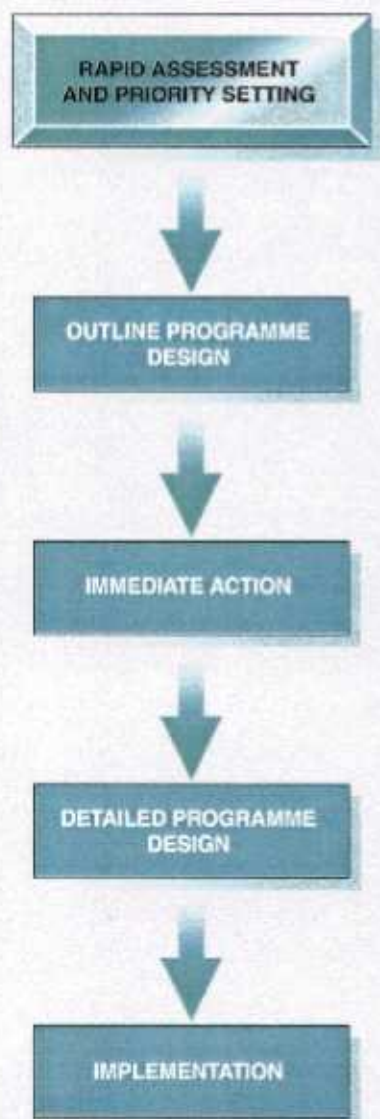


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Chapter 16

Rapid assessment and priority setting

The purpose of this section is to explain how to assess the current and likely future sanitation situation and prioritise needs accordingly. It is also designed to show how to determine appropriate intervention levels and urgency of action.

16.1 Is intervention appropriate?

There are several factors which are likely to influence whether humanitarian intervention is appropriate in a given situation. The most important of these is probably the health of the affected population. The crude mortality rate and morbidity rates for sanitation-related diseases are useful indicators. Sanitation-related diseases which should be considered include:

- Diarrhoea
- Roundworm
- Bacillary dysentery (shigellosis)
- Hepatitis
- Scabies
- Hookworm
- Typhus
- Plague
- Malaria
- Dengue fever

This list is not exhaustive and advice from qualified medical staff should be sought at all times (see Chapter 2).

Wherever data is unavailable or the risk of sanitation-related disease is suspected to be high (or is completely unknown) a rapid assessment should be conducted.

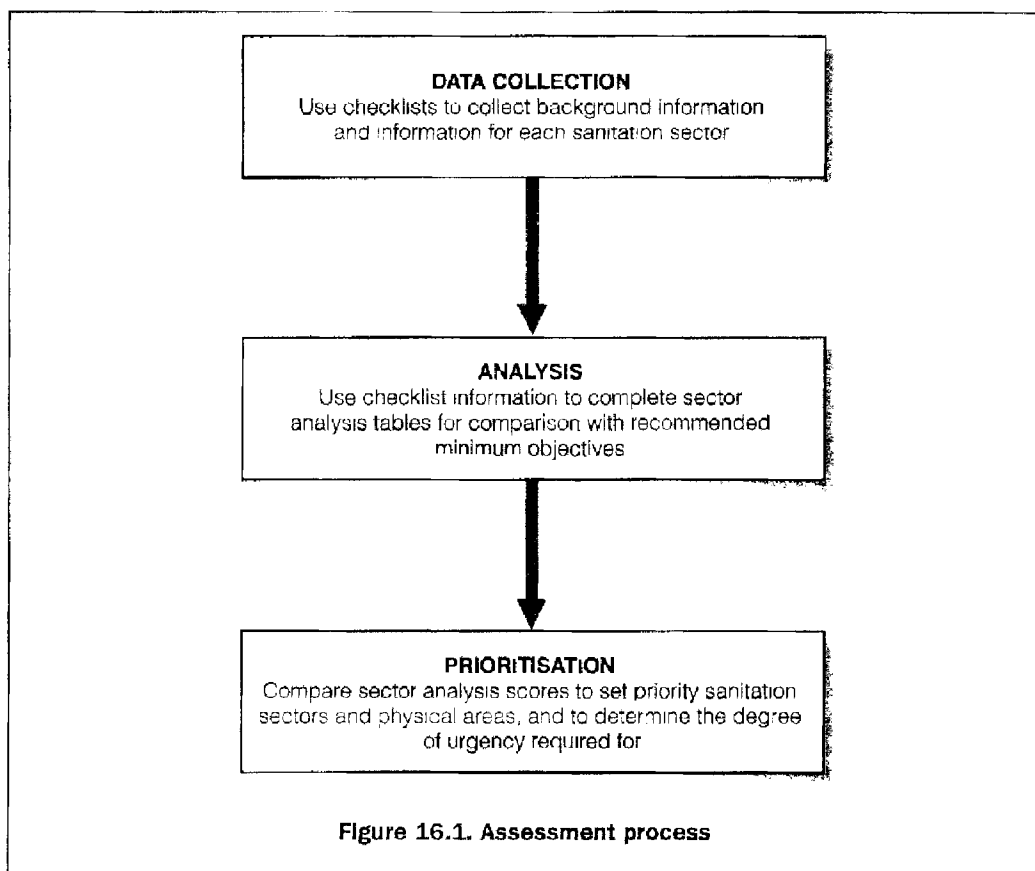
16.2 Assessment process

The rapid assessment stage has been designed to facilitate the speedy collection of all relevant information and form the basis of the initial assessment. This process of data gathering will be followed by rapid analysis of the present sanitation situation. This will be

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achieved through comparison with minimum objectives for each sanitation sector. From this information the assessor will be able to prioritise needs and recommend where interventions are most important for the health and well-being of the affected community.

Both data collection and analysis must generally be undertaken quickly. Therefore the relevant checklists and tables have been designed in a comprehensive but easy to follow style. This chapter will cover the assessment process outlined in Figure 16.1.



Data collection

A series of checklists is presented to assist in the collection of appropriate data. As much as possible of this data should be gathered to allow a full analysis of each sanitation sector.

Analysis

Current data for each sector is analysed to allow a comparison with recommended minimum objectives for quality, quantity and usage of facilities or practices. The 'present situation' refers to the existing facilities and facilities likely to be operating within one month.

Prioritisation

The result of each sector analysis will be compared with recommended intervention levels for that sector. This will enable the assessor to decide which areas should be given priority.

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The prioritisation results should provide the basis for intervention. These will help the assessor to recommend necessary action according to:

- the gaps identified in one or all of the sectors; and
- the mandate of the agency.

16.3 Getting started

Some key tips that should be considered prior to data collection are outlined below.

16.3.1 Background information

Before travelling to the affected area it is possible to collect some relevant information in advance. This can be from agency headquarters, the Internet or existing publications. Reports from other organisations, and political and climatic data may be of considerable use.

16.3.2 Communication

Effective communication with all key stakeholders is likely to be essential to programme success. For this reason, on arrival at the site, one of the first steps to undertake is to locate and recruit a good interpreter. It is likely that in many cases the language of the affected population will not be widely spoken among relief staff. Even where the official language of the relevant country is a common international language, many members of that country may only be able to converse in an endemic local language. For these reasons a good interpreter is essential to ensure that all individuals are able to express their views effectively.

16.3.3 Software issues

In all programme activities it is important to maintain a good awareness of cultural, social and gender issues. A balance between technical, managerial and community-based activities should be adopted from the beginning.

16.4 Data collection

There are a many methods that can be used to collect data for emergency sanitation needs assessments, but it is important to remember that no single method will provide all the data required. The best option is to use a variety of methods, as this will enable the assessor to cross-check the accuracy and reliability of the information. The following are the most common methods routinely used in the emergency sanitation sector:

- Background information and data gathering
- Questionnaires
- Interviews
- Observation
- Group discussion
- Mapping
- Measuring

It is important to appreciate the likely reliability of answers to questions. Care should be taken to refrain from asking leading questions and to involve different interest groups. More details on assessment can be found in the Manual (Chapter 3).

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16.4.1 Reconnaissance

Before embarking on sector checklists it is recommended that a brief reconnaissance of the affected area be conducted. This can be done by walking and driving through the affected area and can be used to help sketch a map and gather additional background information through observation.

16.4.2 Checklists for rapid emergency sanitation assessments

The following checklists A-G have been developed to help the assessor to collect information for analysis. If there is any point or question that does not apply to your situation then assumptions or estimates may need to be made. Each sector has been divided into four sections: general description; quality; quantity; and usage.

At this stage, the data collection methods will be observation, measurement and interviews with key informants (men, women, children and representatives from the affected community), local authorities, ministries or departments responsible for sanitation, local and international agencies, and staff from medical centres in the affected area. Maps and aerial photographs may also be used where available.

An assessment checklist is provided for each of the following sectors:

- Checklist A: Background information
- Checklist B: Excreta disposal
- Checklist C: Solid waste (SW) management
- Checklist D: Waste management at medical centres
- Checklist E: Disposal of dead bodies
- Checklist F: Wastewater (WW) management
- Checklist G: Hygiene promotion

Definitions can be found in the relevant chapters (4-11) of the Manual. Checklist A can be used to collect general information which may be relevant to more than one sector.

The assessor should record the collected data in a structured way, either on paper or in the electronic form of this document. If the assessor is unsure about how to do this or how to answer any of the questions in the checklists, they should refer to the relevant section of the Manual (indicated at the top of each checklist).

If no data is available for particular aspects of assessment, estimates may need to be made based on existing information and experience. Great care should be taken in making assumptions based on similar populations or scenarios, and wherever possible accurate data should be collected for the specific situation. The physical area of assessment should include dwelling areas, medical centres, feeding centres, markets, schools and wherever there is easy access by the affected population.

Note: The term 'facilities' is adopted in these checklists; this can refer to existing **activities** or **practices** that are occurring in the assessment area. For example, in an area where open defecation is practised, excreta disposal may still be assessed using the checklists and tables by assessing practice rather than facilities.

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Checklist A: Background information

See Chapter 4 for more information

General description

- Write a general description of the emergency, affected area and population. Include socio-political, institutional, demographic, health and geographical information.

General information

- Organisation carrying out the assessment
- Name of assessor(s)
- Position of assessor(s)
- Dates of assessment
- Maximum level of intervention (short-term or long-term)
- General location or site affected
- Logistics and resources available
- Human resources available
- Nature and history of emergency
- Government involvement
- Conflicts and likely resolutions
- Origin of affected population
- Seasonal/climatic implications
- Existing/potential donors
- Other organisations working in the area including current and planned activities

Demographic data

- Approximate number of affected people
- Breakdown of the population by sex
- Breakdown of the population by age
- Proportion of vulnerable groups (e.g. female-headed households, children, sick, disabled, etc.)
- Average family size
- Likely increase in population over next month

Geographical information

A sketch map should be produced and the following features identified and located:

- Location and types of existing sanitary facilities with estimates of key distances from dwelling areas
- Location of indiscriminate dumping of solid or medical waste
- Areas of indiscriminate excreta disposal
- Location of key public services/institutions
- Water sources
- Water storage and distribution points
- Pooling of wastewater
- Burial / cremation sites
- Groundwater levels
- Ground conditions
- Geological features
- Slope directions and drainage

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Checklist B: Excreta disposal

See Chapter 6 for more information

Note: This checklist may be used to collect data for domestic or communal latrines.

General description

- Write a full description of the current facilities and practices (including anal cleansing). Include how facilities were constructed, operated and maintained with general comments on quantities, qualities and cultural factors.

Quality

- Are existing facilities technically appropriate?
- Are existing facilities socio-culturally acceptable to all users?
- What are the potential hazards for disease transmission?
 - Is there any potential contamination of food and water sources?
 - Are any excreta disposal facilities breeding sites for vectors or pests?
 - Are appropriate anal cleansing and handwashing materials available?
 - Is there evidence of any indiscriminate defecation or potential for direct human contact with excreta?
- For how long are current facilities and practices sustainable?

Quantity

- What is the ratio of domestic facilities (cubicle or space) to population?
 - If required, what is the ratio of population to facilities for children, disabled or elderly?
 - If there is a need for facilities in public places or institutions, what is the ratio of facilities to unit of measure?
- What is the maximum one-way walking distance for users?

Usage

- What proportion of the affected population has access to appropriate facilities? What groups do not have access and why?
- What proportion of the affected population is using the appropriate facilities correctly on a regular basis? Are facilities maintained hygienically?

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Checklist C: Solid waste management

See Chapter 7 for more information

Note: This checklist can be used for domestic waste, feeding centres, schools or markets.

General description

- Write a full description of the current waste management system, with general comments on effectiveness, appropriateness, quantities, qualities and cultural factors.

Quality

- Are facilities and systems technically appropriate?
 - If bins or containers are provided in the affected area, are they appropriate and hygienic?
 - If required, what proportion of SW is collected and transported to a disposal site?
 - Are facilities emptied/replaced at an appropriate interval?
 - Are the vehicles that are being used appropriate for carrying SW?
 - Is the technology used for final disposal of SW appropriate?
- What are the potential hazards for disease transmission?
 - Are any of the solid waste facilities (bins, collection points, disposal sites) breeding sites for vectors and pests, and if so where?
 - What is the environmental impact (such as contamination of food and water) of solid waste management in the affected area?
 - What proportion of workers is provided with and using protective clothing?
- For how long can the current appropriate disposal systems be sustained?
 - Are the appropriate transport modes being used sustainable (available fuel, spare parts, and human resources for operation and maintenance)?

Quantity

- If the affected population disposes of their SW directly into pits, what is the ratio of pit volume per day to population?
- If bins or containers are used in the affected area, what is the ratio of waste container volume to unit of measure?
- What is the maximum walking distance to the nearest pit, bin or container?
- Where SW is transported, what is the ratio of vehicle capacity to unit of measure?
- How far is the disposal site from the nearest habitable building?
- What is the approximate volume of land available for land-fill or volume of existing pits, as a ratio to population and number of days to be used?

Usage

- What proportion of the population is using appropriate collection facilities correctly?
 - Is there evidence of indiscriminate dumping of SW in or around the affected area?
 - For areas deemed to be served by communal/family bins or pits what proportion of the population has access?
- What proportion of collected SW is transported to approved disposal sites?
- What proportion of collected SW is disposed of appropriately?

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Checklist D: Waste management at medical centres

See Chapter 8 for more information

General description

- Write a full description of the current waste management system and how it is managed, with general comments on effectiveness, appropriateness, quantities, qualities and cultural factors.

Quality

- Are the facilities and systems technically appropriate?
 - Is medical waste segregated from general waste?
 - Are the containers used for segregated waste stored and labelled correctly?
 - Are these containers kept safe, hygienic and emptied regularly?
 - Are the transport modes for segregated waste appropriate and safe?
 - Is the technology used for final disposal of medical waste safe and appropriate?
- What are the potential hazards for disease transmission?
 - Is any waste polluting water and food sources?
 - Are any of the waste facilities breeding sites for vectors and pests, and where?
 - What is the environmental impact of waste management in the area concerned?
 - Should disinfection be necessary, is it taking place correctly?
 - What proportion of staff/workers have and are wearing protective clothing whilst handling medical waste?
- How long can the current disposal system be sustained?

Quantity

- What is the average number of beds for each set of three segregated containers (sharps, medical, general)?
- What is the average walking distance to the container(s)?
- What is the volume per bed of the transport system from container to final disposal point?
- If waste is disposed into a pit, what is the ratio of original pit volume per bed?
- Is the capacity of the incinerator sufficient for its purpose?
- What is the distance to the nearest habitable building from the pit and/or incinerator?

Usage

- What proportion of waste is sorted and placed in correct containers?
- What proportion of collected waste is safely transported to the disposal point?
- What proportion of the collected waste is safely disposed of?

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Checklist E: Disposal of dead bodies

See Chapter 9 for more information

General description

- Write a full description of the current facilities and systems and how they were constructed, operated and maintained with general comments on quantities, qualities and cultural factors.

Quality

- Are all facilities technically appropriate?
 - What proportion of dead bodies is buried or cremated correctly (facilities and procedures)?
 - If dead bodies require collection and transport, is it sufficient and appropriate?
 - How will seasonal variations affect access to cemetery or cremation sites?
 - What types of tools, materials and transport are available for collection and burial or cremation of dead bodies?
- What are the potential hazards for disease transmission?
 - Are any burial practices polluting food or water sources?
 - Are any of the burial practices increasing vector and pest populations?
 - What proportion of dead bodies from epidemics is disinfected before disposal?
 - What proportion of workers handling dead bodies have been provided with and are using protective clothing?
- Are current facilities socially and culturally acceptable?
 - Are the usual wake practices of the population being kept to?
 - Are the usual transportation means being used?
 - Are the usual burial/cremation practices being used?
- How long can the current facilities continue to be used?
 - Are the transport modes being used sustainable?

Quantity

- How much space (area/10000 population) is available for burial sites?
- Where appropriate, is there sufficient fuel to properly cremate all bodies?
- What is the distance to burial or cremation sites from the nearest habitable building?
- What proportion of bodies is properly disposed of in an appropriate time?

Usage

- What proportion of the affected population has access to and is willing to use the designated facilities?

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Checklist F: Wastewater management

See Chapter 10 for more information

Note: These Guidelines only cover the hygienic disposal of wastewater, however, it is quite possible that problems may be due to poor water delivery and use. If this is obviously the case comment on it in the general description. This checklist may be used to assess wastewater from standposts, laundry areas, bathing areas, kitchens, medical facilities etc.

General description

- Write a full description of the current facilities and how they were constructed, operated and maintained with general comments on quantities, qualities and cultural factors.

Quality

- What proportion of facilities is technically appropriate for their current use at all times of year?
- In what way are the facilities a hazard to health or the environment? For example, are there breeding sites for flies or mosquitoes; physical hazard to users from sharp edges or slippery surfaces; pollution of water courses; or strong odour close to dwellings, etc
- What proportion of facilities is adequately maintained and managed?

Quantity

- What proportion of facilities have been provided with a functional wastewater disposal system?

Usage

- What proportion of the total wastewater generated is disposed of in appropriate designated locations?

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Checklist G: Hygiene promotion

See Chapter 11 for more information

Note: Hygiene promotion covers good practice for use and maintenance only. Promotion to install new facilities or manage systems is covered by the checklist for that sector.

The following sectors are considered for hygiene promotion in these Guidelines:

Domestic excreta disposal
Communal excreta disposal
Domestic solid waste disposal (consumer actions only);
Solid waste disposal at communal sites (at point of waste generation only)
Medical waste disposal
Disposal of dead bodies
Wastewater disposal systems

Best practice assumes that any hygiene promotion programme will cover all these sectors.

General description

- Write a full description of the current hygiene promotion programme noting its objectives and strategy. Assess its strengths and weaknesses, successes and failures.

Quality

- What proportion of facilitators is from the same social and ethnic background as the affected population?
- What proportion of the facilitators has received appropriate training?
- What proportion of the messages being promoted is accurate, appropriate to the target audiences and completely covers the topic?
 - Are vulnerable and gender groups (disabled, women, children, men etc.) targeted by hygiene promotion activities?
- What proportion of the methods being used to disseminate the messages is compatible with socio-cultural aspects of the population?

Quantity

- What is number of facilitators per thousand affected people?
- What proportion of the affected area has been targeted for hygiene promotion activities
- What proportion of relevant sanitation sectors covered by these Guidelines is being targeted by the promotion programme?

Usage

- What proportion of the affected population has received, understood and remembered the messages?
- What proportion of the population has put hygiene promotion messages into practice?
- What proportion of all messages delivered has been implemented by the population?

16.5 Data analysis

Once as much as possible of the data in section 16.3 has been collected, or estimated, work can begin on its analysis. The purpose of this analysis is to obtain a clear picture of the current situation and provide the data necessary to prioritise interventions. The analysis process for all types of sanitation intervention should follow the procedure outlined below:

- For each of the following tables fill in the column entitled '**Collected data**' using relevant information collected in section 16.3. This information should be only several words briefly summarising the data collected. In the early stages of an emergency some of the data may have to be estimated and assumptions made because of lack of information or time, but the process can always be repeated at a later stage.
- Compare the collected data with the values in the '**Range**' columns to assign a score. Definitions for terms used are provided in the Manual (Chapter 5). Select a number between 1 and 10 that best reflects the collected data (1 being better than long-term standards and 10 being worse than minimum standards). The assessor should be able to interpret the data and use the recommended scoring system as a guideline. This number is the **Base score ('B')**.

N.B. Where table rows are shaded grey only **one** row should be completed for each analysis table. This allows separate analysis of the relevant sanitation situation for different locations or services, e.g. health centres, schools, markets, feeding centres etc.

- Where indicated, multiply the base score number by that shown in the **Multiplier ('M')** column. This weights the score so that *quality, quantity and usage* have equal importance in the analysis. Write the resultant number in the **Common score ('C')** column.
- Add up the numbers in the '**C**' column and place the answer in the '**TOTAL**' box provided at the bottom of the table. In Table A.1 only the *average* should be used, not the total.
- The total scores will be used for comparison and prioritisation between various sanitation sectors and between different physical areas assessed.

16.5.1 Recommended objectives

The recommended objectives used in the range columns are based on the Sphere Project *Minimum Standards in Water Supply and Sanitation*. These provide a description of what people affected by disasters have a right to expect from humanitarian assistance and specify the minimum acceptable levels of service (Sphere Project, 1999). These have been expanded to incorporate the following elements:

- **Quality:** technical appropriateness; social and cultural acceptability; potential health hazard; and sustainability.
- **Quantity:** number of facilities/activities, capacity; and distances to facilities.
- **Usage:** accessibility; and operation and maintenance

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In addition, objectives have been divided into the following intervention levels based on duration of service:

- **Immediate:** very basic minimum standards applied to the initial phase of an emergency lasting up to one month's duration
- **Short-term:** basic minimum standards applied to emergency situations lasting up to six months' duration
- **Long-term:** objectives applied to longer term emergency scenarios and interventions lasting up to several years' duration

Detailed recommended minimum objectives and definitions of terms are provided in the Manual (Chapter 5).

Table 16.1. Base score definitions

	Description
1	Better than long-term objectives
2	Equivalent to long-term objectives
3	Between short-term and long-term objectives
4	Equivalent to short-term objectives
5-6	Between immediate and short-term objectives
7	Equivalent to immediate objectives
8-9	Worse than immediate objectives
10	Much worse than immediate objectives

B. Excreta disposal

B.1-3 Domestic excreta disposal

Location of assessment: Date: Assessor:
 This table should be completed for each of the following as appropriate (underline or circle the relevant):
B.1 Single or shared family latrines B.2 Domestic communal latrines B.3 Latrines for special groups

Data	Collected data	B	Range				M	C
			10	7	4	1		
Technical appropriateness			inappropriate	technically basic	appropriate	very appropriate	0.25	
Social and cultural acceptability			very unacceptable	unacceptable	acceptable	very acceptable	0.25	
Potential hazard to health			major hazard	basic protection	minimal hazard	no hazard	0.25	
Sustainability of facilities			None	1 month	6 months	> 1 year	0.25	
Ratio of latrine spaces to population			None	1/100 or immediate responses	1/50	1/20	0.5	
Maximum one-way walking distance			>100m	75m	50m	<25m	0.5	
% of population with access to appropriate facilities			None	50%	75%	>95%	0.5	
% of population using appropriate facilities correctly			None	50%	75%	>95%	0.5	
Total								

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B.4 Excreta disposal for public places

Location of assessment: Date: Assessor:
 This table should be completed for each of the following as appropriate (underline or circle the relevant):
Medical centres Schools Markets Feeding centres

Data	Collected data	B	Range				M	C
			10	7	4	1		
Technical appropriateness			inappropriate	technically basic	appropriate	very appropriate	0.25	
Social and cultural acceptability			very unacceptable	unacceptable	acceptable	very acceptable	0.25	
Potential hazard to health			major hazard	basic protection	minimal hazard	no hazard	0.25	
Sustainability of facilities			None	1 month	6 months	> 1 year	0.25	
Ratio of latrine spaces to health centre beds / patients OR			None	1/50 beds 1/100 outpatients	1/20 beds 1/50 outpatients	1/10 beds 1/20 outpatients	0.5 OR	
Ratio of latrine spaces to school pupils OR			None	1/50 girls 1/100 boys	1/30 girls 1/60 boys	1/15 girls 1/30 boys	0.5 OR	
Ratio of latrine spaces to market stalls OR			None	1/100 stalls	1/50 stalls	1/20 stalls	0.5 OR	
Ratio of latrine spaces to population at feeding centres			None	1/100	1/50	1/20	0.5	

continued ...

B.2 Excreta disposal for public places

... continued

Data	Collected data	B	Range					M	C
			10	7	4	1			
Maximum one-way walking distance			> 100m	75m	50m	<25m	0.5		
% of population with access to appropriate facilities			None	50%	75%	> 95%	0.5		
% of population using appropriate facilities correctly			None	50%	75%	> 95%	0.5		
Total									

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