



GOVERNMENT OF GHANA

MINISTRY OF WORKS AND HOUSING

COMMUNITY WATER AND  
SANITATION AGENCY

**SMALL COMMUNITIES  
WATER & SANITATION  
POLICY**

*May, 2005*

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## **ACKNOWLEDGEMENT**

## **PREFACE**

The CWSA was established by an Act of Parliament to facilitate the provision of safe water and related sanitation services to rural (small) communities and small towns. To date, the operational performance of the CWSA has been guided by fragmented policy documentation which requires harmonisation, adequate dissemination and operationalisation at the local, regional and national levels.

The Water Directorate of the Ministry of Works and Housing, acting through the CWSA, sought to set basic guidelines for better management of CWSA activities in Small Communities. This involved reviewing the existing policy documents to ensure harmonisation and adequate dissemination.

The key policy directives to facilitate delivery of water supply services have been presented in the policy document. The objective is to improve coverage of potable water to 85 % of the populace by 2015.

The revised document is presented in three volumes, and basically sets out the policy and implementation guidelines to achieve the desired objective of enhancing development of small communities in the sub-sector and therefore shall be used by relevant stakeholders at all levels. This document is Volume I of the revised document.

## LIST OF ACRONYMS AND ABBREVIATIONS

|        |  |
|--------|--|
| COM    | - Community Ownership & Management                   |
| CWSA   | - Community Water and Sanitation Agency              |
| DA     | - District Assembly                                  |
| DWSP   | - District Water and Sanitation Plan                 |
| DWST   | - District Water and Sanitation Team                 |
| EPA    | - Environmental Protection Agency                    |
| ESA    | - External Support Agency                            |
| FMP    | - Facilities and Management Plan                     |
| GoG    | - Government of Ghana                                |
| GPRS   | - Ghana Poverty Reduction Strategy                   |
| GSB    | - Ghana Standards Board                              |
| GWCL   | - Ghana Water Company Limited                        |
| ISO    | - International Standards Organisation               |
| MDGs   | - Millennium Development Goals                       |
| MLGRD  | - Ministry of Local Government and Rural Development |
| MOE    | - Ministry of Education                              |
| MOH    | - Ministry of Health                                 |
| MWH    | - Ministry of Works and Housing                      |
| NCWSP  | - National Community Water and Sanitation Programme  |
| NGO    | - Non-Governmental Organisation                      |
| O&M    | - Operation and Maintenance                          |
| PO     | - Partner Organisation                               |
| RCC    | - Regional Co-ordinating Council                     |
| RWST   | - Regional Water and Sanitation Team                 |
| SIP    | - Strategic Investment Plan                          |
| STWSP  | - Small Towns Water Supply Project                   |
| TA     | - Technical Assistant                                |
| VIP    | - Ventilated Improved Pit                            |
| WATSAN | - Water and Sanitation Committee                     |
| WHO    | - World Health Organisation                          |
| WRC    | - Water Resources Commission                         |

## **1 INTRODUCTION**

### **1.1 Context**

The Community Water and Sanitation Agency was established by an Act of Parliament, Act 564 of 1998, with the objective of facilitating the provision of safe water and related sanitation services to small communities and towns.

The establishment of the Agency is in support of the on going National Community Water and Sanitation Programme (NCWSP), which was launched in 1994. The Programme seeks, among others to achieve an accelerated and equitable delivery of improved water and related sanitation facilities to small communities and towns within the context of a decentralised local government administration.

The NCWSP was launched with the following strategic objectives;

- Provide basic water and sanitation services to communities that will contribute towards the capital cost and also pay the normal operation, maintenance and repair cost of their facilities mindful of the need to ensure affordability, equity and fairness for the poor and vulnerable;
- Ensure sustainability of the facilities through Community Ownership and Management (COM), community decision-making in the planning and design of facilities, active involvement of women at all stages of the programme, private sector involvement in the provision of goods and services, and public sector promotion and support;
- Maximise health benefits by integrating water, sanitation and hygiene education interventions, including support to establish community level capabilities for hygiene education and latrine construction.

Communities with populations from 75 – 2000 have peculiar water and sanitation characteristics, which need to be addressed. Some basic concepts, strategies and implementation arrangements for delivery of water and sanitation facilities to these small communities have been developed and used since inception of the NCWS in a bid

to deepen and assist in consolidating the decentralisation agenda of the Government of Ghana.

## **1.2 Challenges**

The strategic objectives of the NCWSP pose a number of challenges for CWSA with regard to provision of water and related sanitation facilities to small communities.

The Ghana Poverty Reduction Strategy (GPRS) and the Millennium Development Goals (MDGs) seek to halve the proportion of those who do not have access to potable water and adequate sanitation facilities by the year 2015. In consonance with the above, the Strategic Investment Plan (SIP) of the CWSA seeks to achieve 85% coverage of water and sanitation facilities by the said target date. The current coverage of community water supply services is about 41%, according to the 2000 population and housing census. The status of sanitation is even worse. The SIP requires a total investment outlay of some \$756m to achieve the said targets<sup>1</sup>. The support of External Support Agencies (ESAs) in this regard cannot be overemphasised.

In accordance with the Local Government Act (Act 462), DAs are the legal entities responsible for the provision of water and sanitation facilities in their areas of jurisdiction. Most of the Assemblies, however, lack the human and financial resources to fulfil their obligations. The CWSA, over the years has been playing a facilitative role in the provision of these facilities. Low literacy rates in communities require that support be provided to build on existing community level capabilities towards achieving community ownership and management of facilities provided. Supportive roles of these Assemblies and relevant private sector entities and how they relate to the communities in the context of community ownership and management of facilities need to be clearly defined. The Community Ownership and Management (COM) concept places responsibility for the planning, implementation, operation and maintenance on the community, in the belief that as end users, they have higher motivation to ensure that the facilities continue to be operational and sustainable.

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<sup>1</sup> CWSA SIP – 2005 - 2015



### 1.3 Vision

Water Supply and Sanitation are essential to the well being of every community. CWSA shall therefore endeavour to provide basic water supply and sanitation facilities to all communities which are prepared to meet the strategic requirements of the NCWSP. Communities shall be made aware of the public health benefits of good water supply and sanitation services to enable them express demand. The Strategic Investment Plan of the CWSA envisages about 85% coverage of water supply and improved sanitation facilities by the year 2015. Facilities provided shall be operated and maintained in a sustainable manner.

## 2 POLICY OBJECTIVES

### 2.1 Overall Objective

To improve on the public health and economic well being of communities described as **Small Communities** through provision of adequate, safe and sustainable water for domestic and commercial purposes in a planned and coordinated manner, with integrated hygiene education and sanitation interventions.

### 2.2 Specific Objectives

- Provide basic water and sanitation services to communities that will contribute towards the capital cost and also pay the normal operation, maintenance and repair cost of their facilities mindful of the need to ensure affordability, equity and fairness for the poor and vulnerable;
- Ensure sustainability of the facilities through Community Ownership and Management (COM), community decision-making in the planning and design of facilities, active involvement of women at all stages of the programme, private sector involvement in the provision of goods and services, and public sector promotion and support;

- Maximise health benefits by integrating water, sanitation and hygiene education interventions, including support to establish community level capabilities for hygiene education and latrine construction.

## 2.3 Definition

Within the context of this policy formulation, and given the mandate of the CWSA, **Small Communities** are defined as communities of between 75 and 2,000 population who require improved water supply and related sanitation facilities.

## 3 BASIC PRINCIPLES

1. District Assemblies shall be the focal point for delivery of water and sanitation facilities and Government Agencies (CWSA, RCC, Ministries, etc.) as facilitators and regulators, providing policy guidelines and setting standards, and providing back-up professional support to District Assemblies.
2. Small Communities shall be supported to provide improved Water Supply and Sanitation Facilities.
3. Each intervention shall consist of both water supply and sanitation components for a given community.
4. Promotion of hygiene education and sanitation shall be incorporated into the provision of water supply services.
5. Beneficiary communities shall contribute 5% of the capital cost of water facilities to be provided, and shall be responsible for all Operation and Maintenance Costs.
6. Communities shall select the technology that will give them the highest service level. The selection shall be guided by community preference, affordability and ability to operate and maintain the facility in a sustainable manner.

7. Groundwater based technologies shall be the basic level of service for small communities as follows:
  - Provide hand dug wells for population of 75 – 300;
  - Provide boreholes for population of 301 – 2,000.
8. Other technological options, which shall include surface water/spring sources for rural piped schemes, rainwater harvesting etc. shall be adopted in the absence of adequate groundwater sources.
9. Institutions shall contribute 10% for Institutional Latrines with support from DAs, where necessary.
10. A Water and Sanitation Committee (WATSAN) shall be formed in each community and shall be responsible for the management of the water and sanitation facilities in the community.
11. The membership of WATSANs shall exclude Traditional Authorities and DAs. Where necessary, they may participate in meetings as observers.
12. Tariffs shall be set by the WATSANs in accordance with CWSA approved tariff setting guidelines. DAs shall approve all tariffs.
13. Women shall be involved at all levels of implementation of any water supply and/or sanitation intervention in the community.
14. Water supply and sanitation facilities shall be financed through Government, Donor and Private Sector funding arrangements.
15. The implementation of Small Community water supply and sanitation projects shall be in accordance with the regulations of the Environmental Protection Agency (EPA) and Water Resource Commission (WRC).
16. Simple, low cost latrine technologies shall be adopted. All sanitation interventions shall be in accordance with the National Environmental Sanitation Policy.
17. A demand-responsiveness approach based on individual communities first deciding whether or not to participate in the programme, community preferences, etc., shall be adopted. In special instances - for example, in guinea-worm infested

communities and in cases of verifiable extreme poverty - this requirement may be waived.

18. Districts, with RWST facilitation, shall select and prioritise communities based on the following:

**30% - Demand:**

- 15% - Past Community Initiated Projects  
(expressed willingness to contribute 5% of capital cost)
- 10% - Community Based Organizations  
(Formation and legal recognition of WATSAN)
- 5% - Letters of Request for Intervention

**70% - Need:**

- 35% - Prevalence of Waterborne Diseases
- 20% - Extreme Case of Poverty
- 15% - Inadequate Water and Sanitation Facilities

All selected communities shall be supported to provide improved water supply and sanitation facilities irrespective of existing hydro geological and hydrological conditions.

19. Procurement of the services of the private sector for the provision of all services shall be in accordance with the Public Procurement Act, Act 663.
20. Financial administration of WATSANs shall be guided by the provisions of the Financial Administration Act, Act 654.
21. A spare parts distribution network for hand pumps shall be established at the regional and district levels to ensure availability of spares.
22. Trained and certified Area Mechanics shall be available in every district. All Area Mechanics shall be provided periodic training through refresher courses.
23. Provision shall be made for coverage of institutions such as schools, clinics and markets. These institutions must arrange to be provided with adequate water and sanitation facilities.
24. Procurement of drilling services shall commence upon payment of 50% of the contribution of a given community to ensure timely delivery.

25. Periodic workshops shall be organised for all categories personnel working for private sector entities involved in the delivery of water and sanitation facilities to small communities to upgrade their skills on new developments in the areas of specialisation.
26. NGOs, and other civil society organisations, desirous of providing any water and sanitation facilities in a given small community shall do so within the framework of the NCWSP and in accordance with CWSA operational policy guidelines.

## **4 ROLES AND RESPONSIBILITIES OF INSTITUTIONS**

### **4.1 Ministry of Works and Housing – Water Directorate**

- a) To set and revise Water and Sanitation Sector Policies upon recommendations made by the CWSA.
- b) Initiate and lead sector dialogue on policy and sector-wide planning issues.
- c) Initiate and coordinate annual GoG-Development Partners joint water and sanitation sector reviews.
- d) House projects preparation activities and ensure coordination in projects.
- e) Carry out clearing house functions for funds flow management for projects.

### **4.2 CWSA**

#### ***Head Office***

- a) To recommend policies to the Ministry of Works and Housing and set strategies, procedures and standards for Small Communities Water Supply and Sanitation;
- b) To assist DAs to source funds both nationally and internationally;
- c) To provide back-up support to Regional Offices for Monitoring and Evaluation;

- d) To disseminate sector policies to all stakeholders;
- e) To let and manage contracts at the national level to consultants and contractors.

### ***Regional Offices (RWST)***

- a) To provide professional back-up services to district assembly staff in all areas especially in the development and preparation of the District Water and Sanitation Plan (DWSP);
- b) To monitor the state of all Small Communities water and sanitation projects (both completed and ongoing);
- c) To enhance sector capacity building through provision of training opportunities to stakeholders at the local, regional and national levels;
- d) To monitor the effectiveness of CWSA policies and guidelines and to initiate review where necessary;
- e) To let and manage contracts at the regional level to consultants and contractors.

## **4.3 District Assemblies**

- a) To receive and vet applications from communities, pre select and prioritise them for projects as and when funds become available;
- b) To monitor Operation and Maintenance of Systems in terms of the Financial, Technical and Administrative performances;
- c) To periodically audit WATSAN accounts (at least quarterly);
- d) To review and approve community tariffs in accordance with tariff setting guidelines;
- e) To prepare and review DWSPs annually;
- f) To provide technical approval for WATSAN plans (extensions etc.);
- g) To actively support DWST to provide technical support to WATSANs;
- h) To let and manage contracts at the district level to consultants and contractors.

## **4.4 Communities - WATSANs**

- a) To prepare and execute plans for provision of improved water supply and sanitation facilities;

- b) To mobilise funds to pay their share of the capital cost contribution and take up all operations and maintenance costs;
- c) To set tariff;
- d) To build the requisite capacity to ensure sustainability of facilities provided;
- e) To maintain financial records for O & M and provide records to DA and CWSA for inspection;
- f) To audit financial records internally;
- g) To present reports on management of water and sanitation facilities twice yearly to the entire community;
- h) To facilitate sanitation and hygiene education activities in the towns.

#### **4.5 Private Sector**

The private sector shall be responsible for the provision of relevant services. These services shall include but not limited to:

- a) Hydro geological/Geophysical Investigations;
- b) Drilling and drilling supervision;
- c) Supply of hand pumps;
- d) Training;
- e) Repair and servicing of equipment, hand pumps, spare parts, etc.;
- f) Consultancy (design and construction supervision, training, mobilisation and hygiene promotion, institutional support, etc.,) where applicable;
- g) Construction;
- h) Operation and maintenance of water supply and sanitation infrastructure;
- i) Management of Water Supply Schemes.

#### **4.6 Other Stakeholders**

The Ministries of Local Government and Rural Development (MLGRD), Education (MOE), Health (MOH), National Development Planning Commission (NDPC), NGO's, Academic and Research Organisations and Civil Society shall provide the necessary support for effective implementation and sustainability of Small Communities Water Supply and Sanitation Projects.

## **5 STRATEGIC OPERATIONAL GUIDELINES**

### **5.1 Basic Standards**

The design standards for community water supply and sanitation shall ensure that:

- Each person in a served community has access to no less than 20 litres of water per day.
- The maximum walking distance to a water facility does not exceed 500 metres.
- Each spout of a borehole hand pump or standpipe of a piped system serves no more than 300 persons, and for a hand-dug well hand pump no more than 150 persons.
- The facility provides all year round potable water to the community.

The O & M requirements shall ensure that a Facilities Management Plan (FMP), which meets the national standards is prepared for each community with the active participation of the community. The standard and level of service provided by managers or operators of the water supply and sanitation facilities shall be in compliance with the requirements of the FMP.

### **5.2 Principal Technological Choice**

Groundwater based water supply systems (boreholes and hand dug wells fitted with hand pumps) are considered to be appropriate and relatively inexpensive, and therefore shall constitute the principal technological choice for Small Communities based on the following:

- Little or no energy costs;
- Installation, O&M and repairs can be undertaken using local resources and expertise;
- Breakdown of one pump may not necessarily render a community without water, as other hand pumps may still be functional;
- Limited or no treatment is required. Simple Fe and Mn removal systems may be provided in some cases.



Sound environmental management shall be practiced in beneficiary communities to avoid possible pollution of groundwater, especially in the case of provision of hand dug wells as these are usually located within shallow aquifers which are easily contaminated.

### **5.3 Standardisation of Hand Pumps**

To ensure spare parts are always available the following Hand Pumps have been adopted for use. These are:

- For shallow wells
  - Nira AF-85
  - Nira AF-85D
- For deep wells
  - Ghana Modified India Mk 2 (GMIM2)
  - Afridev
  - Vergnet

### **5.4 Promotion**

Every DA shall prepare a DWSP for the district. The District Assemblies, through the DWSTs and with the support of CWSA Regional Offices, shall ensure that all communities are duly sensitised and made aware of eligibility criteria, procurement procedures and the various activities to be undertaken at the community level to enable the community have access to potable drinking water.

### **5.5 Sustainability**

A small community water system may be considered to be sustainable if it provides reliable and good quality water in sufficient quantity over the design period of the system. To ensure sustainability, the basic design criteria and the O&M arrangements indicated in the FMP shall be strictly adhered to. Communities must ensure the setting and payment of adequate tariffs with transparent accounting and management practices.

Stakeholders, especially DAs and the CWSA regional offices and shall ensure effective community management by monitoring and advising on the administrative, technical and financial performances

of the WATSANs. Periodic audits shall be carried out in each community.

## **5.6 Future Expansion**

For point sources, provision of additional source (borehole or hand dug well) due to an increase in population shall be with the assistance of the DA/GoG, and in accordance with the existing cost sharing arrangement.

For rural piped schemes, the cost of expansion of the pipe network shall be borne by the community (if the population is above 1500) with assistance from the DA. If source expansion is envisaged, the costs shall be borne by the community with assistance from the DA/GoG, and in accordance with the existing cost sharing arrangement.

## **5.7 Capacity Building**

Training shall be provided to all key stakeholders at the local, regional and national levels on a continuous basis.

The CWSA shall be supported by the private sector to provide relevant training to various categories of personnel to upgrade skills and capabilities.

Accredited academic institutions shall provide specialised training courses to consolidate the sector training efforts made by the CWSA.

## **5.8 Environmental Management**

The implementation of all Small Communities Projects shall comply with the regulations of the Environmental Protection Agency (EPA) and the Water Resources Commission (WRC).

The CWSA, District Assemblies and prospective Communities shall be supported by the EPA to ensure compliance.

O&M activities for latrines and other sanitation interventions shall be in accordance with the Environmental Sanitation Policy of the MLGRD.

## **5.9 Operation and Maintenance**

Communities are required to meet the full cost of normal operation and maintenance and minor repairs through tariffs.

## **5.10 Spare Parts Distribution Network**

There shall be established a national spare parts distribution network for hand pumps, which shall be available in each regional capital. Efforts shall be made to establish distribution outlets at the district level to ensure spares are available on hand for repair of broken down hand pumps.

## **5.11 Area Mechanics**

Area Mechanics shall be trained to undertake preventive maintenance and repair of hand pumps, to promote effective O&M and ensure sustainability. Refresher courses and training of new Mechanics shall be organised periodically as part of the NCWSP.

## **5.12 Tariff Setting**

WATSANs shall be trained to set tariffs in accordance with CWSA approved tariff setting guidelines. DAs shall review and approve all tariffs with facilitation from the RWST. Any reduction in expected tariff revenue as a result of action by the DA, e.g., reduced tariff, etc., shall require that the DA pay the difference in revenue into the WATSAN account. The CWSA in collaboration with the RCC shall ensure compliance.

## **5.13 Health/Hygiene Education and Promotion**

Health/Hygiene Education and Promotion programmes shall be designed in accordance with the policies and practices of the Ministry of Health. Hygiene education shall be carried out by trained WATSANs at the zonal/ward level to include men, women and children. The education carried out shall ensure water utilisation from improved sources all year round.

The use of participatory methods including discussion fora, audio-visual materials, etc., shall be encouraged. The educational activities shall be done in collaboration with Environmental Health Assistants

(EHAs) and School Health Co-ordinators, to facilitate observance of personal and environmental hygiene in the community. Hygiene education shall be continuous process and shall be carried out at all times.

#### **5.14 Funding**

The CWSA, in partnership with External Support Agencies (ESA), the Government of Ghana, District Assemblies and Communities, shall source funding for the implementation of projects.

The disbursement of all funds for eligible payments shall follow the GoG approved financial and accounting procedures.

#### **5.15 Water Quality**

Water Quality shall meet the Ghana Standards Board (GSB) criteria for drinking water. As much as possible, no treatment systems shall be required for ground water. Where necessary, simple Iron (Fe) and Manganese (Mn) removal systems, e.g., Mwacafe may be provided. Such systems shall have minimal operation and maintenance requirements.

Safety chlorination shall be provided for rural piped schemes.

## **6 SPECIFIC IMPLEMENTATION STRATEGIES**

### **6.1 Community Mobilisation**

a. This shall normally be of about 3 months duration. A mobilisation assessment report shall be submitted to the CWSA and the relevant DA at the end of this phase. An extension team comprising technical and non-technical personnel shall be engaged to provide relevant community mobilisation and extension services in each beneficiary community. WATSANs shall be established and trained to facilitate mobilisation of capital cost contributions.

b. During Community Mobilisation, activities to be carried out shall include the following:

1. Project information to communities;
2. Preparation of baseline socio economic and feasibility studies;
3. Support to communities to establish WATSANs in accordance with a constitution;
4. Support to communities to open bank accounts;
5. Mobilisation of the community to pay its share of capital cost contribution (to be completed before commencement of civil works);
6. Training of WATSANs in hygiene promotion, tariff setting, etc;
7. Preparation of FMPs.

## **6.2 Participatory Planning**

This shall be carried out in an interactive manner among the TA, community, WATSAN and district assembly staff. This will normally last about six months.

Communities shall be supported to undertake the following, among others;

1. Location of water source and positions of standpipes and possible pipe routing for rural piped schemes;
2. Identification of sources of water, where technically feasible alternatives exist;
3. Securing land rights for water sources;
4. Preparation of Facilities and Management Plan (FMP) with arrangements for managing the operation and maintenance of the system.

## **6.3 Design**

a. All designs shall be in accordance with the CWSA Design Criteria and Standard Drawings for piped systems, boreholes and hand dug wells, and shall be supported by a design report to be made available to CWSA and respective DA(s). Where necessary, for rural piped schemes, hydraulic designs shall be carried out by means of a computer program acceptable to the CWSA. Engineering designs shall be simple and supporting calculations and/or computer printouts shall be submitted with all designs.

- b. Equipment specifications shall be in accordance with British or ISO codes and standards. Codes accepted by the Ghana Institution of Engineers shall be used, where necessary.
- c. The main water supply technologies to be adopted shall be according to the following priorities:
  - 1. Borehole fitted with hand pump;
  - 2. Hand dug well fitted with hand pump;
  - 3. Spring or highland surface water with simple piped scheme (Gravity or pumped scheme) with simple treatment;
  - 4. Rain water harvesting with simple treatment;
  - 5. Surface water (unpolluted) with simple treatment;
  - 6. Surface water (polluted) with simple treatment;
  - 7. Other technologies to be adopted, where necessary
- d. Water source selection shall be according to the following priorities:
  - 1. Groundwater abstraction
  - 2. Springs
  - 3. Rainwater harvesting (to augment inadequate source)
  - 4. Relatively unpolluted surface water sources
  - 5. Polluted surface water sources
- e. Energy source selection (where applicable) shall be according to the following priorities:
  - 1. Grid Electricity;
  - 2. Solar Energy;
  - 3. Diesel Generator
- f. Water sources shall be protected by prohibiting human activities within 50 meters radius in case of ground water source, and 100 meters in case of surface water source.

#### **6.4 Operation and Maintenance**

- a. All small community water supply systems shall be operated and maintained in a manner to ensure sustainability. A system is considered to be sustainable if it meets the following requirements:
  - 1. Delivering to consumers the design quantity of water, over the design life of the water supply system.
  - 2. Producing water to Ghana Standards Board Water Quality Standards

3. Delivery of water in a cost effective manner (according to tariff guidelines)
  4. Delivering water in a virtually uninterrupted manner (at least 95% of the time).
  5. Planned routine and periodic maintenance are carried out regularly.
- b. Water supply systems shall be operated and maintained either directly by the community or through contractual arrangements with private companies.
  - c. Adequate records shall be kept on the operation and maintenance of the water supply systems for analysis, decision-making and reporting.
  - d. All caretakers/operational staff engaged shall be adequately trained and shall be certified to perform their respective duties. Periodic refresher training shall be provided.
  - e. Area mechanics and other personnel engaged for periodic maintenance shall have adequate training and shall also be provided with periodic refresher training.
  - f. All operation and maintenance requirements shall be specified and documented by the TA, and shall be complied with by operators and managers of the systems.

## **6.5 Sanitation**

- a. Sanitation, in the form of individual household latrines shall form an integral part of interventions in small communities to maximise health benefits in beneficiary communities. Sanitation shall be promoted through social marketing techniques. Institutional latrines may be constructed for schools and clinics.
- b. The design of latrines shall be in accordance with acceptable design criteria and the level of affordability established through feasibility studies.
- c. Technological choice shall include the following:
  - 1) Rectangular single pit VIP (lined and unlined)
  - 2) Mozambique single pit VIP (lined and unlined)
  - 3) San plat

- 4) 1-2 Seater K-VIP
- 5) Other technologies as considered appropriate by the CWSA.

d. Subsidies may be applied depending on the level of affordability established during feasibility studies. Subsidies of 50 - 70% shall be provided for household latrines and 90% for institutional latrines. Subsidies shall be progressively reduced as awareness of the need for hygienic latrines is created and potential beneficiaries are in dire need of latrines.

e. Construction of latrines shall be assigned to artisans or small-scale contractors who have the requisite qualification experience and/or training. Typical designs for both household and institutional latrines shall be provided by the CWSA for adaptation.

## **6.6 Construction**

Construction shall be carried out in accordance with the specifications and conditions set out in the Contract Document. Emphasis shall be placed on:

- Time - The agreed time schedule for completion;
- Cost - The project cost shall be kept within the contract sum;
- Quality - The quality of construction shall be in accordance with the drawing and specifications in the contract.

The progress of construction shall be monitored by CWSA and or DA in accordance with these basic principles and the detailed requirements of each works contract.

## **6.7 Monitoring and Evaluation**

### **a. Monitoring**

Progress monitoring shall be carried out to ensure compliance with specifications and to improve on performance.

Monitoring of projects shall be carried out taking into account the Technical, Administrative and Managerial aspects of project implementation.

### **b. Evaluation**

Evaluation shall be carried out based on mid-year and end-of-year project reviews.



All relevant stakeholders shall be involved in project evaluation, especially the end-of-project evaluation. Stakeholders shall include beneficiary communities, DAs, CWSA and other Government and External Support Agencies.

## **6.8 Post Project Support**

A one-year post project support shall be included as part of each project. In addition to this, the CWSA regional offices shall follow-up on all completed projects to enable lessons to be learnt for design of future projects. They shall be assisted to provide relevant post project support to beneficiary communities and DWSTs. DAs shall monitor the performance of WATSANs, particularly with regard to the administrative, technical and financial management of the water supply systems.

## GLOSSARY

**Basic Level of Water Supply Service:** Service level established based on the existing technical, financial and socio economic characteristics of the town, resulting in an all year round production of a minimum of 20 litres per capita of potable water for Handpumps and Standpipes, and 60 litres per capita for House Connections

**Capital Cost:** The total cost of construction of a water/sanitation facility.

**Community:** Town to be provided with water supply and sanitation related facilities.

**Household:** The family unit comprising the father, mother, children and other dependants.

**Institution:** Educational, health and commercial establishments located in the town.

**Post Project Support:** Technical assistance provided within a one-year period as part of the normal project cycle, which commences from the date of commissioning of the completed water supply facility. During this period, project funds shall be used to remedy any defects for which the contractor is not liable.

**Small Community:** Community of population between 75 – 2,000.

**Small Town:** Community of population between 2,001 – 50,000.

**Technical Assistant:** Private sector (consultants, POs, contracted to assist communities in mobilisation and selection of alternatives.