MANAGEMENT

Description
This chapter provides the skills needed to design, implement, and evaluate Primary Health Care services for emergencies, based on the identified needs and the resources available. It emphasises the community-based approach in delivering services, which requires involvement of the affected population in decision-making.

Learning Objectives
- To characterise management issues in emergencies
- To describe basic management tools and their application in relief program planning.
- To discuss how to carry out a rapid assessment, and set goals and objectives based on the most important problems.
- To define an action plan and the resources needed, while considering those available locally.
- To describe the implementation process in terms of coordination, leadership, and management of resources and constraints.
- To define the steps for monitoring and evaluating relief projects.

Key Competencies
- To understand the main management issues that can interfere with the success of a relief operation
- To apply the planning cycle and the systems model when planning a relief operation.
- To organise a rapid assessment and write "SMART" objectives based on assessment findings.
- To design a simple relief program, with consideration of existing resources.
- To recognise the importance of coordination and good leadership in management of resources and constraints
- To set up an information system and organise a final evaluation.

TABLE OF CONTENTS

OVERVIEW OF MANAGEMENT IN EMERGENCIES

"If you don't know where you're going, any road will get you there."

"If you don't know where you are, you may already be there. Or you may not be."

Management is sometimes presented as a complicated process, but it simply means searching for the best way to use resources, with a view of achieving objectives. Management of a project involves the following:

- **Planning** — analysing different ways of moving toward identified goals in the order of priorities.

- **Implementation** — transforming inputs through a set of systems and procedures to produce outputs.

- **Monitoring and Evaluation** — continuously and periodically assessing work against the targets.

- **Leadership** — people who are responsible for accomplishing the organisation's goal by making the best use of available resources (staff, money, material, etc.), within given constraints.

- **Coordination** – a harmonious and effective working together of people and organisations toward a common goal.

Good management should begin with a clear understanding of management terms. The table below lists common management terms and their definitions.

Table 2-1: Terms and Definitions

Accountability	The responsibility of demonstrating to stakeholders, including the beneficiaries, that humanitarian assistance meets with agreed standards.
Activity	An action within a project that is done to achieve an objective; activities transform inputs to outputs.
Coordination	Harmonious and effective working together of people and organisations toward a common goal
Coverage	The proportion of the target group that has received a service or is protected from a disease or health problem.
Effectiveness	The extent to which an organisation is doing the right thing to reach its objectives.
Efficiency	The degree to which results (desired outcomes) are achieved without wasting resources. How economically inputs are converted into outputs.
Evaluation	A periodic assessment of the relevance, effectiveness and impact of health interventions against the set objectives. Evaluation is a learning and action-oriented tool that requires the establishment of specific objectives, progress indicators and criteria.
Goal	General statement about what is to be eventually achieved (i.e. impact) through a program.
Implementation	Transforming inputs through a set of systems and procedures to produce specified program outputs.
Indicator	A "signal" that shows whether a standard has been reached. It is used to measure and communicate the result of programs as well as the process or methods used. Indicators can be quantitative or qualitative.
Inputs	Resources (staff, supplies, money, information) available for carrying out a project in a given time.
Leader	Someone who makes people work together, by motivating and inspiring them, to achieve a common goal.
Management	Searching for the best use of resources in pursuit of objectives subject to change (Keeling)[i]
Methods	Sequence of tasks or activities for achieving objectives.
Minimum Standard	The minimum acceptable level (of service) to be attained in humanitarian assistance.
Monitoring	An ongoing process of checking the progress of activities against the plan to ensure that all processes are going on as intended.

Objective	The intended, measurable targets (outcomes) of a program; the specific targets or positions that are to be reached in order to achieve the overall goal.
Planning	A continued process of anticipating the resources and services required to achieve objectives determined according to an order of priorities that permits the selection of the optimal solution or solutions from among several alternatives; these choices take account of the context of internal and external constraints, whether already known or foreseeable in the future. (Pineault) The core of planning consists of analysing alternative means of moving toward identified goals in the light of priorities and existing constraints. (Reinke)
Process	The steps or tasks for carrying out activities (diagnosing, counselling, referral, etc.).
Program	An organised set of projects or services seeking to attain specific (usually similar or related) objectives.
Project	A planned scheme aimed at achieving specific objectives within a given time/budget.
Results	Outcomes of processes and necessary inputs for the target population as: • Outputs — Direct results (products or services) a program delivers to a target population to produce the expected impacts. • Effects — Changes in knowledge, attitudes, behaviour/practice, coverage resulting from the output. • Impacts – Changes in health status (morbidity, mortality, disability, fertility) resulting from the output.
Staffing	Planning for the types and number of personnel that will be required.
Strategy	The order of pursuing priorities and objectives based on relative effectiveness and consideration of constraints.
Target Group	A family, specific population group, or a community in a defined area of a country.
Training	Transferring specific skills and competencies to individuals about to do a particular job.

Management Issues in Emergencies

The success of relief operations may be affected by several management issues, including:

1. **Poor Management of Relief Operations**
   During the last thirty years, hundreds of humanitarian relief and development programs have been started in developing countries in response to natural or man-made disasters. Although the quality of the international aid is improving, poor planning has resulted in poorly organised, inappropriate, delayed, and ineffective relief. Constraints do exist in planning relief operations. These include lack of reliable information, the urgent and rapidly evolving emergency situation that is beyond managerial control and lack of relief managers with planning and management skills. Because many relief operations extend into long-term rehabilitation programs, it is important that none of the planning steps are missed out. For example, if the objectives were not established at the beginning of the operation, programs cannot be evaluated. As a result, organisations would not be able to take advantage of lessons learned from previous relief operations.

2. **Relief Planning Not Based on Sound Information**
   Planning a relief program is hard work because it should be based on the best available information. Emergency situations change quickly, demanding timely assessment and reporting to obtain funds. Yet there is often not enough time to assess the situation and get all the facts. Many relief organisations conduct rapid assessments to gather critical information for planning their interventions. However, data on current status may not be measurable, or the information that is collected may be unreliable. This may lead to inappropriate responses. Lack of time should not be an excuse for not analysing or reporting the information carefully. (See the *Disaster Epidemiology* chapter for further details on collecting and analysing information.)

3. **Relief Aid Not Promoting Recovery and Self-Reliance**
   When planning any emergency operation, it is important to consider the local ways of coping with the situation. Some disasters are seasonal (e.g., floods) and the affected communities may have fairly adequate response mechanisms, which are not always obvious to the outsider. Each community has the primary responsibility for caring for its own well-being. Yet time and again, emergency managers around the world have designed and directed relief operations without fully appreciating the capacities of local communities and their central role in determining their own needs. The tragic result is often the erosion of local coping mechanisms, the development of a dependency cycle, and the creation of incentives for populations to remain displaced. (For further detail on these issues, refer to the *Disaster Dimension* chapter.)

4. **Failure to Recognise the Impact of Emergencies on Host Communities**
   Many emergencies occur in developing countries that still depend heavily on international aid to care for its own people. An influx of a large population can put a heavy strain on existing resources. It is crucial that the plight and needs of host communities are also addressed during the relief response to displaced communities.

5. **Poor Coordination and Cooperation**
   Poor coordination and collaboration with governments, other agencies and community leaders is unfortunately a common problem, particularly in large-scale disasters. This often occurs because of failure of host authorities or lead agency to establish appropriate structures and mechanisms for coordination. As a result, other humanitarian agencies may set up operations without consulting with or providing regular feedback about the relief operation to the host authorities (for health and other sectors), the leaders of the affected population and other locally based agencies. This can make the relief operation ineffective. Coordination must be based on good information sharing and sound management. Working with local authorities can help in addressing the political issues concerning the relief response. Regular meetings will reveal a variety of perspectives from other agencies and a common goal of meeting priority needs of displaced populations.

6. **High Turnover of Relief Workers**
   Working in a relief operations places unique demands on relief workers. They work under high stress conditions, with little support from headquarters and no career development or future prospects. It is not uncommon for them to leave the agency in search of better opportunities. Better leadership and team building can help foster team spirit and increase commitment in assisting the most vulnerable. In addition, more attention should be given to staff training and motivation, conflict resolution, and staff health and welfare. (See the *Human Resource Management* chapter for further details.)

7. **Trained/Skilled Volunteers Not Available from the Affected Population**
   When responding to acute emergencies, relief agencies recruit skilled workers or volunteers that are not from of the affected population. Skilled workers from among the beneficiaries may not be available since they may also have been affected by the disaster. As a result, they may be "lost" for a couple of weeks.

8. **Relief Programs Not Based on Primary Health Care (PHC) Framework**
   Many relief programs ignore the principles and concepts of PHC. Relief planners do not always collaborate with other sectors, nor encourage victims to come up with the solutions and ideas to help their recovery. In addition, they introduce inappropriate procedures and technologies that cannot be sustained without long-term outside support. (See the *Primary Health Care (PHC)* chapter for further details.)

9. **No Codes or Yard Stick for Measuring Performance**
   Lack of standards and quality levels for monitoring and evaluating the performance of humanitarian agencies has led to unprofessional and wasteful relief operations, and sometimes, unnecessary loss of life. Common standards (such as Sphere) and health information systems are needed to help humanitarian actors to work more effectively, and become accountable to donors, as well as the beneficiaries.

10. **Failure to Link Relief and Development**

There are distinct phases of any emergency (i.e. pre-emergency, impact and flight, acute emergency, post-emergency, repatriation, and rehabilitation/reconstruction), each of which requires different interventions and approaches to management. It is not enough to simply keep people alive. The emergency manager must focus on the long-term solution for the displaced population (whether it is repatriation, integration, and resettlement). Many disaster-affected populations are displaced for long periods of time, usually as the result of internal conflict. Relief projects should serve both their immediate and long-term needs by building upon local capacities to respond to disasters. (Refer to the *Disaster Dimension* chapter for further details.)

11. **No Exit Strategy**

Many relief programs close down when there is no more funding to support the relief interventions. The closure is usually very abrupt, with no proper handing over of the relief operation and resources to the local authorities or transfer of skills to the affected community. The consequences may be severe if the affected community is not yet self-reliant and has no other means of support.

Management Objectives

Humanitarian agencies need to improve their skills in management of relief projects. Good management is measured by two criteria, namely:

- **Effectiveness —** achieved by setting the right goals, developing an appropriate strategy for activities, and coordinating and monitoring the overall performance to the satisfaction of the stakeholders (beneficiaries, host country authorities, etc.)

- **Efficiency —** achieved through assessment, planning, carrying out and monitoring the operation in the most economical (cost-efficient) manner

Objectives of management of relief projects include the following:

- To define the existing problems and the priority needs.
- To integrate the perspectives and priorities of the beneficiaries with those of the organisation.
- To give a sense of direction and purpose to an organisation.
- To monitor quality and performance and motivate personnel.
- To make optimum use of resources (local and external).
- To coordinate activities and cooperate with other agencies

Management Tools

The following **planning cycle** and **systems model** can be used as management tools where no standard guidelines exist within an organisation.

The Planning Cycle

Planning is basic to any human activity and it is a continuous process. Providing proper answers to a series of common sense questions in the planning cycle can establish a solid base for project planning, as follows:

1. **Assess the Situation** — What is the nature of the crisis? How urgent is it? What are the needs of the displaced population?

2. **Prioritise the Needs** — What needs are most important to the survival of the displaced population? What can actually be accomplished?

3. **Set Goals and Objectives** — What should be done and what are the limits of these actions?

4. **Plan the Activities** — How will the goals and objectives be met? What resources will be required? Create a schedule.

5. **Implement the Plan** — Carry out the planned activities.

6. **Monitor the Implementation** — Are the activities being carried out as planned: were the inputs delivered, were the processes conducted, and were the outputs produced as planned?

7. **Evaluate the Program** — Did we achieve what was planned? Were the objectives relevant? What was the impact?

The following shows how the series of questions forms a planning cycle:

Figure 2-1: The Planning Cycle
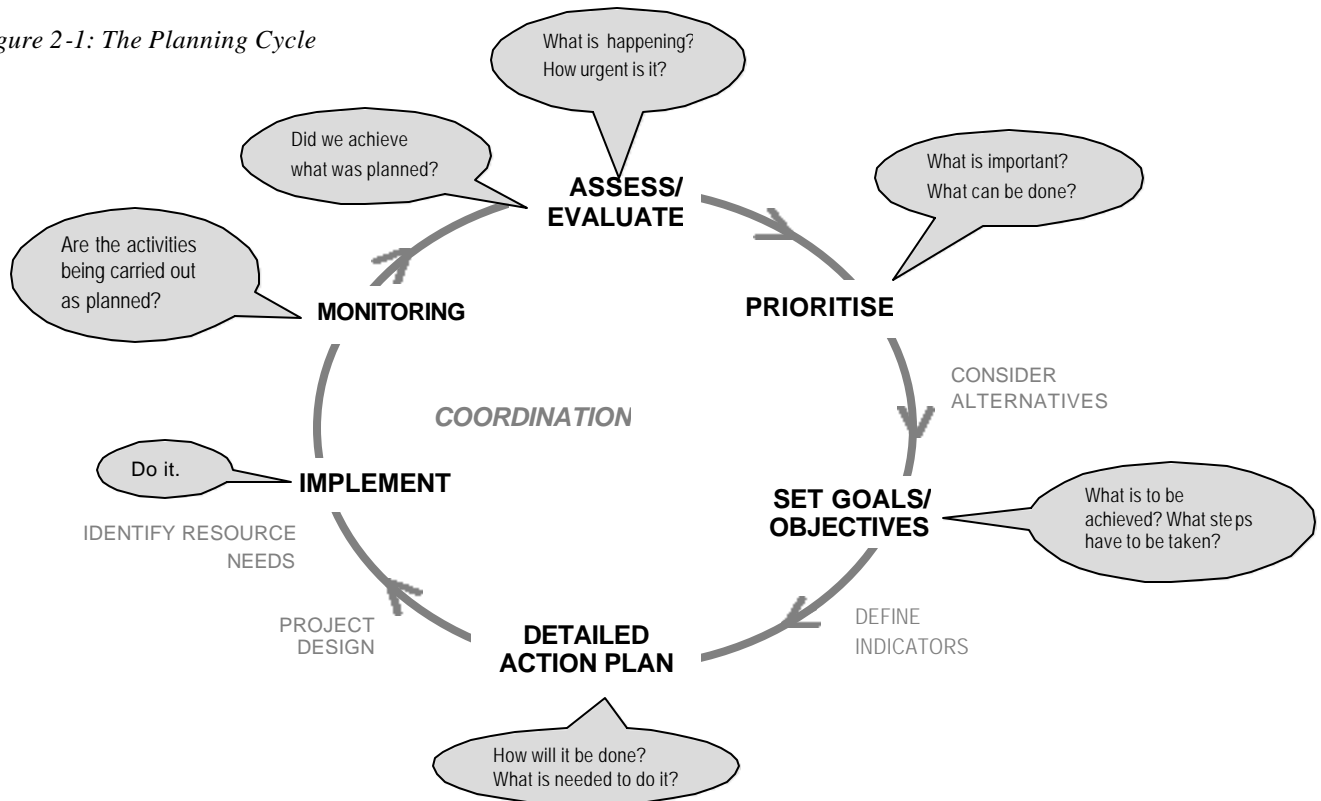
The first step when responding to a crisis is to rapidly assess the situation in order to understand the overall picture, e.g., lack of food, contaminated water, and poor sanitation. Then carry out a detailed assessment of individual problems or issues to identify root causes as the real problems are often not what may appear on the surface, and wrong assumptions may result in a project that is inappropriate. The basic health needs arising from the identified problems should then be ranked by priority. However, other less urgent needs should not be forgotten since they are no less important. They should be considered once the situation becomes stable. Thereafter, the overall goal and specific objectives through which the goal will be reached should be defined. Actions that are necessary to achieve the objectives should then be determined, as well as the required inputs and the expected outputs. During the planning phase, measurable indicators of progress towards objectives need to be identified. Indicators of quality, though more difficult to define, are also important for tracking progress. Potential constraints that may arise should be anticipated, and appropriate actions for eliminating them planned in advance. Monitor services to determine whether they are being delivered as planned. Periodic evaluations should also be carried out to establish if the program objectives were achieved and any important lessons for the future. It is important to ensure good coordination when planning and implementing a relief operation. This requires a clear definition of objectives, responsibilities and authority.

The Systems Model

PHC services and management services are two sub-systems that are linked to the health needs and outcomes of a population. PHC services have a direct effect on the health needs and outcomes. Management services do not impact directly on the health of the affected population, but provide support that is critical for delivering PHC services. This link between PHC and management subsystems through the health needs and outcomes is shown in the Figure below.

Figure 2-2: Linking PHC and Management Services
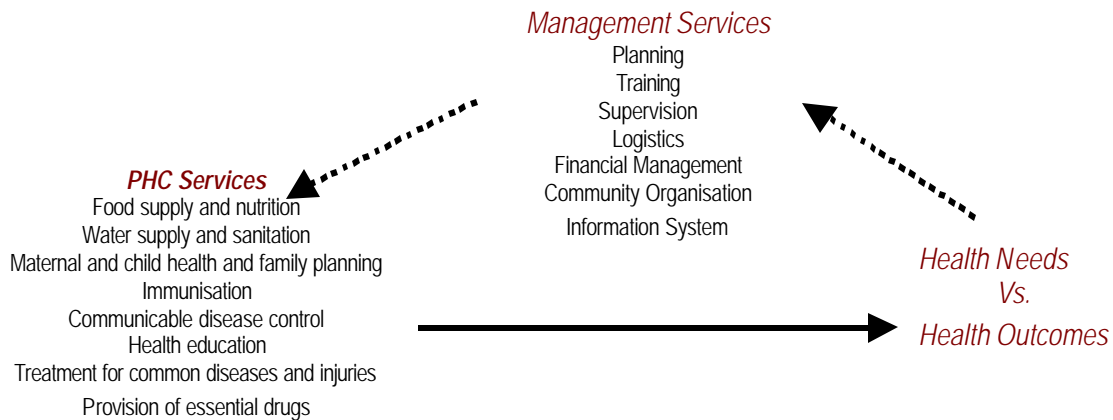
The **systems model** is a management framework that allows managers to focus on the *process* of providing PHC services in order to produce better results. It helps them to identify the key elements of a program, which include resources (*the inputs*) for carrying out a set of activities (*the process*) in order to achieve the expected results (*the outcomes*), as shown in the Figure below. The model thus defines the relationship between what is needed and what should be invested, and between what is invested and what is actually achieved.
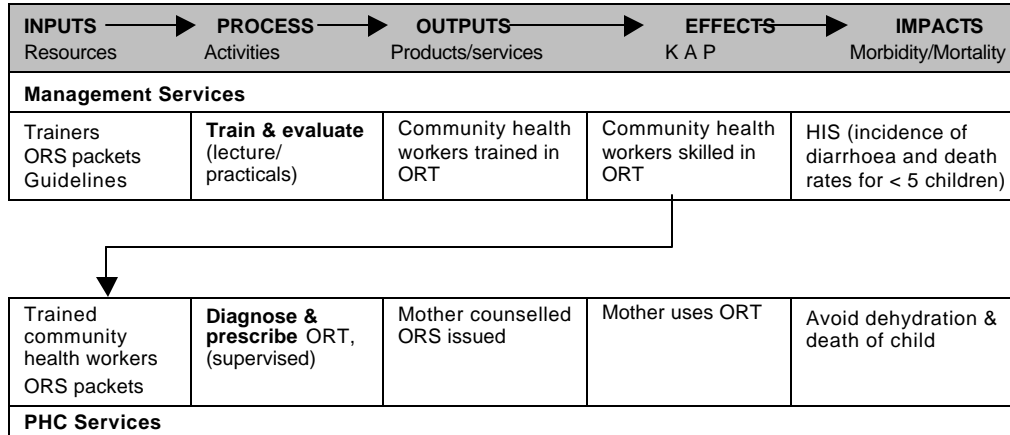
Figure 2-3: The Systems Model

This link between what goes into PHC services and what comes out at the end is an important management concept. The *process* is the focal point of both planning and evaluation. Some managers look only at what goes into a project. Others look at what comes out. Most cannot explain why things go wrong. The systems model helps managers to gather and analyse information on the key processes of health care delivery so that they can identify weak links and take appropriate action when things go wrong, for example:

- Poor outcomes of a program (e.g., a rising incidence of common diseases and high death rates) may be due to insufficient inputs (e.g., lack of vaccines) and/or incorrect processes (e.g., poor storage of vaccines).

- Defective inputs (e.g., frequent stock-out of essential supplies, poorly performing staff) require better quality of inputs (e.g., regular drug supply, trained staff) in order to improve the quality of outcomes,

- Deficient processes (e.g., wrong diagnosis, delayed referral) require corrective action (e.g., job aids, supervision) rather than simply improving the quality of inputs.

Figure 2-4: A System Diagram for Diarrhoea Control

| INPUTS → Resources	PROCESS → Activities	OUTPUTS → Products/services	EFFECTS → K A P	IMPACTS Morbidity/Mortality
Management Services				
Trainers ORS packets Guidelines	**Train & evaluate** (lecture/ practicals)	Community health workers trained in ORT	Community health workers skilled in ORT	HIS (incidence of diarrhoea and death rates for < 5 children)
Trained community health workers ORS packets	**Diagnose & prescribe** ORT, (supervised)	Mother counselled ORS issued	Mother uses ORT	Avoid dehydration & death of child
PHC Services				

The above systems diagram for diarrhoea control shows the link between the management services and PHC sub-systems and also defines different outcomes (outputs, effects, impacts). The outcome of management services (e.g., improved staff skills, and motivation) leads to improvements in PHC service inputs and processes. The result of training a community health worker (CHW) in oral rehydration therapy (ORT) and providing an adequate stock of oral rehydration solution (ORS) should be a more capable CHW who provides better service to the target population.

By linking all the components in a systems diagram (inputs-process-outputs-effects-impacts), the systems model can be used for planning as well as monitoring, and evaluating programs. A logical **IF-THEN** relationship is observed within the linked processes of systems diagram for diarrhoea control. This relationship can help in program planning, monitoring, and evaluating as follows:

Planning — Work backward from the known health needs of the affected population. The overall picture may be obtained from the community through Health Information Teams (HITs), and ongoing data collection in health facilities. Analyse the data in the health information system (HIS) to identify the impacts, effects, and outputs; then the processes and finally, the inputs.

- **IF** diarrhoea is a major cause of deaths among children under five years, **THEN** the desired impact is avoiding deaths from dehydration.

- **IF** deaths from dehydration are to be avoided, **THEN** the mothers have to administer oral rehydration therapy (ORT) correctly.

- **IF** mothers are to correctly administer ORT to children with diarrhoea, **THEN** ORS should be issued with proper counselling on ORT given by the CHW.

- **IF** ORS is to be issued and proper counselling given to the mothers, **THEN** diarrhoea should be correctly diagnosed and ORT prescribed.

- **IF** diarrhoea is to be correctly diagnosed and ORS prescribed, **THEN** the CHW should be trained and ORS supplied regularly.

Figure 2-5: The Systems Framework and the Planning and Evaluation Cycle
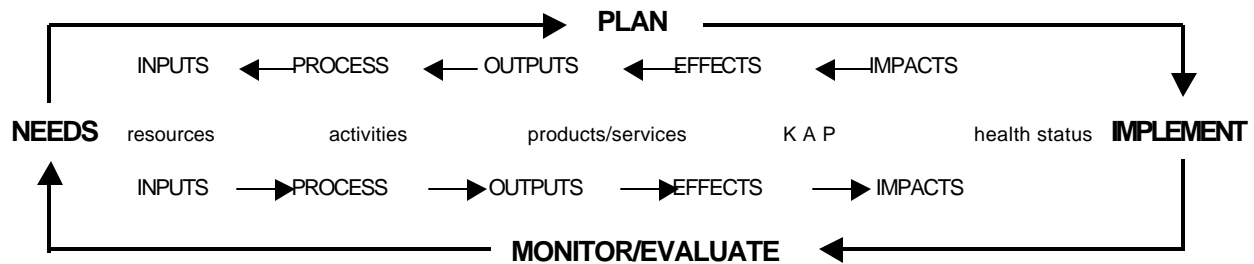
Monitoring/Evaluating — Work forward to ensure that what was planned is actually carried out. Ensure that inputs are processed as planned, in order to bring about the planned effects, and then monitor the impacts. This will ensure that the priority health needs are met, as described below:

- **IF** the CHW is trained and the ORS regularly supplied as planned, **THEN** a child with diarrhoea will be correctly diagnosed and ORT will be prescribed

- **IF** diarrhoea is correctly diagnosed and ORT is prescribed as planned, **THEN** the ORS will be issued and mothers will be properly counselled on ORT and encouraged to breastfeed

- **IF** the mothers are properly counselled and ORS issued as planned, **THEN** the mothers will administer the ORT correctly

- **IF** the mothers administer the ORT as planned, **THEN** deaths from dehydration will be avoided among children

- **IF** deaths from dehydration are avoided as planned, **THEN** the problem of diarrhoea causing many deaths among children less than five years will have been addressed.

Using Management Tools

In acute emergencies, reaching out to the community effectively is more important than efficiency. It is better to get the right things done than to do the wrong—or irrelevant—thing most efficiently. However, prolonged use of products, procedures and services that are too expensive will eventually interfere with effectiveness. This should always be remembered but should not serve as an excuse for poor planning and implementation of a relief program. Both the planning cycle and the systems model can be used to improve the efficiency and effectiveness of a relief project.

A step-by-step approach to management of a relief project is described the next sections.

PROJECT PLANNING IN EMERGENCIES

ASSESSMENT
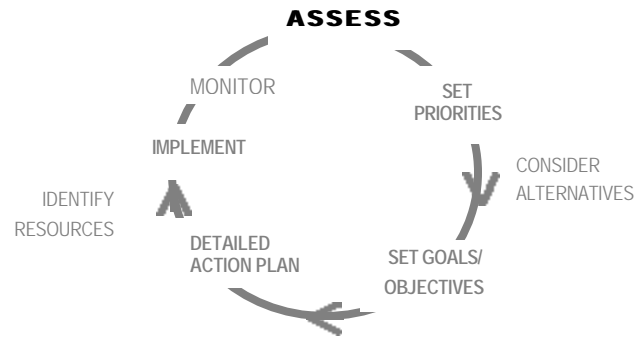
Carrying Out an Assessment

Assessing the emergency situation should be the first step toward setting up or taking over a relief project. The objectives of carrying out an assessment may include the following:

- To determine the magnitude of the emergency and the affected population.

- To appraise the present and potential public health impact of the emergency.

- To evaluate the local response capacity and immediate needs.

- To determine if external assistance is needed and plan an appropriate response.

- To establish the basis for a health and management information system.

When assessing emergency situations, there is a trade-off between accuracy and timeliness. The amount of time available for conducting a rapid assessment may depend on the nature of the disaster, the skills of the assessment team and the existing constraints (e.g., poor access). A preliminary assessment may be completed in 2-5 days, after which priority actions and estimates of resources can be determined. Data may be gathered through quantitative and qualitative methods e.g., direct observations, reviewing existing records, interviewing key people and rapid surveys. Focused assessments (e.g., nutritional surveys) and focus group discussions can be organised immediately after deciding to intervene. These may require 2-4 weeks to determine the appropriate PHC interventions to address potential public health problems. Regardless of the total amount of time spent on the assessment exercise, it is important to plan and prepare for the event adequately. An epidemiological approach to data collection, analysis and interpretation is essential for gathering reliable information and drawing the right conclusions about the health needs of the affected population. Rapid assessments, however crude, can help to initiate community participation and break down fear and mistrust so their recovery can begin. (Refer to the *Disaster Epidemiology* chapter for details on Rapid Assessments.)

Be aware of the potential mistakes that can occur during an assessment and try to prevent them. The assessment team should plan and co-ordinate the assessment with the local authorities and other agencies. An epidemiological approach to data collection and analyses will produce reliable information and ensure the right response is carried out. Many assessment checklists have been developed to help teams identify the information they need to collect from the assessment. However, these checklists should be used with caution, since they should first be translated and adapted to the disaster context and local culture. They may be considered as guides for thinking out the information needed, to ensure that the key issues have been covered. Involving the affected population in this process can produce much insight to what is or is not applicable.

After the assessment, the team should prepare a report describing the impact of the disaster on the target population (e.g., poor health status of children under 5 years) and services, the existing resources and capacity of the local response. The perceptions of the affected population should be included. The report should be sent to the host country Ministry of Health and Ministry of Internal Affairs, the headquarters of the agency conducting the assessment, other local and international agencies and donors. The conclusions should enable decision-makers to determine whether or not external assistance is required, otherwise any data collection that is not linked with decision-making and feedback is a waste of resources. Any external assistance should follow a hierarchy of needs:

1. **Basic life support needs** – food, water, shelter, and clothing.

2. **Security and Protection** from physical violence and aggression (especially in conflict situations).

3. **Psychological and social needs** due to the stressful effects of the disaster.

Table 2-2: Outline for a Rapid Assessment Report

Executive Summary – disaster being addressed, program planned and resources needed

Survey – by whom, when it was carried out, objectives and methods used

Background of Disaster – origin, impact and forecast of evolution of disaster

Affected Population – size, age/sex composition, general condition, casualties/ death rates, disease pattern, condition of host population

Current Response – relief measures so far

Needs and Resources – existing services and facilities and unmet health needs (security, access, etc.)

Capacities – of disaster victims, host country, local NGOs, other organisations

Recommendation – aim/strategy for action, target beneficiaries, program implementation

International Aid Needed – equipment, supplies, technical, etc**.**

Forthcoming Reports – advise on pending surveys, etc**.**

Appendices – maps/country profiles of affected areas, data analysis of assessment, program design, description of other relief actions, contact names/addresses

Writing a Project Proposal

The first response following an assessment report's recommendation of assisting a large displaced population is to write a project proposal. This will be presented to potential donors and the host government, in order to convince them of the need to respond to the disaster situation and how the proposed project can address the identified problems. These proposals can later provide a basis for detailed project planning and for evaluation of the project.

The proposal should do all of the following:

- Be brief but include all the important details about the project (project justification, goals and objectives, general outline of strategy, activities, and time-frame, indicators for monitoring and evaluation, budget).

- Be supported by facts and estimates from the assessment report and other reliable sources.

- Name all sources of funding and other contributions. Where necessary, it should advise on the future sustainability of the project.

Use pre-designed formats for project proposals with care. They can serve as useful checklists of all the issues that should be considered, but they should not be taken as a "form-filling exercise." The forms should be adjusted to the particular situation or culture of the project.

Establishing a Health Information System

As soon as the decision to establish a relief program is made, a *health information system* (HIS) should be established, ideally based on findings from the initial assessment. (An information system consists of people, equipment and procedures that are organised to provide information to health workers in a way that enables them to make informed decisions.) The baseline data from an initial assessment can be compared with other data collected over time. This will allow relief workers to review the overall progress of the operation in terms of the the health status of the affected population. Later, the information may assist in evaluating the achievements of the project. The HIS uses a group of quantitative and qualitative indicators to store information from routine surveillance and periodic, population-based surveys. (For details about quantitative and qualitative indicators, surveillance and surveys, refer to the chapter on *Disaster Epidemiology*. For more details about setting up an information system, refer to the last section of this chapter under Monitoring and Evaluating Relief Projects.)

Table 2-3: Example of How to Collect Data for a Health Information System

> The Federation (IFRC) recruits **Health Information Teams** (**HIT**) to quickly make contact with the community and establish information flow. They monitor health posts, food availability, water, sanitation, disease control measures, health education, etc. TBAs, CHWs and teachers are favoured for recruitment. Members of vulnerable/victimised groups are recruited for maintaining communication between the targeted community and peripheral clinics.
>
> HIT form a vital link between the community and the peripheral clinics, where the really sick are referred to. They receive training each week, e.g. on use of ORS, how to dig latrines, promote breast feeding, etc. Later, they will become CHWs.

SETTING PRIORITIES
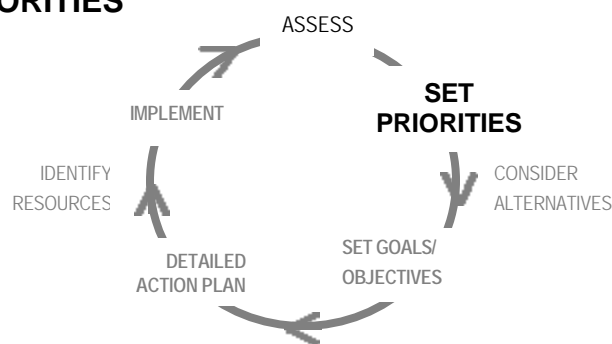
Once the proposal for a relief program has been accepted (by donors, the host government and the concerned UN agency), the implementing agency should proceed with the next planning step. Since not all problems can be addressed at once, planners should determine which of the problems identified in the assessment should be given highest priority. Representatives from the affected population should also be involved in this process. Determination of priorities is best done with a **priority chart**, which is used to rank identified health problems according to specific criteria. The following criteria may be used:

- **Seriousness of the Disease** — What will happen if the problem is not addressed in terms of mortality, disability?

- **Prevalence of the Disease** — What is the total number of cases with the disease among the target population at a given period of time?

- **Feasibility of Control** — Can the health problem be adequately controlled by the available resources (technology, staffing, funding, supplies) and despite existing constraints (such as lack of security, transport delays, inadequate staff skills, budget restrictions, etc.)?

- **Community Acceptance** — What is the likelihood of gaining the community's support for the disease intervention with respect to perceptions and demands?

Each health problem gets scored against a set of criteria. In the table below, problems are given scores from 1-4, where 1 is considered the lowest priority and 4 as the highest.

Table 2-4: Priority Chart for Ranking Health Problems

Health Problems	Prevalence	Seriousness	Feasibility of Control	Community Acceptance	Additive Scores	Multiplicative Scores
Malnutrition	3	3	3	2	**11**	**54**
Diarrhoea/ Dehydration	3	4	2	4	**13**	**96**
Cancer	1	4	1	4	**10**	**16**
AIDS	2	4	1	3	**10**	**24**

Note: *Multiplication may produce a more sensitive score for comparison of health problems that have equal scores after addition. In the above exhibit diarrhoea is ranked as being of the highest priority followed by malnutrition, with cancer being ranked as the lowest priority.*

The consequence of ignoring some of the identified health problems should be considered, such as:

- A high prevalence of tuberculosis among a displaced population may increase the incidence of the disease in the host population.

- Neglecting the local population in the control of diarrhoeal disease outbreak when local disease control measures are lacking may render any control measures among the displaced population ineffective.

SETTING GOALS AND OBJECTIVES

Goals are general statements about what one wants to eventually achieve through the program. They are derived directly from the health needs identified in the assessment, and are used to define the limits of what can be achieved through specific objectives. Not more than one or two goals should be set for the overall program. A logical goal to address the problem of high mortality among a displaced population could be: to improve the survival of children less than five years.

Objectives are the specific targets or positions that are to be reached in order to achieve the overall goal. They are the intended results for problems identified in the initial assessment. Table 2-4 shows examples of PHC project goals and objectives and their indicators. Objectives should be SMART (**S**pecific, **M**easurable, **A**ppropriate, **R**ealistic, and **T**ime-bound) and ideally, should specify the following:

1. the intended type of improvement
2. the target group (e.g., children 12-23 months, women 15-45 years)

3. the amount of change that should occur from the baseline (absolute number or proportion, or reference to standard)

4. the time frame for achieving the objective

Following are examples of objectives that are not SMART:

- to increase the immunisation coverage – neither specific nor time-bound

- to increase the mothers' use of oral rehydration therapy for all children with diarrhoea to 100% within one year – may not be appropriate and gives no idea of baseline

- to ensure access to basic health care for the affected population – not measurable

Most PHC projects have only two or three goals. However, each goal may only be achieved through several objectives. Each objective may be measured by at least one indicator. Examples of goals, objectives, and indicators are shown in Table 2-4 below.

*Table 2-5: Worksheet for Identifying Goals, Objectives, and Indicators*

TARGET GROUP	GOAL	OBJECTIVE	OBJECTIVE INDICATORS
Total population	To improve the overall well-being of the disaster affected population	Reduce the incidence of the 3 most common diseases to host population levels within 6 months	No. of cases diagnosed with the 3 most common diseases within 6 month period /Total population
		Provide the basic needs to all affected persons, including 15 litres/p/day of potable water within the first 3 months	% population who received at least the recommended minimum of basic needs
Children under 2 years	To improve the survival of children under 2 years	Reduce mortality among children under 2 years to a rate of 90 per 1,000 live births within 1 year	No. of deaths of children < 2 years per total no. < 2 years
		Decrease the prevalence of third degree malnutrition among children < 2 years by 30% within 6 months	No. of cases of third degree malnutrition among children age < 2 years/total no. age < 2 years
Women 15-49 years	To improve the reproductive health status of women of child-bearing age	Increase the prevalence of modern contraceptive use among women aged 15-49 years from 10% to15% within 1 year	% women aged 15-49 years who are using a modern contraceptive method
		To increase the coverage of ANC by 50% within 3 months	No. of pregnant women attended by a health worker at least once for pregnancy-related reasons

Sometimes people define *process* objectives (which are truly methods) rather than outcome objectives. Unfortunately, process objectives only indicate what the program is going to do, not what it is going to achieve. The table below distinguishes between *process objectives* (which are truly methods) and true *outcome objectives*.

Table 2-6: Differentiating between Outcome Objectives and Process Objectives

OUTCOME OBJECTIVES	PROCESS OBJECTIVES (METHODS)
To reduce the incidence of measles among children < 2 years to host country levels within 1 year	To provide measles immunisation services weekly at all health centre and do monthly outreach for all children < 2yrs within 1 year
To increase the average breast feeding period to at least 18 months among children < 2 years within 1 year	To provide for 1 year, bi-weekly individual and group counselling to motivate mothers to breast-feed children till the age of 2 years.
To reduce the prevalence of malnutrition among children under 5 years from 15-10% over the next 3 months	To improve the food supply from an average 1900-2,200 Kcal food/p/day to all displaced persons over the next 3 months
To raise the prevalence of modern contraception to 25% among women of child bearing age within 1 year	To extend the availability of information and services for modern contraception to all women of child bearing age within 1 year
To reduce the incidence of diarrhoea among the children < 5 years by 75% within 6 months	To increase the potable water supply in the district by 25% within 6 months

DETAILED PLAN OF ACTION
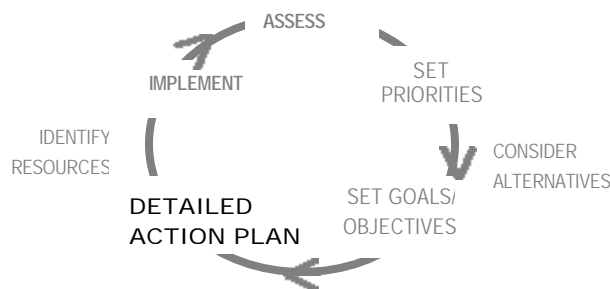
The next step is to define the **detailed action plan.** This plan of action defines how a project will be carried out in terms of strategies, activities and work schedule. Planners should draw a detailed action plan mainly for the initial phase of the project, as the situation may change thereafter. Where possible, preliminary action plans for activities that will be introduced after the initial phase of the project could also be drawn. To ensure the timetable or schedule for the planned actions is realistic, involve local workers with past experience in this field. Activities that could cause a delay should be anticipated and alternative timetables prepared. The plan of action should include suitable indicators and targets for monitoring the progress of implementation.

Identifying Strategies, Activities, and Work Schedules

1. Define What, How, By Whom, and Where

   a. From the eight components of PHC, consider all the services that should be carried out to achieve the project objectives. Then select those services that address the most urgent needs and consider the management services that are necessary for supporting the selected PHC services.

   b. The next step is to define the how the services will be delivered (strategies), e.g., whether the initial response will focus on preventive or curative measures, whether services will be integrated or function independently, community-based or facility-based. In acute emergencies, the priority is to control the situation quickly regardless of efficiency. Therefore determine the logical sequence of activities (methods) for each PHC and management service, e.g., vaccinate, manage cases, and maintain records. Supportive management services (e.g., training, supervision) should also be broken down into strategies and activities. (Refer to Table 2-6 below.)

Table 2-7: Work sheet for Identifying Services, Strategies, and Activities

Objective	Services	Strategy	Activities	Who Will Deliver	How and Where
Reduce incidence of measles	**Immunisation** Nutrition Health education Basic curative care	**Emphasise prevention**: Provided with basic supplies to new arrivals after screening at settlement entry point	Establish cold chain Vaccinate all < 12 years Active case-finding Manage cases	PHN at clinic Vaccinator at entry, clinics Vaccinator & CHW Community Health Doctor	At h/centre, camps, OPD consultation, home-visits, screening
Reduce incidence of diarrhoea	**Community organisation** Water/Sanitation Child health care Nutrition	**Emphasise promotion:** Mobilise community to participate in improving the sanitary conditions	Meet community leaders Form health committees Recruit volunteers Train on diarrhoea control Mobilise supplies	Community Organiser, PHN COs, PHN Health committee PHN, volunteers COs, PHN	Visit camp COs Assemble at camp offices Camps, health centres
Reduce incidence of malaria	**Basic Curative Care** Disease control Health education Nutrition	**Emphasise curative:** Provided regularly at health facility and periodically in community	Standardise case definition & treatment protocols Identify/refer cases from field Manage cases Maintain drug supply Maintain records	CHD, Pharmacy technician CHWs & supervisors CHD, CHN Pharmacy technician CHD, Clerks	Health centre Camps At h/centre At health centre

Note: *It is only when a relief program is being implemented that each activity is broken into a series of tasks. For example, to manage cases under basic curative care involves taking history, doing a physical examination then making a diagnosis which will determine whether to admit or refer the patient, prescribe treatment and book a follow-up, or simply give the patient some health care advice. Even then, only key tasks should be specified, since in emergencies it may not be practical to standardise every specific task in the face of changing emergency situations and resources.*

   c. People who will be responsible for carrying out key activities and tasks should be specified. Recognising that tasks should be assigned to the lowest skilled worker capable of doing the task, let the family and community do whatever promotive and preventive health care they can for themselves. It is also necessary to specify where each activity will be conducted.

2. Define the Timetable for Each Project

Estimate the duration of each activity. Then define the order in which related activities need to be performed (while considering obstacles) and the expected time frame. Thereafter, draw a monthly schedule for each service and an annual one for the entire program (project time-frame). A Gantt chart can be used to map the time-line of activities as shown in the table below. A Gantt chart can later assist in evaluating the process.

Table 2-8: Gantt Chart Showing Timeline for Oral Rehydration Therapy (ORT) Project

ORT ACTIVITIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Recruit volunteers										
CHW training on ORT										
CHW diagnose & prescribe ORT										
CHW motivate 20% mothers to use ORT										
CHW motivate 30% more										
Motivate remaining 40%										

Selecting Indicators and Targets

1. Select Indicators for Monitoring the Progress of Activities

a. For each PHC service to be delivered, define the principal *inputs*, *processes*, and *outcomes,* making sure that they are all logically linked. The systems approach (shown in Table 2-8 below) helps managers to remember all the essential information for each proposed service. One can start with the inputs and work forward, or from the desired impacts and work backward.

Table 2-9: Defining Indicators for PHC and Management Services

INPUT	PROCESS	OUTPUT	EFFECT	IMPACT
CHILD NUTRITION				
GM cards, scales, Nutrition monitors, Functioning TFC	weighing, diagnosing PEM, counselling	weight recorded, child referred to TFC, mother counselled on breast feed & nutrition	Mother understands child nutrition, Mother feeds better	weight gain, malnutrition drops
WATER SUPPLY				
Water monitors, chlorine, pipeline	Transport to taps, disinfect	Quantity & quality of water at household	Water consumed: drinking, hygiene	Decreased illness from diarrhoea and skin diseases
BASIC CURATIVE CARE				
CHD, CHN, drugs	patient consulting, diagnosing, counselling	patient diagnosed, counselled on therapy, drugs prescribed & issued as per protocols	patient understands therapy, complies to treatment	patient recovers, decreased death rates
SUPERVISION				
Supervisors, checklists	visiting, evaluating	performance evaluated and worker counselled	Improved skills, increased motivation	not applicable
COMMUNITY ORGANISATION				
Community Leaders	visiting	communities visited	active volunteers	not applicable

b. Since it is not feasible to monitor very many indicators, particularly in the acute phase, select two to three indicators to monitor the progress of each service. Experience has shown that the most crucial indicators for monitoring program implementation are the *inputs*, *outputs,* and *outcome* indicators as illustrated below:

- *Input Indicators* — Are the critical resources adequate to produce services/products? Cost of services?

- *Output Indicators* — Are the target groups being provided with the expected services and products?

- *Outcome Indicators* — Are the PHC services having the desired effect on the target group? Is there an increase in immunisation coverage? Has there been any health improvement?

Table 2-10: Examples of Indicators for Monitoring Program Implementation

Service	Input Indicator	Output Indicator	Outcome Indicator
Child Nutrition	% child care units which lacked nutrition monitors	% mothers counselled on proper child nutrition	% under-fives who are malnourished
Basic Health Care	% health units which experienced shortage of essential drugs and supplies	% malaria cases treated (as per protocols)	% deaths due to malaria

2. Set Targets

a. Performance may be measured in terms of quantity as well as quality. **Quality** may be assessed in terms of the service delivery *process* and *availability* of resources (e.g., drugs, staff). Checklists can be designed for both quality indicators and quantity indicators to measure the progress against the objectives, as shown in Table 2-10:

Table 2-11: Indicators for Monitoring and Evaluating Oral Re-Hydration Therapy

Input Indicators	Output Indicators	Effect Indicators
% health units which experienced stock shortage of ORS packets*	% health workers who counsel mothers on preparation and administer ORS *% health workers who correctly showed mothers how to prepare and administer ORS**	% mothers who know how to prepare and administer ORS % mothers who used ORS and continued feeding during their child's last diarrhoea episode
% health units using program guidelines about service quality to plan or focus training sessions in the last period	% health workers who received refresher training on specific PHC interventions within the last period *% training sessions given that completed the technical content**	*% health workers who showed improvement between the pre- and post-tests during training**

*Quantity indicators are shown in italics

b. Setting targets or standards helps to gauge the performance and detect any deficiencies in PHC or management services. Whether the targets or standards are based on base-line data or international standards (e.g., minimum standards), they should be realistic. In addition, they should be reviewed and updated periodically by the concerned staff. Targets may be set for the following criteria:

- **Access** – e.g., access to safe water resources within a walking distance of 15 minutes

- **Utilisation** – e.g., prenatal care attendance to be above 60% of pregnant women

- **Quality** – e.g., cold chain to be maintained 100% of the time

- **Resource availability** – e.g., 15 most essential drugs must always be available
- **Cost** – e.g., cost of drugs consumed to be within fixed budget
- **Coverage** – e.g., a minimum of 80% of children aged 12-23 months to be fully immunised

The Minimum Standards of the Sphere Project[ii]

The international humanitarian community, through the Sphere Project, have produced a set of **minimum standards** for humanitarian response. The aim of the minimum standards is to improve the effectiveness of humanitarian efforts in five sectors: water supply and sanitation, nutrition, food aid, shelter and site planning, and health services. Minimum standards can make relief agencies more accountable for what they are doing by providing a yardstick for measuring what an agency should try to achieve. These standards can also be used to monitor and evaluate the service delivery and outcome of projects. The following table summarises the areas covered by minimum standards for different sectors.

Note: *Using the minimum standards will depend upon the context of each emergency situation. Not every standard will be relevant in every situation.*

Table 2-12: Summary of the Minimum Standards of the Sphere Project

SECTOR	MINIMUM STANDARDS
WATER SUPPLY AND SANITATION	1. **Analysis**: initial assessment, monitoring and evaluation, participation 2. **Water Supply**: access and water quantity, water quality, water use facilities and goods 3. **Excreta Disposal**: access to and number of toilets, design and construction 4. **Vector Control**: individual and family protection, physical, environmental and chemical protection measures, good practice in the use of chemical vector control methods 5. **Solid Waste Management**: solid waste collection and disposal, solid waste containers/pits 6. **Drainage**: drainage works, installations and tools 7. **Hygiene Promotion**: hygiene behaviour and use of facilities, program implementation 8. **Human Resource Capacity and Training**: competence
NUTRITION	1. **Analysis**: initial assessment, response, monitoring and evaluation, participation 2. **General Nutritional Support to the Population**: nutrient supply, food quality and safety, food acceptability, food handling and safety 3. **Nutritional Support to Those Suffering From Malnutrition**: targeted nutritional support for moderate malnutrition, for severe malnutrition, and for micronutrient deficiencies 4. **Human Resource Capacity and Training**: competence, support, local capacity
FOOD AID	1. **Analysis**: initial assessment, monitoring and evaluation, participation 2. **Requirements**: requirements 3. **Targeting**: targeting 4. **Resource Management**: resource management 5. **Logistics**: logistics 6. **Distribution**: distribution 7. **Human Resource Capacity and Training**: competence, local capacity
SHELTER AND SITE PLANNING	1. **Analysis**: initial assessment, monitoring and evaluation, participation 2. **Housing (Shelter)**: living quarters 3. **Clothing**: clothing 4. **Household Items**: items for household and livelihood support, environmental concerns 5. **Site Selection and Planning**: site selection, site planning, security, environmental concerns 6. **Human Resource Capacity and Training**: competence, local capacity
HEALTH SERVICES	1. **Analysis**: initial assessment, health information system – data collection, data review, monitoring and evaluation, participation 2. **Measles Control**: vaccination, vaccination of new comers, outbreak control, case management 3. **Control of Communicable Diseases**: monitoring, investigation and control 4. **Health Care Services**: appropriate medical care, reduction of morbidity and mortality 5. **Human Resource Capacity and Training**: competence, support, local capacity

Source: "Humanitarian Charter and Minimum Standards in Response," The Sphere Project, Geneva, 2000

Identifying Resources Needed

Humanitarian ethics dictate that during acute emergencies immediate assistance should be given at any cost to alleviate suffering of the victims. Even if it involves providing large consignments of food, standard health kits, water trucking, or shelter material. Appeals for humanitarian assistance typically result in tons of unnecessary donations, which consume valuable storage space, manpower and time to sort. To ensure assistance is more efficient, the implementing agencies should specify what external resources are needed (e.g., personnel, commodities, equipment, drugs and transport). Estimates should be based on the assessment findings and proposed action plan. Otherwise major shortages could greatly interfere with the relief operation. After identifying the resources, a reasonable budget needs to be drawn for each project and for a specified time period. The budget should be based on information on the local availability of the required resources (in terms of their cost, quantity, quality, etc.). More resources should be focused on the community level and health centre level care (refer to the *Primary Health Care* chapter for details).

Standard rules for identifying and procuring resources must be respected. Donors should enquire from the relief agencies about the external needs before sending any donations. Other basic rules for selecting resources include:

- Must involve the affected population in order to build capacity.
- Should strengthen rather than cripple the existing services.
- Prolonged external support can lead to dependence that cannot be sustained.
- Must be compatible with local customs.
- Must conform to local protocols and methods.
- Select materials which can be rapidly mobilised and easily stored or distributed.

Resources for the program may be classified as follows:

- *Basic supplies* — what is consumed, how much, buffer stock for losses or sudden population influxes
- *Equipment* — what type, how to mobilise and maintain, clearance costs and possible duty charges
- *Staffing* costs — specify who, how many, for how long, training needs, staff health care, and end-of-contract bonus

Below is a summary of essential resources that relief programs may require:

Table 2-13: Essential Resources for an Emergency Health Care Program

Staffing		Basic Supplies	
PHC co-ordinator	Health co-ordinator	Food	Shelter/Service structures
Administrator	Medical assistants	Water supply	Shelter material
Field managers	Public health nurse	Sanitation	Household items
Finance staff	MCH staff	Drugs/medical supplies	Clothing
Logistics staff	Nutrition staff		
Guards/messengers	Health educators		
Cleaners	Water/Sanitation staff		
Drivers, mechanics	Health assistants		
Construction workers	Cleaners		

The following steps may be used to estimate the resources for the proposed actions:

1. Determine Basic Supplies

Estimating basic needs for the displaced persons according to internationally approved standards. The Minimum Standards of the Sphere Project identifies the following requirements:

- There should be access to sufficient amount of water for drinking, cooking and bathing (at least 15 L/person/day); additional supplies may be necessary if there are large numbers of domestic animals.

- A steady and adequate supply of sufficient quality food to sustain life (an average 2100 kcal/person/day).

- Safe access to sufficient number of clean functioning latrines (1 latrine per 20 persons or family).

- Each person has access to 250 g of soap per month.

- New Emergency Health Kits (1/10,000 population) are used initially, but later drug needs are ordered.

- The Minimum Initial Service Package (MISP) is used initially for people's reproductive health needs.

- Sufficient protection from the climate (appropriate shelter material and sufficient blankets per family)

- At least one full set of clothing per person (which is appropriate to the culture and climate) and a regular supply of sanitary protection for women and girls.

- People have appropriate household items (1 cooking pot with lid, 1 basin, 1 kitchen knife, 2 wooden spoons, 2 water collection and water storage vessels per family; 1 plate, 1 metal spoon, 1 mug per person)

- Particular attention is paid to the provision of cooking fuel, and the control and management of natural resources in the area around the camp.

- As soon as possible, people to have appropriate tools and materials to support livelihood activity.

Note: *Considerable losses occur, particularly food and drug,s during transport, distribution and at the household.*

2. Determine the Equipment Required

Determine the equipment required for key activities, such as cold chain maintenance, pumping water, and well drilling, laboratory, transportation, telecommunication, etc.

3. Determine Staffing Requirements

The affected population should play a central rol in delivering services. Outsiders may be limited by language barriers and unfamiliarity with the local culture. The following steps may used to estimate staffing requirements:

a. After specifying *who* will deliver services, determine *how many* workers are needed for each service. The number will vary according to the level of the PHC system. The minimum staff that can deliver the services should be recruited for the project. It is important to plan for supervision right from the beginning. The table below defines the minimum standards for staffing in health services:

Table 2-14: Health Services Staffing Based on the Minimum Standards

• Home Visitor:	1 per 500-1000 people (at least 50% should be female)
• Traditional Birth Attendant:	1 per 2,000 population
• Supervisor:	1 per 10 home visitors, 1 senior supervisor
• Qualified health worker:	1 per 10,000 population (based on 1 person per 50 consultations/day)
• Health worker:	1 per 20-30 beds (8 hour shifts)
• Doctor:	1 per 50,000 population
• Locally-trained health worker:	1-2 for pharmacy, 1 for ORT, 1-2 for dressing/injection/sterilisation
• Non-medical staff:	1-2 clerks, 1-3 guards (8 hour shifts), cleaners

b. It is not enough to base the number of personnel required only on the recommended health worker norms, but also according to the level of competence of the work force. To ensure the most productive use of people, the following should be specified when new staff are recruited:
    - Who will do what?
    - Who will be responsible?
    - Who will report to whom?

    Drawing an **organisational chart** and individual **job descriptions** may help answer the above questions. Organisational charts help define reporting lines while job descriptions are useful for selecting the right staff and preventing future problems of excess staffing or poor performance. For each staff position, very short job descriptions can be drawn (one to two sentences that summarise the main responsibilities will do). The organisational chart and job descriptions may need revision during the course of the relief project because of changes in the emergency situation, in staffing or program funding.

c. In order to determine *how much work time* will be required for specific activities, basic **work plans** (or timetables) may be developed as shown below. They are useful for guiding how the work will be carried out. Supervision should be included in the work plans to ensure that workers can get help when they need it and to maintain a high standard of service delivery.

Table 2-15: Example of a Community Health Nurse Weekly Work Plan

TASK	CHN WEEKLY WORK PLAN					
	Mon	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
Child care clinic			8-12		8-12	
Health education	8-9			8-9		
ANC	9-12				2-5	
Immunisation				9-12		
High-risk visits		8-12		2-4		
Supervision		2-5				
Community meetings	3-5					
PHC meeting			1-2			
Continuing education			3-5			9-12
Reports	ANC	MCH	EPI	CHW		

d. Because of the wide range of backgrounds and skills among the staff and to prevent waste of resources, task descriptions or **job aids** can be provided to instruct workers on how to perform a task in a standard (and efficient) way. Different job aids can be developed for various categories of health workers. They may range from simple pictures and instructions for community outreach workers to decision-making flow charts and checklists for qualified health workers. Many job aids have been developed and are readily available from the local Ministry of Health, WHO, and other organisations. For example, the WHO-UNICEF IMCI guidelines can be used to standardise the clinical management of common childhood illnesses. In addition to improving the quality of care, job aids can be used for supervising staff and helping them to achieve the desired outcomes from program interventions.

e. Determine the training gaps of the available work force by comparing their current skills to the desired level of skills, i.e., those skills that would enable them to carry out their assigned tasks according to set standards. Plan for training according to the identified training gaps, and arrange for in-service and on-the-job training to be provided by the more experienced staff. Up to 50% of the experienced staff's time should be spent on staff training and supervision. For more details on management of staff, refer to the *Human Resource Management* chapter.

4. Putting the Budget Together

A budget is a financial management tool that shows how much money is needed to carry out a relief project, as well as how the resources are distributed and used. It can later be used to evaluate how well the resources were distributed and used to achieve the project objectives. The following steps can be used to draw the budget:

a. Budgeting for the relief program should be based on the best available population estimates. The following table shows a hypothetical population profile that may be used to estimate the resources for a relief program for 20,000 internally displaced persons (IDPs).

Table 2-16: Hypothetical Population for Estimating Resources

Target Group	% Total Population	Estimated Size
Total population	100	20,000
Infants	4	800
Children 0-4 years	20	4,000
Children 0-14 years	40	8,000
Women 15-44 years	30	4,000
Elderly	10	2,000

b. First specify the minimum resources required for individual projects and then look at all the resources needed for the entire program. Since many projects involve similar inputs (personnel or supplies), resources should be distributed efficiently, in a way that will ensure optimal level of care for vulnerable groups. Requests should be sent to donors for essential staff, supplies, equipment that cannot be obtained locally.

c. Planners should budget for resources according to the health needs and available funding. They should to keep track of the cash limits for each project or items, e.g., vaccination or salaries or "in-kind" contributions (drugs, food, personnel, equipment, etc.).

d. The final budget may be prepared as a line budget or program budget (allowing for inflation, contingency plans and costs of running and evaluating the project). Agency and donor preferences and local practices should be respected when drawing the final budget. An outline and the advantages of each type of budget are shown in Table 2-16.

Table 2-17: Outline and Advantages of a Line Budget and a Program Budget

Outline of Line Item Budget	Advantages

<table><tr><td></td><td>Cost
(local currency)</td><td>Donor</td></tr><tr><td>Personnel
  Qualified
  Non-qualified
Capital Expenses
  Office
  Vehicles
  Laboratory
Recurrent costs
  Drugs
  Vaccines
  Stationery
  Travel</td><td></td><td></td></tr></table>
	• Easy to visualise costs.
	
	• Simpler to work out.
	
	• Good for small projects with few activities.

Outline of Program Budget	Advantages

<table><tr><td></td><td>Water/San</td><td>Food</td><td>Health Centre</td></tr><tr><td>Personnel
  Qualified
  Non-qualified
Capital Expenses
  Office
  Vehicles
  Laboratory
Recurrent costs
  Drugs
  Vaccines
  Stationery
  Travel
 	
 TOTAL COST</td><td></td><td></td><td></td></tr></table>
	• Breaks down cost per activity.
	
	• Good for multiple interventions.
	
	• Essential if funding may change during project.
	
	• Allows cost-analysis of multiple interventions.

Table 2-18: Example of Worksheet for Estimating Resources for a Relief Program (for 20,000 IDPs for One Year)

INTERVENTION			PERSONNEL			LOGISTICS			FINANCES	
			Required		Avail	Required		Avail.		
Service or Activity	Target Group	Frequency	Type	No.	No.	Type	Amount.	No.	Cost	Source
Community-based Health Care										
Reproductive Health: **Safe motherhood**	600 pregnant women (CBR~30/1000/yr)	50 ANC visits/month	TBA @ 30 deliveries/mo	2		TBA kits	30	10		UNICEF
CHW Home Visits: IEC (GM/ORS/EPI/ANC/FP), follow-up high-risk. referral, collect data, etc.)	3,500 households (@ 6 persons/house-hold)	1visit/house-hold/month High-risk 1/week or more PRN	CHW @ 30 persons per day	20	4	Weighing scale, ORS packs, registers, stationery	10 20,000 5	5 5,000 10		IFRC
Community organisation: H/Ed, dialogue, feedback	All mothers in 5 camps	1 camp meeting /mo	CHW CHN CHD	2.5 1 0.4		Flip charts	5			ONS
Outreach										
Vaccination	All children < 5 & pregnant women in 5 camps	1 visit / camp/week	Vaccinator	1		Vaccines, carrier, syringes, van	10 days/ month			UNICEF
Supervision	All CHWs, TBAs, Vaccinators	3 visits/ camp/month	CHN @ 1 per 10 workers	3		Van	15 days/ month			MOH
Centre-based										
Curative care (includes vaccination)	All 20,000 IDPs @ 4 consult /person/yr	200 patients/day (20% refer. to CHD)	CHN, CHD CHW Vaccinator	3 1 5 0.8		Drugs, equipment, van	2 days/ month			MOH MOH IFRC UNICEF
Management activities (meetings, reports, training)	Health care team, CHN, CHD	1/mo 1/mo	CHD CHN CHW Vaccinator	0.6 1 2.5 0.2		Stationery (registers, forms)				IFRC
Administration			Admin. clerk Junior staff Security	2 3 2		Van, stationery, cleaning supplies, etc.	2 days/ month			ONS
TOTAL			Vaccinator CHN CHW CHD TBA Admin. clerk Junior staff Security	2 8 30 2 2 2 3 2	1 1 8 1 10 @ 20% 1 1 1	Van, cost of other equipment	1			

ANC – antenatal care
GM – growth monitoring
EPI – expanded program on immunisation
FP – family planning
IEC – information, education, communication
H/ED – health education

CHN – community health nurse
CHD – community health doctor
TBA – traditional birth attendant

ONS – Operating National Society
MOH – Ministry of Health

IMPLEMENTING RELIEF PROJECTS

Project implementation is defined as transforming inputs through a set of systems and procedures to produce planned outputs. The implementation process is described in the Figure below.

Figure 2-6: The Process of Implementing a Relief Project
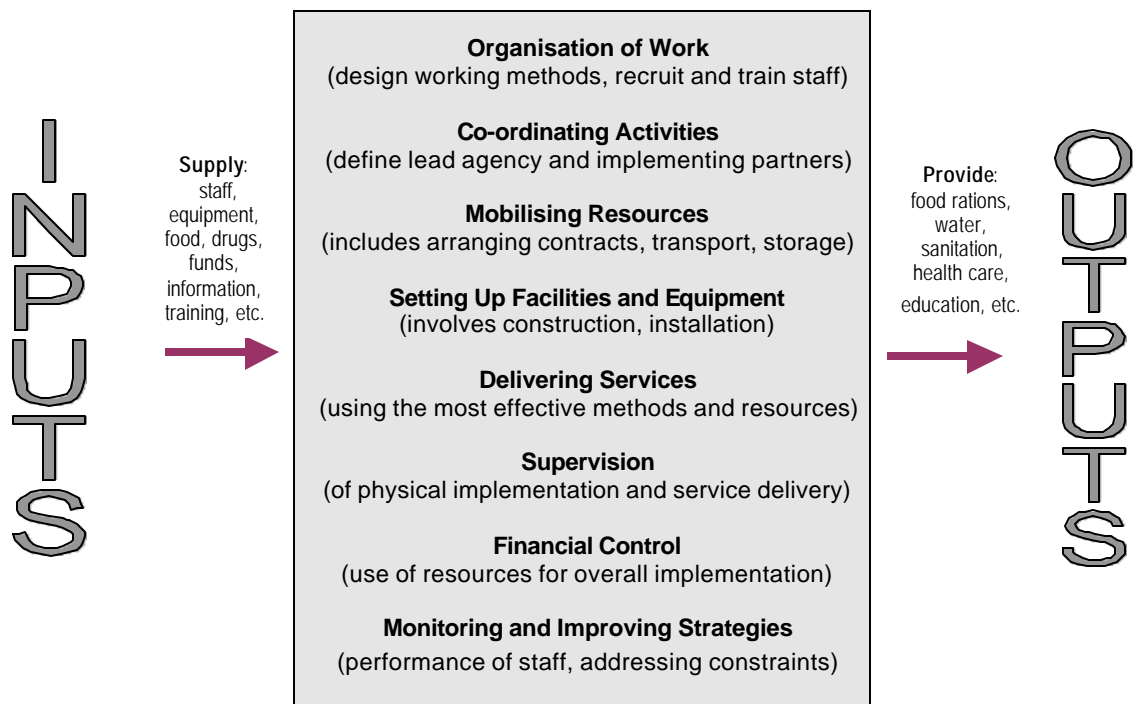
Implementation begins with organisation of work and continues until a project is fully operational. Implementation takes time. To be successful, it requires coordination, good leadership and management of staff, regular reporting of the progress of the project, and timely management of constraints and changes.

Coordination[iii]

The implementation of a relief operation needs to be coordinated with the activities of other partners (government ministries, UN and other concerned agencies). Good coordination will result in the following:

- appropriate division of responsibilities,
- elimination of gaps and overlap in services,
- uniform treatment and standards of protection and services for all the beneficiaries,
- maximum impact for a given level of resources.

It is important to establish a single coordinating body to provide a framework within which the overall relief response can be coordinated. Where a coordinating structure does not exist, the concerned United Nations agency (e.g. UNHCR for refugee situations, the WHO for natural disasters) should take the lead in cooperation with the host country in setting up a coordinating body and mechanism. The coordinating body should have clearly defined responsibility and authority.

Coordination is not free. It has costs in terms of time and other resources that are needed to make it work. The coordinating body should hold regular meetings where the overall progress is reviewed and plans adjusted. Government ministries and departments, UN agencies and all concerned NGOs should be represented in the coordinating body. For large scale emergencies with many actors, sectoral committees, for example for health and nutrition, may be set up to coordinate implementation in that sector. These committees could be made responsible for developing common standards for the delivery of assistance This is particularly important where a number of agencies are providing similar assistance.

Leadership

Translating project plans into action requires good relief managers who can ensure that activities are carried out as planned so that the intended objectives can be achieved. In other words, managers should be good leaders who can provide a sense of to direction to team members and motivate them to be committed to the mission's overall goals.

In emergencies, there is no correct management style as everything depends on the situation and the ability and confidence of a relief manager in leading a team. Managers are accountable for their staff, time, material resources, for making timely reports of what is being done, and even for their health and welfare. The following table summarises the role of a manager during the course of a relief project:

Table 2-19: The Role of a Manager

ROLE	DESCRIPTION
Leading the team	Motivating and inspiring team members to exceed their personal expectations, in line with the mission's objectives and providing an "enabling" environment for team members to work effectively.
Managing people	Adopting a flexible management style according to the abilities of each team member. Provide direction when needed but look for opportunities to give responsibility.
Team building	Holding regular meetings is both a clear indicator of the team's working methods and an excellent opportunity for team building.
Communicating the project purpose and strategy	Taking the time to review the purpose and strategy of the project with the team, build their commitment and keep emphasising the need to be flexible in order to adapt to new challenges. Also communicating the potential security risks and evacuation plans.
Managing the performance of team members	Taking the time to sit down with each team member and discuss how their work is going and how performance can be improved.
Managing for results and building capacity	Making the job more interesting by giving responsibility, recognising work that is done well and involving team members in program monitoring, analysis of trends and decision-making.
Delegating responsibilities	Delegating tasks is essential and should be done gradually, with on-the-job coaching. Be sure to give the necessary authority and resources.
Managing conflicts	Conflicts cannot be completely avoided, but they should always be prevented from growing into major problems.
Coordinating with the team and others	Reporting and sharing information from the central level with the field staff, and ensuring important information is passed to the coordination body.

Managing Staff

All project managers need to recognise and understand the importance of good management of staff. Certain aspects of disaster relief operations make human resource management particularly important, for example:

- Humanitarian assistance consists of services provided to people by other people. As a service industry, which depends on good relationships with all stakeholders, human resources are the most valuable asset of relief operations.

- Because of the urgency of responding to disasters, humanitarian organisations are often forced to hire inexperienced or unsuitable staff. To ensure that the quality of relief services does not suffer, it is necessary to set up the management systems in a way that addresses this reality.

- Humanitarian organisations usually hire both local and expatriate staff. Human resource policy can prove to be either an obstacle or an aid to building co-operation and team spirit between all staff, regardless of their culture, position, or gender. Addressing the professional and personal needs of both staff pools can greatly reduce the high staff turnover typically experienced by humanitarian agencies.

- Working in disaster situations often exposes workers to security incidents, a high level of stress and health risks, and insufficient support from headquarters. Human resource policies must be designed with these special challenges in mind.

On recruitment, each worker should be welcomed and given a good orientation of the relief operation and working environment. A detailed job description should be provided, which informs of his or her main responsibilities, relationship to other workers and the expected *achievements* from doing a job. (An example of a job description is shown in Table 2-19.) Thereafter, all workers should receive adequate support from both the project and headquarter level. Supervision and periodic evaluation of performance should be carried out to identify further training needs as well as to consider promotion or other incentive.

Table 2-20: Responsibilities of a Medical Assistant

Administrative Duties	Patient Care
• Maintain smooth-running of health centre • Co-ordinate health centre with community activities • Supervise team of health workers • Facilitate collaboration with other sectors • Convene health committee meetings • Manage basic health information system • Monthly reports (for MOH, UNHCR)	• Preventive care: screening for TB • Promotive: counsel on child care, nutrition, hygiene • Curative: diagnosis, treatment, referral and follow-up of ill patients

Managing Constraints and Changes

During the course of the relief operation, managers are constantly faced with an evolving situation and unexpected complications. They should think of all possible ways in which plans may go wrong and plan how to prevent such complications before they happen. The following table describes common constraints and possible actions.

Table 2-21: Examples of Constraints and Possible Actions

CONSTRAINT	SUGGESTED ACTION
Inadequate or incorrect baseline data resulting in inappropriate project objectives, e.g., only long term objectives defined for a rapidly changing situation.	Improve information system and monitor trends and always set both short and long-term objectives for unstable situations.
Lack of basic skills among staff.	Not solved by increasing the number of workers but by recruiting the right staff and providing on-the-job training.
Procedures for procuring material resources too complicated, causing delays in setting up the relief project and poor quality of outputs.	Train logistics staff on basic procurement procedures while initially ordering for standard emergency kits.
PHC approach not supported by professional health workers.	Facilitate dialogue on PHC concept and successful programs.
Community participation may not occur in practice.	Discourage top-down decision-making.
Poor integration of community-based health interventions into the existing health care system, e.g. community health workers not supported by community and professional health team.	Involve all concerned in planning, implementation and evaluation of the project.
Environmental changes beyond managerial control causing an increased incidence of communicable diseases.	Improve surveillance for early warning signs.
Unexpected population influxes due to worsening political situation in neighbouring regions.	Plans for relief response to unstable emergencies should be flexible.
Developing constraints not picked up by the monitoring system.	Periodically evaluate the information system.
Chronic delays by central authorities (agency, host country, donors) in responding to emergency requests.	Improve data collection and reporting.

Sometimes the problems or needs identified during the assessment may evolve, calling for changes to be introduced. A plan that no longer addresses the needs of beneficiaries, overlooks vulnerable groups or causes serious negative effects should be changed or abandoned. Since not all changes are easy to implement, it is important to review the plan and determine if it should be adjusted to the reality, rather than the partners. Any changes of plan should be discussed with all who may be affected. It is easier to implement changes when all partners approve changes to the original plan.

For more details about Leadership, Managing Staff, and Managing Changes, see the *Human Resource Management* chapter. Many of the principles covered in that chapter apply across all organisations, be they for-profit businesses, government offices, schools and hospitals, or humanitarian assistance organisations.

Reporting

Reports are management tools that summarise the results of monitoring the progress of a project toward achieving the objectives. They are good for analysing the progress of activities as well as for sharing information with other concerned parties. Reporting for the project should be outlined in advance in terms of:

- What is to be reported?
- Who will prepare the reports?
- How often will the reporting be done?
- To whom are the reports to be submitted?

Reporting must be timely, regular and accurate, to ensure good management support and sufficient funding for a relief operation. In order to meet reporting deadlines, managers have to take time off from other demands to write reports. Even if no progress has been made or the data is incomplete, they should follow the principle "go with what you have" and compile the required report. In emergencies, no news is *not* good news. The frequency of reporting will depend on the nature of the emergency and the type of report. A manager may have to submit different types of reports including *situation reports, monthly reports, quarterly reports, final reports* or *special donor reports*.

Some reports have to follow a particular format. Where no special format is requested, the standard reporting requirements and procedures of the implementing agency should be used. Even though various funding partners may require their reports in special formats, all reports actually provide differently worded answers to the same basic questions, namely:

- What was intended?
- Has it been done?
- If not, why not?
- What is to be done next?

Reports should be objective, factual and brief, yet provide enough details for a reader to understand the context of the project. Including the priorities and plans for the next reporting period may be helpful. All information should be checked and verified, and its sources quoted in order to establish reliability.

MONITORING AND EVALUATING RELIEF PROJECTS
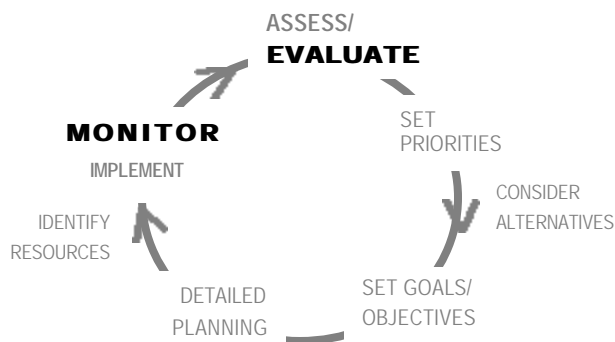
Program monitoring and evaluation can provide a powerful means for building support for assistance to displaced populations. It is important that relief programs are evaluated as follows:

1. **Initial Evaluation —** usually known as **needs assessment**, carried out before starting a program asks, "What is happening?

2. **On-going Evaluation —** usually known as **monitoring**, carried out during implementation by those managing it, asks, "How is the program progressing?"

3. **Interim and Final Evaluation** — An interim evaluation, usually known as **process evaluation**, is carried out between program phases, may ask, "What has been achieved from the resources allocated? What are the other needs?" The final (end-of-project) evaluation, usually known as **outcome evaluation**, asks, "Have the objectives been achieved?"

The above three evaluations are essential for good program management. When combined, they provide information on the full range of an emergency situation and the relief response. The information gained can be used for establishing or confirming relief program priorities, for linking resources to needs and for measuring program results against intentions. Most relief programs carry out the needs assessment and on-going monitoring. However, due to limited resources, process and outcome evaluations are less likely to be carried out.

While a needs assessment is useful for determining the initial response, and monitoring for checking that the objectives are still valid for achieving the overall goal, relief agencies should recognise that an interim or end-of-project evaluation can greatly influence how future projects are planned and managed. The time and resources for carrying out *all* evaluations should be budgeted for from the beginning of a relief program. How the results of each evaluation will be used should also be decided in advance so that results can be presented in the most practical way. Representatives of the affected community should be involved in organising and carrying out all evaluations as relief organisation must be accountable, not just to donors, but also to the beneficiaries.

Monitoring

Monitoring primarily means watching the efficiency of project implementation. It concentrates on project inputs, outputs and processes, while checking the progress of work against earlier identified indicators. It also attempts to identify reasons for any differences between actual and planned results.

Purpose of Monitoring

- To make sure the program is implemented as planned:
    - resources are mobilised as scheduled.
    - services and products are delivered as planned.
    - beneficiaries are receiving quality services as intended.
- To detect when something goes wrong so that it can be fixed (a supportive role).
- To revise objectives (if inappropriate in addressing the original problem, or if the situation has changed).
- To make sure that any program changes are carried out as planned and that they work.

A good monitoring system can show whether or not actions are in line with the project goals and objectives, and where the plan needs to be adjusted. In addition, monitoring program **outcomes** and impacts can reduce the amount of work involved in an interim or final evaluation. Monitoring is usually done through an **information system**. An information system consists of people, equipment and procedures that are organised to provide information (e.g. use of health services, disease surveillance, health status of affected population and program management) to health workers in a way that enables them to make informed decisions.

Objectives of an information system include the following:

- To follow trends in the health status of the affected population and establish health care priorities.
- To detect and respond to epidemics.
- To evaluate program effectiveness, coverage and quality of services delivered.
- To ensure that resources are targeted to the areas of greatest need.

To be effective, the information system should:

- *Collect only the most relevant data* — focuses on data which is of direct relevance to work and conforms with the data processing capabilities.
- *Be simple, up-to-date and cost-effective* — consumes the minimum amount of time and resources to collect and analyse.
- *Be action-led* — linked with decision-making and feedback. Data collectors should also be able to use the data they collect for their decision-making.

Setting Up an Information System (IS)

A very systematic approach is necessary when establishing an IS. The following steps can guide people setting up an information system where none exists or where the local IS cannot be strengthened:

1. **Define the People Concerned with the IS**
   One person or agency at the highest PHC level must be put in charge of co-ordinating the information system and regularly supervising data collectors based in facilities and within the community. The reporting lines should be defined and key people made responsible for monitoring and reporting data for different levels/facilities. All data collectors should understand the purpose of gathering data and should be trained to follow standard data collection procedures.

2. **Define What Is to Be Monitored**
   Indicators to be monitored should meet the objectives of the information system, i.e., they should be related to decisions that need to be made. The volume of data to be collected should be manageable. Because it will not be feasible to monitor all the activities simultaneously, organise the management information system as follows:
   a. Summarise the baseline survey findings
   b. List the program objectives, for example:

   - Improve child survival rates to pre-emergency levels within 3 months.
   - Increase measles immunisation coverage to 95% of children less than 5 years within 3 months.

- Improve food availability to 2,100 kcal/person/day for all displaced people within one month.
- Increase potable water supply to 10 litres/person/day within one month.
- Reduce the malnutrition rate from 15% to below 10% for children under 5 years within three months.

c. Summarise each PHC and management activities that is carried out in order to achieve the objectives, in terms of *what, how, when* and *who* (may be extracted from the detailed plan of action).

d. Define the indicators to be monitored and set targets for all PHC and management services: Select 2-3 indicators that will show the progress of each service and the achievement of targets. Targets that were defined in the action plan may be adjusted during the course of implementation, as more reliable data is gathered. Indicators may be categorised as follows:

   i. *Demography* (quantify target population: total, age/sex breakdown, new arrivals, ratio to host population)

   ii. *Health Status* (birth rate, death rate, morbidity incidence and prevalence, nutritional status)

> **Note** : - *determine cause-specific morbidity/mortality to identify the priority interventions.*
>
>   - *determine age/sex-specific morbidity/mortality to assess equity to resources and services and to target interventions.*
>
>   - *after the acute emergency phase, health status does not usually change rapidly, and may be monitored annually to detect changes resulting from project interventions.*

   iii. *Program Process* – assess the output, coverage and quality of services. Table 2-22 on the next page shows specific examples of program process indicators for various PHC services.

   iv. *Resources* – assess the quantity and quality of supplies, equipment, staffing, finances, etc. The following table shows specific examples:

Table 2-22: Examples of Resource (Input) Indicators

Resource	Quantity Indicator	Quality Indicator	Expected Number /Ratio to Total Population
Facilities			
Hospital	# per total population	Access, utilisation, morbidity/mortality	1 per 30,000
Health centre	"	"	1 per 10,000
Health post	"	"	1 per 5,000
Cholera centre	"	"	1 per camp
Therapeutic feeding centre	"	"	1 per camp
Staffing			
Camp administrator	# per camp	Level of training	1 per camp
Storekeeper	"	"	"
Registration officer	"	"	1 per camp
Registration team	# per daily arrivals	"	10 per 1,000 daily arrivals
Supplies			
New Emergency Health Kit	# per total population	% drugs expired	1 per 10,000 for 3 months
Beds	"	Bed occupancy rate	1 per 1,000
Domestic kits	"	Use by beneficiaries	1 per household

Table 2-23: Examples of Program Process Indicators

Emergency Health Service	Output	Coverage	Quality of Services	Target
Nutrition	# beneficiaries/month	% population getting an average 2100 kcal/p/day	Global malnutrition rate for children < 5 years	Malnutrition rate < 10%
Water	# Litres/person/day	% population within 15 mins walk to safe water sources from shelters	Water quality Frequency of water shortage	Average water supply: 20 L/person/day
Sanitation	Persons/ functioning latrine	% population with latrines close enough to dwellings for safe access, day or night.	Cleanliness of latrines	Latrine coverage: 1 per 20 people or 1 per family
Maternal health care	# ANC visits/month	% mothers with child < 24 mos. who received ANC at least once before delivery	% of high risk pregnancies detected	All pregnant women: (estimated at 25% of women)
Child care	% mothers counselled on breast-feeding	% children 18-23 months breast-fed until aged 18 months	Infant mortality rate (IMR)	IMR < 2.0/ 1,000/ day
Immunisation	% children vaccinated/month	% children 12-23 months fully immunised	Measles incidence & mortality rates	>= 95% measles coverage 40% vaccine loss
Disease control	# diarrhoea cases given ORT/month	% diarrhoea cases given ORT	Frequency of ORS shortage	100% ORS availability
Health education	# home visits/month	% homes visited by CHW	Level of awareness	100% coverage
Treatment of common diseases and injuries	# patients treated/month # admissions/month	% malaria cases treated	% emergency cases detected early Case Fatality Rate (CFR)	Acute phase: Total visits = total population Post-emergency phase: 4 visits/person/year
Essential drugs	# prescriptions /month	% population with access to essential drugs	Frequency of drug shortage Cost per prescription	Acute phase: NEHK Post-emergency: essential drug orders

3. **Define the Equipment /Tools for Data Collection**

The IS co-ordinator should ensure a constant supply of the following tools/equipment to facilitate smooth function:

- *Simple tools* for collecting and recording the information on indicators for each PHC service include pencils, maps, graphs, health cards, diaries, checklists, tally sheets, registers and pictorial charts (for workers with low education levels).

- *Communication channel* for transmitting information from the data collectors up to the level of the MIS Co-ordinator who needs to transmit the analysis results to decision-makers. This may involve vehicles, radios, telephones, faxes, etc. Other means of communication may be considered for giving feedback to the beneficiaries and data collectors, e.g. progress reports, quarterly newsletters.

- *Analysis tools*: should always be done manually with a pocket calculator and verified, where possible, by computer. EPI-INFO, a public domain software from CDC may be downloaded free through the internet. A CD-ROM version is also available.

4. Define the Procedures

To regulate monitoring, the following should be decided in advance:

a. *Information sources and methods for collecting data* for each indicator (observation, interviews, surveys, census).

b. *Frequency* of data collection and compilation (depends on the event being studied and available resources), e.g., in the acute emergency phase, death rates may have to be monitored daily, and later weekly then monthly.

c. *Standard data handling procedures* – to improve data quality, train staff to use:

- standard recording procedures (e.g., event to be tallied just *before* giving service)
- standard case definitions (e.g., malaria = fever > 38.5 C and absence of other infection)
- standard compiling procedures (total events summed up by the end of the day; daily summaries summed up weekly, and then monthly). Note the time, place and person for all data collected.

d. *Standard analysis procedures* – how the data will be analysed will determine how it should be collected, e.g. if use of services will be analysed by gender, then information on gender must be included in data collection. Adequate time and resources should be allocated for data analysis which should begin at the field level where the results can be used.

e. *Standard reporting procedures*: The results of the analysis should be displayed in an easily understood format for decision-making, e.g., using percentages, rates, tables and graphs, etc.

Note*: To ensure use of standard case definitions and indicators by all implementing agencies, the coordinating body for the overall relief response should develop and promote standard data collection and reporting protocols.*

5. Take Appropriate Action

After receiving the analysis results, share the information during management meetings and determine how to solve reported problems. This will help the project adapt to the evolving phases of the emergency. Data collectors should be informed about these decisions to keep them motivated.

6. Adapt the IS to Changing Information Needs

- Periodic examination and revision of the information system should be planned, particularly following any major changes in action plans. The information system should evolve as the needs for information changes.
- Any additional resource-needs to maintain the function of the IS should be addressed.
- This information should also be stored in a database as future reference for similar emergency situations.

Evaluating

Evaluation means to systematically establish the relevance, efficiency, effectiveness, and impact of the project in relation to its goals and objectives. This involves:

- Looking at whether the original problems to be tackled have changed since a project began, and whether the objectives have been achieved or not, in order to improve on-going operations (INTERIM or PROCESS evaluation).
- Measuring the actual results against the set goals and analysing reasons for success or failure in order to draw lessons for future planning, programming and decision-making (FINAL or OUTCOME evaluation).

In other words, evaluation is "the periodic measurement of performance against intentions." Evaluations are only possible if objectives and quantifiable indicators of success were defined at the beginning of a relief project. It is not enough to carry out regular monitoring of the project. **Interim evaluations** of the Gantt chart, job descriptions, job aids, staff work plans can help identify solutions to problems detected by routine monitoring and to adjust the action plan for the next phase. Few organisations conduct a **final evaluation** to assess the benefits, the effectiveness and the *impact* of a completed project. Final evaluations are essential for large, complex projects and particularly for long-term development projects where the final benefits may not be known for many years after completing the project.

Note: *Evaluation is a management and learning tool. It does not "put the project on trial," like an inspection (on-the-spot checks to investigate a particular problem and determine appropriate solutions) or audit (which is a review of whether activities measure up to set financial or management standards).*

Types of Evaluations

The type of evaluation that is carried out will be determined by who is included in the evaluation team. It may be carried out by the project staff, beneficiaries and/or external supporters as follows:

3. **Internal Evaluation** — This happens when members of the implementing organisation evaluate their own relief projects. Results from this type of evaluation are subjective, particularly when future funding depends on good performance, since they deal with how people feel about a project, rather than concrete results of the project. While an internal evaluator is immediately familiar with all aspects of the program and often poses less threat to others involved in the activities, s/he may lack objectivity and/or special evaluation experience.

3. **External Evaluation** — A more objective evaluation may be designed and conducted by bodies outside the implementing organisation. These evaluations greatly add to the credibility of the organisation but are more costly and time-consuming. More money should be invested in outside expertise for larger projects and for end-of-program evaluations. Program managers should ensure that external evaluators fully understand the goals and objectives, which is critical to a relevant evaluation.

3. **Self-Evaluation (Participatory)** — Beneficiaries of the project can be invited to participate in the evaluation as full partners with the organisation staff. They are the ones who can truly explain how an intervention has affected the target population: whether it was for better or for worse. They can provide insight and information on areas that may have been overlooked while planning the project and the evaluation. In addition, trusted and respected members of the community may be able to get more detailed and/or accurate information from the affected population. Finally, involving them enables the transfer of vital skills (i.e., evaluation skills) to the community. However, beneficiaries participating in such exercises may feel pressured by their community to view the project in a less objective way and use the opportunity to make additional demands.

The following table summarises the advantages and disadvantages of including different members of the evaluation team:

Table 2-24: Advantages and Disadvantages of Having Various Members on Evaluation Team

Evaluation Team Members	Advantages	Disadvantages
Beneficiaries	• Provide a unique "user" perspective. • May learn new skills. • Fosters co-operation and understanding between project staff and beneficiaries.	• May be influenced by other beneficiaries. • May have vested interests.
External consultants	• No vested interest. • Can apply "lessons learned" to and from other projects.	• May not understand the local situation well enough. • May lack support of project staff. • Can be expensive.
Donors	• Have a good overview of program goals and objectives. • May better understand the progress and the operating environment of the project as a result of their participation.	• May raise too many questions. • Can make program staff and beneficiaries uncomfortable and possibly pressured to report progress inaccurately (i.e. tell evaluation team what they want to be told rather than reality). • May have expectations and goals that are unrealistic or not the same as the agency's
Local authorities	• Provide a unique perspective of community-wide issues relevant to project progress.	• May be skilled in doing evaluations. • May take too long to report findings. • May be influenced by political interests (either their own, or from elsewhere within the community).
Program staff	• Good resource persons for immediate feedback.	• May find it difficult to criticise own program. • Often perceived as less credible by donors and other outside parties due to natural tendency to be subject.

Planning an Evaluation

Evaluations need to be planned when a project is being designed. The terms of reference should be written and agreed upon in advance, including the criteria for measuring the project's progress towards success (i.e., comparing achievements to baseline or target indicators), the types of evaluations that will be carried out, the dates and the cost. This will help determine what information needs to be collected during the course of the project. When planning an evaluation, determine *who, what*, *where, when* and *how* to carry the evaluation, as follows.

1. Who

    Who should be on the evaluation team (the beneficiaries, external consultants, donors, local authorities, and/or program staff) and who needs the report will depend on the answers the following:

    • **Who will participate in the evaluation?** – This will depend on the timing and depth of the evaluation, the availability of different parties, and the available funding. The team should not be too large and women should be included in order to assess the impact of the project on women's needs and status.

    • **Who are to be the users and why is the information needed?** – an outside consulting team may be most appropriate if the evaluation is for donors who want to measure impact of the intervention. Project staff and beneficiaries can evaluate the project on a smaller scale to help the organisation plan the next phase of activities or write a proposal to extend the project.

2. What

What is to be evaluated will depend on the purpose of carrying out an evaluation. The aim of evaluation is it to research, understand, and document changes that have occurred as a result of the project. These changes may be measured according to answers to the following:

- **What are the project's goals and objectives?** – In many cases, project planners do not fully understand the difficulty of evaluating objectives that are unclear or not measurable until the time comes to evaluate activities. Involving them may help them to better define goals and objectives for future projects

- **What are the assumptions upon which the project was designed?** – this will help to identify links between the inputs, outputs and impacts. This model can then be compared with the actual implementation.

- **What are the policies for operating the project?** – evaluating information about health indicators, without considering an agency's policies for the operation may not provide a complete picture.

3. Where

Where the evaluation will be carried out will depend on the project and the evaluation team's capacity to gather information. This may mean travelling to a number of different locations. For example, in evaluating an immunisation project, the evaluation team may review the supply and storage of vaccines at the central and district level of health care, thereafter evaluate specific immunisation activities in the field. They may review records at health clinics, and visit the target population immunised in their households. All the information should be gathered from representative sources of information.

4. When

When to carry out an evaluation will depend on the length of the project cycle and the purpose of the evaluation – i.e., why the information is needed. Short-term projects that begin and end within a six-month time frame, will most carry out on-going data collection for monitoring purposes, and then only a final evaluation, if any, at the end. Projects that address the more long-term needs of displaced populations may include both interim and final evaluations.

5. How

How an evaluation is conducted will depend on the purpose for the evaluation, and time and cost constraints. In addition, certain donors may request for a particular evaluation method, e.g., **qualitative** rather than **quantitative**. Quantitative evaluations can be carried out alone, but combining them with qualitative evaluations can help to explain deviations in quantitative data. (For more details about qualitative and quantitative methods of data collection, please refer to readings suggested at the end of the *Disaster Epidemiology* chapter.)

Carrying Out an Evaluation

Carrying out the evaluation involves the following:

1. Data Collection

Once the team has defined the information to be collected and the most appropriate methods and sources of information, the evaluation should proceed smoothly. Many areas can be explored during evaluations, and their importance will vary from project to project. The following table gives examples of key information that can be obtained from evaluations.

Table 2-25: Information from Evaluations

1. What were the project's objectives? To what extent have these objectives been achieved?	11. What is the relationship between the project objectives and the problems addressed?
2. In retrospect, how realistic were the objectives when they were set against existing limitations? What alternative objectives were considered and why were they rejected?	12. What factors account for the variations in the level and the distribution of benefits produced?
3. When were the benefits of the project expected to materialise, and when were they actually realised? How did this timing correspond with the timing of the needs which were addressed?	13. What were the intended benefits from the project? Who was expected to benefit from the project; who actually did and who did not benefit?
4. How was the program organised, set up and financed?	14. How were the various levels within the aid system linked?
5. Is the organisation's communication and co-ordination efficient? Is its structure flexible enough to adapt to changing conditions? Are decision-making and authority lines clear?	15. What pressures were exerted on the project and personnel? Where were these pressures generated?
6. What opportunities existed for the beneficiaries to influence the project set up?	16. Which way did information flow? To whom is the organisation accountable?
7. Has the project encouraged the growth of networks to facilitate problem-solving and learning between the communities and organisations?	17. What effect did the project have on local and social processes, on the way different communities and individuals interact and participate in public life?
8. What effect did the project have on the coping mechanisms within the community? Did the project improve or damage this internal system? Was any dependency created?	18. What effect did the project have on the physical environment?
9. Was there an effective control system for tracking the disbursement of financial and capital items and service provision?	19. Is the system geared to avoid and solve conflict – either internal or with other organisations?
10. What policy lessons have been learned from the project?	20. What issues emerged during the setting up and management of the project that might be generalised to other situations?

2. Dealing with Constraints

While an evaluation can be a powerful management tool for identifying project strengths and weaknesses, it is important to recognise that there are many constraints to project evaluation. Evaluators and program managers should address the following constraints when planning or preparing for an evaluation:

- Goals and/or objectives are frequently unclear or unrealistic.
- Projects often accomplish positive effects besides "documented" objectives.
- Health service programs are usually complex and individual components are difficult to separate.
- Health outcomes are difficult to link to cause and effect.
- The question why goals have or have not been reached is a key issue.

3. Reporting the Evaluation

It is important to specify to whom, when and how to report an evaluation in advance. The evaluation report should describe what the project has achieved or failed to achieve, and explain the reasons for its success or failures. In addition, it should include recommendations on how to improve the project in the future. Any recommendations that are accepted should be acted upon. Interim evaluations may require immediate action while end-of-program evaluation recommendations may be built into the planning and implementation of the next project. Major evaluations should include a review of whether recommendations from previous evaluations were taken up and acted on. The evaluation report should be shared with all parties concerned, including beneficiaries where applicable.

SUMMARY OF MANAGEMENT

Poor management of relief programs has resulted in poorly organised, inappropriate, delayed, and ineffective relief. Managers of relief programs should be skilled but flexible if they are to accomplish the organisation's goal. Otherwise, the plans may remain on paper. Planning a relief operation is hard work because it needs to be based on the best available information, which may be difficult to collect. For every emergency, the health needs of the affected population must first be identified and prioritised (since not all problems can be addressed at once). The detailed action plan should address both short-term objectives (for immediate survival needs), followed by long-term objectives (to foster recovery and build capacity of the affected population). Continuous monitoring of the program implementation is essential to measure the achievements of the program against pre-set objectives and to determine whether the priorities and objectives need to be adjusted. Once the humanitarian response has been implemented, the relief program can be evaluated to determine the effectiveness of the primary health care services, i.e., whether or not the objectives have been met and identify important lessons for future programs.

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[i] Collins, Charles. 1994. Management and Organization of Developing Health Systems, pp 2:
Keeling pointed out that "the most we can hope to achieve in management is to move frequently and quickly as possible to better positions from worse. Management in the public service is for those who can travel hopefully, not for those who expect to arrive."

[ii] A project of SCHR and Interaction, with VOICE, ICRC and ICVA as observer members. SCHR is an alliance for voluntary action of: CARE International, Caritas Internationalis, International Federation of Red Cross and Red Crescent Societies, International Save the Children Alliance, Lutheran World Federation, MSF International, Oxfam International and World Council of Churches. InterAction is a coalition of over 150 US-based non-profit organisations. VOICE is a European consortium of agencies working in emergencies while ICVA is a consortium of NGOs from the North and South.

[iii] UNHCR Handbook for Emergencies, second edition 2000.