsewhere, and activities (if any) pertaining directly to the delivery of services.

(6) **Support** - providing for and initiating those aspects of the system needed to ensure its effective continuance.

(7) **Project administration** - administrative activities pertaining directly to the project, such as recruiting consultants and finding accommodation for project staff.

One or more of these columns may be eliminated if it does not suit the nature of the project; for example, if no facility construction or modification is required, that column would be omitted.

In addition to relating each change to each activity column to determine if an activity of that nature is required (horizontal review), as a cross-check each column should be reviewed against each change (vertical review). An activity in one column may also suggest the need for supporting activities in the same or other columns (horizontal and vertical).

The team should be careful not to neglect needed policy revisions. Each change in the service should be checked to see if a corresponding policy change is implied, and, conversely, each requested policy change should be reviewed to make sure that it is in fact necessary for the service changes to be carried out.

During the process of specifying project activities, the team should be aware of other developments and improvements being planned or made in the health service that relate to the present project. If a concentrated effort will soon be made to improve the medical supply system, for example, the team would not include specific supply-related activities in its matrix. It would, on the other hand, transmit its suggestions and requirements in regard to supplies to the consultant or working group in charge of that effort. The steering committee is in the best position to inform the team of related ventures.

If this step is carried out as described here, it tends to generate a rather large number of activities. While there is advantage to being comprehensive and not overlooking necessary activities, the activities initially listed on each matrix should probably be consolidated into fewer more general activities or clusters of activities. The resulting matrices should be detailed enough to (a) make it perfectly clear to everyone how much work the project will involve, and of what types; (b) provide a basis for estimating how many and what types of resources (primarily manpower) will be needed for that work; and (c) inform the project staff (those who will be carrying out the implementation activities) what is to be done. (Later on (Chapter 11), the project manager and his staff will specify the needed activities in greater detail.)

The final step should be to examine all the matrices just constructed and consolidate them into a single list of activities, by type. At this point the team may notice that two strategies require the same activities (such as health education campaigns). In such cases the two activities should obviously be consolidated into one.
8.3 LIST PROJECT PRODUCTS

At this point the specific products of the activities or activity clusters listed in step 8.2 are enumerated in detail. Examples include:

(1) The types and numbers of items to be designed:
   (a) standardized strategies,
   (b) job descriptions,
   (c) procedure manuals,
   (d) facilities.

(2) The types and numbers of staff to be trained.

(3) The results expected from promotion efforts:
   (a) policy changes,
   (b) new legislation,
   (c) population to be reached through health promotion and education.

(4) The types and numbers of facilities to be constructed.

(5) The types and numbers of staff to be recruited.

(6) The types and numbers of surveys to be conducted.

(7) Types of administrative procedures to be put into operation.

This list represents a detailed supplement to the **project objectives**, 8.1.

8.4 REVIEW OBSTACLES TO IMPLEMENTATION

The list of project activities, 8.2, should now be reviewed against background information to see what possible obstacles there are to successful implementation. These obstacles must be analysed and dealt with in much the same manner as the obstacles to target achievement (step 6). Primary inputs to this step include:

(1) the review of past implementation experience conducted in step 2.1;

(2) the summary of policies and programmes, 2.2;

(3) the resource projections, 2.3 (implementation is often hindered because budgeted resources are not made available when needed or are shifted to other programmes); and

(4) the ranked obstacles, 6.5 (the same obstacles to effective service delivery may also hinder the setting up of those services).

The best sources of information about potential difficulties in implementation are those people in the Ministry of Health and the health services who have had recent experience in setting up new or revised services. In discussions with such persons the team should concentrate on identifying the reasons for past delays and the organizational approaches that have been used successfully for directing and controlling past efforts.
For example, experience may show that new projects, although given official approval, often do not receive the resources they need to begin early activities, such as facility design (because it is performed by another Ministry) and staff training (because money for training stipends is not available). Probably the most frequently mentioned obstacle to progress is that project staff are simply not available for implementation activities long enough to get the necessary work done. Implementation activities are often added to their regular duties, which already take up more than the normal working day.

8.5 CREATE ACTIVITY SCHEDULE

Step 8.5 cannot be completed until the team has a good idea of what approach to implementation will be adopted (step 8.6). In practice, steps 8.5 and 8.6 are done concurrently.

The activity schedule for the project is established through a three-step process, as follows:

8.51 CONSTRUCT PRELIMINARY ACTIVITY NETWORK

The first step in constructing a network is to determine the sequence in which the activities should be carried out. This is done by examining the list of project activities, 8.2, and asking the following three questions in regard to each activity or group of activities:

(a) What other activities must be completed before this activity can be undertaken?
(b) What other activities cannot begin until this activity is completed?
(c) What activities can be performed at the same time as this activity?

Answering these questions establishes the interrelationships in time between activities and hence suggests their ideal sequence of accomplishment. It may also draw attention to necessary activities that may have been overlooked before (these should now be added). The sequence decided upon should then be sketched in the form of a network (see Fig. 5, page 156) and the overall layout should be carefully reviewed for completeness and logic of activity placement. Note that scheduling these activities in time does not occur until step 8.53.

8.52 ESTIMATE RESOURCE REQUIREMENTS FOR ACTIVITIES

Next, the list of project activities, 8.2, is examined in order to estimate the amounts and types of resources required for each activity or cluster of activities. The categories into which resources are usually broken down for budgeting purposes are as follows:

(1) personnel - project staff, consultants, and others;
(2) facilities - construction, rental, overheads;
(3) equipment, vehicles, and supplies; and
(4) administrative costs (if applicable).

Personnel costs are usually estimated in man-months and multiplied by monthly salary rates. (If staff are to be seconded from existing posts, their salaries probably do not have to be included in the project costing.) Facilities and equipment costs are those chargeable to the project (as opposed to the existing services). Capital costs of service facilities and equipment are not included here.
SCHEDULE PROJECT ACTIVITIES

The first step in scheduling the project is to determine in detail the limitations on resource availability by type and time period. The major limitations will be on money and manpower. Budget limits by year will of course limit the amount of manpower applied, but another determining factor will be the availability of suitable people from within the ministry or the service, or from outside sources. Other factors that affect the rate at which a project can be implemented are the capacity of training institutions, the rate at which construction can be done by public works or contracting firms, and the speed with which necessary legislative or policy changes can be made. The time it takes to order and receive scarce materials or equipment, especially when imported from abroad, may also slow down implementation. Lastly, the schedule must allow for the necessary time interval between request for and receipt of external assistance, which may be very long.

Now, the team must estimate how much time will be needed to complete each activity. In this task, three elements must be considered together: (a) the inherent time requirements of each activity, (b) its relationships in time with other activities (as shown in the preliminary network), and (c) the limits on resource availability by type and period, which set a ceiling on the amount of work that can be scheduled during each period. The scheduling of activities is done by laying the preliminary network along a time line and making appropriate adjustments. The guidelines and criteria to be used here include:

1. any scheduling criteria stated in the terms of reference, 1.6;
2. the need to utilize allocated resources efficiently during each time period, particularly manpower;
3. the desirability of gradually building up, levelling off, and then diminishing the level of project activity and resource consumption;
4. the importance of performing activities according to the sequence shown in the network.

The amount of detail to be included in the schedule depends on the situation. In general, the more complex the project, the tighter its budgets and external time commitments, and the greater the number of administrative units that will be carrying out the project activities, the more detailed the schedule should be. If extreme detail is considered to be justified, the PERT (Project Evaluation and Review Technique) methods of time and cost control may be used.

It is important to identify milestones in the project schedule. These are events that are critical for measuring how the project is progressing; they usually signal the completion of one or more activity sequences or permit the commencement of other major sequences of activity. Examples of milestones are budget approval, completion of training activities, completion of construction, and implementation of important service functions. An additional use of milestones is to measure progress toward the achievement of operational output targets. Thus "50% of population reached with health service publicity" and "50 immunizations per week" may be selected as milestones.

A complete list of milestones, with their target dates, should be written. In addition, all milestones should be labelled on the network.

DESIGN GENERAL APPROACH TO IMPLEMENTATION

Given the basic project objectives, the list of project activities, and the likely obstacles to implementation, the formulation team must now design the general approach to be
used for implementation. The same degree of creativity and imagination in finding ways to avert possible obstacles is needed here as during the step of strategy design (step 7).

Basically, this step involves answering the following questions:

1. **Who should be responsible for implementation?** If the project is national in scope, if the Ministry of Health operates in a highly centralized fashion, if there is a department or division that is responsible for the subject, or if the project is of top priority, it may be necessary to assign responsibility for implementation to someone at a high level within the Ministry. However, it is difficult for such people to devote much time to new efforts. Decentralizing responsibility to the provinces or peripheral institutions offers the advantage of assigning responsibility to people who are directly involved with the implementation and most interested in its success.

2. **What sources of funds and manpower should be utilized for project implementation?** The team must determine whether existing ministry and service staff can be expected to carry out the project activities in addition to their routine duties. It may be possible to second people temporarily from posts in various divisions and operating facilities for carrying out certain project activities. If the technical or managerial expertise needed for certain activities is not available within the existing organization, it may be necessary to secure the services of a consultant. There may be other projects competing for the same resources. If so, it may be advantageous to merge or identify with them. Since most project staff will be seconded from existing posts there should be little need to obtain funds for salaries, but secretarial support, office supplies and space, and transportation will have to be found and funded.

3. **Are there potential problems of political, technical, or public acceptability?** If so, the project staff may have to spend some time and effort in promoting the proposed strategies with legislative groups (to change laws), vested professional interest groups (to change policies), and other agencies (to obtain support and achieve coordination). All of this may require that the project have a high degree of visibility within the government and with the public. In other cases, there may be advantage in restricting publicity by burying the project within the activities of an existing programme or service.

4. **Are there unknown or open options that require flexibility in regard to technical approaches, organizational structure, and sources of leadership?** Some decisions may not be forthcoming for some time (some are best left open until certain project activities have been completed). Most situations will require that the implementation approach be flexible enough to accommodate subsequent decisions or changes in strategies.

5. **In summary, what managerial approach should be used for implementation?** The basis for responding to this question cannot be provided through a set of strict criteria. Every organization has its strong and weak points. Every organization has a built-in capacity for performing work (which is seldom realized to its fullest). The formulation team must assess, perhaps with the help of senior managers, where the strong and weak points of their organizations lie and whether the existing structure and staffing provide the capacity to absorb the additional amount of work represented by the implementation activities. Where the existing organizations (central ministry and decentralized service organizations) have:

(a) staff in the right positions with the necessary capabilities and the time to devote to implementation,

(b) coordination and control procedures that can be effectively applied to a greatly expanded and diversified set of activities, and
(c) a strong influence over the political process and the attitude of health workers, professional groups, and the public

then they should be utilized as is for carrying out implementation. Normally, however, ministries of health and health services are taxed to their limit with routine administration and operations. Coordination and control may exist in certain special nationwide programmes, but they are often deficient in more general services. Alternative approaches are thus often necessary.

The project approach, which is one alternative, has certain features that may be able to circumvent some of these obstacles to implementation. Three possible variants of this approach, together with criteria for deciding which one would be most suitable in a given situation, are described in the Introduction to Part II. The team should now refer to that description so that they can make their decision as to the best implementation approach for the project.

All decisions concerning the implementation approach should be documented. The product of this step is a brief description of the unit or organization that will be entrusted with the implementation, including the person to be in charge of the project, the full-time and part-time staff (whether seconded from the health ministry and/or service or brought in from other agencies and contractors), and the reporting relationships with existing organizations. Care should be taken to delineate the scope of the project manager's responsibility, especially since some of the implementation activities for which he is responsible may well be carried out by staff over whom he has no direct authority. For staff to be seconded from other posts, there should be a description of their proposed activities and the times at which they will be needed. The project's most important working and control procedures should also be described.

A fuller description of how these organizational and procedural characteristics are decided on and specified will be found in Part II of this Manual. While this specification work will be done in far greater detail and depth by the project team at the beginning of the implementation phase, it should be helpful for the formulators to refer to the descriptions in Part II when they undertake the present step.

8.7 DEFINE RESOURCE REQUIREMENTS FOR PROJECT

The resources required for the project can now be specified in greater detail than in step 8.52 on the basis of the activity schedule, 8.5, and the project organization and procedures, 8.6.

8.71 DETERMINE STAFF REQUIREMENTS

The manpower needed for carrying out the implementation activities -- full-time project staff, consultants/advisors, and part-time personnel -- should be specified in detail. For each person required the team should state:

1. a title and code number;
2. potential or actual source;
3. assigned activities, by number (from the schedule);
4. start and finish dates;
5. special training required.
In addition, a staffing summary should be prepared describing the numbers and types of project staff required for each month of the project's duration. Assignments of specific people should be indicated only when they are certain. Usually, all that is known at this time is the type of expertise needed and potential sources of such manpower.

8.72 DETERMINE FACILITIES, SUPPLIES, AND EQUIPMENT REQUIRED

All accommodations and other material requirements of the project also need to be described in detail together with the dates and activities for which they are needed, the quantity needed, and estimated cost. The usual categories are:

1. facilities (office space, classrooms);
2. vehicles;
3. equipment; and
4. expendable supplies.

8.73 PREPARE PROJECT BUDGET

The final step is the preparation of the project budget. Local administrative procedures will dictate its form and content. The budget should include only those costs directly attributable to project administration, not those costs pertaining to the service being established. The decisions taken in steps 8.6 through 8.72 will determine exactly what is to be included.

The budget should present the total and annual costs of the major expenditure categories, which most likely will include:

1. project staff;
2. consultants;
3. travel;
4. facilities;
5. other services;
6. vehicles;
7. other equipment; and
8. expendables.

The budget should be presented by whatever time phases are used locally in budgeting (normally one-year periods).

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ILLUSTRATION - CHAPTER 8

Once the team is satisfied that the proposed strategies can be paid for, it divides into two working groups. One group begins to plan the project through which the strategies will be implemented. The other group continues preparing the documents that describe the strategies and begins outlining and assembling the proposal document (see step 8).

The project planning group starts by reviewing the proposal strategies and creating a list of project objectives that they feel must be achieved in order to implement the recommended strategies successfully (step 8.1). The list is shown as Fig. 1.

The group then begins to develop the implementation approach by:

1. Listing all the activities that will have to be carried out to put into effect the changes required by the strategies (step 8.2). Change/activity matrices are generated for the purpose of cross-checking. The matrix for the community health worker strategy is shown as Fig. 2.

2. Consulting with persons having health service implementation experience to determine what obstacles are frequently encountered when attempting to implement something new (step 8.4). A list of such obstacles is prepared (Fig. 3).

3. Spelling out the specific products expected from the project activities (step 8.3).

On the basis of the above, the group concludes the following (step 8.6):

1. Completion of so many diverse activities will not be possible unless there is a full-time project manager.

2. The project manager should be placed at the provincial level and should report directly to the Director-General of Health Services.

3. Because of the shortage of staff within the Province, the project manager must be assigned from within the Ministry. (Owing to the national interest in the project and the need to apply this experience throughout the country, the manager will probably be seconded from the national Health Planning Unit.)

4. The project will be chartered so as to receive whatever technical support it needs from relevant Ministry departments.

5. Project staff will be appointed full-time and part-time from within the Ministry, from within the Province, and, when necessary, from other agencies.

6. One of the project's first tasks is to set up a Provincial Health Advisory Committee made up of representatives of the public, professional, and private sectors. This committee will act as a public sounding board for publicizing the results of the project, for monitoring its progress, and for assisting in inter-agency and private sector coordination and support.

7. The steering committee at the national level will be converted into a technical guidance committee and will also assist with inter-agency coordination.

8. The project will remain active for at least two years, but in no case longer than five. The criterion for its termination should be the ability of all provincial health offices throughout the country to implement these strategies on their own.

9. A certain amount of responsibility for evaluation will be assigned to the project, so that the soundness of the strategies will be ascertained before they are applied throughout the country.
FIGURE 1. PROJECT OBJECTIVES

(1) To create mobile health teams in each district of Province Eaks which make twice-yearly visits to all villages and schools not in close proximity to health centres and which provide the critical preventive and curative services expressed as targets in this proposal.

(2) To create an auxiliary health worker, hereafter called the rural community health worker, by registering, recruiting, and training traditional midwives and practitioners and local community volunteers. Such workers will function as the first-line source of medical care by delivering a standard set of simple preventive and curative services. There will be at least one such health worker for every village of 1,000 people or more (313 out of the total 544).

(3) To institute a provincial health education programme utilizing mass media, commercial firms, and the schools. This programme will be managed by a number of the Provincial Health Officer's staff in such a way that 90% of the population receives a health education message at least once a month.

(4) To establish a traffic accident prevention programme either under the auspices of or in coordination with the Ministry of the Interior, such a programme to contain public promotion, legislation revision, enactment, and enforcement.

(5) To establish a system of emergency communication and transport facilities in all districts and all villages of 1,000 people and over (313).

(6) To design and implement revised procedures for rural health services (fixed and mobile) which will maximize the probability of target achievement; to produce manuals of these procedures; to design and conduct in-service training courses in these procedures for existing staff; and to set up a supervisory and control system at the provincial level.

(7) In coordination with the Ministry of Community Development, to design and institute a programme of community participation in health promotion covering 300 villages; to establish a Provincial Health Advisory Committee.
### Figure 2. Change/Activity Matrix for Community Health Worker Strategy

<table>
<thead>
<tr>
<th>CHANGES</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology</strong></td>
<td></td>
</tr>
<tr>
<td>delivery technique</td>
<td><strong>DESIGN</strong> Standardize techniques</td>
</tr>
<tr>
<td>breast feeding</td>
<td><strong>TRAINING</strong> Conduct training courses</td>
</tr>
<tr>
<td>nutrition supply</td>
<td><strong>PROMOTION</strong> Publicize the techniques</td>
</tr>
<tr>
<td>general hygiene</td>
<td><strong>IMPLEMENTATION</strong> Begin recruitment &amp; registration</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td></td>
</tr>
<tr>
<td>traditional midwife</td>
<td><strong>DESIGN</strong> Write job description</td>
</tr>
<tr>
<td>traditional practitioner</td>
<td><strong>TRAINING</strong> Train govt staff in supervision</td>
</tr>
<tr>
<td>lay volunteers</td>
<td><strong>PROMOTION</strong> Publicize the strategy, promote</td>
</tr>
<tr>
<td></td>
<td><strong>IMPLEMENTATION</strong> Use of these staff with</td>
</tr>
<tr>
<td></td>
<td><strong>SUPPORT</strong> Begin recruitment &amp; registration</td>
</tr>
<tr>
<td></td>
<td><strong>PROJECT</strong> Monitor recruitment, training</td>
</tr>
<tr>
<td>district health staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DESIGN</strong> Revise job description</td>
</tr>
<tr>
<td></td>
<td><strong>TRAINING</strong> Train the tutors</td>
</tr>
<tr>
<td></td>
<td><strong>PROMOTION</strong> Publicize the strategy, promote</td>
</tr>
<tr>
<td></td>
<td><strong>IMPLEMENTATION</strong> Use of these staff with</td>
</tr>
<tr>
<td></td>
<td><strong>SUPPORT</strong> Begin recruitment &amp; registration</td>
</tr>
<tr>
<td></td>
<td><strong>PROJECT</strong> Monitor recruitment, training</td>
</tr>
<tr>
<td><strong>Procedures</strong></td>
<td></td>
</tr>
<tr>
<td>registration</td>
<td><strong>DESIGN</strong> Design promotion, registration, and</td>
</tr>
<tr>
<td>recruitment</td>
<td><strong>TRAINING</strong> Write manuals &amp; curriculum</td>
</tr>
<tr>
<td>training</td>
<td><strong>PROMOTION</strong> Produce procedures manuals</td>
</tr>
<tr>
<td>support (supplies)</td>
<td><strong>IMPLEMENTATION</strong> Distribute manuals</td>
</tr>
<tr>
<td>supervision</td>
<td><strong>SUPPORT</strong> Monitor performance</td>
</tr>
<tr>
<td>referral/comm.</td>
<td></td>
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<tr>
<td></td>
<td><strong>DESIGN</strong> Specify supply requirements</td>
</tr>
<tr>
<td></td>
<td><strong>TRAINING</strong> Design procedures</td>
</tr>
<tr>
<td></td>
<td><strong>PROMOTION</strong> Promote concept with Min. of</td>
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<tr>
<td></td>
<td><strong>IMPLEMENTATION</strong> Establish and maintain</td>
</tr>
<tr>
<td></td>
<td><strong>SUPPORT</strong> Follow up</td>
</tr>
<tr>
<td></td>
<td><strong>PROJECT</strong> Monitor strategy</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
</tr>
<tr>
<td>coordination with</td>
<td><strong>DESIGN</strong> Design liaison procedure</td>
</tr>
<tr>
<td>Min. of Interior,</td>
<td><strong>TRAINING</strong> Train the tutors</td>
</tr>
<tr>
<td>Commun. Development</td>
<td><strong>PROMOTION</strong> Publicize the strategy, promote</td>
</tr>
<tr>
<td></td>
<td><strong>IMPLEMENTATION</strong> Begin recruitment &amp; registration</td>
</tr>
<tr>
<td></td>
<td><strong>SUPPORT</strong> Begin recruitment &amp; registration</td>
</tr>
<tr>
<td></td>
<td><strong>PROJECT</strong> Monitor recruitment, training</td>
</tr>
<tr>
<td><strong>Policy</strong></td>
<td></td>
</tr>
<tr>
<td>use of traditional</td>
<td><strong>DESIGN</strong> Draft policy guidelines</td>
</tr>
<tr>
<td>practitioners, midwives,</td>
<td><strong>TRAINING</strong> Train the tutors</td>
</tr>
<tr>
<td>lay volunteers</td>
<td><strong>PROMOTION</strong> Publicize the strategy, promote</td>
</tr>
<tr>
<td>payment</td>
<td><strong>IMPLEMENTATION</strong> Use of these staff with</td>
</tr>
<tr>
<td></td>
<td><strong>SUPPORT</strong> Begin recruitment &amp; registration</td>
</tr>
<tr>
<td></td>
<td><strong>PROJECT</strong> Monitor recruitment, training</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

*Note: The table continues with additional changes and activities.*
FIGURE 3. FREQUENT OBSTACLES TO SUCCESSFUL IMPLEMENTATION

(1) Projects have political importance, which makes it difficult to designate the agency or office responsible for implementation and creates coordination problems.

(2) Project allocations often do not adhere to expressed policy or budgets.

(3) In implementing new services investment is often out of proportion to the financial ability to maintain and operate the services once developed.

(4) Project manpower is often limited by the scheduling of foreign training during critical implementation periods.

(5) Implementation responsibilities are often diffused across several agencies.

(6) Implementation activities requiring multidisciplinary, multi-organizational work may have differing priorities to the various contributors; the degree of their commitments to the project may thus vary.

(7) Implementation work is usually only a part-time activity for health administrators and may be subordinated to the management of routine operations.

(8) Procedures for monitoring implementation progress are lacking.

(9) There is no effort to promote and maintain interest in individual projects, resulting in diminishing enthusiasm, attention, and follow-through.

(10) Projects are slow to start because of difficulties in obtaining approval for all aspects by all the interested agencies.

(11) There often is inadequate understanding of the purpose and content of priority projects by the offices involved.

(12) Projects are unrealistically scheduled.

(13) Staff rotation and reassignment often slows progress and destroys continuity.

(14) Foreign "experts" are allowed to dominate early planning and management of the project and then leave behind an approach the nationals do not believe in.

(15) There is too much emphasis on pilot efforts, demonstration projects, and special surveys and studies; and too little emphasis on "across the board" development in the high priority health areas.

(16) Public acceptance is often not given adequate consideration. The success of the project and the newly implemented services is hindered because:

(a) the possibility of public help with implementation activities is not explored fully, and

(b) efforts to increase public acceptance of the new health services are not begun early in the project.
This project approach to implementing important strategies and services will itself be evaluated by the Planning Unit and, if successful, will be used for other important undertakings.

With this implementation approach in mind the group begins to schedule the project (step 8.5). The major activities and milestones are listed and a preliminary network is constructed as shown in Fig. 4 and 5. This phasing is checked against the likely availability of resources, and milestone dates are then applied. It is not considered necessary to work out the detailed activity schedule for the whole 5-year period. This will be the responsibility of the project manager. The group does, however, attempt to schedule the important activities of the first year (see Fig. 6 for the details of activity 2).

Finally, the group writes a description of the implementation organization and the methods with which it is to operate (step 8.6). Very few resources are required for the project team. However, the project staff are listed in detail for the first year. In addition, office supplies and a transportation budget are requested in order to get the project started (step 8.7). The project manager will have to submit a more detailed budget request after the project is initiated (steps 10 and 11).
**Figure 4. Major Activities and Milestones**

<table>
<thead>
<tr>
<th>ACTIVITY No.</th>
<th>ACTIVITY TITLE</th>
<th>MILESTONE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Review Proposal</td>
<td>Approved</td>
<td>JAN 75</td>
</tr>
<tr>
<td>2.</td>
<td>Establish Provincial Health Advisory Committee</td>
<td>Established</td>
<td>APR 75</td>
</tr>
<tr>
<td>3.</td>
<td>Design Mobile Health Service</td>
<td>Completed</td>
<td>JULY 75</td>
</tr>
<tr>
<td>4.</td>
<td>Train Mobile Teams and Independent Mobile Service</td>
<td>First District</td>
<td>OCT 75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All Districts</td>
<td>DEC 78</td>
</tr>
<tr>
<td>5.</td>
<td>Evaluate/Revise Mobile Health Service</td>
<td>Completed</td>
<td>DEC 79</td>
</tr>
<tr>
<td>6.</td>
<td>Set up Registration System for Traditional Practitioners</td>
<td>Established</td>
<td>OCT 75</td>
</tr>
<tr>
<td>7.</td>
<td>Train Community Health Workers</td>
<td>300 trained</td>
<td>DEC 79</td>
</tr>
<tr>
<td>8.</td>
<td>Implement Provincial Health Education Programme</td>
<td>Covering 90% pop.</td>
<td>MAR 76</td>
</tr>
<tr>
<td>9.</td>
<td>Design Community Health Participation Programme</td>
<td>Completed</td>
<td>NOV 78</td>
</tr>
<tr>
<td>10.</td>
<td>Implement Community Health Participation Programme</td>
<td>300 villages</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Set up Traffic Accident Prevention Programme</td>
<td>Established</td>
<td>JULY 77</td>
</tr>
<tr>
<td>12.</td>
<td>Implement Emergency Transport and Communication System</td>
<td>313 villages</td>
<td>JULY 78</td>
</tr>
<tr>
<td>13.</td>
<td>Make Health Centre Improvements</td>
<td>Completed</td>
<td>DEC 76</td>
</tr>
<tr>
<td>14.</td>
<td>Develop Operating and Supervisory Procedures</td>
<td>Completed</td>
<td>JULY 75</td>
</tr>
<tr>
<td>15.</td>
<td>Set up Staff In-Service Training</td>
<td>Established</td>
<td>MAR 76</td>
</tr>
<tr>
<td>16.</td>
<td>Conduct Staff In-Service Training</td>
<td>1st Round Compl.</td>
<td>DEC 79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(all Health Centre Staff)</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Provincial Assessment, Annual Budget Submission and Plan Revision</td>
<td>Continuing</td>
<td></td>
</tr>
</tbody>
</table>
Figure 5. Phasing of Major Activities

*The activity numbers refer to the activities listed in Fig. 4.*
**Figure 6.**
DETAILS OF MAJOR ACTIVITY 2:
ESTABLISHING PROVINCIAL HEALTH ADVISORY COMMITTEE

<table>
<thead>
<tr>
<th>Activity No.</th>
<th>Activity Title</th>
<th>Preceding Activity</th>
<th>Date of Activity</th>
<th>Responsible Staff</th>
<th>Other Support</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Prepare draft of TOR including general functions and procedures (special attendance &amp; subcommittee)</td>
<td>Project approved by Min of Health</td>
<td>2 Jan. 15 Jan.</td>
<td>PHO &amp; staff</td>
<td>HPU</td>
<td>Details for years '76, '77, '78</td>
</tr>
<tr>
<td>2.2</td>
<td>Prepare budget (sources, scheme of payment)</td>
<td>Determine total no. of members, facilities to be used</td>
<td>2 Jan. 15 Jan.</td>
<td>PHO &amp; staff</td>
<td>Governor, Provincial administration, etc.</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Estab. provincial secretariat (PHO staff &amp; facilities)</td>
<td>Annual operating plan 2.1, 2.2, 2.3</td>
<td>2 Jan. 15 Jan.</td>
<td>PHO</td>
<td>Governor's office</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Review and approval of 2.1, 2.2 &amp; 2.3 by Governor</td>
<td></td>
<td>16 Jan. 31 Jan.</td>
<td>Governor</td>
<td>Dept. of Health, HPU</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Select meeting site</td>
<td></td>
<td>1 Feb. 2 Feb.</td>
<td>Governor</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>Document functions &amp; procedures</td>
<td></td>
<td>1 Feb. 28 Feb.</td>
<td>PHO</td>
<td>PHO staff</td>
<td></td>
</tr>
<tr>
<td>2.7</td>
<td>Promotional effort to establish membership</td>
<td></td>
<td>2.4</td>
<td>PHO, Gov's PR Officer</td>
<td>Governor's staff</td>
<td>Formal appointment.</td>
</tr>
<tr>
<td>2.8</td>
<td>Finalize membership selection</td>
<td></td>
<td>1 Mar. 7 Mar.</td>
<td>Governor</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.9</td>
<td>Distribute membership list, indoctrination materials</td>
<td></td>
<td>2.8</td>
<td>Governor's Admin. Officer</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.10</td>
<td>Prepare for first meeting (agenda &amp; reference materials)</td>
<td></td>
<td>2.9</td>
<td>PHO &amp; staff</td>
<td>Governor</td>
<td>Agenda to include other strategies being implemented in Province</td>
</tr>
<tr>
<td>2.11</td>
<td>First Meeting</td>
<td></td>
<td>2.10</td>
<td>Governor</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.12</td>
<td>Prepare &amp; distribute minutes</td>
<td></td>
<td>2.11</td>
<td>Governor's Admin. Officer</td>
<td>PHO Office</td>
<td></td>
</tr>
<tr>
<td>2.13</td>
<td>Public information on PHAC activity</td>
<td></td>
<td>2.12</td>
<td>Governor's PR Officer</td>
<td>Radio, newspaper, etc.</td>
<td></td>
</tr>
</tbody>
</table>

HPU = Health Planning Unit; PHAC = Provincial Health Advisory Committee
PHO = Provincial Health Officer; PR = Public Relations
CHAPTER 9,
WRITING THE PROJECT PROPOSAL
9. WRITING THE PROJECT PROPOSAL

INPUTS

activity schedule, 8.5
summary of policies and programmes, 2.2
resource projections, 2.3
Socioeconomic trends, 3.2
objectives and operational targets, 5.5
resource shortfalls, 7.7
project budget, 8.7

STEPS

9.1 ADJUST OBJECTIVES & TARGETS

9.2 DESCRIBE BENEFITS OF PROBLEM REDUCTION

9.3 JUSTIFY EXTERNAL ASSISTANCE REQUEST

9.4 CREATE PROPOSAL OUTLINE

9.5 WRITE PROPOSAL & ANNEXES

9.6 SUBMIT THE PROJECT PROPOSAL

PRODUCTS

CONTAINED PROPOSAL DOCUMENT

POINTS OF USE

10. Initiating the Project
11. Specifying and Scheduling Work
12. Obtaining Resources
13. Establishing the Control System
14. Directing and Controlling
What purposes must the project proposal serve?

The primary purpose of the proposal document is to enable the project to be initiated as soon as possible. This normally requires a description of the proposed strategies, their costs and benefits, and how they are to be implemented — a description that is sufficient for the making of essential technical, organizational, and resource allocation decisions. If such decisions have already been made and a summary report is not needed to document them, it may be unnecessary and possibly disadvantageous to produce a formal proposal. In such cases, the technical specifications, costing details, and activity schedule should be reproduced as initially prepared by the formulation team for subsequent use by the persons responsible for implementation.

The proposal document may in addition be used:

(a) to support budget requests;
(b) as promotional material within the country;
(c) as a basis for requesting foreign assistance;
(d) as a depository of the results of data collection and analysis activities, and a means for making such data available for other uses;
(e) as guidance to those who will have responsibility for implementation;
(f) as a description of the application of the formulation method for subsequent teaching and use.

Who should write the proposal?

One or two members of the formulation team should do most of the drafting. Others on the team should provide support as necessary (technical summaries, exhibits, charts and graphs, annexes). The writers may be advised by senior administrators in the Chartering Agency and elsewhere.
How can the time for proposal writing be reduced?

(a) Have the preparatory workshop agree on the general outline of the proposal.

(b) Have the preparatory workshop agree on the format for documents to be produced during formulation, so that such products may be used as annexes to the proposal without redrafting.

(c) Have the coordinator insist that formulation steps are not completed until their products are in written form.

(d) Do not engage in group editing sessions.

*
9.1 ADJUST OBJECTIVES AND TARGETS

If the project activity schedule, 8.5, calls for a slower pace of implementation than had originally been envisaged when the problem-reduction objectives were set (step 5.5), it may now be necessary to alter the timing of problem reduction to fit the new schedule. This will usually mean adjusting the problem-reduction objectives downward and making a corresponding adjustment of the operational output targets. The adjusted objectives and targets and their predicted impact on the critical problems should be shown in a table as was done in step 5.

The final problem-reduction objectives will be one basis for evaluating the newly designed strategies and services implemented by the project.

9.2 DESCRIBE BENEFITS OF PROBLEM REDUCTION

The team must now describe the various local, regional, and national benefits that will accrue if the problem-reduction objectives are achieved.

9.2.1 HEALTH BENEFITS

Beyond the specific reduction of the target diseases, the broader effects of achieving the reduced disease levels should be described. Examples include:

(1) The cumulative effect of improved nutrition on preventing subsequent disease.
(2) The decreased severity of prevalent conditions as a result of early diagnosis and treatment.
(3) Improvement in overall health indicators such as:
   (a) reduction in the infant mortality rate;
   (b) reduction in birth rate (or population growth rate);
   (c) number of premature deaths prevented;
   (d) number of cases prevented;
   (e) number of disability days saved;
   (f) a general expression of symptomatic relief provided.

Use should be made of graphs and tables (compiled from products 4.6 and 5.6) that permit comparison of trends based on projections under present conditions versus those expected if the new strategies are implemented. If cost savings are expected, the possible application of such savings to other health promotion work should be mentioned.

9.2.2 ECONOMIC BENEFITS

An attempt should be made to convert the expected disease reduction into man-days (or bed-days) saved and increased longevity. It may then be shown that labour-intensive endeavours would benefit from specific degrees of reduction of worker absenteeism and increasing years of productive employment. These benefits may then be converted into economic return.
9.23 SUPPORT FOR OTHER PROGRAMMES

The review in step 2.2 should have produced a comprehensive list of other programmes and projects at national and regional levels, both within and outside the health sector. Statements by the administrators of those programmes about the hindrance posed by health problems should form a basis for pointing out the beneficial effect that the proposed project will have on them. If the proposed health strategies were designed in close coordination with other development programmes (education, agriculture, housing, etc.), the supportive nature of such coordination should be stressed here. Comments about the programmes supported by the present project should not be limited to national programmes but should include provincial/regional and community activities.

9.24 NATIONAL OBJECTIVES AND POLICIES

Step 2.2 will also have produced up-to-date statements of national policies and objectives. The ways in which the proposed strategies support these national aims should be clearly indicated.

9.25 IMPROVED EFFICIENCY

Certain additional benefits may be inherent in the strategy design and implementation.

1. The fact that strategy design is oriented toward the reduction of specific problems may lend an objective-oriented character to the health services that was previously lacking. This type of planning and control may deserve consideration in other problem and development areas.

2. The higher levels of operational output resulting from the strategies may attract the attention and approval of senior administrators, politicians, and lending agencies.

3. There may be several examples of lower costs per unit of service output. In these cases the planned cost/output ratios should be compared with the current ratios.

9.3 DESCRIBE JUSTIFICATION FOR EXTERNAL ASSISTANCE REQUEST

In step 7.7 the team determined whether there would be any resource shortfalls for project and/or the support of the implemented services, and whether external assistance would be necessary to cover the shortfalls. In the present step the team first determines whether the times for which these resources need to be requested will have to be altered to fit the activity schedule, 8.5. They then prepare descriptions of each item needed, by category (capital, manpower, equipment, etc.), the time period when needed, the related project activity, and possible sources of each (known or suggested). Together with these descriptions there should be a carefully worded explanation of how the team determined the need for foreign assistance to cover these resource shortfalls (step 7.7). This will be the justification for any assistance requests ultimately submitted.

9.4 CREATE THE PROPOSAL OUTLINE

The structure of the project proposal deserves careful design as it must comply with local administrative procedures and requirements while presenting the results of a new method
of analysis and design. There are many obvious alternatives.

In general, it is considered necessary to provide an "executive summary" of the proposal for the use of the main decision-makers. The executive summary would contain:

1. a brief summary of the strategies being proposed, highlighting the most important aspects of each (from step 7.3);
2. the cost implications of the proposal, identifying new costs and comparing current costs and outputs with those being proposed;
3. the major decisions that must be taken to initiate the project (from step 2.14);
4. the potential political and other pitfalls, and the means for avoiding them (from steps 6, 7, and 8);
5. the external assistance needed, and potential sources (from step 9.3);
6. the potential benefits (from step 9.2); and
7. the overall approach to, timing of, and costs of implementation (from step 8).

Details of the analysis (steps 2-4), strategy design, and project plan would be presented in separate sections of the proposal and in supporting annexes. It is crucial to tailor these sections of the document to the needs of the various readers who will subsequently be receiving, deciding on, or otherwise using the proposal. These "target groups" may include the following people:

1. technical review committees;
2. Ministry of Finance planning or budgeting officers;
3. programme officers of various assistance agencies;
4. technicians or consultants assigned to detailed design activities;
5. project manager and team;
6. operational or service staff called upon to support implementation;
7. staff of the planning unit or training institutions called upon to apply the method to other formulations or to teach it to potential planners.

Thus, in addition to the executive summary, sections of the proposal could be devoted to such subjects as:

1. The problem situation:
   a. description of the geographic area where the project is to be carried out;
   b. results of the analysis (steps 2-4);
   c. the problems and how they interrelate;
   d. how the problems are expected to change in the future;

---

1If at all possible, the proposal outline should be decided on during the preparatory workshop so that the products of analysis and design can be prepared initially in a form that can be used in the final document.
(e) the current and expected obstacles to dealing with these problems.

(2) Objectives for the future:
   (a) the basis of choice of problem-reduction objectives;
   (b) objective/output relationships;
   (c) the output targets to be achieved.

(3) Strategies to be implemented:
   (a) design criteria;
   (b) alternative strategies;
   (c) detailed description of chosen strategies.

(4) Plan of implementation:
   (a) project objectives;
   (b) implementation approach;
   (c) project organization;
   (d) the details of early implementation activities;
   (e) the overall phasing of implementation.

(5) Resource requirements:
   (a) resources required for achieving targets;
   (b) sources and shortfalls;
   (c) resources required for implementation, sources and shortfalls;
   (d) foreign assistance required and potential sources.

(6) How the formulation method was applied.

While it is usually desirable to retain all products of the formulation for subsequent use in detailed planning of this or other projects, they need not be included in the proposal itself. Those that are felt to be necessary to explain and support sections of the proposal may be attached as annexes.

Possible annexes are:

(1) The terms of reference, 1.6;
(2) organizational structure and procedures charts (steps 2.11, 2.12);
(3) chart of the decision process (step 2.14);
(4) extracts from relevant policy and programme documents (step 2.2);
(5) supporting data for the socioeconomic trend analysis (step 3.2);
(6) the complete problem diagram, 4.3;
(7) population data and population projection, 3.3;
(8) health resource data and resource projections, 2.3;
(9) current health work description, 2.4;
(10) the problem projection technique used (step 4);
(11) the problem reduction — operational output relationship (step 5);
(12) the obstacle analysis models (step 6);
(13) the ranked obstacles, 6.4;
(14) the design criteria, 7.1;
(15) the detailed list of design changes (step 7.2);
(16) potential strategy outlines, 7.3;
(17) detailed strategy descriptions, 7.5;
(18) strategy costs, 7.6;
(19) project objectives, 8.1;
(20) the project activities, 8.2;
(21) obstacles to implementation (step 8.4);
(22) details of the implementation approach (step 8.6);
(23) the activity schedule, 8.5;
(24) project organization and procedures, 8.6;
(25) project resource requirements, (step 8.7);
(26) benefits (step 9.2);
(27) foreign assistance requirements (step 9.3).

9.5 WRITE PROPOSAL AND ANNEXES

Once the outline is finalized and most products of the previous steps have been prepared in written form, the various sections of the proposal may be drafted. It is usually best for most of the writing to be done by one or two of the team members. The writers must fully understand all aspects of the proposal and be familiar with the attitudes of those who will be reviewing the document. It may be necessary for such writers to be advised by sympathetic senior managers as to the best ways of presenting the proposal.

The other members of the team would, in the meantime, gather supporting material for the proposal and its annexes.

9.6 SUBMIT THE PROJECT PROPOSAL

The submission of the project proposal to the Chartering Agency in final form signals the end of the project formulation. Either before or after its submission, depending on local decision-making procedures, the lengthy process of review and approval of the proposal will begin. (This process is discussed in greater detail in step 10.1.)

*  
*     *


ILLUSTRATION - CHAPTER 9

The working group dealing with the preparation of the project proposal divides the writing tasks among several of the more experienced writers. The descriptions of the proposed strategies (begun in step 7) are completed.

The team reviews the objectives and targets and finds no reason for adjusting them (step 9.1). A small group is assigned to calculate and describe the potential benefits of the proposed strategies (step 9.2). Fig. 1 is a summary of such benefits.

Next (step 9.3), the team explains how it had arrived at the conclusion in step 7.7 that external assistance would be required for the provision of powdered milk to the mothers of malnourished children and for a vehicle to be used by the mobile health team in one district. This explanation will be the justification for the draft request to UNICEF, which is considered to be the appropriate agency for providing both these items.

The outline of the proposal (step 9.4) is designed in such a manner as to provide the most information in the smallest space. The first target groups are the decision-makers within the Ministry of Health and the Economic Planning Board. For these people an executive summary is prepared that briefly covers the problems, objectives, strategies, their costs and benefits, the implementation approach, assistance needs, and the decisions needed to initiate the project.

The second target group includes the more technically oriented department and division heads within the Ministry of Health and other agencies who may be called upon to give their technical approval of the proposed strategies. A section describing all strategies in detail is provided for these readers.

The third target group to whom the proposal is directed are those people who will be assigned the task of carrying out the project activities. A section describing the project plan is prepared for their guidance.

A fourth section is written describing the detailed resource requirements of:

(1) all strategies during the period 1976-1985; and
(2) the project organization.

This section is for Ministry of Health budget purposes.

Finally, a number of annexes are prepared that present background data produced during many of the analytical and design steps. These are for the use of project staff during implementation and of others in the Ministry who will have to conduct formulations on other subjects. Fig. 2 shows the overall outline of the proposal.

The proposal is written, typed, and produced in sufficient copies for all reviewers, implementers, and other interested parties. It is presented and discussed at the final meeting of the steering committee.
**Figure 1. Summary of Potential Benefits**

**Improved Health of the Population**

1. **Infants (age 0)**
   - (a) prevention of 5,000 cases
   - (b) prevention of 450 deaths

2. **Children (aged 1-4)**
   - (a) prevention of 26,600 cases
   - (b) prevention of 644 deaths

3. **Children (aged 5-14)**
   - (a) prevention of 41,350 cases
   - (b) prevention of 3,060 deaths

4. **Adults (aged 15-44)**
   - (a) prevention of 62,000 cases
   - (b) prevention of 4,400 deaths

5. **Adults (aged 45 and older)**
   - (a) prevention of 16,130 cases
   - (b) prevention of 1,362 deaths

6. **Children (aged 1-15):** 80% or 245,000 protected through immunization against smallpox, poliomyelitis, diphtheria, whooping cough, tetanus, and tuberculosis.

7. **Females (aged 15-44):** prevention of 19,780 births between 1976 and 1985 (reducing the population growth rate from 2.36% to 2.0%).

8. Placing health services within the reach of 80% of the population and providing a 60% consultation coverage for the problems of greatest concern.

**Reduced Cost of Health Service for the Government and the Public**

1. Reducing the pressure of public demand for hospital medical care through the preventive strategies, leading to the case reduction specified above.

2. Reducing the average consultation cost to the government by:
   - (a) conducting large numbers of consultations for preventive work and common ailments in the villages and schools with less expensive types of staff (cost per consultation to be 8.72 T and 4.08 T for villages and schools respectively, as compared to the present average cost per consultation of 56.73 T in health centres and OPDs);
(b) increasing the volume of consultations (requiring an MD) in the health centres through referral from mobile contacts;
(c) reducing OPD workload by screening out common ailments in the villages and health centres.

(3) Reducing the annual per capita public expenditure for health services by:
(a) the disease prevention mentioned above;
(b) contacting the people in the villages and thereby obviating their need for travel;
(c) generating public appreciation and demand for the cheaper government services as a replacement for expensive self-medication;
(d) reversing the trend of increasing institutional and private clinic deliveries by relying on the cheaper traditional and government midwives.

SUPPORT FOR GOVERNMENT POLICIES AND PROGRAMMES

(1) Conducting family planning activities to the degree consistent with the national intention of reducing the rate of population growth.

(2) Placing emphasis on the provision of services to the rural population to rectify the current imbalance between urban and rural services and alleviate their feelings of government neglect.

(3) Providing a means for including health promotion in the Community Development Programme and the educational system.

(4) Providing a vehicle for strengthening health management ability and intersectorial coordination at the Provincial level.

(5) Establishing strategies capable of greatly expanding health service to rural people throughout the country at minimal increased costs.

(6) Encouraging the expansion of private medical practice while striving to increase the degree to which such practice supports government programmes.

(7) Increasing the appeal of the government health service in order to attract future health workers.

(8) Effecting fuller integration of disease control programmes into the basic health services in a practical manner.

(9) Providing political and administrative support for water, latrine, and mosquito control programmes.

SOCIAL AND ECONOMIC BENEFITS

(1) Reduction of working days lost due to illness and accidents of the order of 186 000 man-days, or 7 750 000 T of production and 10 568 000 T of income between 1980 and 1985.

(2) Reduction of school-days lost due to illness and accidents of the order of 124 000 days between 1980 and 1985.

(3) Prevention of potential epidemics of cholera and smallpox and general reduction of other diseases, resulting in international recognition of improving health conditions and a corresponding increase in foreign investment and tourism.

(4) Altering the trend of increasing traffic accidents with its corresponding costs in lives, impairment, treatment, rehabilitation, and property loss.
Figure 2: Project Proposal Outline

(1) Executive Summary
   (a) Summary of the problem
   (b) Objectives
   (c) Strategies in brief
   (d) Implementation approach
   (e) Cost implications
   (f) Potential benefits
   (g) Assistance requirements
   (h) Decisions to be made

(2) Strategy Descriptions

(3) Project Plan

(4) Resource Requirements

Annexes

(1) Terms of reference
(2) Organization charts
(3) Chart of decision-making process
(4) Relevant policies and programme descriptions
(5) Socioeconomic data and projections
(6) Population data and projections
(7) Health problem definition and projection
(8) Health resource data and projection
(9) Problem-reduction objectives and operational targets
(10) Potential obstacles to objective achievement
(11) Design criteria
(12) Detailed list of changes, by problem
(13) Detailed strategy descriptions
(14) Strategy costing
(15) Project objectives
(16) Project activities
(17) Obstacles to implementation
(18) Activity schedule
(19) Project organization and procedures
(20) Derivation of potential benefits
INTRODUCTION TO PROJECT IMPLEMENTATION

The purpose of Part II of this manual is to help project managers ensure that their health projects are carried out successfully. "Successfully" here means that the project activities have been completed on schedule and within budget, that the project has implemented the desired changes in the operating service, and that these changes have a reasonable chance of being sustained after the project as such is terminated.

For two reasons, the emphasis in Part II is on the managerial procedures to be followed by the project manager, rather than on technical project activities such as designing hospitals or developing training curricula:

1. While the purely technical activities performed in projects are usually of high quality, experience shows that the management of these activities is often neglected.

2. It is difficult to give general guidelines on technical project activities, since these vary so greatly from one project to another. All project managers, however, are obliged to perform much the same kinds of managerial activities, whether their project has to do with constructing a water supply system, altering a health centre, or initiating a malaria control programme.

Chapters 10-16 are thus concerned with activities such as motivating project staff, preparing work schedules, obtaining funds, manpower, and other resources, and supervising the work of project team members to make sure that the project is yielding the desired results.

Applicability of this method

These procedures could conceivably be applied when implementing any new undertaking. In general, however, the implementation method described here should be most useful when applied to a project with the following features:

1. Importance. The method should be used when there is strong pressure at the highest levels of the ministry or government to have the undertaking implemented successfully, thereby justifying an intensive effort to manage the implementation.

2. Specific objectives. This method is most useful when the end points of the undertaking can be defined with reasonable precision because it provides for close control by a manager to ensure that end points are reached.

3. Large size and scope. Strong emphasis on management of implementation obviously has greater potential benefit when substantial sums of money are to be expended, or when changes in a large number of facilities or institutions are to be made, or when a large number of health staff are to be trained or retrained.

4. Complexity. This method is most useful when the proposed undertaking consists of a set of interrelated activities that can only be carried out through the combined efforts of several different ministries, ministry divisions, states, or nongovernmental agencies.

5. Time limits. The method is designed to help the ministry complete the activities within a given time period. If there is little or no pressure to show results by a specified time, the use of this implementation method is probably not justified.
(6) **Unusual.** If the undertaking is new, or unusual, or unfamiliar in the sense of not having been effectively dealt with by existing organizational units, project implementation is usually justified.

**Special features**

The main difference between this method and the traditional managerial approach to implementation lies in the organizational structure used for implementation.

Most industrial and governmental organizations have a traditional organizational structure, with the following characteristics:

1. **Departmentalization.** Functions and activities are separated and distributed to strictly separate units and divisions organized on the basis of functional homogeneity, geographical location, and so on. The result is parochialism; each manager will always be more concerned with his particular department than with the overall work of the organization.

2. **Vertical hierarchy.** Authority usually flows fairly strictly from the highest to the lowest levels along every link in the chain.

3. **Distribution of objectives.** Each relatively short-term objective (such as smallpox eradication) is usually assigned specifically to a separate organizational unit, while the longer-term objectives (for example, reducing infant mortality) are usually not assigned to any particular unit -- it is simply assumed that all units will cooperate to achieve them.

4. **Permanence.** Organizational units (and often personnel as well) are rather permanent in nature, adapting gradually to changes in the environment by absorbing new functions, changing unit titles, etc.

Implementation through a project temporarily bypasses this structure. A project is carried out by a temporary organization, the core of which is the project team, that works to coordinate and mesh the efforts of a large number of relatively independent existing organizational units (see Fig. 1). Project implementation therefore requires a high degree of horizontal and diagonal communication, as shown in the figure, and an environment characterized by peer-to-peer, associate-to-associate contacts. The emphasis is on cooperation rather than authoritarian hierarchical relationships, and on the coordination rather than the separation of functionally different activities. Project activities are oriented towards both short-term and long-term objectives, and responsibility for achieving those objectives that fall within its lifespan is firmly fixed onto the project. Creating the project team and the proper project environment thus means making temporary changes in the traditional organizational structure. Once the project is terminated, the existing organization absorbs the functions (and normally also the staff) of the project team.

Many industrial and governmental organizations have been quite successful in restructuring part of their organization temporarily in project form to make sure that important undertakings are implemented successfully. Although the nature of these undertakings, such as developing a new aeroplane or changing a postal system, differs from that of most health projects, organizing people in a project team to implement large undertakings appears to be equally valid in the health field, provided there is careful planning.

**The project team: three variants**

The core of the project organization is the project team. The number of people to be included in the team depends of course on the size of the project but it also depends on other factors, as discussed below. Briefly, there are three main possibilities:
Figure 1. THE PROJECT ORGANIZATION CONCEPT

MINISTER OF HEALTH

CHIEF OF ADMINISTRATION

DIRECTOR-GENERAL OF HEALTH SERVICES

PERSONNEL

BUDGET & FINANCE

SUPPLY

RESEARCH & PLANNING

PUBLIC HEALTH

HOSPITALS

PROJECT TEAM

PUBLIC HEALTH INSTITUTE

--- direct authority

- - - - - - coordinating authority

DISTRICT HEALTH OFF.

DISTRICT HEALTH OFF.

DISTRICT HEALTH OFF.
The project team may consist of only one individual, the project manager (supported by clerical personnel as needed), who acts as an "expeditor" to ensure that existing technical units perform the necessary work as and when required. No personnel report directly to him. This arrangement minimizes disruption of the existing organizational structure and is most appropriate when many of the project activities can be carried out by existing technical units in the ministry, or other governmental or nongovernmental agencies. At the same time, however, the project manager's authority is very limited in this particular arrangement since primary responsibility for seeing to it that work gets done rests with the technical unit directors. Because these individuals have other priorities, it is unlikely that project activities will be done on time unless the project manager is extremely skilful in interpersonal relations.

The project team may consist of five or more members who themselves do most of the project activities. This arrangement has many advantages from the standpoint of project efficiency, but it is likely to be more costly in terms of overall ministry manpower; it is also apt to result in conflict between the project team and existing technical units in the ministry. In addition, since personnel from such units are only minimally involved in actual project implementation, they are less likely to feel committed to sustaining the implemented changes in these units once the project is phased out.

A combination of the first two alternatives is an obvious third possibility that has proved quite feasible in ministries of health and other governmental agencies. In this variant some of the project activities are carried out by existing technical units, others by project team members. As a consequence, the management of the project activities is accomplished by a network of people including "managers" from the existing organizational units in addition to the project manager.

The procedures described in Part II are applicable to all three variants. However, greatest emphasis is given to the "combination" approach on the assumption that it will be both feasible and effective for most ministries of health.

Use of Part II

The procedures in Part II are intended mainly for the use of the project manager, since he is a key figure in implementation and must be skilled in effective management techniques. In practice, however, a large-scale project cannot be successfully implemented unless senior administrators, staff from technical units, health service supervisors, and project team members themselves understand something about project implementation and their respective roles in it.

It has been assumed, therefore, that Part II of the Manual would be used in orientation courses for project managers and project-related managers, as well as a subsequent guide for project managers to refer to during implementation.

The best candidates for orientation courses would be the intended implementors of a recently formulated project proposal. A 3-5 day orientation course in the implementation procedures could then be conducted with the project proposal serving as a live case study. These procedures could also be taught in a medical school, school of public health, or university as part of a longer, more general course in management for prospective public health administrators. Here, since there would be no actual project proposal to serve as a case study, more general material would need to be developed to illustrate the procedures. In both types of orientation course, the learners would need some exposure to basic management concepts. The World Health Organization is now in the process of developing suitable didactic material for both these situations.
As a subsequent reference guide, the manual is intended mainly to benefit the project manager, providing him with techniques that he can use on a day-to-day basis in managing his project. At the same time, the procedures should also be useful to Chartering Agency officials engaged in establishing (Chapter 10), monitoring (Chapter 15), or terminating a project (Chapter 16). Finally, the procedures should be of use to project team members themselves for determining how to organize their own activities (Chapters 11, 12, and 15).

Structure of Part II

Part II has been structured so as to adhere as closely as possible to the sequence of steps that the project manager would follow in implementing his project in real life. Unfortunately, perfect adherence to this sequence was not always possible because (a) many of the project implementation steps are, in fact, repetitive ones (for example, rescheduling occurs periodically throughout the project), and (b) in any given situation the nature of the project and of the existing organization will impose some deviations from any general model of project implementation steps (for example, when approving the project proposal the Ministry of Health may already assign specific staff to implement it, thus obviating the need for a number of steps outlined in Chapter 13, "Obtaining Resources"). Each project manager will have to adapt the procedures to his own situation.

Taking the above into consideration, the authors have structured Part II as follows (see Fig. 2):

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Contents</th>
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</thead>
<tbody>
<tr>
<td>10. Initiating the Project</td>
<td>Obtaining approval for the project proposal, appointing the project manager, preparing the interim budget, and beginning the recruitment of other project staff.</td>
</tr>
<tr>
<td>11. Specifying and Scheduling the Work</td>
<td>Projecting the details of work and deciding what tasks are to be done by whom, and when.</td>
</tr>
<tr>
<td>12. Clarifying Authority, Responsibility, and Relationships</td>
<td>Obtaining agreement as to who is responsible for ensuring that the work gets done, distributing decision-making authority among the project team and the existing organizational units, and establishing formal lines of communication.</td>
</tr>
<tr>
<td>13. Obtaining Resources</td>
<td>Obtaining the funds, manpower, supplies, and equipment necessary for doing the project activities.</td>
</tr>
<tr>
<td>14. Establishing the Control System</td>
<td>Determining what information is necessary for project control, identifying sources of such information, and setting up reporting systems for the project.</td>
</tr>
</tbody>
</table>
Chapter 15. Directing and Controlling

Motivating project staff, executing project activities, obtaining information for control, and taking corrective action as necessary.

Chapter 16. Terminating the Project

Handing over responsibilities to existing organizational units, reassigning staff, and preparing the final report.

Since many of the implementation steps are repetitive or are undertaken simultaneously (for example, the organizing steps described in Chapters 11, 12, and 13), it is strongly recommended that Part II be read in its entirety rather than chapter by chapter. For the same reason, whenever there is a cross-reference to a preceding or subsequent step, the reader is urged to look back or ahead as suggested.

Flow charts

As in Part I, the flow charts illustrate the sequence of steps to be followed and the products that emerge from these steps. There are a few differences in the flow charts of Part II, however, stemming from the special character of the implementation steps.

(1) Since implementation is carried out by a variety of implementors, the "step" column has been divided into three columns each indicating the individuals who should be doing those steps. Apart from the project manager, who appears as an implementor in all steps once he has been assigned, the implementors will be seen to change somewhat from chapter to chapter.

(2) There is no longer a special column for inputs. To avoid making the flow charts complicated, inputs have been drawn with the "product" symbol and shown as leading to the relevant step:

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PROJECT SCHEDULE
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```
12.1
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OBTAIN MANPOWER COMMITMENTS
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(3) The managerial activities of project implementation do not yield such a variety of different products as the formulation steps; rather, there are a few highly important products -- schedules, budgets, manpower assignments -- that are worked and reworked in successive steps, becoming more precise and detailed over time. For this reason, the products in Part II have not been assigned numbers.
(4) Project implementation involves a number of important decision-making and approval steps. The standard flow chart symbol has been used to indicate these steps:

```
no

APPROVE

yes
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In the event of a "yes" decision, the steps continue in the normal downward sequence; a "no" decision entails looping back to rework a previous step.

(5) The flow charts of Part I used no arrows because they were meant to be read downward. Because of the cyclical nature of many implementation steps, however, many of which involve decision-making and approval, arrows have been used in the flow charts of Part II to make it absolutely clear in which sequence the steps are to be carried out.

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  *  
  *
CHAPTER 10

INITIATING THE PROJECT
10. Initiating the Project

<table>
<thead>
<tr>
<th>STEPS DONE BY</th>
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10.11 IDENTIFY NECESSARY DECISIONS

10.12 PLAN PROPOSAL APPROVAL PROCESS

10.13 ASSESS PROPOSAL

10.13 MODIFY STRATEGIES AND/OR PROJECT

10.21 SUGGESTIONS FOR CHANGE

10.22 DEFINE PROJECT MANAGER'S FUNCTIONS & QUALIFICATIONS

10.22 SEARCH FOR ACCEPTABLE CANDIDATES

10.23 APPROVED PROPOSAL

10.24 SELECT/ASSIGN PROJECT MANAGER

10.24 ISSUE LETTER OF APPOINTMENT

10.25 BRIEF PROJECT MANAGER

10.26 BEGIN RECRUITING FULL-TIME PROJECT STAFF

10.27 PREPARE INTERIM PROJECT BUDGET

to Step 11.1

APPROVED STRATEGY DESIGN

APPROVED PROJECT PLAN

APPROVED BUDGET(S)

APPOINTMENT LETTER

APPOINTMENT OR AGREEMENT LETTERS

INTERIM BUDGET
What steps are involved in initiating the project?

Project initiation is similar in many ways to the preparatory phase of project formulation (step 1). It involves (a) obtaining approval of the proposed strategies and project plan (from the Ministry of Health) and of the relevant budgets (from the Ministry of Planning/Finance and external funding agencies, and (b) selecting and assigning the project manager, preferably full-time, who will assume responsibility for the subsequent steps of project implementation.

In some situations initiation may involve a third set of activities designed to ensure that manpower, funds, supplies, and equipment are available in time for the early commencement of project activities, namely (c) beginning the recruitment of project staff needed for activities early in the project, (d) preparing an interim budget for the first year of the project, and (e) ordering project-related supplies and equipment that take a long time to procure. Activities (c)-(e) are described only briefly in this chapter; detailed procedures for carrying them out will be found in Chapter 13.

How much time is required to initiate the project?

Experience indicates that from several weeks to several months may be required, depending on the contents of the proposal and the government's decision-making processes.

Who should be involved in doing these activities?

The Chartering Agency has the main responsibility for project initiation. Normally, they will be assisted as necessary by members of the formulation team, relevant Ministry of Health department heads, and the Director-General of Health Services.

What are the potential dangers in this step?

Any proposal for change will find itself in conflict with one or more vested interests, who may try to block its implementation. Overcoming the doubts and fears of these various interest groups requires a considerable amount of skill in interpersonal relations.
10.1 OBTAIN APPROVAL OF PROJECT PROPOSAL

10.11 IDENTIFY NECESSARY DECISIONS FOR IMPLEMENTATION

Representatives of the Chartering Agency and the coordinator of the formulation team should first review the proposal, describe as succinctly as possible the decisions that must now be taken to initiate project implementation, and identify specifically who will make these decisions (see steps 2.14 and 9.4). The decisions that are absolutely necessary can normally be limited to the following:

(1) Agreement in principle to the proposed strategies.

(2) A decision on the approximate level of funding (from governmental and other sources).

(3) Agreement to establish a project.

(4) Selection of the project manager.

(5) Agreement on the staffing of the project (see pages 174-176) - how many staff will be full-time, how many will be part-time, how many will be seconded from existing units, etc.

Identifying who will make these decisions is not always easy. In practice, the decision to "approve" a project is usually made by several levels of the government hierarchy, with each level relying on advice from a variety of sources. For example, agreement in principle to the proposed strategies may be given by the Director-General of Health Services following discussions with selected department heads within the Ministry (and possibly following discussions with professional groups such as the medical and nursing associations). A decision on the approximate level of funding of the new or modified services being proposed may come from the Ministry of Planning/Finance, but may be contingent upon knowledge that development funds will be forthcoming from an external assistance agency. Each project and each country will therefore require a different approach to project approval.

10.12 PLAN THE PROPOSAL APPROVAL PROCESS

If not already a part of the project schedule, a plan for review and approval of the proposal should be prepared by the formulation coordinator and representatives of the Chartering Agency. This plan should be based on the decision flow chart from the summary of organization, management, and decision making, 2.1, and should take into consideration anticipated pitfalls in obtaining approval and achieving subsequent implementation. It should specify the following information:

(1) Who should review/approve the proposal? Specifically identify, among the following decision-makers, those who have to approve the strategies (7.5), the project plan (8.1-8.7), and the respective budgets (7.6 and 8.7):

- the Minister of Health and/or Director-General of Health Services;
- relevant department heads;
- professional organizations (for example, medical and nursing associations);
- other relevant Ministries (for example, Education and Public Works);
- the Ministry of Planning/Finance;
- external assistance and lending agencies (World Bank, etc.).
(2) Which parts of the proposal will need to be given to each of these? (For example, many of the annexes to the proposal will be useful to implementors but confusing to decision-makers.)

(3) Is supplementary briefing of the decision-makers necessary? If so, who should do it?
- The formulation coordinator?
- Representatives from the Chartering Agency?
- The Director-General of Health Services?

How should it be done (in group session or individually)? What briefing material should be provided?

(4) What are the dates by which these steps should be completed?

Since experience indicates that many project proposals are rejected or seriously compromised during the approval process, it would be wise for the Chartering Agency and the formulation coordinator to seek guidance from senior officials within the Ministry on how to go about obtaining approval from the various governmental units and external funding agencies. (As will be described in the next step, obtaining approval consists essentially in promotion.) Normally, the Director-General of Health Services, the Chief of Administration, and the Minister of Health are in the best position to provide such guidance.

10.13 OBTAIN APPROVAL

During the critical approval process, the Chartering Agency and/or the formulation coordinator should concentrate on:

(1) Providing relevant decision-makers with a general understanding of the objectives and benefits of the proposed project.

(2) Obtaining agreement in principle to the proposed strategies. The likely political ramifications and budgetary consequences of the strategies should be touched on but there should be an attempt to avoid long discussions on technical details, which may be changed in any case during project implementation.

(3) Focusing the attention of reviewers as quickly as possible on the practical aspects of implementation (who will be responsible for the project, what units should be involved, how soon it can start, where staff can be recruited from quickly, etc.). This process is often facilitated if the Chartering Agency identifies individuals by name who are presently available and motivated to implement the project (see step 10.2, Assign Project Manager).

In practice, obtaining approval of the proposal can be a very time-consuming process for a variety of reasons. In some cases the proposed strategies will be questioned on technical grounds by representatives within the Ministry of Health (although the real motive behind their questioning may be a fear that the proposed changes in some way threaten their status). In other situations, the Ministry of Health or Ministry of Planning/Finance may conclude that the funds or manpower requested (governmental and/or external) are too high in the face of other priorities, and that changes in the proposal are therefore warranted. Without prejudging the prerogatives of approving authorities, the formulation coordinator and the Chartering Agency must be prepared to spend the time to overcome (where possible) the doubts, fears, and misconceptions of officials in and outside the government.
If a consensus that the project should be approved develops within the Ministry of Health, the Director-General or the Minister of Health should immediately authorize the Chartering Agency to begin recruiting the project manager and full-time project staff. Although this is not always possible, much time can be saved if recruitment occurs concurrently with the formal government budgetary approval process.

Another possible outcome of the approval process is that there are a number of suggestions for changes in the project plan. The Chartering Agency should be flexible in accepting these suggestions so long as they do not jeopardize the achievement of project objectives. The Chartering Agency should note all suggestions for change; these will subsequently be used in briefing the project manager. Suggestions for change should also be reviewed with the formulation team. In some cases, the approval process will result in changes having to be made in the proposal itself prior to its publication and/or distribution outside the Ministry. If so, project formulation team members should make the changes as necessary.

In summary, the proposal approval process may result in a variety of situations, each of which requires a different response from the Chartering Agency:

1. The proposal has been accepted in principle by all levels of approving authority, a project manager (who participated in the formulation of the proposal) has been appointed, and a number of specific individuals have been seconded as full-time project team members. This is the ideal situation.

2. The proposal has been accepted in principle by the financing institutions. However, a number of changes in the proposed strategies have been recommended by approving authorities, no project manager has been assigned, and the question of how many full-time staff are to be assigned has not been resolved.

3. The proposed strategies have been accepted by the Ministry of Health and approved by the funding agencies, but at a lower level of funding than the proposal suggested. No project staff have been appointed.

4. The proposal has been rejected.

In the first situation, the Chartering Agency and the project manager can proceed directly with organizing the project (steps 11, 12, and 13). In the second, the Chartering Agency will have to decide whether (a) to postpone making changes in the proposed strategies and proceed directly with recruitment of the project manager (and project staff) or (b) to have the formulation team reformulate the proposal prior to or concurrently with recruitment. The possibilities in the third situation are the same except that there is a further choice between reformulating the strategies and merely rescheduling project activities over a longer period of time.

10.2 ASSIGN PROJECT MANAGER

Normally, the next step in project implementation is the recruitment and selection of a project manager. Under the best of circumstances, one of the individuals assigned to the project formulation team would have been designated as the person who would eventually be responsible for implementation. Experience indicates that if the implementors have not been involved in the initial preparation of the project plan, their commitment to implementation is significantly reduced.

If a project manager has already been appointed or decided upon, he can begin immediately to organize his project (steps 11, 12, and 13). If not, the following steps should be taken.
10.21 DEFINE PROJECT MANAGER’S FUNCTIONS AND QUALIFICATIONS

The Chartering Agency, with the assistance of the project formulation coordinator, should begin by specifying the expected functions of the project manager. While these will obviously vary with the organizational structure of the Ministry, experience with projects of this nature indicates that the project manager will probably be performing the types of functions listed in Fig. 1. In drawing up a list of functions of the project manager, one should attempt to identify as precisely as possible:

(1) those tasks for which the project manager himself is likely to be responsible;
(2) the various departments and ministries and professional groups with which he is likely to be dealing; and
(3) the level of the individuals in each of these agencies with whom he would have to negotiate.

The reason is that these factors have the greatest importance in determining the required qualifications and grade level of the project manager. Fig. 2 is a checklist of the qualifications that a project manager should have.

10.22 SEARCH FOR ACCEPTABLE CANDIDATES

The most practical solution would be to have a suitable candidate currently employed by the Ministry who could be reassigned reasonably full-time to the project. In most cases, time will be too short to permit recruitment through the normal government recruitment processes, and thus the search will be limited to candidates already employed in one of the departments in the Ministry, a training institute, or the health services. If there is not enough time to look outside the Ministry for candidates, the Chartering Agency should ask each of the relevant departments in the Ministry (or the steering committee) to provide a list of candidates who (a) appear to have the required qualifications (see Fig. 2); (b) are likely to be interested in such a position; (c) are likely to be available in time; and (d) will be available for the duration of the project. If this process does not yield an acceptable list of candidates, then alternative sources should be considered.

The Ministry should approach the question of finding suitable candidates pragmatically. Supermen are not likely to be available. The emphasis should therefore be placed on finding available individuals who have a reasonable mixture of the qualifications in Fig. 2, rather than on searching for the ideal candidate. Undue emphasis should not be given to one qualification (for example, technical knowledge) to the exclusion of others.

10.23 SELECT/ASSIGN PROJECT MANAGER

The assessment and selection of the most suitable candidate should, if possible, be done in consultation with those department heads within the Ministry or other institutions with whom the project manager will be working most closely. The Chartering Agency can help the selection process by providing this group with the list of functions and desired qualifications, their own assessment of each of the candidates, and their recommendation as to the most suitable candidate. Once the selection has been made, the Chartering Agency should ensure that the necessary administrative steps are taken to assign the project manager promptly to the project so that the activities can begin. In most cases, the actual administrative processing of the project manager’s post description and the formal assignment of his authority and responsibilities can take place later when a clear idea has developed of the nature of the project activities and the consequent project organization (see Chapter 12).
FIGURE 1
CHECKLIST OF PROJECT MANAGER'S FUNCTIONS

GENERAL

(1) Planning/controlling the project to ensure that objectives are achieved with minimum consumption of resources.
(2) Getting project activities started.
(3) Recognizing potential future problems in time to ensure that preventive measures can be taken.

SPECIFIC

(1) Establishing criteria, guidelines, and formats for project plans.
(2) Approving detailed schedules and budgets prepared by activity managers and other project staff.
(3) Proposing and/or selecting activity managers and other project staff.
(4) Directing the execution of project activities.
(5) Promoting the project among health service supervisors, ministry department heads, professional groups, and other relevant people.
(6) Facilitating communication within the project team.
(7) Keeping informed about the progress of the project by collecting and recording project control information.
(8) Analysing causes and effects of deviations from the project plan.
(9) Adapting and modifying project schedules in response to problems as they arise.
(10) Communicating with various departments as to changes in schedule, job assignments, etc.
(11) Motivating staff to perform effectively.

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FIGURE 2
CHECKLIST OF PROJECT MANAGER'S QUALIFICATIONS

(1) Knowledge of the political and organizational "environment" surrounding the project.
(2) Knowledge of the relationships (actual and potential) between project activities, on the one hand, and project objectives, operational targets, and problem-reduction objectives, on the other hand.
(3) Experience in the subject matter of the project (in the development of curricula, operating procedures, etc.).
(4) Experience in the practice of management:
   - effectiveness in planning and organizing work;
   - effectiveness in getting activities started;
   - effectiveness in ensuring that work schedules are followed;
   - effectiveness in maintaining quality;
   - effectiveness in cost control.
(5) Good relations with relevant ministry divisions and institutions (in order to negotiate for resources).
(6) Ability to communicate effectively.
(7) Ability to tolerate ambiguity and uncertainty.
(8) Adaptability to changes in the "environment" of the project.
10.24 ISSUE LETTER OF APPOINTMENT

Once the project manager has been selected, the Chartering Agency should prepare a brief 1-2 page memorandum to all relevant units (in most cases, issued by the Director-General of Health Services). This memorandum would normally contain (a) a brief description of the project and its objectives, and (b) a statement to the effect that (name) has been appointed project manager and he/she will be reporting to (name) until further notice.

10.25 BRIEF PROJECT MANAGER

The project manager will require some briefing by the Director-General of Health Services, representatives from the Chartering Agency, formulation team members, and relevant division directors in order to (a) familiarize him with the contents of the project proposal, (b) explain the rationale behind the proposal, and (c) make him aware of likely pitfalls in the implementation process. The amount of briefing needed will depend on whether the project manager has been involved with the project from the beginning, for example, as a member of the formulation team.

10.26 BEGIN RECRUITING FULL-TIME PROJECT STAFF

Although ideally the project manager should be responsible for the selection and recruitment of full-time project staff (see Chapter 13), which means that recruitment should be delayed until the project manager has been appointed, in some instances it may be more practical for the Chartering Agency to begin recruiting project staff at the same time as the project manager. Early recruitment of project staff is usually warranted when (a) such staff are to be recruited from international agencies (which may take 6-9 months after an agreement has been signed), or (b) the normal national civil service recruitment process is to be followed (in many countries this also requires 6-9 months). The coordinator of the formulation team can assist in this process, if necessary.

10.27 PREPARE INTERIM PROJECT BUDGET AND SUPPLIES AND EQUIPMENT LISTS

Similarly, although the project manager is in theory responsible for preparing his own budget (see Chapter 13), if there is a delay, those bearing the interim responsibility for implementation should prepare the first-year budget for him in order to ensure that necessary funds are available when the project manager takes up his post. The same holds true for project equipment and supplies (such as vehicles) that take a long time to procure. The formulation team members should assist in this process as necessary.

* *

* *
Because of the interest generated by the formulation, the DGHS and the Deputy Director for Planning agree that a core group of formulation team members should be assigned immediately to the project in order to maintain the existing impetus. The following staff are assigned:

- three officers from the Health Planning Unit (the senior officer is appointed interim project manager), and
- the Provincial Health Officer (designate) of Province Eaks.

The first task of this core project team is to promote the proposal during its review by the Ministry of Health and other agencies. Since the proposed strategies require far fewer resources than had been expected (by the DGHS and others), the primary obstacle to approval lies in getting the government agencies and professional groups involved to accept the new ideas. The team feels the proposal needs promotion especially with the following individuals and groups:

(1) The Director of Health, because he was counting on an expansion of rural facilities and staffing.

(2) The Director of the Community Development Programme, because he may feel that the proposed involvement of his programme in health activities will require other activities to be de-emphasized.

(3) The Governor of Province Eaks and various officers on his staff, who are interested in seeing a proposal for new facility construction that would entail requesting and selecting from tenders submitted by construction firms.

(4) The Medical and Nursing Associations, who may resent the use of traditional practitioners, the use of mobile teams, and the requirement that they should support prevention programmes.

The review and approval process is scheduled with the DGHS and briefings are arranged for all offices concerned within the Ministry. Certain technical and administrative aspects of the proposal must be reviewed and approved by designated offices, and special meetings are scheduled to support these reviews. In general, the interim project manager adopts the policy that the proposal will be actively supported through every step of review and decision-making: "There will be no delays because the document is sitting on the desk of some director who is unaware of its importance". Another precaution he adopts is to refrain from requesting decisions that are not absolutely essential for beginning implementation. If objections are raised to minor technical points, adjustments will either be made accordingly or the matter will be put in abeyance until a specialist in the subject can pass judgment.

Following the briefing and review sessions within the Ministry, the proposal is accepted in principle. Minor objections to certain technical aspects are raised, but none are strong enough to delay formal approval. One question continually raised by Directors pertains to the ability of the Ministry and provincial health staff to implement the strategies throughout the country within a reasonably short period of time. The proposal was apparently successful in making the point that implementing new or revised procedures requires considerable time and effort from existing staff in all departments and throughout the service. All divisions concerned fear that their staff may not have the spare time that will apparently be required. This problem is handed to the core project team, which is preparing to undertake the detailed specification of work (step 11). The immediate response from the interim project manager is a suggestion that each department and unit that might later have to contribute manpower to the project should send a staff member to meet with the core team during its working sessions (step 11). This will allow them to see exactly what is required of project staff, and when. It will also permit them to participate in the planning of the work and to identify themselves with the project.
The division directors agree. The DGHS then directs the Ministry of Health Budget Officer to prepare the supplementary budget submission covering the strategies for the next year, when the costlier implementation activities will begin.

The DGHS, the Deputy Director for Planning, the Provincial Health Officer from Province Eaks, and the interim project manager then meet in closed session. The following decisions are made in regard to the assignment and authority of the project manager:

1) During the setting up of the project (steps 10, 11, 12, 13, 14, and part of 15), the designated officer from the Health Planning Unit will function as project manager. He will have full responsibility for the project and authority over all full-time and part-time staff assigned, including provincial staff. He will report directly to the DGHS in all matters relating to the project.

2) At some later point (to be determined) responsibility for implementation within Province Eaks will shift to the newly appointed Provincial Health Officer. He will be assisted by a full-time local project manager (to be provided by the Health Planning Unit or by an assistance agency).

3) At that same time the interim project manager will assume the position of National Coordinator for the implementation of these strategies throughout the country.

An appointment letter reflecting the above decisions is signed by the DGHS and distributed to all relevant agencies and departments.

The Health Planning Unit prepares a supplementary budget request in order to obtain secretarial support, office supplies, and transportation for the project staff for the current and next year.
CHAPTER II

SPECIFYING AND SCHEDULING THE WORK
11. Specifying and Scheduling the Work

Steps done by

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<th>Project Working Group</th>
<th>Existing Units/Agencies/Departments</th>
<th>Senior Chartering Agency Official</th>
<th>Products</th>
</tr>
</thead>
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<td>11.1</td>
<td>APPROVE PROJECT PROPOSAL</td>
<td>IDENTIFY STAFF TO SPECIFY WORK</td>
<td></td>
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<td>11.2</td>
<td>DEFINE INTERMEDIATE AND END PRODUCTS</td>
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<td>11.3</td>
<td>PREPARE DETAILED LIST OF PROJECT ACTIVITIES</td>
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<td>DEFINE RESOURCE REQUIREMENTS &amp; ACTIVITY DURATION</td>
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<td>11.6</td>
<td>GROUP ACTIVITIES ACCORDING TO POTENTIAL ACTIV. MAN</td>
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<tr>
<td>11.7</td>
<td>PREPARE DETAILED BUDGET</td>
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<td>CONSOLIDATE SCHEDULE &amp; ACTIVITY DESCRIPTIONS</td>
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<td>11.9</td>
<td>REVIEW</td>
<td></td>
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</tr>
</tbody>
</table>

- Activity Descriptions (Tentative)
- Detailed Schedule (Tentative)
- Project Budget (Tentative)
What is the purpose of this step?

In planning the project (step 8) the following were produced:

(a) A statement of project objectives.
(b) A list of project products.
(c) A tentative list of activities and schedule.
(d) A list of the resources required by the project.
(e) An outline of the project organization.

Now that the proposal has been approved (and perhaps modified), it becomes necessary to elaborate on the project plan by specifying in detail when, where, and how the project activities are to be done, and (to the extent possible) who is to manage and/or do them. Essentially, detailed activity specification consists in:

(a) defining the products of the project in greater detail where necessary;
(b) preparing a more detailed list of project activities, and further specifying how each of these activities is to be done;
(c) determining detailed resource requirements by time period;
(d) preparing a detailed project schedule.

How does this chapter relate to Chapter 12 (Clarifying Authority, Responsibility, and Relationships) and Chapter 13 (Obtaining Resources)?

The activities in this chapter are the logical foundation for the steps described in Chapters 12 and 13: (a) By specifying in detail what work is to be done and who should do it (Chapter 11), one can better identify who should be responsible for the various project activities (Chapter 12). (b) Specifying in detail the necessary resource requirements of each project activity according to a schedule (Chapter 11) makes it easier to obtain the necessary resources when required (Chapter 13).

In practice, however, the three chapters are obviously interrelated, and it is thus recommended that all three chapters be read carefully and understood before the procedures described in Chapter 11 are begun.
Is detailed work specification a one-time activity?

Definitely not. During the life of the project these steps will be repeated many times, in response to delays in implementation, changes in policy, etc. If, for example, a given activity is not completed on time, rescheduling of subsequent activities will usually be necessary. Each time these steps are repeated, the project manager should find himself in a better position to estimate the necessary activities, time schedule, and consequent resource requirements. When doing detailed work specification, therefore, most emphasis should be placed on those activities that are scheduled to take place during the next 6-12 months; subsequent work assignments should be outlined in only general terms.

How much time do these activities involve?

These steps consist essentially in refining the project plan where necessary. How much time needs to be devoted to making these refinements will vary from project to project depending on the answers to the following questions:

(a) How much detail did the original project proposal go into in specifying the project products, the activities needed to produce each of them, and the resources required for each activity? Most project proposals, viewed from the standpoint of the implementors, will be sufficiently detailed in some regards but insufficiently detailed in others, necessitating further clarification, elaboration, etc., at this stage.

(b) How many changes need to be made in the project objectives, schedule, and resource requirements as a consequence of the proposal review/approval process? The greater the number of changes, the more time will have to be devoted to rescheduling, etc.

(c) To what extent were the implementors involved in preparing the project proposal? The greater the prior involvement of the implementors, the less time will be needed on detailed work specification.
11.1 IDENTIFY STAFF TO SPECIFY WORK

In theory, those who are to carry out or manage the project activities should prepare the detailed work plan. The project manager should only guide this process. In practice, there will be departures from this rule because (a) some of the full-time project staff are unlikely to have been recruited at this time; (b) there are other individuals within the existing organization (in the ministry, training institutions, the health services, and other agencies) who are more familiar with the nature of the work required and therefore better qualified to schedule it; and (c) other units within the existing organization (and private groups and agencies) are unlikely to commit resources later on to the project if they feel they have not had an integral part in the detailed specification of the project activities.

Although it may not be possible to have all relevant units participate in steps 11.2-11.8 (as the group would become too large), the project manager may be able to overcome this difficulty by creating a small core group of individuals to do most of the work and asking selected individuals (liaison persons) to assist on a part-time basis in defining specific activities or clusters of activities. The types of individuals that should be included in the working group can be deduced from the activities specified in the project proposal. The main criterion in selecting individuals should be: Who is most likely to be knowledgeable about and/or subsequently responsible for implementing this activity or cluster of activities?

Responsibility for creating this working group rests with the project manager. The senior Chartering Agency official may facilitate the process as required.

11.2 DEFINE INTERMEDIATE AND END PRODUCTS IN DETAIL

From a technical standpoint this step is needed to ensure that the schedule of activities is developed by a working group that has a detailed understanding of what the project is expected to produce. From a motivational standpoint the purpose of this step is to ensure that as many project staff as possible, full-time as well as part-time, feel that they have been personally involved in specifying the details of the work they will have to perform. Briefing alone is insufficient; for both purposes active participation of the future implementors in clarifying project products is required.

The working group created in step 11.1 should begin by:

1. reviewing the project proposal in the light of the comments of those who approved it (see step 10.1) in order to identify which project products, 8.3, need to be made more specific and explicit; and

2. reviewing the three sets of objectives contained in the proposal -- the problem-reduction objectives, the operational output targets, and the project objectives (refer back to steps 5.6, 7.8, and 8.1).

The group should then begin to specify exactly what the project must produce in order to achieve those objectives. For example, one project objective may have been formulated in the following terms: "To construct, equip, and put into operation x rural health training centres in order to increase population coverage by specific health services (operational target) and thereby reduce specific diseases (problem-reduction objective)". In such a case the working group's task would be to specify as precisely as possible:

1. what the end product – the operating rural health training centre – should consist of, in other words, what kinds of staff should be trained in it, how many of these should be trained in each of the years of the project, etc.;
(2) what intermediate products will be needed to implement such a training centre (e.g., trained teachers, a building, etc.);

(3) the dates by which those products are to be produced; and

(4) how the end product will differ from what currently exists.

Once the working group has agreed on the details of the expected products of each activity, it should record them. The activity description form shown in Fig. 1, page 203, is a useful form for recording the various details of each activity as they are decided on. In this step, only the section marked "activity purpose/product" should be filled in.

Although activity descriptions will eventually be created to describe the products of all project activities or clusters of activities (see steps 11.3 and 15.12), the emphasis of the working group at this stage should be on those activities (a) whose products are critical to project success and (b) which are not likely to be done correctly by implementors unless clear guidance is provided. In effect this means concentrating the group's attention on "high risk" activities. For example, the group should probably prepare a detailed activity description for the designing of a new district health centre if such a centre is crucial for the project and if the group feels that staff would not be able to design it properly without guidance. A detailed description of the design would, on the other hand, probably not be necessary if Public Works had constructed this type of health centre reasonably well many times before.

11.3 PREPARE DETAILED LIST OF PROJECT ACTIVITIES

The project proposal will contain a tentative list of the main activities to be carried out (product 8.2). This list should now be closely reviewed by the working group and modified to take into account (a) changes decided upon in the proposal review process and (b) the detailed specification of project products (from step 11.2). Although the entire list should be reviewed, greatest emphasis should be placed on those activities that can and should take place during the first and second years of the project, since the remainder of the schedule will be changed subsequently in any case. The working group should put particular stress on identifying important (high risk) activities that will need to be described in greater detail in order to be understood by implementors.

The detailed activities thus identified should be listed and each one should be assigned a number for subsequent scheduling purposes. An activity description form should be filled in for each such activity, showing at the very least the title of the activity, its number, and its purpose and product.

At this time the working group may also tentatively fill in the "how to perform activity" section of the more important activity descriptions. Not too much time need be spent on specifying these details at this stage as this is likely to be redone anyway by the implementors themselves (see step 15.12).

11.4 DETERMINE INTERRELATIONSHIPS AMONG ACTIVITIES

Several alternative methods exist for determining which activities must precede others in the project schedule (refer back to step 8.5). One method is to draw a preliminary sketch of the network of activities based on the network contained in the project proposal. The second is to use a Gantt chart with broken lines connecting related activities. The third is to write down beside each listed activity the activity numbers of all activities that must be accomplished before it can begin, then proceed with a Gantt chart or a network. If the project is fairly small (less than 20 activities) a modified Gantt chart will usually be satisfactory for sequencing purposes. If it is fairly large, a network would be preferable.

A sample network and corresponding Gantt chart are shown in the Illustration, Chapter 1.
11.5 DEFINE RESOURCE REQUIREMENTS AND ACTIVITY DURATION

Since the duration (and to some extent sequencing) of a given activity depends in part on the number of people available and the specific times when these people would be available, it is recommended that the working group proceed as follows:

11.51 DEFINE RESOURCE REQUIREMENTS IN DETAIL

The overall feasibility of obtaining resources for the project and the service to be implemented will have been assessed during project formulation (steps 7.7 and 8.7). The proposal reviewers will also have indicated the likelihood that specific resources will be available from certain sources at the precise times they are needed. Taking both types of information into account, the working group should specify for each activity the type of resource required, the preferred source, and the exact time periods for which the resource will be needed. If in the group's opinion the preferred "source" is not likely to provide the resource at the specified time, the group should consider (a) ways of rescheduling the activity to overcome the problem, and (b) other temporary sources of manpower, funds, supplies, etc. Fig. 3, page 205, illustrates the logical sequence to follow when thinking through the situation regarding resource availability.

Some special considerations pertain to the selection and specification of manpower.

(1) When considering the use of people from existing units for doing project activities, the group should make every effort to limit the number of persons assigned on a part-time basis. When part-time reassignment is inevitable, the group should at least try to keep the proportion of an individual's time devoted to project activities above 50% if possible. The reason for this is motivational. People tend to take the path of least resistance. If an individual assigned less than half his time to a project finds the work enjoyable, he will do it; if not, he will devote his capacities to his main duties. Scanty part-time involvement is not sufficient to generate strong motivation.

(2) The group will find in most cases that the manpower situation is in a fluid state at this point. Some full-time project staff may already have been recruited. For others, especially part-time staff from existing organizational units, there will only be a general idea of who might be seconded to the project. Some informal commitments to provide project manpower may in fact be made at this time by the unit chiefs present in the working group; these commitments will be formalized later on in written manpower agreements (see Chapter 12). Other negotiations of the type described in Chapter 12 may also be in progress.

(3) Whatever the source of manpower, and regardless of whether the staff member has already been recruited, wherever possible people should be designated by name in the "resource input" section of the activity descriptions.

11.52 ESTIMATE PROJECT ACTIVITY TIMES AND DURATIONS

Once a preliminary determination of resource requirements and availability has been made, the working group should indicate the precise starting date, duration, and completion date of each of the project activities on its activity description form.

The resulting specification of time-phased resource requirements (project staff, supplies and equipment, and funds) for each activity then becomes the primary input to both the process of negotiating for resources (see Chapter 12) and the process of actually obtaining the resources (see Chapter 13).
11.6 GROUP ACTIVITIES BY POTENTIAL ACTIVITY MANAGER

Although the assignment of responsibility for managing activities is done primarily through negotiation with heads of existing units (see Chapter 12), at this stage the working group should tentatively identify the individuals who are to be responsible for managing specific groups of activities. Activity managers may or may not be full-time project team members. For example, the working group might tentatively identify an individual within the Division of Medical Stores as being the activity manager for a cluster of activities concerned with making specific improvements in the drug distribution system even though the manpower for doing the activity will come largely from the project team and from units of the Ministry. In small projects, activity managers may be both supervising and doing the activities.

This grouping of activities by activity managers has two main purposes: (a) to permit a better balancing of the work load among various staff and units (to minimize the number of part-time staff), and (b) to allow the project manager and heads of units to see clearly the nature of their expected commitments. The products of this step are sets of activity descriptions grouped by unit chief and activity manager.

11.7 PREPARE DETAILED BUDGETS

By this time the working group should be in a position to expand in more detail or modify (where necessary) the government and external agency budget submissions. Obviously the exact format, timing, and supporting documentation of the submissions will depend on the country and the project. The following are therefore only general guidelines.

11.71 PREPARE GOVERNMENT BUDGET SUBMISSION

Usually, there will be two types of budget submissions required: a development budget estimate (for new facilities, major items of equipment, etc.) and an annual operating or recurrent budget estimate for increases in annual costs of services or institutions (staff, salaries, drugs, etc.). Depending on the country, project-related costs may be included in one or both of these budgets. These costs may be specifically allocated to the project or may be included under other budget headings, according to the existing government budgeting procedures. In general, for a large (high-cost) project it is advisable to keep the project budget separate from the Ministry of Health service budgets in order to permit careful monitoring of project costs. For a smaller project, this is probably not necessary.

If a project is to begin out of cycle with the government's annual budget process, a supplementary request for funds will usually be required to cover the first (partial) year of operation. If necessary, this interim request should be submitted as quickly as possible (see step 10.27), especially if there are project activities for which funds will be needed quickly (for example, the construction of facilities).

In any case, within the format specified by the funding sources, the project manager should ensure that the budget is as detailed as possible and that contingency funds are available. At the least, the relevant budgets should include:

1. salaries and expenses of project staff;
2. transportation of project staff, including allowances and per diem;
3. purchase or rental of office space (including utilities);
4. office supplies and equipment (purchase or rental);
(5) salaries of clerical and administrative support staff;
(6) information collection and data processing costs (for project activities);
(7) consultative or contractual services (if required);
(8) miscellaneous expenses.

In addition, depending on the particular project and the relevant budgetary requirements, the following might be appropriate:

(9) capital expenditures (facility construction, land purchases, etc.);
(10) vehicle purchase (including maintenance for the time period in question);
(11) training costs for service staff;
(12) service operating costs (staff, salaries, drugs, supplies, travel costs, etc.);
(13) information and data processing (for health service);
(14) publication costs (for example, reproduction of procedures manuals).

In preparing the relevant service and project budgets, particular attention should be given to factors of inflation and depreciation. If facility construction is to be included, there must be provision for initial costs plus operating costs. Estimates for these factors can usually be obtained from the Department of Finance and Budget.

11.72 PREPARE BUDGETS FOR EXTERNAL AGENCIES

Determining whether resources will be available when needed is particularly problematic when the expected source is an external funding agency (WHO, UNDP, IBRD, UNFPA, bilateral agencies, etc.). Such agencies have complex and widely differing administrative requirements that must be met before funds or other resources can be released. If the project proposal anticipated requesting resources from any external source, the organization in question should be contacted immediately and meetings arranged with their representatives to determine what documents (such as proposals and budget justifications) will need to be submitted. The project manager should anticipate extensive delays even after the initial commitments have been received, and he should therefore concentrate on submitting all the necessary paperwork as rapidly as possible.

11.8 CONSOLIDATE SCHEDULE AND ACTIVITY DESCRIPTIONS

It should now be possible to prepare the following:

(1) An overall schedule (in the form of a network or Gantt chart) showing the activities, time schedule, and the time relationships among activities.
(2) A tentative activity description form for each project activity, grouped by activity manager.

11.9 REVIEW BY CHARTERING AGENCY

The modified schedule and activity descriptions should all be reviewed by the senior Chartering Agency official assigned to supervise the project. In addition to making recommendations for changes, this official should give explicit guidance to the project manager on how to go about negotiating with relevant units and agencies for the needed resources, particularly manpower. The procedures to be followed for these negotiations are described in Chapter 12 although, as stated earlier, informal discussions about manpower commitments may have taken place at the same time as the steps described in the present chapter.

* * *
The project manager and his core project team schedule sessions for detailed work specification and invite representatives from the following offices: Training, Public Health Institute, Department of Family Health, Department of Health Education, Department of Medical Stores, Finance Office (Ministry of Health), Provincial Health Office (Province Eaks), Bureau of Community Development, and Governor's Office of Province Eaks. Relevant sections of the project proposal and recent revisions are forwarded to all designated representatives prior to the working sessions.

The first session is devoted to clarifying questions about the proposal, its objectives and strategies, and the general purpose of the working sessions (which is to identify project manpower and specify and schedule the work).

At the second session those present divide up into working groups in order to review and further define the intermediate and end products of project activities (step 11.2). These product descriptions are in more detail than those in the proposal and include the revisions made during the review process. The results of the working group are reviewed by the group as a whole and consolidated into sets of products that constitute the project objectives.

The third session deals with the details of the individual project activities. Again working groups are formed, this time by activity type, to generate lists of detailed activities and to write activity descriptions for major activities and groups of minor activities. At this point such descriptions include:

1. activity title and number,
2. activity duration,
3. the resources required (principally manpower),
4. the product of the activity,
5. criteria for guidance, and
6. any relevant notes on how the activity should be carried out.

When such descriptions have been completed the group reviews the total set and determines the interrelationships that exist between them. This leads to the overall sequencing of activities and allows the specific resource requirements and activity schedule to be determined. Throughout this session, emphasis is given to the activities to be performed in the first two years and to the identification of the "high risk" activities.

It is at this point that the representatives of the various agencies and units present are asked to commit manpower for activities requiring their expertise. Staff are designated by name. When no one is suggested, note is made of the need for future action by the project manager, who will have to arrange for special consultants or external assistance. The activity description forms are completed and a Gantt chart is drawn for the overall activities of the first two years of the project. In addition, for each activity cluster a Gantt chart is prepared and a resource feasibility table is filled in. The activity description, Gantt chart, and resource feasibility table prepared for the activity of establishing a Provincial Health Advisory Committee are shown as Fig. 1, 2, and 3 respectively. Note the broken lines in the Gantt chart indicating dependency relationships between activities (activity 2.4 cannot begin until 2.1, 2.2, and 2.3 are completed, etc.).

The group then designates activity managers for the groups of activities falling within various categories (design, training, promotion, etc.). Most of those chosen to be activity managers are from the core project team, but a member of the Public Health Institute volunteers to manage the training activities and the representative from the Bureau of Community Development offers to manage the design and promotion activities related to community participation.
Figure 1. ACTIVITY DESCRIPTION

Author(s): Project Manager and Provincial Health Officer

Activity Manager
Provincial Health Officer

Activity Name
Establish Provincial Health Advisory Committee

Activity Duration
3.5 months
Starting date (planned)
2 January
Completion date (planned)
10 April

Resource Inputs and Costs

<table>
<thead>
<tr>
<th>Sources</th>
<th>Names, other identification</th>
<th>Quantities</th>
<th>Unit Price</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Prov. Hlth Office</td>
<td>Prov. Hlth Officer, Dr _______</td>
<td>4 man-weeks</td>
<td>4 man-weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admin. Assist., Miss _______</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Governor’s Office</td>
<td>Public Relations Officer</td>
<td>4 man-weeks</td>
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<td></td>
</tr>
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<td></td>
<td>Support Staff</td>
<td>2 man-weeks</td>
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<tr>
<td>Municipal Authority</td>
<td>Mr. E. Representatives of Mayor’s Office</td>
<td>1-2 man-days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop. Programme</td>
<td>Mr. H. Representative, CDP</td>
<td>1-2 man-days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prov. Council</td>
<td>One representative</td>
<td>1-2 man-days</td>
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</tr>
</tbody>
</table>

Activity Purpose/Product and Criteria for Assessing Product

PRODUCT: a permanent Health Advisory Committee at the Provincial level.

SPECIFICATIONS:

a. The Committee is to have representatives from:
   (1) the various government agencies active in the Province;
   (2) the municipalities;
   (3) the district administrations;
   (4) voluntary and benevolent organizations;
   (5) professional organizations;
   (6) public at large.

b. The Committee is to be chaired by the Governor.

c. It is to meet approximately monthly to discuss:
   (1) health problems as expressed by the people;
   (2) complaints about or requests for services;
   (3) ideas for health improvement;
   (4) support required for current implementation and service activities.

d. The agenda and minutes of these meetings are to be published in the newspapers.

HOW TO PERFORM ACTIVITY:

a. The Provincial Health Officer manages the detailed activities with strong support from the Governor’s Public Relations Officer.

b. The Province will budget end pay for expenses incurred.

c. Members will be formally appointed by the Governor.

d. Considerable public information to be generated in regard to the PHAC.

Authorization date: __________________________ Signature: ____________________
### Figure 2. Establishment of Provincial Health Advisory Committee (Gantt Chart)

<table>
<thead>
<tr>
<th>Activity Number</th>
<th>Activity</th>
<th>Responsible Officer</th>
<th>1975</th>
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<tbody>
<tr>
<td>2.1</td>
<td>Prepare TOR, description of functions, procedures</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Prepare budget</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Establish Provincial Secretariat</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Review and approve 2.1, 2.2, &amp; 2.3 (by Governor)</td>
<td>Governor</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Select meeting site</td>
<td>Governor</td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>Document functions and procedures</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.7</td>
<td>Do promotion to establish membership</td>
<td>PR Officer</td>
<td></td>
</tr>
<tr>
<td>2.8</td>
<td>Finalize membership</td>
<td>Governor</td>
<td></td>
</tr>
<tr>
<td>2.9</td>
<td>Distribute membership list and procedures</td>
<td>Gov. Admin. Assist.</td>
<td></td>
</tr>
<tr>
<td>2.10</td>
<td>Prepare first meeting agenda and materials</td>
<td>PHO</td>
<td></td>
</tr>
<tr>
<td>2.11</td>
<td>Hold inaugural meeting (1 April)</td>
<td>Governor</td>
<td></td>
</tr>
<tr>
<td>2.12</td>
<td>Prepare and distribute minutes</td>
<td>Gov. Admin. Assist.</td>
<td></td>
</tr>
<tr>
<td>2.13</td>
<td>Disseminate public information</td>
<td>Gov.'s PR Officer</td>
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<tr>
<td>Description of resource</td>
<td>Source</td>
<td>Date required</td>
<td>Likely to arrive in time</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>---------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>1. Funds for administrative costs</td>
<td>Provincial Treasury</td>
<td>15 Jan</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Office space for preparatory work</td>
<td>Provincial Health Office, Provincial Governmental Offices</td>
<td>1 Jan</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Meeting room</td>
<td>Governor's conference room</td>
<td>1 April</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Newspaper coverage</td>
<td>Laks Times</td>
<td>1 Feb and 3 April</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Acceptance by committee members</td>
<td>Governor, Mayors, District admin., Voluntary organ., Profes. organs., Public</td>
<td>1 Feb, 7 Mar, 7 Mar, 7 Mar, 7 Mar</td>
<td>Yes, Yes, Yes, No, Yes</td>
</tr>
<tr>
<td>6. Support staff</td>
<td>PHO, Provincial health staff, Provincial admin., Prov. PR, Provincial govt. secretaries</td>
<td>1 Jan, 1 Jan, 1 Jan, 1 Feb, 1 Jan</td>
<td>Yes, Yes, Yes, No, No</td>
</tr>
</tbody>
</table>
Chapter 12

Clarifying Authority, Responsibility, and Relationships
12. Clarifying Authority, Responsibility, and Relationships

Steps done by

<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Senior Chartering Agency Official</th>
<th>Agencies/Departments/Units</th>
<th>Products</th>
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<tbody>
<tr>
<td>Activ. Descr.</td>
<td>Obtain Manpower Commitments</td>
<td>Determine Organizational Location of the Project</td>
<td></td>
</tr>
<tr>
<td>Project Schedule</td>
<td></td>
<td></td>
<td>Written Manpower Agreements</td>
</tr>
</tbody>
</table>

Further clarify authority, responsibility & relationships

- 12.32 Clarify responsibilities of Project Manager
- 12.33 Clarify responsibilities of Activity Managers

- 12.34 Decide about project coordinating committee
  - 12.35 Clarify responsibilities of liaison persons
  - 12.36 Clarify responsibilities of external sources

- 12.4 Communicate project organization

- Project Organization
- Revised schedules

... if necessary
Why emphasize this activity?

There are two main reasons for placing emphasis on this "organizing" activity.

In most organizational undertakings, whether they be projects, programmes, or delivery of services, the roles of the various participants are not often mutually understood. More simply stated, in many situations the lower levels of staff do not really understand (or, as is more often the case, misunderstand) what is expected of them by their immediate and higher-level supervisors. Depending on the situation and the personalities of the individuals, they will either do what they feel is best in the situation, or do what they think the supervisor wants — or even do nothing.

In a project (since it is carried out by a temporary organizational entity) it is even more critical that both the project team members and the various units of the existing organization should know the limits of and relationships between their respective authority and responsibility. Otherwise there is a good chance that one or more of the following may occur: (a) there may be duplication of effort among project team members and existing organizational units; (b) resources from existing units may not be available for project activities when needed; and (c) ill feelings may be created in existing organizational units, with the result that they may fail to support the implemented service changes once the project has been terminated.

These difficulties may be avoided in part through the active involvement of existing organizational units in the process of clarifying authority, responsibility, and relationships.

What are the main steps of this chapter?

There are four interrelated steps:

(a) Obtaining manpower commitments: reaching agreement as to who will do the work (project staff) and who will directly supervise them (activity managers).

(b) Determining the organizational location of the project: assigning the project to the appropriate location within the government hierarchy.
(c) Clarifying external relationships: defining the respective authority and responsibilities of the project manager, the activity managers, and the senior Chartering Agency official, and where necessary establishing a project coordinating committee, formally designating liaison persons, etc.

(d) Communicating the project organization to the relevant organizational units, divisions, and agencies.

Who is responsible for doing these activities?

The senior Chartering Agency official and the project manager. The project manager is mainly responsible for sorting out the "internal" authority, responsibilities, and relationships; the Chartering Agency official is primarily responsible for clarifying the "external" relationships between the project team and the existing organizational units.

How are the first three steps of this chapter related?

In most cases the project manager and the senior Chartering Agency official will find that the first three steps are undertaken not in sequence, but simultaneously. The steps have been separated to make it easier for the reader to understand the processes and the products. To oversimplify somewhat, the first step essentially says "Agree who will be on the project team", the second says "Agree where to attach the team", and the third says "Agree on what the team's relationship is to the rest of the organization". Obviously in doing the first, one also has to do the third, at least in part.

In practice, however, these interrelationships among the steps should not cause problems because the relevant authority, responsibilities, and relationships will have been clarified in good part as a consequence of the proposal approval process (see step 10.1). Usually the senior Chartering Agency official will have been determined, the main organizational units to be involved will be known, the number of full-time project staff will have been more or less agreed upon, and so on.

*
12.1 OBTAIN MANPOWER COMMITMENTS

Basically, this step consists in reaching agreement on what units, divisions, and agencies inside and outside the Ministry of Health will cooperate with the project by supplying manpower for doing or supervising project activities. (Existing organizational units will also be asked to cooperate with the project in other ways, for example, by providing assistance in obtaining resources, promoting changes in the service, obtaining feedback, and so on. Securing those types of cooperation will be covered in steps 12.3 and 15.3.)

The project schedule, activity descriptions, and project budget provide the basis for identifying the relevant units and agencies with which negotiation should take place in order to reach agreement on manpower to be supplied. Copies of these documents should therefore be provided to each of the relevant division directors, agency representatives, etc., as they provide a concrete basis for discussion and negotiation.

Another tool that can be used in the negotiation process is the linear responsibility chart (see Fig. 8, page 224). The project manager can easily prepare a first draft of this chart prior to discussions with other units and agencies by using the list of project activities and the activity descriptions produced in steps 11.3 to 11.6. In filling in the chart at this point the project manager should specify who (from which unit) is going to do each of the activities and who will supervise the work (that is, who will be the activity manager). It may be useful for the purposes of subsequently doing step 13.2 to indicate at the same time who should be involved in each activity on a part-time basis in counselling the implementors, reviewing the results, and so on (liaison persons).

Negotiations regarding manpower commitments can take place individually between the project manager (and/or the senior Chartering Agency official) and each relevant unit or agency, in a group meeting of all relevant units, or in a combination of the two. This negotiation process requires a considerable amount of tact and skill on the part of the project manager and/or the Chartering Agency official. Unit and agency chiefs must have a positive attitude toward the project before they willingly commit their manpower to such an undertaking. Creating this positive attitude may have been accomplished only in part during the proposal approval process (step 10.1) and during informal discussions about manpower that may have taken place when specifying and scheduling the work (step 11).

During these negotiations with existing units regarding manpower commitments, the question of using full-time versus part-time staff for doing and/or managing activities will continually arise. From the standpoint of the efficiency of project management, the centralized full-time project team is preferable. However, it is recognized that most ministries of health lack the managerial and technical manpower to spare for implementation activities, particularly when more than one major project is going on simultaneously. Consequently, the use of part-time staff from existing units will usually be unavoidable. In such cases, it becomes even more important that the respective manpower commitments from various units be clear, as part-time staff will have a tendency to give priority to the tasks assigned them by their regular supervisors (see page 199).

It is usually advisable to formalize the results of this negotiation in the form of a written manpower agreement that specifies for each organizational unit:

(1) the quantities agreed upon (for example, two nurses, Mrs X and Mr Y);
(2) the work to be done by them (e.g., preparing a curriculum);
(3) the time periods involved (e.g., 50% of their time over a two-month period);
(4) an agreement as to what will happen if deviations occur (replacements by name, in case of absence); and, where relevant,
(5) agreements upon prices for the relevant persons.
When negotiating with external agencies, private organizations, or volunteer groups, the project manager will usually have to prepare some form of legal document that formalizes these commitments. If so, he will need legal advice from the appropriate governmental unit for drawing up the contract. Even when not legally required, however, a written agreement is useful to both the supplier and the user of project staff. Three copies of each agreement should be prepared, one copy to be retained by the project manager, the second to be retained by the supplier of the manpower, the third to be returned to the project manager with the supplier's initials indicating approval. In this way, both parties know at any given time what agreements have been made and what has been approved. All subsequent amendments to these agreements should be documented and distributed in the same fashion.

12.2 DETERMINE ORGANIZATIONAL LOCATION OF THE PROJECT

The main purpose of this step is to foresee and avoid difficulties in relationships among units in the existing organization and between these units and the project team.

In some instances, the decision regarding the organizational location of the project is made when the project manager is appointed (see step 10.2). In others, the project manager, the senior Chartering Agency official, division directors, etc., may have to recommend the appropriate location of the project in (or outside) the Ministry of Health when they review the project schedule. In either case the following factors should be taken into consideration:

1. How visible does the Ministry (government) wish the project to be vis-à-vis the existing organization? Generally, the more visibility desired, the higher the project should be placed in the organization.

2. Is the project operating in one geographical area or over the entire country? If it is to operate in one geographical area (and if successful), is it likely that it will be applied to other geographical areas? Generally, the greater the desired coverage, the higher in the organization the project should be placed.

3. How many units are involved in the project and how interrelated are their activities? Normally, the more complex the project, the higher it should be placed in the organization.

4. How rapidly should implementation occur? If decisions must be made quickly, this suggests that the project should report directly to a high level decision-maker.

12.3 FURTHER CLARIFY AUTHORITY, RESPONSIBILITY, AND RELATIONSHIPS

Obtaining manpower commitments from units, divisions, and agencies (step 12.1) and deciding upon the organizational location of the project (step 12.2) only partially clarify the authorities, responsibilities, and relationships of the project manager, activity managers, and senior Chartering Agency official vis-à-vis the existing organization. Still to be answered are such questions as the following:

- Who has the authority to change the project schedule?
- Who has the authority to substitute project resources?
- Who can terminate the project prematurely?
- Who has approval/authority over contingency funds?
- Who can change the project objectives?
- Who is responsible for obtaining resources?
- What reports are required and who is responsible for making them?
One might ask whether these questions of authority really have to be settled at this point. Cannot a project manager simply assume that he has the necessary authority to implement his project and proceed with implementation until he runs into difficulty, then cry for help? In other words, can he not work out these problems as he goes along? The answer is that it depends on the size, complexity, and importance of the project.

In this respect there are two widely differing types of project:

(1) A relatively "simple" project that falls entirely inside the health sector, does not involve multiple technologies (for example, is not involved in both family planning and water supplies), is localized geographically (or will be implemented in successive stages), has less than 15 full-time staff, and has only marginal resources coming from external donor agencies.

(2) A "very complicated" project that spans several sectors, involves multiple technologies, covers the entire country, employs more than 15 staff, and is expecting a considerable amount of external resources.

In general, for the "simple" project, it should only be necessary for the senior Chartering Agency official, project manager, and activity managers to agree informally on their respective authority, responsibilities, and relationships. For the "complicated" project, it may be necessary to (a) clarify these responsibilities in writing, (b) establish a formal project coordinating committee, (c) formally nominate liaison persons in the existing organization (and in volunteer groups, private organizations, etc.), and (d) clearly define in writing the authority and responsibilities of external donor agencies. (Obviously for projects that fall between the two extremes, the Chartering Agency in consultation with the project manager will have to decide if a project coordinating committee, liaison persons, and formal agreements with external agencies are necessary.)

Fig. 1 illustrates the relationships among the complete range of organizational elements that may be involved in a "complicated" project. Their specific authority, responsibilities, and relationships might be as follows:

12.31 CLARIFY RESPONSIBILITIES OF SENIOR CHARTERING AGENCY OFFICIAL

The senior Chartering Agency official assigned to the project is normally the immediate supervisor of the project manager and is usually responsible for making most of the decisions that fall outside the limits of authority of the project manager. Fig. 2 provides a checklist of his authority/responsibility.

12.32 CLARIFY RESPONSIBILITIES OF PROJECT MANAGER

The project manager's primary responsibility is to ensure that the project objectives are achieved with a minimum consumption of resources. His main function in this regard is to recognize potential future problems early enough for corrective action to be taken. Fig. 3 provides a checklist of his authority/responsibility.

12.33 CLARIFY RESPONSIBILITIES OF ACTIVITY MANAGERS

Activity managers may be viewed as sub-project managers in that they are responsible to the project manager for ensuring that activities or clusters of activities are accomplished with a minimum consumption of resources. An activity manager may be a full-time member of the project team, or he may be permanently attached to a unit within the Ministry, a training institute, etc. He may be managing a group of people, or he may be actually doing activities himself. Fig. 4 is a checklist of the responsibility/authority of an activity manager.
Figure 1. The Project Organization

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*lines of communication and authority*

*lines of communication*
Figure 2. Checklist of Authority/Responsibility of Senior Chartering Agency Official

1. Reviewing the project proposal and deciding upon steps to be taken.
2. Reviewing the detailed project schedule, budget, and organization, and approving the proposed steps to be taken.
3. Arranging for a coordinating committee for the project (if necessary) and deciding on its authority/responsibility.
4. Participating as a member of the project coordinating committee.
5. Appointing the project manager and assigning his authority/responsibility.
6. Scheduling periodic project review meetings in collaboration with the project manager.
7. Deciding upon major revisions to the project schedule, budget, and organization.
8. Providing guidance to the project manager on all questions regarding resource inputs for the project.
9. Negotiating manpower agreements in collaboration with the project manager.
10. Communicating with other ministries.
11. Deciding on the termination of the project.
Figure 3. Checklist of Authority/Responsibility of Project Manager

1. Adding, changing, and/or deleting activities in the project schedule.
2. Substituting resource inputs when necessary.
3. Scheduling meetings with the project team.
4. Communicating with relevant organizational units and professional bodies as necessary and when authorized.
5. Determining causes and effects of actual and expected deviations from the current project proposal.
6. Selecting project staff (when feasible and authorized).
7. Developing proposals (with project team members) for actions and alterations to the project plan that are essential for achieving the project objectives.
8. Deciding on such actions that fall within the limits of his authority (see 10 below). For problems outside these limits, submitting suggestions for corrective action to the senior Chartering Agency official and/or the coordinating committee.
9. Monitoring important project activities to ensure that target dates are met.
10. Normally the following will be outside the scope of a project manager's authority:
   (a) Changing the project objectives.
   (b) Making major changes in the strategy/service design that have policy implications.
   (c) Reallocating national or external funds beyond a specified level. (Since in most governmental agencies reallocation of funds is a difficult problem, it is customary to establish a contingency fund of approximately 10% that the project manager is authorized to reallocate.)
   (d) Except as authorized, engaging in official communication with (specific levels of specific) agencies outside the Ministry of Health.
   (e) Recruiting additional staff beyond those specified in the proposal.
Figure 4. Checklist of Activity Manager's Responsibilities
(same as project manager, but at activity level)

(1) Assisting in the preparation of the project schedule.

(2) Giving information about and clarifying the contents of activity descriptions to all concerned.

(3) Planning, ordering, and supervising the execution of specific project activities or clusters of activities (or executing activities himself).

(4) Making sure that activities are producing the desired end products with a minimum of resource consumption and within the time limits of the project, while attempting to reduce resource inputs, time, and cost by proposing and applying measures for greater economy.

(5) Within the limits of his authority:
   - making necessary substitutions of staff (in consultation with the project manager),
   - making necessary additions, deletions, and changes in project activities so as to meet the project milestones.

(6) Checking activity results, problems, etc. and reporting them to the project manager.
12.34 DECIDE ABOUT PROJECT COORDINATING COMMITTEE

One important decision to be made by the senior Chartering Agency official is whether or not to establish a coordinating committee for the project (or convert the formulation steering committee into such a body). A related decision is whether the coordinating committee should function as a decision-making body or as a consultative group. In making these decisions, the official should take into consideration the nature of the involvement of various agencies/units/divisions and the nature of the normal Ministry decision-making processes. A "complicated", politically sensitive project with important deadlines, involving project staff from several Ministries, and where decisions on funding are normally made by another ministry (such as the Finance Ministry) might well deserve a coordinating committee, whereas a "simple" one involving staff from only one department in the Ministry of Health may not require such a group, except on an ad hoc informal basis.

If a coordinating committee is established, it should be clarified whether the committee is to be used for decision-making or as a mechanism for informing various agencies/units/divisions. In this regard, it should be recognized that most committees do not function very well as decision-making bodies without a great deal of preparation on the part of its members (and a great deal of project staff time in preparing for such committee meetings). Furthermore, it is often difficult to get high level decision-makers together on a regular basis to review project progress. On the other hand, if these agencies/units/divisions are not involved, it may be extremely difficult for the project manager to obtain additional resources for the project if and when they are needed. The possibility of using existing committees should always be considered. Fig. 5 contains a checklist of the authority/responsibility of a coordinating committee acting as a decision-making body. If a committee is not set up, or if it is not to perform many of the functions listed in Fig. 5, the senior Chartering Agency official will have to decide who will perform these functions. Some of them can be carried out by liaison persons (see below).

The senior Chartering Agency official is normally the chairman of the coordinating committee.

12.35 CLARIFY RESPONSIBILITIES OF LIAISON PERSONS

Liaison persons are representatives from existing units who are favourably disposed towards the project and who are willing to provide personal day-to-day guidance and assistance to the project manager regarding methods and problems affecting the project, the schedule of activities, and the project organization, and regarding the obtaining of needed resources. They might include a representative of Finance (for budgetary questions and following up the allocation of funds), a representative of Personnel (for following up on recruitment), representatives from specific technical units in the Ministry (for guidance on technical aspects of the project), a representative from a training institute (if the project involves training), relevant service supervisors (such as Provincial Medical Officers), and so on. Liaison persons can act as formal and/or informal links between the project team and the rest of the organization. The working group involved in specifying and scheduling work (step 11) might consist primarily of liaison persons. A checklist of the specific types of authority/responsibility that might be assigned to liaison persons is given in Fig. 6.

In effect, liaison persons behave like a coordinating committee with the following notable differences: (a) their role is normally advisory rather than decision-making (unless they are specifically delegated authority to decide, as they might be if there is no coordinating committee), and (b) they assist the project manager on a day-to-day basis rather than at scheduled intervals.
FIGURE 5. CHECKLIST OF AUTHORITY/RESPONSIBILITY OF THE PROJECT COORDINATING COMMITTEE

GENERAL

(1) Deciding on and ordering the start of the project.
(2) Evaluating the project and deciding on all matters concerning the limits of the project.
(3) Deciding on the termination of the project.

SPECIFIC

(1) Approving the project objectives.
(2) Approving the project organization (manpower, responsibilities, budget).
(3) Approving major milestones of the project schedule.
(4) Selecting the project manager.
(5) Scheduling periodic meetings to review project progress.
(6) Deciding on alterations to:
   (a) the project objectives;
   (b) the strategy/service design;
   (c) policies;
   (d) the project budget;
   (e) the project organization.
Figure 6. Checklist of Authority/Responsibility of Liaison Persons

(1) Assisting the project manager in obtaining resources.

(2) Cooperating with activity managers and the project manager in breaking down clusters of activities into detailed activities.

(3) Assisting in preparing activity descriptions.

(4) Taking part in selected detailed design sessions and formal meetings.

(5) Obtaining the opinions and advice of persons affected by the project activities and by the solutions proposed.

(6) Communicating with relevant individuals as to project objectives and activities.

(7) Assisting the project manager and activity managers in preparing proposals for alterations (see step 15.35).

(8) Giving opinions and advice on such proposals and suggesting alternative solutions.

Figure 7. Responsibilities of External Sources

(1) Negotiating manpower and resource agreements with the project manager for external resources.

(2) Supplying the resources agreed upon in manpower and resource agreements at the times specified.

(3) Cooperating with the project manager on all questions regarding changes in the external resource inputs for the project.
12.36 CLARIFY RESPONSIBILITY OF EXTERNAL SOURCES

For the purposes of this manual, external sources are considered to be external to the organization performing the project in the sense that they control their own resources. Included in this category are: international agencies (WHO, UNDP, UNFPA, etc.) and bilateral organizations (AID, SIDA, NORAD, etc.). If such sources are heavily involved in the project, their respective authorities and responsibilities should be clarified in the form of a resource agreement.

When staff are provided from an external source, it is particularly important that they thoroughly understand their authority/responsibility vis-à-vis both the project manager and the provider of the resource (see Fig. 7). In practice, this clarification rarely takes place beyond some general statement in the resource agreement, with the result that the provider, the user, and the "resource" himself are dissatisfied. Responsibilities should be made clear to all concerned. If, for example, a "foreign" staff member is expected to work as an activity manager, this should be made known to him in the process of setting up the project organization.

12.4 COMMUNICATE PROJECT ORGANIZATION

How formal one needs to be about communicating the respective authority and responsibilities of the relevant units and individuals with regard to the project depends upon its size and complexity, the managerial "styles" of the project manager and the senior Chartering Agency official, and the extent to which the authority/responsibilities differ from what presently exist. The project manager should not waste time producing documents that cause antipathy to the project. The minimum he should do is thoroughly brief, orally, each of the activity managers and liaison persons on what he expects from them. In turn, the Chartering Agency official should brief the project manager on what is expected of him. However, since experience indicates that briefings are often not understood by the recipient, it is recommended in more complicated projects that the following documents be provided to the relevant units, activity managers, liaison persons, etc., after the oral negotiations:

1. Written manpower and other resource agreements.
2. An organization chart illustrating the project organization.
3. A description of the authority/responsibility of each major unit cooperating with the project.
4. The project schedule, if published.

The organization agreed upon should be published under the name of either the project coordinating committee or the senior Chartering Agency official.

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Soon after the initiation of the project and the beginning of work specification and activity scheduling, several things happen. The word begins to spread that a high priority project has been launched. Although some directors and technical personnel are aware of the contents of the project proposal, there is considerable misunderstanding over what is happening and who exactly is involved. There has been no conscious effort to conceal information about the project, but the staff directly involved are too busy to spend much time informing others in the Ministry about their new tasks.

The DGHS allows this situation to persist for a short while and then decides that the time has come to clarify for all what the project is about, who is involved, and what are their responsibilities. His decision to publicize the project throughout the government is not made simply to satisfy idle curiosity. It has begun to be apparent that some of the agencies and offices that have been asked to support certain project activities are not taking their commitments seriously. It is felt that a more public expression of the priority of this project and the identification of its contributors would strengthen those weak commitments.

Several steps are undertaken simultaneously.

The DGHS convenes the first meeting of the transformed formulation steering committee. It is now referred to as the project coordinating committee. Some of the members have changed, but the same agencies are represented. The committee is briefed by the project manager about the steps that have been taken to put the project into full operation. He goes into detail about the activities scheduled for the next 12 months and highlights those activities for which manpower is not assured.

The DGHS informs the committee members that their task is primarily supportive and advisory, that they will be asked to follow the progress of the project and to assist in rectifying problems. He impresses the committee with the high priority that the Ministry of Health attaches to the project.

The representative of the Economic Planning Board, a member of the committee, describes the importance which the Prime Minister attaches to the project and particularly stresses his interest in seeing how well the Ministries can work together. He implies that if such an inter-sectoral development project succeeds, the approach would be encouraged and development money would be allocated to efforts set up in a similar fashion. He implores the various agencies to assign their best people to the project and to search for ways to make up the current manpower shortfalls.

The project manager adds that periodic meetings of the committee will be held to keep members informed of the current status of the project and any difficulties that may arise. Recommended changes in approach will be offered for approval, and coordination and staffing problems may have to be discussed if he is unable to rectify such problems personally with the agency concerned.

The DGHS concludes by promising all members that they will soon receive copies of written manpower agreements, the description of the project organization, and any revisions to the project schedule.

In the meantime, the project staff has been summarizing the current activity assignments on "linear responsibility charts" that identify who is responsible for performing various tasks, who is to supervise such work, and who can be called on for counselling, review, and liaison. (Fig. 8 shows the chart prepared for the activity cluster of establishing the CHWs.) While the project manager leaves individual assignments up to the agency or office providing the manpower, he does ask the agency to specify the names of those assigned so as to check the unit's degree of commitment and facilitate communication.
As assignments by cooperating offices are finalized, the nature and duration of the work to be performed are documented in a written manpower agreement. The relevant activity description is attached to the agreement, copies of which are signed by the project manager and the supervisor of the staff member assigned.

In an effort to publicize the authority and responsibility vested in the project as well as its location within the Ministry, the DGHS asks the project manager to write an information circular for distribution within the Ministry and to other related agencies. The circular is to be signed by the Prime Minister. The text of this circular makes the following points:

1. A project has been established for health development among the rural population of the country.

2. The project is beginning its activities in Province Eaks, but if the techniques applied are successful they will be extended throughout the country.

3. Several agencies besides the Ministry of Health are contributing manpower to the project. These are: Eaks Provincial Government, the Community Development Programme, the Medical and Nursing Associations, the Ministry of Education, and the Agricultural Development Authority.

4. Dr [name] of the Health Planning Unit has been assigned as Project Manager and as such has been given authority to direct supporting staff in all matters pertaining to the project. In this capacity, he reports directly to the Director-General of Health Services.

5. A national coordinating committee has been established to support and advise the project. All agencies concerned are represented. This committee will report on the status of the project directly to the the Prime Minister's office.

6. At an appropriate time in the future, [name], the Provincial Health Officer of Province Eaks, will become responsible for all implementation activities in his province.

7. Information circulars about this project will be distributed periodically. Owing to the high priority attached to the project, all agencies are asked to extend their full cooperation and support.
### Figure 8.
LINEAR RESPONSIBILITY CHART: ESTABLISHING THE COMMUNITY HEALTH WORKERS

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Dr. A. District Health Officer</th>
<th>Mr. B. Provincial Admin.</th>
<th>Dr. C. PHO</th>
<th>Mr. D. Min. of Interior</th>
<th>Mr. E. Min. of Finance</th>
<th>Mrs. F. Chief Matron</th>
<th>Mrs. G. Nurse Pub. HHG Inst.</th>
<th>Mrs. H. PHN Prov. Eaks</th>
<th>Mrs. I. Mrs. J. Mrs. K. Tutors</th>
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<tbody>
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<td>6.1 Design the registration system</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>6.2 Initiate and monitor registration and recruitment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6.3 Design payment scheme</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 Prepare CHW procedure manual</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 Design supervision and support procedures</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
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<td>7.3 Develop CHW curriculum</td>
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<td>7.4 Train CHW tutors</td>
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<td>7.5 Conduct 1st CHW course</td>
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<td>7.6 Evaluate 1st CHW course</td>
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</tr>
</tbody>
</table>

1. Does the work (project staff)

2. Supervises (activity manager)

3. Advises, reviews, or otherwise supports (liaison person)
CHAPTER 13

OBTAINING RESOURCES
13. Obtaining Resources

Steps Done By

<table>
<thead>
<tr>
<th>Project Manager (or Activity Manager)</th>
<th>Liaison Persons</th>
<th>Senior Chartering Agency Official</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUDGETS</td>
<td></td>
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<td>MANPOWER AGREEMENTS</td>
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<td>ACTIV. DESCRIPT.</td>
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<tr>
<td>PROJECT SCHEDULE</td>
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</tbody>
</table>

- **13.1**
  - Obtain Funds
  - Schedule
  - Monitor & control

- **13.2**
  - Obtain Staff
  - Schedule
  - Monitor & control

- **13.3**
  - Obtain Supplies and Equipment
  - Schedule
  - Monitor & control

Reschedule (where necessary)

- Allotments Available
- Staff Recruited
- Equipment Available
- Revised Project Schedule
What is the purpose of this chapter?

The purpose of this chapter is to provide guidance to project managers (and/or activity managers, and/or the senior Chartering Agency official) to help them ensure that project resources (funds, manpower, supplies, and equipment) are available at the time they are needed.

What are the end products of these steps?

The process of obtaining resources is completed when:

(a) necessary project funds are allotted (physically available) for the project manager or activity manager to spend;
(b) full-time and part-time project staff are in place at the appropriate duty station ready to work on project activities; and
(c) project supplies, equipment, office space, etc., are obtained.

Who is involved in obtaining resources?

This, of course, depends on the type of resource and where it is to be obtained from (a governmental unit, a local private source, a foreign agency, etc.). Specific responsibilities for these activities should have been clarified when project authority, responsibility, and relationships were defined (see Chapter 12). In general:

(a) There are administrative units within the Ministry of Health who normally will do most of the work (Budget, Finance, Medical Stores, Personnel).
(b) The project manager (or activity manager) should closely monitor and control the various administrative processes to ensure that resources are available in time.
(c) For those resources that are required for the health service (for example, annual operating budgets), service supervisors should be involved in scheduling, monitoring, and controlling the process.
What steps are involved in this chapter?

The steps from the standpoint of the project manager (or activity manager) are relatively obvious — and deceptively simple. They include:

(a) Working with the relevant administrative units in preparing a timetable of administrative steps to be taken to obtain the resources.
(b) Monitoring this timetable to ensure that the administrative steps are being accomplished on time.
(c) Taking corrective action, when necessary.

When are these steps performed?

Obtaining resources is a process that occurs periodically throughout the life of the project. For example, obtaining funds occurs at the beginning of the project and at least annually thereafter. Obtaining staff can occur as early as during project initiation, and may be repeated several times during the course of the project when staff are transferred or it is concluded that a different type of staff is required, etc. Similarly, supplies and equipment are normally required at specific time periods throughout the project. The reason for devoting a whole chapter to obtaining resources is that it is so important to project success: experience indicates that failure to obtain resources in time is the most common cause of delay in implementation.

*
Once the work to be done has been specified in detail and scheduled (Chapter 11) and all commitments have been obtained from various units/divisions/agencies to provide the resources for project implementation (Chapter 12), then, if the process has not already begun (see steps 10.26 and 10.27), the project manager must begin the actual process of obtaining the resources themselves. Basically, three types of resources are involved: funds, staff, and supplies and equipment.

13.1 OBTAIN FUNDS

A real test of a project manager's patience, ingenuity, and motivation towards implementation is his determination to manipulate varying sources of funds (governmental, external agency, etc.) in a bureaucratic environment so as to ensure that funds are available when needed. In no case should the project manager (or activity manager) assume that the required funds will be available when he needs them just because he has submitted a budget to the Ministry of Planning or Budget Bureau and received a commitment from them (see Chapters 10, 11, and 12). In many countries, financial allocations to a given agency will be made by another agency (or at least by a different department in the Ministry) that may have different priorities. Furthermore, the overall financial picture (cash flow) within the government may change during a fiscal year, necessitating adjustments in various allocations. Finally, the effects of inflation may be such that the original budget submission no longer covers the amounts required. Private, bilateral, or international organizations are usually somewhat more reliable regarding commitments but are still subject to the same types of fluctuation.

How then does a project manager (or activity manager or senior Chartering Agency official) avoid these difficulties? Obviously, he cannot be prepared for every contingency, but he can avoid some of the most common ones by taking the following steps for each of the important budget submissions (government development budget, external agency budget, etc.):

(1) **Select a good liaison person in the relevant administrative units** (Ministry of Health, Treasury Department, and appropriate external agencies)

The project manager should already have made contacts with the appropriate administrative units in the Ministry of Health, possibly during project initiation (see step 10.27) and in any case during the process of budget preparation (step 11.7) and clarifying authority and responsibility (see step 12.3). As a consequence of these contacts he should have a good idea of who in these units (a) is knowledgeable about the administrative steps that must be taken to obtain the appropriate allotments, (b) knows the average time each of these steps should take, (c) knows where and when other funds are likely to become available (in case the original request falls through), and (d) knows how to shift funds from one category to another. The project manager should take the time to become well acquainted with these persons and familiarize them with the purposes and resource requirements of the project.

(2) **Prepare a schedule of administrative steps**

Using an activity description form and/or Gantt chart, the project manager and the financial liaison person(s) should prepare a short schedule (5-10 main activities) of the necessary steps between budget submission and availability of the appropriate allotment. For each step they should indicate who will be responsible for doing it and the expected start and completion times. The activities should be selected in such a way that one can subsequently find out whether they have been completed or not completed (that is, the end points must be identifiable). Fig. 1, page 232, illustrates such a schedule.
(3) **Prepare contingency plans**

For each step in the above schedule, the liaison person and project manager should specify what action they should take if (a) the step is not completed on time or (b) the funds approved at that step are less than required. As indicated in Chapter 11 (step 11.5) there are usually at least three possible alternatives in the event that problems occur: (a) using another source of funds temporarily; (b) appealing to higher authority (for example, the senior Chartering Agency official); or (c) rescheduling subsequent project activities accordingly.

(4) **Monitor/control the schedule to ensure that steps are being followed**

Through periodic contacts (telephone calls, informal visits, etc.) with the financial liaison person, the project manager or activity manager should verify that milestones are being met. If not, the contingency plan should be put into effect.

(5) **Monitor the economic environment**

Through reading the newspaper and through appropriate contacts with government and private individuals who know what is happening to the relevant costs, the project manager should keep watch over the economic environment. If costs are increasing, he should take actions as necessary to ensure that funds are available.

13.2 **OBTAIN STAFF**

As implied in Chapters 10, 11, and 12 (see steps 10.26, 11.5, and 12.1), project staff may be coming from a variety of sources: (1) temporary part-time reassignment from an existing organizational unit; (2) full-time reassignment from somewhere in the government services; (3) recruitment from the private sector; or (4) recruitment from a bilateral or international agency. For most countries and types of manpower, these sources are probably listed in descending order of likelihood that the staff required will be obtained when needed. To overcome these difficulties when formal national or international recruitment procedures must be followed, the project manager should: (a) select an appropriate liaison person (usually within the Personnel Department) who appears motivated to follow up the recruitment process; (b) schedule the necessary steps with this person and specify the offices responsible for the various steps (see Fig. 2, page 233); (c) periodically check that the appropriate steps are being taken; (d) plead, cajole, scream, threaten, etc., when the steps are not being done in time; and (e) be prepared to shift the project schedule or sources of manpower as a last resort.

13.3 **OBTAIN SUPPLIES AND EQUIPMENT**

From the standpoint of the project manager (or activity manager) the process of obtaining supplies is the same as for staff and funds in that, once having prepared a list of project supplies and equipment, he should (a) ensure that an appropriate liaison person is designated; (b) work out with him the schedule of steps in the process (see Fig. 3, page 234); (c) periodically monitor the procurement process (which is admittedly difficult to do when equipment is ordered from outside the country); (d) plead, cajole, etc., when delays occur; and (e) be prepared to shift schedules and/or sources as necessary.

* * *
ILLUSTRATION - Chapter 13

Since the project manager knows that delay in receiving necessary resources has often been an obstacle to timely implementation (after referring back to the obstacles to implementation identified in step 8.4), he decides to spend time in clarifying and scheduling the steps for obtaining:

(1) the additional resources required in Province Eaks for putting the strategies into operation, and
(2) the resources his project requires for carrying out the necessary implementation activities.

In regard to the Province Eaks resources, the project manager must work within the planning and budgeting procedures described in step 2.1. Since a new five-year plan period begins in 1976, a detailed sequence of steps must be followed in 1975 to set up budget lines for the years of the plan period. He contacts the Permanent Secretary and the Chief of the Budget Bureau to convey the priority of these resource requirements and to ask for the assistance of their budget officers in laying out the schedule of administrative steps leading to allocation and funding. He then convenes a planning session with the specified budget officers and the Provincial Health Officer of Province Eaks. The product of this session is the schedule shown in Fig. 1.

In view of the likely duration of the project, it is realized that more full-time manpower will be needed. After reviewing the existing staff likely to be made available, the project manager concludes that only two such persons will need to be recruited. He suggests that two medical officers be recruited into government service to remain with the project throughout its nationwide implementation and then to be assigned to the Health Planning Unit, which was due for two new staff members anyway. The DGHS agrees that the additional officers are needed to support the project and that such experience will be valuable for developing managerial expertise within the Ministry, but withholds a decision on their ultimate assignment.

Accordingly, the project manager contacts the Ministry Personnel Officer and they jointly schedule the steps necessary to recruit and place two medical officers in the short time of six months. This schedule is shown as Fig. 2.

Finally, the project manager, together with the PHO and the Ministry Stores Officer, schedules the steps necessary to obtain the supplies required for implementing the strategies in Province Eaks. The more important items needed in a relatively short period of time are:

(1) equipment and supplies for use by the mobile health teams;
(2) the kits and supplies to be provided to the community health workers;
(3) visual aids for use in the CHW and health service staff refresher training courses.

This schedule is shown as Fig. 3.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Schedule</th>
<th>Fiscal Year 1975</th>
<th>Fiscal Year 1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Prepare supplementary instructions. Issue guidelines to Units, Institutions, Provinces.</td>
<td>DOH Permanent Secretary, Ministry of Health</td>
<td></td>
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<tr>
<td>3. Review guidelines, prepare and submit 1976 budget proposal.</td>
<td>Provincial Health Officer, Project Manager</td>
<td></td>
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<tr>
<td>4. Review Provincial 1976 budget proposals. Submit to relevant Ministries.</td>
<td>Provincial Health Officer, Provincial Finance Officer</td>
<td></td>
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<tr>
<td>6. Review/approve budget proposals.</td>
<td>Representative for Health Budget Bureau</td>
<td>Nov-Dec-Jan-Feb-Mar-Apr-May-Jun-Jul-Aug-Sep</td>
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<tr>
<td>8. Establish allotments for Ministries.</td>
<td>Treasury Representative for Health</td>
<td>Nov-Dec-Jan-Feb-Mar-Apr-May-Jun-Jul-Aug-Sep</td>
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<tr>
<td>10. Submit request to spend against the allotment.</td>
<td>District Health Officer</td>
<td>Nov-Dec-Jan-Feb-Mar-Apr-May-Jun-Jul-Aug-Sep</td>
<td></td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>Responsibility</td>
<td>APR</td>
<td>MAY</td>
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<td>----------------------------------------------</td>
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<tr>
<td>1. Prepare Post Description</td>
<td>Mr - (Project Man.)</td>
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<tr>
<td>2. Review/approve Post Description</td>
<td>M o H Personnel Mr -</td>
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<tr>
<td>3. Confirm Funds Available</td>
<td>Treasury Mr -</td>
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<tr>
<td>4. Approve Post</td>
<td>Civil Service Commission Mr -</td>
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<tr>
<td>5. Post Vacancy Notice</td>
<td>M o H Personnel Mr -</td>
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<td>6. Prepare for and Convene Selection Committee</td>
<td>M o H Personnel Mr -</td>
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<td>7. Complete Medical Clearance</td>
<td>M o H Personnel Mr -</td>
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<tr>
<td>8. Determine Date of Availability of Candidate</td>
<td>M o H Personnel Mr -</td>
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<tr>
<td>9. Prepare and Send Offer of Appointment</td>
<td>M o H Personnel Mr -</td>
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<tr>
<td>10. Give Notice to Current Employer</td>
<td>Candidate</td>
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<tr>
<td>11. Brief Staff Member</td>
<td>Mr -</td>
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</table>
Figure 3. Schedule for Obtaining Project Supplies and Equipment (Gantt Chart)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Months</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
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</thead>
<tbody>
<tr>
<td>1. Formulate requirements, send to Ministry Stores Officer.</td>
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<td>Project Manager</td>
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<td>2. Establish general specifications, estimate costs, prepare purchase authorization</td>
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<td>Ministry Stores Officer</td>
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<td>3. Approve allotment request</td>
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<td>Ministry of Health Finance Representative</td>
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<td>4. Prepare purchase orders</td>
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<td>Ministry Stores Officer</td>
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<td>5. Send supplies</td>
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<td>Commercial Firms</td>
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<td>6. Receive and store supplies</td>
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<td>Project Manager</td>
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<td>District Health Officer</td>
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</table>
CHAPTER 14

ESTABLISHING THE CONTROL SYSTEM
14. Establishing the Control System

Steps Done By

<table>
<thead>
<tr>
<th>Activity Managers</th>
<th>Project Manager</th>
<th>Senior Chartering Agency Official</th>
<th>Products</th>
</tr>
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<tr>
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<td>ACTIVITY DESC.</td>
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<td>PROJ. SCHEDULE</td>
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<td>PROJECT PROPOSAL</td>
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<tr>
<td>(OBJECTIVES)</td>
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</table>

14.1

SELECT CONTROL INDICATORS

14.2

IDENTIFY SOURCES OF INFORMATION

14.3

DESIGN CONTROL SYSTEM

14.4

TEST AND IMPLEMENT CONTROL SYSTEM

PROJECT REPORTING PROCEDURES

advise
What is project control?

Project control is the managerial function that keeps the project functioning as planned in the previous steps. Some deviations are bound to occur from the project plans, including the planned budgets, schedules, and objectives of various kinds. The purpose of project control is to check that these deviations do not fall outside allowable limits and, if they do, to take corrective action. Control thus involves:

(a) selecting control indicators that reflect the permissible range of project performance;

(b) gathering information on how the project is actually performing and comparing it against the indicators;

(c) taking corrective action if excessive deviations occur.

What is the purpose of this chapter?

This chapter deals with the steps that need to be taken to set up the project control system. The actual functioning of the control system is discussed in Chapter 15. It should not be forgotten when reading this chapter that control serves no purpose unless it includes corrective action. How such corrective action is decided on and taken will be described in Chapter 15.

Who should control the project?

To a certain extent, this depends on the nature of the project. In general, however, control should be exercised at three managerial levels:

(a) At the level of the activity manager, control is directed at ensuring that the activity objectives (activity products) are achieved on time and within budget. Activity managers are supervised in turn by the project manager.

(b) At the level of the project manager, control is directed at ensuring that the project objectives are achieved on time and within budget. The project manager
is supervised in this regard by the senior Chartering Agency official and/or the project coordinating committee.

(c) The senior Chartering Agency official or the project coordinating committee are concerned with ensuring conformity to higher-level objectives and, in some cases, with altering the original plans if need be.

How does project control differ from health service evaluation?

Control and evaluation are conceptually the same in that both involve establishing standards, comparing actual with expected performance, and taking corrective action when necessary. In practice, the following differences can be observed:

(a) Project control focuses mainly on short-term project and activity objectives, whereas health service evaluations are more concerned with longer-term achievements, for example, operational output targets, the problem-reduction effects of these outputs (reductions of mortality and morbidity), and the ultimate benefits of problem reduction, such as avoidance of economic loss, increased productivity of workers, and so on.

(b) Project control is a relatively continuous process, whereas health service evaluations are usually episodic or periodic.

*
Irrespective of the type of project, a control system, as stated above, should serve at least three levels of management: the activity managers, the project manager, and the senior Chartering Agency official and/or the project coordinating committee. To ensure that the objectives for which they are responsible are achieved, the managers at each of these levels must control three parameters: time, cost, and performance (quantity and quality of production).

From the standpoint of the project manager and activity managers, the purpose of controlling these three parameters is to be in a position to make necessary decisions about:

1. rescheduling the project,
2. rebudgeting, and
3. reassigning project staff.

At the highest managerial level, control should be concerned with decisions about:

1. modifying project objectives,
2. redesigning the strategies/services, or
3. terminating the project.

The following sections describe how to set up a control system at each of the three managerial levels.

14.1 SELECT CONTROL INDICATORS

At each of the three managerial levels, indicators should be selected that will allow the respective managers to compare what actually takes place with what was expected. The bases for the selection of control indicators are (a) the project proposal, (b) the project schedule (with its milestones), and (c) the activity descriptions. To be practical, the number of indicators used for control purposes should be kept to a minimum. Following are some general guidelines on how to select the relevant indicators at each managerial level.

14.11 ACTIVITY MANAGERS

The indicators relevant for control by the activity managers can normally be found in the activity descriptions prepared in steps 11.2-11.5. The scheduled start and completion dates are the indicators for assessing if the activity is completed on time (time). The "resource inputs and costs" section contains indicators for monitoring costs at the activity level. The "activity purpose/product and criteria for assessing product" section should contain the standards for judging the product of the activity (performance).

14.12 PROJECT MANAGER

The selection of relevant, sensitive control indicators for use by the project manager is more complicated. While the activity descriptions will suffice for his control over the work of activity managers, the project manager must also exercise control over the way activities interrelate. For example, when delays occur in individual activities he
must be able to determine whether they will have serious or minimal damaging effects on the overall schedule. Conversely, when individual activities are progressing satisfactorily he must be able to detect when the project as a whole is making little progress in achieving the project objectives. Thus, control indicators for the project manager should also include the following:

(a) **Time**

To facilitate later rescheduling, the project manager should identify a limited number of milestones -- events that signal the end of a major sequence of activities and that must be reached on time if the remainder of the schedule is not to be seriously jeopardized. A preliminary list of milestones can usually be found in the project proposal (see the activity schedule, 8.5). For each of these milestones the project manager should now identify a preceding activity whose non-accomplishment on time would give him enough warning to act (for example, by assigning extra resources to the milestone activity sequence) and thus avoid failure in reaching the milestone on time.

(b) **Cost**

For cost control and rebudgeting purposes, the project manager should select a (small) number of project cost items to be kept under constant check. In selecting he should look for those that are:

- large in proportion to the overall budget,
- likely to be exceeded if not closely watched, and
- amenable to control (that is, those about which he can do something).

For example, project staff costs may not need to be controlled if the number of staff for the project is fixed and costs are likely to vary only because of inflation, increasing seniority, etc. On the other hand, the construction and equipment costs of a health centre might be closely controlled if (i) they are likely to increase significantly if not watched, and (ii) the health centre represents a model for future facilities.

(c) **Performance**

Relevant, sensitive, yet practical indicators for controlling performance (that is, the quantity and quality of products) are crucial to project success but extremely difficult to devise. The reason is that the ultimate effectiveness of most project products can only be assessed in terms of their subsequent performance in the operating service. (For example, in the case of training courses, how well do the trained staff (the products) subsequently provide the services?) And if one tries to assess their subsequent performance, one discovers two problems:

- It is difficult to establish cause-effect relationships. (For example, if a trained midwife performs only three deliveries a month instead of ten, was it because the training course was bad, the selection criteria for midwives were poor, the teachers were incompetent, the service supervisor is not doing her job, or the population has not yet accepted the new worker?)
- Even if one could isolate cause-effect relationships, one may do so too late to be able to take action to achieve the project objectives. (In the previous example, the project may be completed and the project team disbanded by the time it is learned that the output of the midwives has not increased significantly.)

These two problems can be partially circumvented by:

- setting up the initial project schedule in such a way that feedback can be obtained quickly (for example, by scheduling field tests of new procedures before
they are taught in training courses;
- using the best judgement of individuals as to cause-effect relationships;
- watching a limited number of carefully selected project or service indicators
  (such as numbers of staff trained, vaccinations performed, accepters of family
  planning, and water supplies operating) that it is assumed will change rapidly
  if the product is effective.

These indicators should be devised by the project manager, the activity managers,
and selected liaison persons (in most instances, knowledgeable service supervisors). They
may be used at one or more managerial levels for assessing the achievement of project
objectives.

**14.13 SENIOR CHARTERING AGENCY OFFICIAL AND/OR PROJECT COORDINATING COMMITTEE**

Given the decisions to be made by the senior Chartering Agency official (see Fig.
2, page 215) the control indicators he requires are far fewer and even more general
than those of the project manager and activity managers. Basically, he needs indicators
of a summary nature and/or critical indicators.

(a) **Time**

The reaching of milestone on time or not should be controlled.

(b) **Costs**

For project cost control purposes, it usually suffices to compare the total
project expenditure for a given year with the budgeted amount.

For controlling **service costs**, a limited number of cost items should be selected
that are:

- relevant to the purposes of the project;
- important in terms of their broader implications for the service, and
- controllable.

These costs might include the annual drug budget within a selected health centre, trans-
portation allowances for service staff in these facilities, etc. Again, the number of items
selected should be limited.

(c) **Performance**

A limited number of project objectives (not all) might be selected for close control
by the senior Chartering Agency official. The indicators representing these objectives
would normally be the same as those used by the project manager. Such indicators might
include numbers of staff trained per year, number of facilities constructed per year, etc.

A limited number of operational output targets (and, in a few instances, problem-
reduction objectives) may also be watched (for example, number of new contacts for family
planning). As at the project manager level, those chosen should be relevant to the project
objectives, sensitive to the changes in services being introduced, and easily measurable.
14.2 IDENTIFY SOURCES OF INFORMATION

For each of the control indicators identified in the previous step, it should now be decided where information regarding the actual status of the indicator should be obtained from.

The first step is to identify any existing mechanisms that can supply information. There will usually be some mechanisms in the finance area as well as some service reporting mechanisms (for example, monthly returns from health centres and midwife clinics reporting numbers of vaccinations, accepters of family planning, etc.). Occasionally there will be an existing state, ministry, or government-wide system for monitoring the status of implementation of new health facilities. Often, more than one source of information will be available for a given indicator; for example, data on actual expenditures can come from the Finance Ministry's audited accounts or from the committed expenditures of the Ministry of Health Finance Section, or from a rough estimate of projected expenditures (for example, derived from a technical unit's records). In these cases the project manager will have to select the best source. Usually, the source that provides rough approximations quickly is satisfactory for project control purposes.

For other indicators, either there may be no existing source or else the existing source may be too slow or distant. In these cases, new sources must be identified and established. For example, for data on the status of completion of project activities, a reporting arrangement will have to be set up to inform the activity managers, and in turn, the project manager.

Finally, there will be some indicators for which there is no existing source and where the cost of deriving information from a new source appears to be prohibitive. Measurements of the actual incidence of most health problems fall in this category, as will some operational targets (for example, the third DPT vaccination in infants). In these cases, it is worth searching for another indicator that is more easily measured, yet still representative of the performance one is trying to measure (for example, total numbers of clients seen as an indication of improved services, instead of specific service outputs).

The products of steps 14.1 and 14.2 should be a list of indicators and a list of the sources of information that relate to each.

14.3 DESIGN CONTROL SYSTEM

Once the project team knows which indicators will enable them to control at their respective levels, and where they can get information for comparison purposes, they can begin to plan the arrangements for transmitting the information to the appropriate managerial levels for decision purposes. More simply, designing the control system means specifying who reports what to whom, and when. How formal the reporting arrangements should depend on such factors as how geographically dispersed the project team members and activities are, how many control indicators are used, how many activities are involved, and how complex their interrelationships are. In a small project, most of the information required for control purposes can be obtained through regular or ad hoc meetings of the project team and no formal written reports may be needed. In a larger project the project manager or senior Chartering Agency official may wish formal files and reports to be used. Some of the following standard types of report forms may be found useful.
14.31 ACTIVITY LOG (OR PROJECT LOG)

It may be useful for activity managers to keep a log of each activity or activity cluster on the reverse side of the relevant activity description. The information recorded might include problems that have arisen in producing the planned product, actual and expected deviations from the activity description (and schedule), and the reasons for and consequences of those deviations. This information can then be used later on for suggesting changes in the schedule or manpower assignments or for commenting on completed activities (see Chapter 15). Fig. 2, page 248, illustrates one format for such a log.

This type of form can also be used by the project manager as a project log.

14.32 ACTIVITY FOLLOW-UP

While the activity log is meant for the use of activity managers, a similar but simplified form — the activity follow-up — is designed to be used by the project manager for monitoring the general progress of all project activities. This form, illustrated in Fig. 3, page 249, can be easily derived from the project network or Gantt chart schedule. Periodically (monthly, for example), the project manager should indicate what activities, if any, are in danger of not being completed on time (by checking them in red or marking them with an X) and what activities are expected to be completed on or before the planned completion date.

(Note. In a small project in which the capabilities of the project team are well known and the members have a thorough knowledge of the activities to be carried out, this simple form could replace the entire activity description.)

14.33 RESOURCE FOLLOW-UP

The resource follow-up (see sample format, Fig. 4, page 250), is another tool for the use of the project manager. It is designed for recording actual versus planned expenditures of resources for subsequent rebudgeting purposes. For each type of resource to be monitored, the total planned cost is indicated at the beginning of the year (and in some cases the planned monthly or quarterly expenditures throughout the year). As expenditures (or obligations) occur these are recorded. If action is required as a result of over or under-expenditure a check mark is made in the column for the month in which it is recommended that action be taken. For most projects it will suffice to use this form for monitoring selected costs. It could, however, be used for monitoring all project costs as well as other resource inputs (for example, man-hours expended or supplies utilized).

14.34 SCHEDULE FOLLOW-UP

In following up the project schedule, the project manager can use a copy of the schedule itself, whether it is illustrated in network form or by means of a Gantt chart. Periodically (monthly, for example) he should:

- check or tick off all completed activities,
- estimate the fraction of completion for each activity still in progress,
- draw a line indicating how much of the schedule has been implemented at that point in time (for example, activity A may be half completed, B fully completed, C not started, and so on), and
- draw a second line indicating where the project should be at the end of the next period.

This annotated schedule provides him with a basis for reporting to the senior Chartering Agency official and/or the coordinating committee on the status of the project.

14.35 FOLLOW-UP ON PROJECT OBJECTIVES

No specific guidance can be offered on the formats to be used in recording and reporting information about the planned versus actual achievement of project objectives (facilities constructed, manpower trained, etc.) as this depends so much on the nature of the project and the existing reporting mechanisms in the country. All that can be stressed here is the importance of following up these objectives.

14.36 DISTRIBUTION LIST FOR CONTROL DOCUMENTS

The project manager should prepare a one-page form (see Fig. 5, page 251) identifying the persons who are to receive each of the various schedules, activity descriptions, budgets, etc., when prepared or later revised. The main purpose of this form is to ensure that the necessary people are informed when changes are made in the documents used for control.

14.4 TEST AND IMPLEMENT CONTROL SYSTEM

Whatever indicators, reports, forms, and procedures are selected for use in project control, they should be tested and modified in the light of experience. The first four forms described above (steps 14.31-14.34) can all be easily tested during the first three or four months of the project (once the detailed schedule, activity descriptions, and budgets have been prepared). It is extremely important that those who are to do the reporting should be actively involved in designing and testing the control system. More specifically, they must first thoroughly understand how their reports will be used at higher managerial levels and be convinced that the control system is not a device to be used against them. If they do not understand this basic principle they are likely to supply over-optimistic (or over-pessimistic) information on project progress. Allowing them to participate in the design of the system helps to overcome this barrier. Another positive result of this participation should be a decrease in the number of reports required. It is a common phenomenon that managers at the higher levels tend to ask for more information than they can possibly use. Confronting them at an early stage with the suppliers of reports should counteract this tendency.

*  *
*  *
Although the project being initiated in Province Eaka does not have a very large staff, the project manager is interested in establishing an effective control system. His reasoning is as follows:

(1) This is the first time the project approach to implementation has been attempted. There are some persons within the Ministry who question the need for allocating so much manpower to activities that are normally handled by existing units and officers within the service. The strength of the project approach is supposed to be control, but the project manager knows that the system by which information is recorded and transmitted must be designed carefully. He wants this system to be as effective as possible.

(2) Although the initial activities within Province Eaka are reasonably unambitious, they require considerable coordination. When implementation is extended to other provinces of the country, the amount of coordination required will increase manyfold.

(3) The effectiveness of the strategies cannot be evaluated unless the operational targets are achieved. The initial operations must therefore be monitored closely to (a) judge the ability of the service to achieve the targets and (b) verify that the targeted levels of service will, in fact, lead to the desired problem reduction.

(4) The strategies were promoted on the basis of their low risks and their minimal requirements for additional resources, both capital and recurrent. There are, however, two elements of risk that need close watching. One is the degree of cooperation required from traditional practitioners and the population of the villages in the rural areas. The other is the overhead costs of the mobile health services for (a) drugs and other expendable supplies, (b) transportation expenses (petrol and vehicle maintenance), and (c) the travel stipends of service staff.

The project manager thus has in mind several clear functions that the control system will have to serve:

(1) To ensure that the contributors to project activities are completing their tasks according to specification and are doing so with the necessary inter-activity coordination.

(2) To ensure that the products of the project activities result in the level and quality of service operations required.

(3) To ensure that the elements of risk mentioned above are controlled.

The project manager and all activity managers review the project objectives and activity specifications before creating a list of control indicators. Each activity manager selects a number of indicators that he feels can serve the functions listed above. He and the project manager then designate which indicators are to be used primarily by the activity manager, which ones the project manager needs to follow, and which ones should be reported to the coordinating committee. In an effort to decentralize control of the activities to each activity manager, the project manager minimizes the number of indicators that he and the coordinating committee will be watching. For himself, he chooses indicators that reflect the degree of coordination between activities and the degree of cost control. For the coordinating committee, he designates indicators that have to do with public response and inter-agency coordination. Fig. 1 shows the list of control indicators set up for the early months of the community health worker strategy, and indicates to whom
**Figure 1. Control Indicators Relating to the Establishment of the Community Health Workers**

<table>
<thead>
<tr>
<th>indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REPORT TO ACTIVITY MANAGER</strong></td>
</tr>
<tr>
<td>6.1* Test of registration system in District A - 30 traditional midwives and 15 traditional practitioners expected, 1 volunteer for every 2 villages</td>
</tr>
<tr>
<td>6.2 Production of procedures manuals which satisfy the Senior Matron (400 copies)</td>
</tr>
<tr>
<td>7.1 CHW curriculum completed</td>
</tr>
<tr>
<td>7.2 Tutors trained (6)</td>
</tr>
<tr>
<td>7.3 First course held; 30 midwives, 15 practitioners, and 40 volunteers completed the course</td>
</tr>
<tr>
<td><strong>REPORT TO PROJECT MANAGER</strong></td>
</tr>
<tr>
<td>6.1 Provincial administration approves registration system</td>
</tr>
<tr>
<td>4.1 Completion of staff in-service training curriculum, including methods of supervising community health workers</td>
</tr>
<tr>
<td>6.3 Cost of training and subsistence for CHWs maintained at specified level</td>
</tr>
<tr>
<td>6.7 Monitoring of first CHW graduates discloses minimum targets achieved</td>
</tr>
<tr>
<td><strong>REPORT TO COORDINATING COMMITTEE</strong></td>
</tr>
<tr>
<td>6.7 Positive public reaction to CHW Programme</td>
</tr>
<tr>
<td>6.8 Successful coordination between CHW, community development programme, and health services</td>
</tr>
</tbody>
</table>

*This is the number of the activity to which the indicator is most closely related.*
they are to be reported.

The primary recording tool of the activity manager is the activity log, which he writes on the reverse side of the activity description form. Fig. 2 shows the initial entries made in regard to the Community Health Worker strategy.

While the annotated activity schedule is the project manager's main tool for seeing the project status at any point in time, he also asks each activity manager to report activity start and completion dates to him at least monthly. If an activity appears to be facing difficulty (either before it starts or while it is in progress) that fact is also to be reported. An activity follow-up sheet is thereby maintained for each group of activities that shows the activity managers and the project manager which activities need extra attention. Fig. 3 is the activity follow-up sheet for the activities leading to the establishment of the Provincial Health Advisory Committee.

For those resources that the project manager is most worried about, he establishes a resource follow-up form. With the information provided on request from the relevant office, this will enable him to keep track of the expenditures to date and how they compare with budgeted amounts (Fig. 4).

In addition, the project manager decides to write a brief status summary (progress and problems) for the monthly coordinating committee meeting. These summaries will also be distributed to designated agencies.

Major changes in objectives, targets, strategy specifications, resource availability, the project schedule, or other important factors are to be communicated by the project manager to his staff and his superiors by means of a change order. Normally, the change order merely confirms in writing a decision that has been made within the project or at a higher managerial level.

Fig. 5 summarizes the distribution of these various control documents.
**Figure 2. Activity Log**

(Reverse side of activity description for Community Health Workers)

<table>
<thead>
<tr>
<th>Date</th>
<th>Problems (deviations from schedule, expected results, resources, etc.)</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 May</td>
<td>Test of registration system in district A to be delayed until District Administrator returns from travel.</td>
<td>CM</td>
</tr>
<tr>
<td>7 June</td>
<td>Some traditional midwives express reluctance at attending course. First course not filled. Stipends to be offered in addition to kits.</td>
<td>SF</td>
</tr>
<tr>
<td>10 Aug</td>
<td>Procedures manual requiring more time for completion than scheduled.</td>
<td>SF</td>
</tr>
<tr>
<td>1 May</td>
<td>First course delayed one month.</td>
<td>CM</td>
</tr>
<tr>
<td>1 May</td>
<td>Interest of community volunteers exceeds first course capacity - second course scheduled immediately after completion of the first.</td>
<td>CM</td>
</tr>
<tr>
<td>Activity Number</td>
<td>Activity Name</td>
<td>Activity Manager</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>2.1</td>
<td>Prepare TOR, description of functions, procedures</td>
<td>PHO</td>
</tr>
<tr>
<td>2.2</td>
<td>Prepare budget</td>
<td>PHO</td>
</tr>
<tr>
<td>2.3</td>
<td>Establish Provincial Secretariat</td>
<td>PHO</td>
</tr>
<tr>
<td>2.4</td>
<td>Review and approve 2.1 2.2, &amp; 2.3 (by Governor)</td>
<td>Governor</td>
</tr>
<tr>
<td>2.5</td>
<td>Selection of meeting site</td>
<td>Governor</td>
</tr>
<tr>
<td>2.6</td>
<td>Document functions and procedures</td>
<td>PHO</td>
</tr>
<tr>
<td>2.7</td>
<td>Do promotion to establish membership</td>
<td>PR Officer</td>
</tr>
<tr>
<td>2.8</td>
<td>Finalize membership</td>
<td>Governor</td>
</tr>
<tr>
<td>2.9</td>
<td>Distribute membership list and procedures</td>
<td>Gov. Admin. Assist.</td>
</tr>
<tr>
<td>2.10</td>
<td>Prepare first meeting agenda and materials</td>
<td>PHO</td>
</tr>
<tr>
<td>2.11</td>
<td>Hold inaugural meeting (1 April)</td>
<td>Governor</td>
</tr>
<tr>
<td>2.12</td>
<td>Prepare and distribute minutes</td>
<td>Gov. Admin. Assist.</td>
</tr>
<tr>
<td>2.13</td>
<td>Disseminate public information</td>
<td>Gov.'s PR Officer</td>
</tr>
<tr>
<td>Type of Resources</td>
<td>Source</td>
<td>Unit Cost (in T)</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Planned</td>
</tr>
<tr>
<td>Rites for C/Aes</td>
<td>Medical Stores</td>
<td>1 000</td>
</tr>
<tr>
<td>Equipment for</td>
<td>Medical Stores</td>
<td>2 500</td>
</tr>
<tr>
<td>Mobile Teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs for Mobile</td>
<td>Medical Stores</td>
<td>1 433 567</td>
</tr>
<tr>
<td>Teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petrol for Vehicles</td>
<td>Public Works</td>
<td>2 T</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spare parts/</td>
<td>Public Works</td>
<td>7 000/veh.</td>
</tr>
<tr>
<td>maintenance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Expenditure</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>A</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
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</tbody>
</table>

XXX
### Figure 5. Distribution List for Control Documents

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Log (recorded continuously, submitted monthly)</td>
<td></td>
<td>Orig.</td>
<td>Info.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity Follow-up (updated monthly)</td>
<td></td>
<td>Orig.</td>
<td>Info.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change Order (as occurring)</td>
<td>Action</td>
<td>Action</td>
<td>Orig.</td>
<td>Info.</td>
<td>Info.</td>
<td></td>
<td></td>
<td>Budget Stores Personnel</td>
<td></td>
</tr>
</tbody>
</table>

*Action = for action*  
*Info. = for information*  
*Orig. = originator of report*
CHAPTER 15

DIRECTING AND CONTROLLING
15. Directing and Controlling

Steps Done By

<table>
<thead>
<tr>
<th>Project Staff</th>
<th>Activity Managers</th>
<th>Project Manager</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 15.11
  - Activity Desc
  - Schedule
  - Project Proposal

- 15.12
  - Revise and Publish Activity Descriptions

- 15.21
  - Order Execution of Activities

- 15.31
  - Communicate with Relevant Units
  - Supervise Activity Managers
  - Gather Control Information Continuously

- 15.32
  - Perform Activities/Clusters of Activities
  - Check Work Results

- 15.34
  - Compare with Indicators, Deter, Causes of Deviation

- 15.35
  - Decide and Communicate Corrective Actions

- Completed Activities
  - Revised Activity, Descr.
  - Revised Manpower Alloc.
  - Revised Budgets
  - Revised Schedules
What is the purpose of this chapter?

The procedures in this chapter are meant to be applied after the project has been organized (Chapters 11, 12, and 13) and after the control system has been designed and set up (Chapter 14). In other words, this chapter provides information on how to run the project once it is organized and functioning.

What steps are involved here, and who does them?

(a) Communicating with the existing organization and motivating project staff to do the work (done by the project manager, activity managers, and liaison persons).

(b) Executing the project activities (done by project staff and, in some cases, by activity managers as well).

(c) Monitoring and controlling: supervising work, assessing progress, collecting information for control purposes, making decisions regarding changes in schedules, budgets, manpower allocations, etc., and communicating corrective actions as necessary (done by the managers at all three levels).
15.1 COMMUNICATE AND MOTIVATE

The need for motivating staff to perform their assigned tasks efficiently and effectively is obvious in any organizational setting. In a project, motivation may be even more critical and at the same time more difficult owing to the transitory and intricate nature of the authority structure and the diversity of staff whose activities must be successfully coordinated. In many cases the project manager and activity managers must rely primarily on their ability to lead, encourage, and support rather than on powers to reward and punish. A project manager often finds himself in a position where he must work by negotiation and coordination, not coercion. To do so successfully, he must gain an understanding of what motivates the people he is working with - economic considerations, pride, social status, work satisfaction, etc. - in order to develop and maintain a sense of momentum and "esprit de corps" in the project team. Obviously, his own enthusiastic belief in the project's worth and importance and the continued communication of this belief to others are indispensable.

Positive actions and the transmittal of beliefs and values to project staff, both by word and by positive example, represents one side of motivation. The other side of motivation is the attempt to minimize chances that avoidable hostility, resentment, and apathy will develop among project staff and people in the existing organization. Frequently, the project and its environment will be pervaded by negative elements that, if neglected, can produce resistance to change. For example:

1. Project staff may avoid involvement in project activities or devote a minimum of intellectual effort to them because:
   (a) they are uncertain about their ability to do what is expected of them;
   (b) they prefer their own routine assignments, which are more certain;
   (c) they do not feel the new assignment will enhance their promotion potential;
   (d) they have been removed from their usual social structure, which gave them a feeling of acceptance and belonging.

2. Existing organizational units may fail to meet deadlines because their other duties seem more important.

3. Service staff may reject project products (such as revised procedures) because:
   (a) the products involve more work than previously;
   (b) the personal benefits to them of using the new products are not clear;
   (c) they were not personally involved in designing them.

4. There may be misunderstandings on the part of members of the existing organization regarding the purposes of the project and the personal motives of the project manager, leading them to circulate rumours that the project products are too theoretical, will not work in practice, etc.

Communication either as a preventive measure or as an antidote is one way of dealing with negative elements such as these. In this context, communication needs to be viewed as a process that takes place:

- from the project manager;
- from and through the ministries' supervisory structure;
among project staff;
- through selected liaison persons.

Further, communication intended to increase motivation must be a two-way process; managers must be prepared to listen as well as talk. Listening is crucial to:

1. ensure that messages are understood and accepted;
2. convey respect for subordinates as individuals and colleagues;
3. detect actual and potential trouble spots; and
4. find needs and opportunities for adjustment that may increase project efficiency, as well as avoiding breakdowns and failures.

The content of communications will of course vary with each project and situation. Although they are difficult to procedurize, certain subjects and certain acts of communication are desirable in any project. These include:

1. orienting project staff;
2. revising and publishing activity descriptions;
3. communicating with relevant units outside the project team.

These are described below.

15.11 ORIENT PROJECT STAFF

Project staff need to understand how their tasks relate to the overall objectives of the project. If they were not personally involved in specifying and scheduling the work (step 11) - that is, if work specification was done by liaison persons and activity managers - they should have one or more meetings with the project manager (and activity managers) to discuss the project proposal thoroughly. These briefings should include the following activities:

1. Explaining the problem-reduction objectives and operational targets, and the reasons for their selection.
2. Describing in detail the changes in service design and the reasons for these changes.
3. Describing the project objectives.
4. Reviewing the current project schedule, activity descriptions, and project organization.
5. Explaining which of the above are relatively fixed and which the project group has some degree of freedom to alter.

Items 3, 4, and 5 are the most important and deserve the most time and attention.

15.12 REVISE AND PUBLISH ACTIVITY DESCRIPTIONS

For the project manager, finalizing the activity descriptions together with his team serves a motivational purpose, as well as a practical one.

Well before a specific cluster of activities is to begin, the project manager should meet with the activity managers, project staff, and the relevant liaison persons to review
and finalize the activity descriptions developed earlier (see steps 11.3-11.5). Activity managers should be encouraged to add, delete, and/or change the descriptions as made necessary by intervening events and decisions. They should also suggest other tasks that may need to be done. Primary emphasis should be given to defining more clearly what the expected products are and how to obtain them. If, in this process, an activity manager concludes that the level of resources should be raised or lowered, or that other changes in resource inputs should be made, he should discuss the matter with the project manager.

All resulting changes in the activity descriptions should be entered on the activity description forms, adding continuation pages as necessary. It is also at this stage that the "how to perform activity" section is filled in (see Fig. 1, page 203).

Activity managers (and their staff) should in addition prepare detailed activity schedules (using networks or Gantt charts) to show the interrelationships among their activities. These schedules will also be useful for their own control purposes.

Next, in the light of the additions, deletions, and changes made by the activity managers to the activities that are about to begin, the project manager should make appropriate changes in subsequent clusters of activities, with particular emphasis on identifying future resource requirements (duration and cost) and changes in activity products. If these changes fall outside the limits of his authority, negotiations with the senior Chartering Agency official are called for.

Once project staff and activity managers have finalized the activity descriptions, they should brief the project manager on the contents of the descriptions. The purpose of this three-way discussion is to prevent misunderstanding as to what is expected in regard to:

- resource inputs,
- time limitations,
- activity products, and
- how the activity is to be performed.

Step 15.12 is extremely important and should not be glossed over. Project staff should be made to feel that they have played a major role in defining their own work, that they can do the work, and that the work is important to project success.

The finalized activity descriptions should be distributed by the activity manager to the relevant individuals (selected liaison persons, project staff, and the project manager).

15.13 COMMUNICATE WITH RELEVANT UNITS OUTSIDE THE PROJECT TEAM

Communication is needed to generate the necessary initial support for the project (Chapter 10) and to motivate project staff (step 15.11). There is also a need for continuous communication with different people, groups, and organizations throughout the lifespan of the project. The key to knowing with whom communication must take place lies in the list of agencies/units/divisions cooperating with the project, which was developed in steps 12.1 and 12.3. In general, communication needs to be maintained with three groups:

1) The chiefs of cooperating agencies/divisions/units, who will have to be kept informed of the progress of implementation.
(2) Liaison persons in selected specialty areas who can provide advice to the project manager about the feasibility and effectiveness of project products, and who can communicate with the rest of the organization on behalf of the project manager.

(3) Members of professional organizations, volunteer groups, and private organizations who can favourably (or unfavourably) influence the acceptance of project products by service staff and the public.

For each group, the project manager (and activity managers) should identify (a) the persons to be contacted, (b) the purpose of the communication, (c) the timing and frequency of communication, (d) the information to be transmitted, (e) the method of communication, and (f) the persons responsible for doing the communication. Although it is not essential to write all this down, developing a communications chart or schedule will often help to ensure that important people and organizations are not overlooked, and that responsibilities for communication are clear. If it is not wished to prepare a separate schedule for this purpose, the dates of important meetings, briefings, etc., can simply be written under the project activity network or Gantt chart so they are not forgotten.

15.2 CARRY OUT PROJECT ACTIVITIES

15.21 ORDER EXECUTION OF ACTIVITIES/CLUSTERS OF ACTIVITIES

The project manager should personally inform each of the relevant activity managers in advance that work on a given cluster of activities should commence on such and such a date (as stated in the activity description). Activity managers should likewise inform their staff to begin executing specific activities as per the activity description and detailed activity network.

15.22 PERFORM ACTIVITIES/CLUSTERS OF ACTIVITIES

The activities and activity clusters are performed by the project team (activity managers and project staff) and liaison persons in accordance with the work instructions in the revised activity descriptions (15.12). During the execution of activities, the cooperating agencies, departments, and units and external sources are under obligation to provide the resources agreed upon in the written manpower and resource agreements (see step 12.1) at the times specified.

Activity managers are responsible for producing the expected work results within the time limits specified in the activity descriptions and with a minimum consumption of resources. To do so, they are expected during execution to substitute manpower if need be and to add, change, or delete work steps as required. If changes are made, they should be discussed with the project manager, as they will usually necessitate corresponding changes in subsequent project activities.

15.3 OBTAIN FEEDBACK

15.31 SUPERVISE ACTIVITY MANAGERS

During the execution of project activities, the main dilemma faced by the project manager is deciding when to become involved personally in individual project activities and when to allow the activity managers the freedom to work out their own problems.
In general, he should not perform clusters of activities himself; he should not disturb project groups in their work; he should not redo work himself if, in his opinion, it is unsatisfactory. He should make himself accessible to the activity managers and project staff for regular advice; he should support the project team and liaison persons in negotiations with the senior Chartering Agency official, the coordinating committee, and various relevant units and divisions; he should make it clear to the project team that he is pleased with their work. More specifically, he should:

1. participate in scheduled meetings (at the request of the activity manager) in which new designs (of facilities, procedures, curricula, etc.) are being considered;
2. be available daily for consultation;
3. regularly (for example, weekly) inform the project team of discussions he has had with outside agencies/divisions/units regarding the project (see step 15.13);
4. pay particular attention to explaining the reasons for decisions he has made relative to changes in expected activity products, manpower assignments, etc.

15.32 CHECK WORK RESULTS

When an activity manager is satisfied that an activity cluster is completed satisfactorily, he should report on its end product to the project manager for review and approval.

The basis of the project manager's review should be the activity description. When checking work results, he should carefully note: (a) mistakes that were made because of misunderstanding of work instructions, and (b) problems that might be avoided in future activities. In case of unsatisfactory work results, the project manager should make it clear to the activity manager (and staff) what needs to be corrected and why. Consequent changes in work schedules should be made and communicated as specified in the distribution list (see step 14.36).

15.33 GATHER CONTROL INFORMATION CONTINUOUSLY

In their control function, the project manager and activity managers gather facts and impressions regarding the present status and expected progress of the project through (a) continuous personal contact with activity managers and project staff; (b) scheduling and conducting periodic formal meetings with the project team (e.g., weekly or monthly); (c) holding selected meetings with relevant units outside the project organization; and (d) calling unscheduled meetings of the project team as problems arise. During this process the following information should be recorded (see step 14.3 for more details):

1. Actual and expected deviations from the project plan as they occur -- record in the project activity log (see Fig. 2, page 248).
2. The date an activity is commenced -- record immediately on the activity follow-up form (see Fig. 3, page 249).
3. The date an activity is completed -- record immediately on the activity follow-up form.
4. The obligating or incurring of a relevant expenditure -- record on the resource follow-up form (see Fig. 4, page 250).
5. The status of completion of activities -- record periodically on the project schedule (see step 14.34).
15.34 COMPARE WITH INDICATORS, DETERMINE CAUSES OF DEVIATIONS

Periodically throughout the lifespan of the project (weekly, biweekly, monthly) and, of course, as problems occur, the information gathered for project control — actual time, cost, and performance — is compared with the corresponding control indicators by activity managers and the project manager. Whenever deviations from the plan are discovered, an effort is made to isolate the causes. Determining the causes of deviations is a process very similar to the formulation step of identifying deficiencies and obstacles to target achievement (step 6): in both the emphasis is on finding the most important causes of difficulty and the causes that are potentially correctable.

The project manager will find that the usual causes of deviations are:

1. Excessive optimism on the part of the project planners, resulting in unrealistic estimates in regard to:
   - the time, funds, manpower, or other resources required to do an activity;
   - the possibility of achieving the expected results (the activity product, project objective, or operational target).

2. Unforeseen resistance from or changes in the "environment" of the project (natural disasters, political changes, etc.).

3. Decisions at higher managerial levels to change the planned resource inputs to the project (for example, a staff member is made available for a shorter period of time than planned, comes too late or not at all, is replaced by someone who is unacceptable, etc.).

4. Inefficient administrative procedures (delays in recruitment, ordering of supplies, etc.).

15.35 DECIDE ON AND COMMUNICATE CORRECTIVE ACTIONS

As mentioned in Chapter 14, a control system serves little or no purpose if it does not include systematic decision-making and the taking of corrective action when needed. In all, there are six possible types of action to be decided on and taken:

1. No action may be taken when no deviation is found, or when the project or activity manager concludes that a deviation has minimal consequences for project objectives or that it can be compensated for later on (in effect, this last is a rescheduling decision).

2. Making changes in the project schedule, budget, or manpower assignments that fall within the limits of authority of the project or activity manager (see Fig. 3, page 216). In such a case, the project and activity managers would return to step 11, prepare a change order showing the revised schedule, budget, or manpower assignment, and send the change order to the units indicated on the distribution list for control documents (see Fig. 5, page 251).

3. Making changes in the project schedule, budget, or manpower assignments that fall outside the limits of authority of the project manager (see Fig. 3, page 216). Such changes would require the approval of the senior Chartering Agency official and/or the coordinating committee. Change orders should be distributed as in (2) above.

4. Changing the strategy or service design, project objectives, operational targets, or problem-reduction objectives. This also requires the approval of the coordinating committee and means, in effect, a partial reformulation of the project (see Chapters 5, 6, and 7). Normally, such a decision is not taken without first testing the original design.
(5) Early termination of the project (see Chapter 16).
(6) Modifying the control system in order to select more useful indicators or provide more relevant information.

The problem with these decisions is not that managers fail to take them, but that they tend to take them in an unconscious, unsystematic way. The criteria used for deciding are frequently not explicit or well structured, and the decisions themselves are all too often not transmitted to those who need to be informed about them. This problem can be overcome to a considerable extent by proceeding systematically through the following decision-making steps.

(a) **Consider alternatives**

Regardless of the level and nature of the decision, a certain amount of preparation is necessary. The importance of the decision will dictate the amount of preparatory work required. For the more important decisions, the following are needed:

- **Assessment data.** These should include the extent of deviation from the expected time, cost, and performance, and the main reasons for these deviations, as derived from the control system.

- **Alternative proposals.** One or more alternative courses of action should be presented in writing in such a way that the decision-maker(s) can make a decision without asking for considerable additional information.

- **Criteria for deciding.** Insofar as possible, criteria for deciding among alternatives should be structured by the decision-maker himself together with the manager at the next lower level. Criteria should be expressed in terms of the desired effects on project costs, the schedule, or objectives and targets.

- **Opinions.** The group doing the preparatory work for the decision should make an effort to obtain the opinions of selected liaison persons regarding criteria for deciding, the expected consequences of the various alternatives (in the light of the criteria), and their preferred alternative.

This preparatory information should then be summarized in not more than five pages for the use of the decision-maker.

(b) **Decide**

Most day-to-day decision-making by the project team need not be formally structured. However, in the case of an important decision to be made by the senior Chartering Agency official (or the project coordinating committee), the project team should give careful thought to how the decision will be made.

Specifically, they should decide how much explanation the decision-maker(s) will need to be given concerning the alternatives, criteria, etc. The consequences of an insufficient explanation should be borne in mind here. If a decision-maker does not fully understand the nature of the decision he is expected to make, or feels uncomfortable about the consequences of deciding one way or another, he is likely to (a) choose what he feels is the least harmful course of action or (b) not choose at all, hoping that the problem will somehow resolve itself. This should be avoided if at all possible. It is usually best for the project manager to discuss the decision personally with the senior Chartering Agency official. Often, such a dialogue brings forth fresh alternatives that are better than those suggested originally.
The project team must also give thought to how quickly the decision is needed and what the consequences are if not getting it by the time planned. The Chartering Agency official is unlikely to feel the same sense of urgency about the decision as the project manager. From his standpoint, it is only one of the many problems currently facing him. Especially if the decision appears complicated to him, as mentioned above, he will tend to put it off and deal first with those problems he feels comfortable with. The chances of getting the decision when needed can be maximized by (a) limiting the amount of written preparatory material, (b) ensuring that adequate time is spent in discussing the decision with the official, and (c) letting him know from the outset why it is important for the decision to be made quickly.

(c) Communicate the decision

One of the most common managerial failures is to assume that a relevant decision has been transmitted to those who are affected by it when, in fact, no action has been taken to ensure its transmittal. In a project, the responsibility for ensuring the transmittal of decisions rests with the project manager. He should systematically determine who needs to be informed, how, and when. (This will have been determined in part in Step 14.36.) The actual communication may be written or oral. It may be performed by the project manager, the coordinating committee, or the senior Chartering Agency official. In any case, it is up to the project manager to ensure that it has taken place.
Once the project swings into full activity, the project manager finds that most of his time is spent in following up unmade decisions, obtaining promised support, and maintaining communication with his far-flung staff. He is faced with managing activities that are going on in three different places. Technical review, follow-up of promised support, and political promotion of the project is concentrated within the Ministry. The documentation of procedures (for the community health workers, community participation, and mobile teams) and the designing of health education and training curricula are being done within the Public Health Institute. The rest of the activities (Provincial Health Advisory Committee, all training, registration of traditional midwives and practitioners, traffic accident prevention, emergency transport and communication, health centre improvements, and all assessment activity) must necessarily be performed in Province Eaks by provincial government and health service staff.

The project manager holds two meetings with all supporting staff early in the project, after which he limits such project meetings to the activity managers and alternates the meeting site between the Ministry and the Provincial Health Office. These meetings are held at least monthly, usually one week before the coordinating committee meeting.

While leaving control over activities to the responsible activity manager, he pays frequent visits to the various working groups. During these visits he brings them news about how the project is being watched in the Ministry and informs them of any changes in approach or schedule that may be necessary. He is often accompanied on such visits by members of the coordinating committee and the DGHS. The activity staff, while not being interfered with, are thus impressed with the importance of their assignments.

The most difficult aspect of project activity control is the initial discomfort that all staff feel because of the tight schedules to which they are bound. Some activity staff and managers are almost paralysed by the pressure generated by these schedules. The project manager is continually asked why certain completion dates are so important, and what would be lost if certain activities were not completed on time. The project manager carries a copy of the project Gantt chart in his pocket so that he can respond to these questions by showing the inter-dependence that exists between activity clusters. Whenever important activities begin to fall behind schedule, he and the activity manager jointly determine the cause and take action (such as providing temporary additional manpower). Very often it turns out that the original time estimates were not realistic; another frequent problem is that external factors prevent timely completion. In such cases the activities may be given more time and the schedule adjusted accordingly. Such adjustments, however, are held to the absolute minimum so as to keep staff productivity high.

Much of the project manager's time is devoted to maintaining external communications. The primary forum for which is the National Coordinating Committee. In addition to preparing for and participating in its monthly meetings, the project manager makes frequent informal calls on its various members, giving them inside information and following up on the specific types of support which their agency can provide.

The forum for coordination within the Province is the Provincial Health Advisory Committee. The project manager works closely with the PHO in setting up this committee to ensure that there is adequate representation from the people of the province as well as from government agencies and professional groups. This committee turns out to be the most effective means for achieving interagency coordination and creating public awareness of the project. The discussions of the committee are publicized first within the Province but are soon picked up by the national news media. The Governor is gratified by the fact that the project is attracting national attention.
The project manager also takes advantage of various training courses, seminars, and meetings of professional societies for additional public and professional promotion of the project.

Many minor problems arise that necessitate small changes in approach and revisions in the project schedule. These are handled readily by the project manager. However, symptoms of larger problems begin to appear that the project manager feels deserve the attention of the coordinating committee.

First, there is difficulty in obtaining the support of the traditional midwives (see Fig. 2, page 240). While they do not object to registering, they show some resistance to attending government-sponsored courses and carrying out work in coordination with the health services. On the other hand, the number of lay volunteers from the villages is exceeding the capacity of the training courses. This situation is discussed by the coordinating committee and as a result the strategy is revised. While traditional midwives are henceforth to be encouraged to attend the CMW courses, the emphasis of recruitment and training is to be shifted to the village volunteers. This being said, it is still considered up to the community (its leaders and development committee) to recommend who should be designated as the village's community health worker.

Second, the estimated date of delivery of the vehicle for District F is postponed several times and in all probability it will be delivered a year late. The representative of Public Works on the Committee reluctantly agrees to loan a Land Rover for the interim but categorically states that this is not a precedent.

Third, the amount of work required of provincial health service staff during implementation causes the project manager to doubt whether it will be feasible to carry out so many activities at one time in other provinces, many of which do not have the numbers of staff that exist in Province Eaks. The coordinating committee suggests outlining the implementation schedule for other provinces and designing a staff rotation system whereby service staff who have acquired experience in implementing these strategies can be assigned to other provinces during periods of implementation activity. The Personnel Department is asked to support this rotation system and to schedule new staff for the various provinces in time to participate in the implementation work.
Chapter 16

Terminating the Project
### 16. Terminating the Project

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<th>CHARTERING AGENCY &amp;/OR COORDINATING COMMITTEE</th>
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16.1
SPECIFY FUTURE STEPS TO BE TAKEN

16.2
REASSIGN PROJECT TEAM MEMBERS

16.3
SUMMARIZE MANAGERIAL EXPERIENCE

16.4
PREPARE FINAL REPORT

- **yes**
  - APPROVE REPORT
    - FUTURE ACTIONS TO BE TAKEN BY THE SERVICES
    - PROJECT MANAGEMENT EXPERIENCE
    - PROJECT EFFECTS

- **no**
Under what conditions should a project be terminated?

(a) Normal termination occurs when the project objectives have been reached within the appropriate time and resource limits.

(b) Late termination occurs when there have been delays in reaching the project objectives.

(c) Non-termination (conversion) occurs when the project organization becomes a normal functioning unit of the existing organization.

(d) Early termination can occur because of:
   - unforeseen changes in the external environment of the project (for example, financial crises);
   - changes in policies or plans on the part of the Ministry or higher levels of the government (such as a change in priority from control of a specific communicable disease to the development of basic health services);
   - the emergence of new, more attractive project proposals that are considered to offer better prospects for achieving government or Ministry of Health objectives;
   - new estimates that there will be difficulty in achieving the project objectives (such an estimate might, for example, be based on a recent observation that most of the staff in a new category of health worker being trained by the project are leaving the health services after their training).

Who terminates the project?

The senior Chartering Agency official and/or the project coordinating committee have the authority to terminate the project (see Fig. 2 and 5, pages 215 and 219). They should do so after taking into consideration the advice of the project manager and activity managers.

What steps are involved in normal termination?

(a) The specification of future steps to be taken by others as a consequence of the project.
(b) The reassignment of project staff.
(c) The summarizing of experiences gained in the project that may be helpful and relevant to future projects.
(d) The preparation of the final project report.

These steps are explained in this chapter.
16.1 SPECIFY FUTURE STEPS TO BE TAKEN

As the final project activities near completion (for example, six months before the scheduled completion date for the whole project), the project manager and the activity managers should devote some time to considering what steps need to be taken after the project is terminated. The steps recommended could be of two types:

(1) A specific proposal for a new project, with new objectives, that would be a logical outgrowth of the present project.

(2) Selected activities that must be done by various parts of the existing organization in order to:

   (a) ensure that the project objectives are kept up, for example, by seeing to it that the newly implemented procedures, products, etc., are maintained;

   (b) monitor progress in achieving the planned operational output targets (and even problem-reduction objectives); activities in this category might include periodic evaluations of specified increased service coverage, routine in-service training of specific categories of staff, etc.

For each recommended activity, the group should be as specific as possible about the nature of the work to be done and who should do it. The activity description form (Fig.1, page 203) is one possible format for recording this information.

16.2 REASSIGN PROJECT TEAM MEMBERS

Since a project is a temporary entity, the senior Chartering Agency official and/or the coordinating committee have at least a moral responsibility for ensuring that the project team members are given a subsequent assignment and, insofar as possible, that their personal desires are accommodated. At the same time, they are responsible for ensuring that the project is terminated. Normally, the project team will wish to continue the project, especially if it has been successful, or reconstitute the group under another title. While this may not necessarily be a bad idea, it is preferable, if projects are to become a "way of life" within the Ministry of Health, that the termination of the project should be clearly visible. In practice, this means that the senior Chartering Agency official should begin considering reassignments of some project staff 6-12 months before the expected termination date.

16.3 SUMMARIZE MANAGERIAL EXPERIENCE

If a project has successfully reached its conclusion, a great deal of valuable experience must have been acquired by the project team that should be communicated to others who are or will be involved in projects of a similar nature or in implementing new activities as members of the existing organization. Normally, for a variety of reasons, this managerial experience is rarely passed on. The project manager should see to it that the following types of information are summarized for future use by others:

- aspects of the formulation procedures that proved to need strengthening or revising;

- organizing procedures (practical advice on how to establish a project organization in the future, things to avoid, etc.);
- successful scheduling, promotion, and control methods (including the lessons learned);
- qualities of (and problems with) internal and external resources, such as the reliability of the agreements made.

This summary could be included as an annex to the final report (step 16.4).

16.4 PREPARE FINAL REPORT

Obviously, the contents of the final report (or even whether such a report is needed) will depend on the nature of the project. Some general guidelines can, however, be given.

Since the purpose of a final report should be to influence future actions, merely accounting for the past is not very helpful. What can and should be transmitted (in addition to the information derived from steps 16.1 and 16.3) is what was learned about cause-effect relationships. The project was designed on the basis of a large number of assumptions regarding cause-effect relationships (between project activities, operational output targets, and problem-reduction objectives) that may or may not have been valid. The final report should emphasize:

(1) which of these relationships were proven valid;
(2) which were proven invalid; and
(3) which remain to be proven.

The first two are most important for use in future projects.

To take an example of the kinds of relationships that should be envisaged here, suppose that a project has been designed to train x midwives in family planning techniques (project objective) in order to increase the number of family planning acceptors to y (operational target) in order to lower the birth rate to z by a specified time (problem-reduction objective). The birth rate may in fact have decreased in selected areas during the project but the correlation between the project activities undertaken and the reduction in birth rate may be close to zero. On the other hand, if a correlation were definitely proved or disproved, it would be extremely useful for future projects if this were recorded. The source of this information is the assessments undertaken in step 15.3. (Assumptions that will need more time to be proved or disproved should be pointed out in step 16.1 so that future steps can be taken to monitor them.)

Identifying and recording valid and invalid cause-effect assumptions should be done by the project manager, activity managers, and selected liaison persons. The project manager should be careful to ensure that individual biases do not influence the process -- people naturally want to believe that their activities have been successful.

The final report should be given to the senior Chartering Agency official and/or the coordinating committee for review and decision-making. Usually, the review process will require a number of meetings with a variety of people to ensure that the necessary subsequent steps are taken and the experience gained is transmitted. The responsibility for seeing to this rests with the project manager.

*   *

*   *
ILLUSTRATION - CHAPTER 16

In time the bulk of implementation work is completed in Province Eaks. Control of the remaining work is passed to the PHO, who continues to report on progress and problems to the Ministry. The project manager is renamed the national project coordinator. Implementation activities are begun in a number of other provinces. The activities in each province are managed by the Provincial Health Officer, supported by an assistant project manager provided by the Health Planning Unit. Service staff with implementation experience are also rotated to the various provinces, as planned. In addition, some training staff are provided by the Public Health Institute to help set up and conduct training courses.

Toward the end of the current Five-Year Plan (1980), the national project coordinator is able to report to the DGHS and the national coordinating committee that the strategies are being implemented in all provinces of the country. At that time the committee suggests that an independent evaluation board be convened to:

1. assess the effectiveness of the district health strategies in getting the targets achieved and reducing problems;
2. assess the effectiveness of the project in producing products on time and within cost limits;
3. submit recommendations about whether the project method for health improvement should be pursued, with comments about the formulation method as well as the techniques used for managing implementation.

The project coordinator is asked to prepare a final report summarizing his and his staff's experiences and recommendations in regard to the project method of management.

Since most project staff were assigned from existing positions and have since returned to their former tasks, little needs to be done in the way of reassignment. The two medical officers hired for supporting the project have become interested in health management. One is assigned to a major province as Provincial Health Officer. The other is retained within the Health Planning Unit as an implementation consultant to various programmes and services. In addition, he is assigned a very important task: setting up a monitoring system whereby it can be determined whether problem-reduction objectives and operational output targets are being achieved on schedule. This system is to monitor not only the objectives and targets set in the present project formulation but the objectives of future health planning efforts as well, since the Ministry has decided to lay greater emphasis on objective-oriented health planning in the future. To ensure timely receipt of the proper feedback he will also need to modify existing reporting systems.

The project coordinator? He takes the weekend off and then begins his new job as Deputy-Director for Health Planning.
ABBREVIATIONS USED

C constant rate or no detectable trend
(applied to indices and rates)

CDP Community Development Programme

CHP country health programme(ing)

CHW community health worker

DGHS Director-General of Health Services

DMO District Medical Officer

DPT diphtheria/pertussis/tetanus

EPB Economic Planning Board

FP family planning

HC health centre

HPU Health Planning Unit

HSC health subcentre

ICD International Classification of Diseases

IUD intrauterine device

MCH maternal and child health

MHC main health centre

MoH Minister(ry) of Health

MWC midwife clinic

NFFB National Family Planning Board

NM nurse-midwife

OPD outpatient department

PCM protein-calorie malnutrition

PHN public health nurse

PHO Provincial Health Officer

RCHW rural community health worker

T unit of currency in fictitious country of the Illustration

TB tuberculosis

URI upper respiratory infection

* * *
GLOSSARY

activity (formulation) A piece of work that results in a product needed, directly or indirectly, for the project proposal. Examples of formulation activities are estimating future socioeconomic conditions, analysing the decision-making process that leads to approval of a project proposal, and calculating the costs of a proposed health strategy.

activity (project) A piece of work that results in a product needed for the implementation of one or more health strategies. Examples of project activities are designing a health centre, training a group of midwives, and passing a new law.

activity description A full description of a project activity, including its title, number, the resources it requires, its planned start and completion dates, the product that is to result from it, and instructions for performing the activity. This information is usually recorded on an activity description form.

activity managers Persons responsible for seeing to it that individual activities or clusters of activities are completed on time and within budget. They may supervise the project staff actually doing the activities or, in small projects, do the activities themselves.

administrative support Support activities that are normally considered to be administrative in nature, such as recruiting and placing staff, preparing and submitting budgets, requisitioning and distributing supplies, and disbursing salaries.

cluster of activities A group of related activities or a major activity, such as implementing a new health centre, that is usually broken down into smaller-scale activities, for example, designing the new centre, selecting the site, constructing it, and putting it into operation.

Chartering Agency The national office requesting and sponsoring the project formulation and/or implementation.

coordinating committee A committee composed of representatives from the Chartering Agency and other offices, units, and divisions cooperating in the project. Its function is to make decisions concerning the project that fall outside the limits of authority of the project manager, such as a decision to alter the original objectives or terminate the project.

coordinator (formulation) The manager of the project formulation team, who is responsible for seeing to it that the team produces the project proposal (and any other products specified in the terms of reference) on time.

country health programme
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>design criteria</td>
<td>Guidance for designing a health strategy, in the form of criteria that the strategy must conform to. Criteria may require that the strategy emphasize coverage of the rural population, for example, or that it should address the problem of known political obstacles.</td>
</tr>
<tr>
<td>formulation (project)</td>
<td>A process of analysis and design by which the justification for a project is established, objectives are decided upon, strategies for making the necessary service changes are designed, project activities are planned, the required resources for the project are calculated, and the method of managing implementation is specified.</td>
</tr>
<tr>
<td>Gantt chart</td>
<td>A chart used for listing activities that depicts graphically their time of occurrence and duration.</td>
</tr>
<tr>
<td>implementation</td>
<td>The process of creating and putting something into operation, such as a health strategy or a hospital. By extension, a project may be said to be implemented when it is being carried out.</td>
</tr>
<tr>
<td>input</td>
<td>Any resource used in an activity or step of a method. Policy documents, discussions with health service staff, products of previous activities, activity schedules, and manpower are all examples of inputs.</td>
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<tr>
<td>liaison persons</td>
<td>Persons from existing organizational units and outside agencies who assist the project manager on a day-to-day basis by (a) communicating with the existing organization on his behalf, (b) helping to schedule and supervise activities, (c) making sure that resources are available as needed, and (d) providing advice and suggestions when there are deviations from the project plan.</td>
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<tr>
<td>milestone</td>
<td>A critical event that signals the completion of one or more sequences of activities or permits the commencement of a new sequence. Examples of milestones are &quot;project budget approved&quot;, &quot;hospital designed&quot;, &quot;curriculum developed&quot;, and &quot;construction completed&quot;.</td>
</tr>
<tr>
<td>network (activity)</td>
<td>The complete set of project (or formulation) activities arranged in the sequence in which they are to be carried out, and drawn in the form of a network that shows which activities are to be done simultaneously and which must be completed for others to be started.</td>
</tr>
<tr>
<td>obstacle</td>
<td>The underlying cause of a (health) service deficiency that may prevent the service from reaching an operational target set for it. Obstacles are classified as resource and non-resource. A resource obstacle to the treatment of x cases a year might be shortage of the necessary drugs. A non-resource obstacle to the same target might be unfriendly attitudes on the part of health centre staff, making patients reluctant to return for treatment.</td>
</tr>
<tr>
<td>operational output</td>
<td>A critical unit of preventive or curative service provided by the health sector or other sectors. Examples of operational outputs are immunizations, health education lectures, wells installed, and well baby clinic consultations.</td>
</tr>
</tbody>
</table>
operational (output) target: The number of a specified type of operational output that is thought to be necessary for reducing a health or health-related problem to a specified level by a specified time.

problem-reduction objective: The reduction of a specified health or health-related problem to a specified level by a specified time, for example, "reduction of infant deaths from gastroenteritis from 75 to 25 per 100,000 by 1979".

product: A concrete, well-defined result of an activity, such as a set of analysed data, the assignment of a project manager, and a recruited and trained midwife.

project (health): A temporary intensive effort to set up and put into operation a new or revised service (or programme) that will, it is believed, result in the reduction of specified health and health-related problems. This intensive effort takes the form of a coordinated set of activities with well-defined objectives and target dates for their achievement. Once the project objectives have been achieved -- once the service or programme is set up -- the project team disbands, leaving the service to operate on its own.

project approach to implementation: Implementing a new undertaking by means of a temporary project organization, which is disbanded once the project has achieved its objectives.

project manager: The manager of the project, who is responsible for seeing to it that the project objectives are achieved on time and within budget.

project objectives: The objectives the project is set up to achieve and upon completion of which it is terminated. Typical project objectives are training a new type of health worker, constructing a water supply system, and initiating a malaria control programme.

projection: An estimate or forecast of a future condition, such as the level of literacy or the magnitude of a given disease, based on the extension of past trends of the condition.

proposal (project): A document summarizing the conclusions of the formulation team, describing the problems to be reduced through the project, the various objectives to be achieved, the proposed health strategies to be implemented by the project, and their costs and benefits.

Province Eaks: In the Illustration to the Manual, the fictitious province in which the strategies are first implemented.

senior Chartering Agency official: The supervisor of the project and project manager, who makes the higher-level managerial decisions that fall outside the limits of authority of the project manager. This person is often the chairman of the coordinating committee.

steering committee: A committee composed of representatives from the Chartering Agency and other offices and divisions concerned with the formulation or having an interest in the problems assigned to the formulation team. Its function is to guide and monitor the project formulation.
strategy (health)  An approach to organizing, managing, and delivering health services that has been designed in such a way as to permit the achievement of the operational targets in the face of known obstacles.

strategy coefficient  A number representing the size of the population to be served by a health strategy, and used in strategy costing.

strategy costing  The process of estimating the development and operating costs of a proposed health strategy. It involves calculating the unit costs of delivering the service and multiplying these by the strategy coefficient.

support  In general, any work necessary to enable the first-line service to be delivered, such as maintenance of equipment, provision of information, supervising of staff, transportation, and so on.

target  See operational target.

terms of reference  A document written by the formulation steering committee that outlines the boundaries of the project formulation, establishes how the formulation team is to work, and specifies what products are to be included in the final project proposal.

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