

## Chapter 20

# Implementation

Once the detailed programme design is complete, implementation of the emergency sanitation programme can begin. It should be noted that immediate action is likely to be implemented in a less systematic way than longer term activities since this occurs before the detailed programme design is completed, but the same principles apply. The implementation time-scale is likely to be several months to several years, depending on the relevant scenario and programme. (Detailed supporting information can be found in the Manual, Chapter 14.)

### 20.1 What is implementation?

Implementation is transforming a planned programme into reality in the field. To ensure that implementation runs smoothly it is first necessary to have a properly thought-out plan, or programme design. Once the planning has been done, implementation is simply a question of managing the various programme components as efficiently and effectively as possible.

The primary objective of any emergency sanitation programme is to:

*Improve and sustain the health and well-being of the affected population.*

Such an objective is crucial and all activities should be geared towards this ultimate goal. Implementation targets are simply a means to an end and should always be viewed as such. An appropriate sanitation programme attempts to achieve the primary objective through the provision of appropriate and adequate sanitation facilities and improving hygiene practice - both elements need to be implemented equally effectively in order to compliment one another.

The term 'implementation' should not apply solely to the practical implementation of activities outlined in the detailed programme design. It should also apply to the day-to-day planning of those activities and how they are to be managed or co-ordinated. It also includes how contingencies are to be planned for and managed, and how the programme is to be monitored and evaluated. There are four important aspects to programme implementation:

- Planning
- Management
- Monitoring
- Evaluation

These guidelines will not address monitoring and evaluation in detail but their importance should be noted.

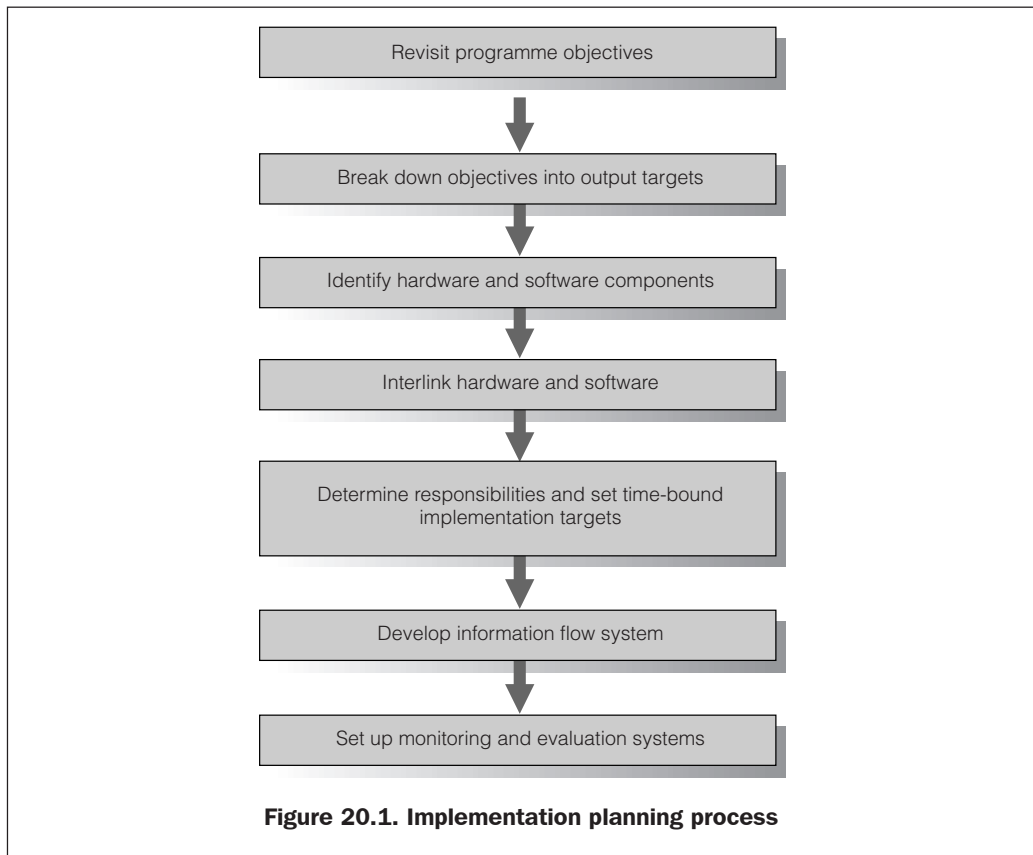
### 20.1.1 Implementation components

Implementation involves managing, planning for, monitoring and evaluating the seven key components indicated below. These components are used to form frameworks for implementation and monitoring.

- Staff
- Resources
- Finances
- Time
- Outputs
- Community
- Information

## 20.2 Implementation planning

The overall implementation planning process can be separated into the following steps (Figure 20.1); these can be conducted by agency staff in conjunction with the key stakeholders.



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A more detailed description of the implementation process with examples is provided below:

- 1. Programme objectives:** From the detailed programme design first chart out ‘the big picture’, work out the objectives in terms of both facility provision and hygiene promotion.  
*Example: To improve the health and well being of affected population through improved safe excreta disposal, solid waste management and hygiene promotion. To achieve this through appropriate use and maintenance, improved hygiene practice, and community empowerment.*
- 2. Output targets:** Now break down the objectives into smaller, achievable and time-bound output targets, and set out plans to achieve these.  
*Example: Fifty communal latrines to be completed within two weeks; solid waste bin collection and disposal system to be in place within one month; hygiene promotion to address appropriate use and maintenance of communal latrines and waste bins for first month, and excreta disposal and handwashing practices for second month, etc.*
- 3. Hardware and software:** Identify hardware and software components for each target, and to each of these allocate resources, staff and finances, and consider issues related to community participation.  
*Example: Hardware components of solid waste management include specifications and procurement of bins, transportation means and construction of disposal site. Software components include consultation with the affected community and other stakeholders concerning location of bins, collection and transportation system, location of disposal site and management and staff responsibilities.*
- 4. Inter-linking:** Identify areas where hardware components and software components need to be inter-linked and where they can run separately from each other.  
*Example: While implementing a solid waste programme, specifications and procurement of bins and transport arrangements can be made, and discussion with the community on bin locations and collection systems can be conducted simultaneously. The location of the disposal site must be determined through consultation before construction can take place.*
- 5. Implementation targets:** Determine who does what and set time-bound targets for staff, resources, finances, outputs and community participation (Section 20.3).  
Example:  
  
*Week 1: Cash advance from finance and logistics request submitted; fifty solid waste bins procured; and consultation regarding bin locations and collection systems carried out.*

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*Week 2: Transfer station constructed using local materials and existing labour force; team of ten solid waste workers recruited; and consultation regarding disposal site location carried out.*

*Week 3: Staff trained; and disposal site constructed.*

*Week 4: Four hand-carts and one tipper truck procured; system in place ready for operation.*

**6. Information flow:** Develop an information flow system that runs through the technical team, hygiene promotion team, logistics, finance and key stakeholders such that every component of the programme is kept up-to-date on the activities of the others and information is fed into the implementation process in the field. This will also facilitate comprehensive monitoring and evaluation.

*Example: Weekly reports prepared following a set format to reflect the situation on site and give information on quantity, quality and usage. A regular meeting plan developed with the team and other stakeholders.*

**7. Monitoring and evaluation:** Make regular checks on the programme progress with respect to the targets developed for each of the implementation components (Section 20.5).

This process can be conducted with the assistance of the implementation framework (Table 20.1) to identify key factors and set appropriate targets.

### 20.3 Implementation framework

The seven key implementation components form the basis of an implementation framework consisting of both the key factors to be considered during implementation, and implementation targets. This framework is not an activity plan but a tool for conducting the implementation process. The implementation targets will be unique to the current programme and situation. The same targets can then be used as the basis for the monitoring and evaluation process.

The implementation framework can be applied to the implementation of sanitation facilities and hygiene promotion activities. The framework is divided into the seven key implementation components and targets are set for each, as indicated in Table 20.1.

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<b>Table 20.1. Implementation framework</b>		
<b>Implementation component</b>	<b>Key factors to consider</b>	<b>Targets</b>
Staff	Recruitment Training and capacity building Workshops Supervision and appraisal	Number of trained staff Number of staff from affected community Performance of staff
Resources	Procurement and transportation Feedback from logistics Meeting places Tools Construction materials Dissemination materials	Appropriate logistical procedures Appropriate meeting locations Use of local materials where possible Quantity of tools Quantity of materials
Finances	Budget control Cost-effectiveness of procurement and construction methods Feedback from finance department	Proposed budget lines Cost per beneficiary ratio
Time	Procurement and transportation Supervision of work Breakdown of activities into short distinct stages	Resource arrival times Facility completion times Specific periods where specific risk practices are targeted and specific activities promoted
Outputs	Completed facilities of appropriate quality and quantity Appropriate use and maintenance of facilities Appropriate sanitation systems Appropriate hygiene promotion activities Improved hygiene practice Improved health	Number of facilities Quality of facilities Cleanliness and state of facilities Efficiency of systems Incidence of risk practices (indiscriminate defecation, undisposed solid waste etc.) Mortality and morbidity rates
Community	Participation in design and construction Participation in operation and maintenance Participation in hygiene promotion activities Training and capacity building	Number of participants Levels of participation Levels of responsibility
Information	Reporting and planning Co-ordination between technical, hygiene and health teams, other agencies and affected community External technical information	Regular situation reports and plans Regular meetings

Implementation methods should be socio-culturally sensitive and should mirror those adopted locally wherever possible.

## 20.4 Implementation management

Once implementation begins it is essential that it is managed effectively. A recommended simple technique for implementation management is the ‘milestones’ approach.

### 20.4.1 Implementation by milestones

The targets set in the implementation framework can be used to produce a milestone management plan. This is a simple management tool which can be used by a multidisciplinary team. A milestones table should be produced for each intended project output. These outputs can be the same as those used in the logical framework or the implementation planning process.

The first step is to match specific targets, or ‘milestones’ to each output. These can include milestones for each of the implementation components which relate to a single project output. For example, the implementation of a solid waste management system may be broken down into milestones for staff recruitment and mobilisation, resource procurement and transportation, activities to promote hygiene and community awareness, as well as milestones for the physical construction or installation of facilities. These milestones can be presented as a list in the first column of a table.

The next step is to decide who is responsible for achieving each milestone and when it should be achieved. This can be presented as shown in Table 20.2.

<i>Selected milestones</i>	<i>Who</i>	<i>When</i>	<i>Current status and comments</i>

Once implementation commences the ‘current status and comments’ column can be used to record the progress towards achieving each milestone and any problems or constraints relating to these. This is a dynamic tool which can be used on a daily or weekly basis to measure progress, adjust implementation plans and determine which programme areas are most in need of attention. Any milestone plan is likely to be constantly changing as circumstances change. A completed example is presented in the Case Study.

### 20.4.2 Contingency planning

The milestones management method can be used to monitor programme progress and can be combined with an appropriate information flow system to pre-empt internal or external circumstances which may affect the programme. In emergency situations it is especially important that managers are ready to respond to rapid changes in the current situation. Appropriate contingency plans should be put in place to respond to possible scenarios such as a sudden influx of refugees or an outbreak of cholera. Effective programme management and monitoring will minimise the problems associated with such potentially volatile situations.

## 20.5 Monitoring

Once implementation begins it is essential to introduce effective monitoring of programme activities. Monitoring can be built into implementation management and is necessary to answer the following questions about the programme:

- Have the various activities been undertaken as specified in the programme design?
- Are materials and inputs reaching the affected population in good time?
- Are the provided facilities being used and maintained?
- Are hygiene promotion activities encouraging the affected population to participate in project/programme activities and to use the facilities provided?
- Are there any unexpected problems occurring and how can appropriate action be taken?

Effective monitoring is essential to ensure the success of the programme. There may sometimes be a tendency to monitor activities only during construction. If this is the case, however, it may be that new facilities are never used, and if monitoring is not on-going the reason for this will never be discovered. Monitoring of all aspects of the programme should continue for as long as the agency is operating in a given area. Time spent on this activity should ensure programme effectiveness and prevent mistakes from being repeated in future.

There are several techniques that can be used for monitoring (see 14.10). A number of these are described briefly below.

### 20.5.1 SWOT analysis

A useful monitoring tool is a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. This can be done simply by brainstorming under the following headings:

- Strengths: Those things that have worked
- Weaknesses: Those things that have not worked so well or could be improved
- Opportunities: Conditions which are favourable and can be taken advantage of by the programme
- Threats: Threats which reduce the range of opportunities for improvement

### 20.5.2 Log-frame analysis

Another method of monitoring is to use the logical framework produced in the detailed programme design. This can be done by using the measurable indicators for outputs and objectives which were identified at the planning stage. Each indicator can be used to test whether the programme has achieved the planned outputs. This is explained in more detail in the manual.

### 20.5.3 Checklist analysis

A useful monitoring tool for more in-depth analysis is to repeat the rapid assessment and priority setting process (Chapter 16) for each sanitation sector relevant to the programme. If each relevant checklist and analysis table is completed, the sub-totals and overall total can be compared with those reached during the initial rapid assessment. This will give a quantifiable indicator of the overall situation improvement for that particular sector. A worked example is presented in the Case Study.

The stakeholder planning team may also be involved in any of these processes, which can be used at any stage of monitoring or in programme evaluation.

### 20.5.4 Monitoring reports

It is essential that the results of any monitoring exercise are reported and that these are used to revise and amend implementation plans. The most simple form of monitoring report is a weekly situation report but more detailed reports can be produced based on each or all of the monitoring techniques described above. Completed examples of various monitoring reports are provided in the Case Study.

Fieldworkers should produce a weekly situation report (sitrep) to record progress made during the past week, any changes in the current situation and amended future plans. This may be a very brief report, but weekly reports may be used to feed into more detailed monthly monitoring reports. (Table 14.6 shows a recommended simple reporting format which incorporates the key components of implementation.)

## 20.6 Evaluation

Programme evaluation is an assessment of an ongoing or completed programme, in terms of its design, implementation and outputs. This evaluation can be built on the monitoring process and is designed to answer the following questions:

- Have the programme aims, activities and outcomes been appropriate?
- Have the initial programme purpose and objectives been fulfilled?
- Have the recommended minimum objectives been satisfied?
- Has the programme been effective?
- Has the programme been efficient?
- Has the programme been equitable?
- Has the programme had any other effects?
- Are the outputs sustainable over their design life?

Generally, evaluation is conducted at, or towards, the end of the programme. An interim evaluation, or review, can be carried out during the programme and may be more useful in identifying and remedying weaknesses. (Table 14.5 represents a simple framework for evaluation.)



### 20.6.1 Cost-effectiveness

Calculation of cost-effectiveness is a useful tool to investigate whether the programme has been efficient in terms of resources versus outputs. Some agencies or donors may require a cost-effectiveness evaluation. A simple method of measuring cost-effectiveness is establishing the *cost per beneficiary* for each programme activity (see 19.13). Cost-effectiveness targets can be set in the programme design and implementation framework and then compared to the final values achieved.

If the programme is to be cost-effective, the benefits to the target population must be greater than the overall costs of running the programme to the community, donor and implementing agency. The cost per beneficiary ratio can be calculated for the overall sanitation programme or for each sanitation sector and incorporated into the overall evaluation.

### 20.6.2 Evaluation reports

An evaluation report should be designed for use by the following groups:

- Programme staff
- Affected community
- Implementing agency support staff
- Other agencies or staff
- The donor
- Researchers/trainers
- Staff working on future sanitation programmes

It is important that the results of any evaluation are reported and studied, otherwise the evaluation process is pointless. If used properly, programme evaluation can be a very useful tool to learn from and improve emergency sanitation programmes. (A suggested structure for an evaluation report is shown in Table 14.7.)

