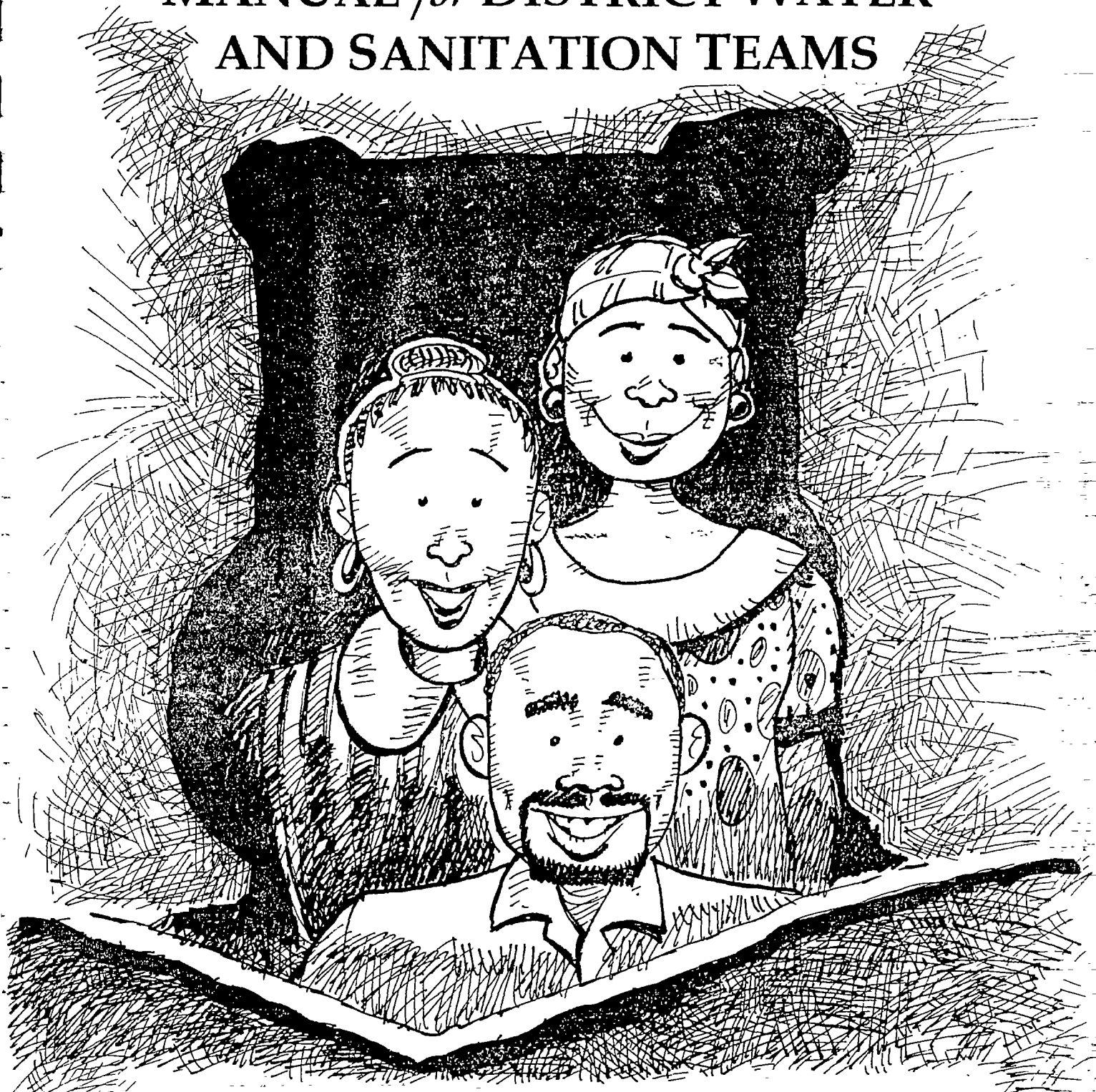
MANUAL *for* DISTRICT WATER AND SANITATION TEAMS



COMMUNITY WATER *and* SANITATION AGENCY
GHANA

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Credits

THE DWST MANUAL is designed as a reference material for DWSTs. It is to help them quickly carry out their tasks, both in the field and office. It is to be used in conjunction with CWSP Implementation Manual and other key manuals of CWSA.

The DWST Manual was developed through a collaborative process involving CWSA staff, DWST members, Cowater Consultants and TREND.

It was written by Tony Batse and Peter Hawkins (Cowater), based on field research and a planning workshop with DWST members held in Kumasi in November 1996. The draft manual was then tested in the field in a series of trial workshops for DWST members.

The draft was also reviewed by members of an inter-agency materials working group made up of CWSA, COWATER, ISODEC, and TREND. Team members included: Bishop Akologo, Dela Amable, Tony Batse, Ross Kidd, Lucia Nass, Beatrice Sakyi, Vincent Tay, Betty Yankson, and Jemima Yelbert.

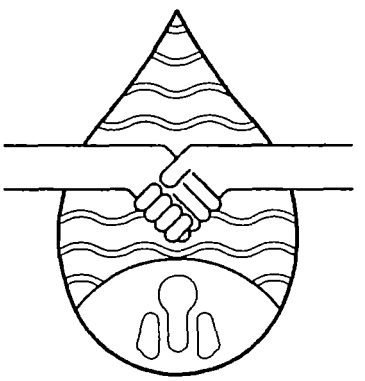
Special credits to Kofi Asamoah, Fay Ephrim, Benedict Kubabom, Yao Asante Sarkodie, Esinu Tsagbey and Sam Asibuo for their help in the development of this DWST Manual and the Training Guide.

Graphics were produced by Ato de Graft-Johnson.

The DWST Manual is one of a series of publications produced in support of the CWSP. The other publications in the series include:

CWSP Implementation Manual
Partner Organisation Manual
Trainer's Guide for PO Training
Watsan Committee Member's Manual
Trainer's Guide for Watsan Training
Trainer's Guide for DWST Training
Technical Booklets on Water Supply
Technical Booklets on Latrines
Pictures for Use in Community Work
Trainer's Guide for WSDB Training
Manual for Water Board Members.

It is planned to revise this manual in a year or two. Please send your comments and suggestions to CWSA.



COMMUNITY WATER AND SANITATION AGENCY
NOVEMBER 1997

Mailing Address
P/Bag Kotoka International
Accra, GHANA

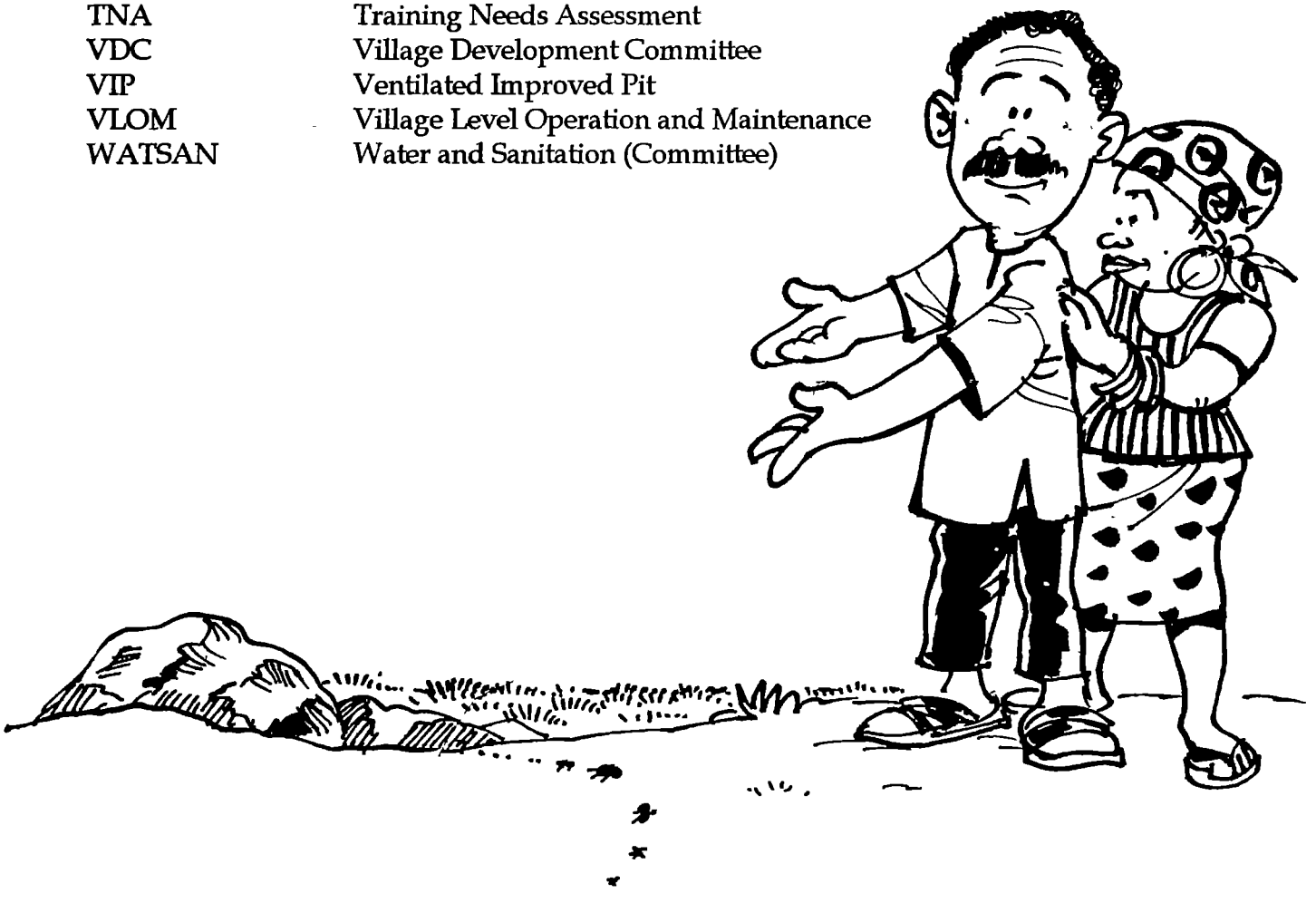
Location

Dzorwulu, Accra.

Table of Contents

Abbreviations

AM	Area Mechanic
BH	Borehole
COM	Community Ownership and Management
CWSA	Community Water and Sanitation Agency
CWSP	Community Water and Sanitation Programme
DA	District Assembly
DMC	District Management Committee
DWST	District Water and Sanitation Team
DWSP	District Water and Sanitation Plan
FMP	Facilities and Management Plan
GWSC	Ghana Water and Sewerage Corporation
HDW	Hand Dug Well
HDWC	Hand Dug Well Contractor
HPC	Hand Pump Caretaker
NGO	Non Government Organisation
O&M	Operation and Maintenance
PO	Partner Organisation
RWST	Regional Water and Sanitation Team
SBDU	Small Business Development Unit
TNA	Training Needs Assessment
VDC	Village Development Committee
VIP	Ventilated Improved Pit
VLOM	Village Level Operation and Maintenance
WATSAN	Water and Sanitation (Committee)



Welcome!

This Manual is prepared specifically for you. It is designed to help you in running your office and carrying out your activities as the DA's secretariat on water and sanitation. Let us quickly look at what is in it and how to use it.

- Chapter One provides information on the CWSP, why it was started and what its role is in the implementation process. If you need more information on any of the above, please look at the CWSP Implementation Manual.

- Chapter Two looks at the question "what happens from the time a community applies for the water facility till the time when the water point is completed and even after"? In answering this question, you will be looking at the whole project cycle, program promotion and community animation, selecting beneficiary communities through a fair transparent process. You will also look at how to monitor the POs and the contractors and when the facility is in place. The rest of the chapter tells you how to assist the Watsans and continue with hygiene education.

- Chapter Three is devoted to sanitation issues. It touches on your roles in latrine artisan recruitment and training, subsidy management and monitoring latrine construction.

- Chapter Four outlines your specific role in the schools programme. It describes what the schools programme is all about and what you should do in implementing the programme.

- Chapter Five looks at how to manage your office properly. Having collected all information in the field, you need to document everything properly. This chapter gives you systems for sharing information among the team, storing the documents and systems for work planning and reporting.

- Chapter Six describes the skills needed to carry out your activities effectively. The key ones are organising and running meetings, effective listening, presentation and motor bike running and maintenance. You may have some of these already. This chapter can be used for quick reference if you are not sure of the skills for a particular task.

- Chapter seven provides a quick information reference in water supply technology, sanitation technology and health and hygiene. If you need further details on it, you should consult other relevant documents.

The Annex at the back of the manual provides the various forms which you will need to do your work. You should liaise with the DA and the RWST to ensure that you always have enough copies in the office. For some of the forms, guides on how to use them have been provided.

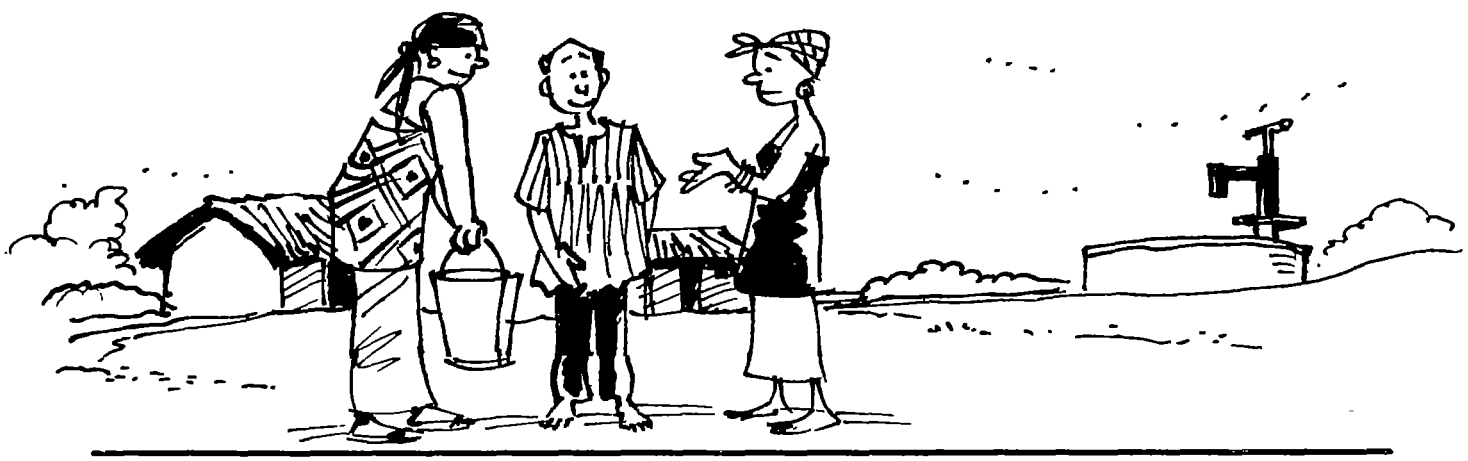
1. Introduction: The CWSP

1.1 Why the CWSP?

In the past, many rural water supply and sanitation projects have not been successful because the facilities were not maintained and eventually broke down beyond repair. Many villages never had any access at all to improved water supply and sanitation facilities. If the limited funds available are not to be wasted, it is essential to ensure that all future investments are sustainable.

Past experience has shown us that government is *not* able to provide sustainable rural water supply and sanitation services. On the other hand, well-organised communities *can* maintain such facilities if they have a sufficient level of interest. This can be achieved if it is the community that takes the initiative in requesting improved facilities and choosing what type of facilities will best fulfil their needs. The Community Water and Sanitation Programme (CWSP) therefore rests on two basic principles:

- It is ***demand-driven***: the community requests the new facilities and chooses the type of new facilities they want and can afford; they also influence where the facilities are to be located
- It is based on ***community ownership and management*** of the facilities constructed.



1.2 What is the CWSP?

The CWSP is a national programme to deliver sustainable rural water supply and sanitation facilities. It follows on from two major changes in public administration in Ghana:

- **Establishment** of the District Assemblies as the focus for rural development activity;
- A **shift from the government to the private sector** for the provision of goods and services.

The programme aims to stimulate a demand for new facilities by COMMUNITIES and to assist communities to plan, design, build and maintain these facilities.

Support and services to the communities will be provided by the PRIVATE SECTOR - Partner Organisations, Hand dug well and Borehole contractors, Latrine artisans etc. GOVERNMENT'S role will be to co-ordinate and control the quality of the work done, as well as provide training and technical assistance.

The CWSP is being funded by a number of donors and the Government of Ghana. The main donors are the International Development Association (IDA) in Ashanti, Brong-Ahafo, Western and Northern Regions; Danish International Development Agency (DANIDA) in Volta Region; Canadian International Development Agency (CIDA) in Upper East and Upper West Regions; and the French Development Bank (CFD) in Central Region etc. Some of the projects started before the national strategy was developed, and there are some differences in the approaches used. For example, in the IDA-sponsored regions, activities cover water supply, sanitation and a schools hygiene programme, whilst in the CIDA-sponsored Upper Regions, the programme is converting existing boreholes to community ownership and management.

In addition to these major projects, water supply and sanitation is a component of some large rural development projects, such as those sponsored by the European Union, or the forthcoming Village Infrastructure Project to be sponsored by the IDA. There are also many smaller projects sponsored by non-governmental or religious organisations, and a growing amount of finance available from the District Common Fund. These projects should also be co-ordinated within the overall CWSP framework, which provides for planning, regulation, quality control and technical assistance.

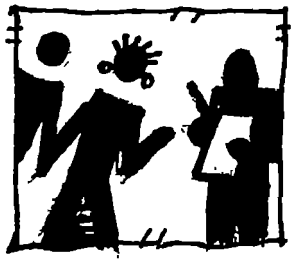
1.3 CWSP Objectives and Principles

The CWSP aims to:

- **Bring water supply and sanitation services in rural communities and small towns up to a basic acceptable level.**
- **Ensure the sustainability of the services.**
- **Promote good practices in using water and latrines, so that users will get the most out of them in terms of health, convenience etc.**

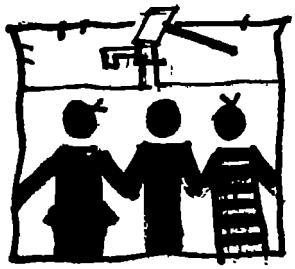
This will be done through a *partnership* in which communities own and manage their water supply and sanitation facilities, taking an *active* role in their planning, funding, construction, operation and maintenance. The necessary services are provided by the private sector. The public sector co-ordinates and controls the quality of the work done, as well as providing training and technical assistance.

The CWSP will be implemented according to a series of basic principles:



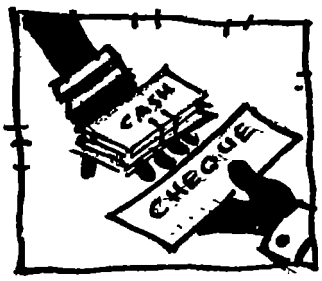
a) Responding to community demand

- The programme assists *only* those communities which express a genuine demand.
- Communities choose the type of facilities they want and can afford to maintain.



b) Community ownership and management

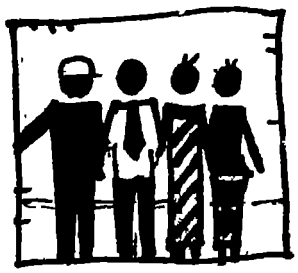
- Ownership and management of facilities by communities, including full responsibility for operation and maintenance costs.
- Active involvement of women in all aspects of decision-making and management.



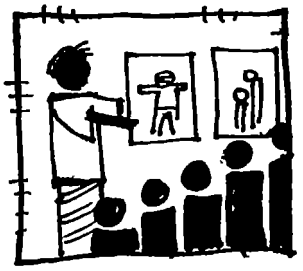
c) Cost sharing

- Contribution by communities towards the capital cost of facilities, to demonstrate and develop both a sense of ownership and their ability to cover running costs.
- Substantial capital cost contribution by government (or other funding agencies) towards the basic level of service.
- Contribution by communities to the extra cost if a higher than basic level of service is chosen.

d) Provision of goods and services by the private sector



- Community mobilisation, design, training and other consultancy services, construction, spare parts supply and provision of repair and maintenance services by the private sectors.
- Quality control, monitoring, evaluation and capacity-building by the public sector, within an environment enabling the active involvement of the private sector.



e) Promotion of behavioural change

- Promotion of a culture of latrine ownership and use, backed by the creation of a latrine construction capacity at community level.
- Hygiene education aimed at helping people identify problems and change their behaviour.

1.4 Implementation Structure

The CWSP aims to respond to the needs expressed by communities, so it must be as decentralised as possible in order to be accessible to them. It is a partnership whereby:

- ***Communities*** plan, finance, own and manage their water supply and sanitation facilities;
- ***Private companies and non-governmental organisations*** provide services in community organisation, planning, design, construction, operation and maintenance;
- ***District Assemblies*** manage and co-ordinate programme implementation at district level;
- The ***Community Water and Sanitation Agency*** (CWSA) is responsible for overall planning, regulation, supervision, quality control, support, training and capacity-building.

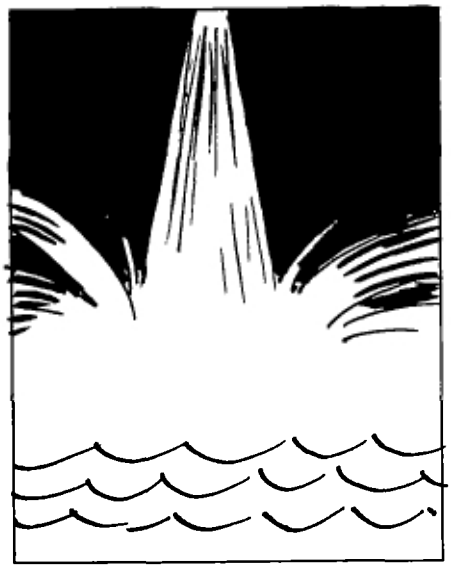
The CWSA consists of a **Head Office**, under the Ministry of Works and Housing. Reporting to the Head Office are **Regional Water and Sanitation Teams (RWSTs)** made up of managers drawn from different professions. The RWST support the District Assemblies to manage water supply and sanitation activities within their respective districts.

Implementation takes place at the district level. Interested District Assemblies establish a three-person **District Water and Sanitation Team (DWST)** to co-ordinate and manage the program at the district level. The DWST is a part of the District Assembly and is entirely supervised and funded by it. This recognises the leading role of the District Assemblies in rural development and provides for accountability through the elected representatives of the communities.

Field implementation is carried out by NGOs and contractors, managed by the DWST with the support of the RWST. Small local NGOs and businesses called Partner Organisations (POs) work with communities to help them organise themselves, plan the type of system they want, and prepare themselves to manage it. When the community is ready, the water supply facilities are constructed by borehole and hand dug well contractors. Latrines are built by individual artisans trained under the CWSP, who sell their services to individual householders.

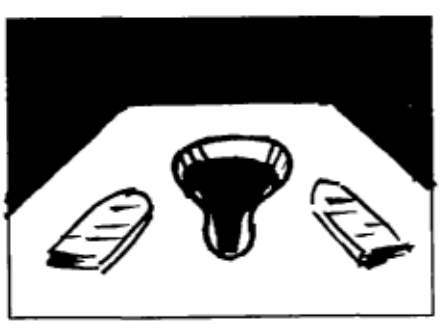
Each community sets up an organisation (or uses an existing one), called a Watsan Committee to manage its new water supply facilities. They appoint caretakers who look after the pump, carrying out regular maintenance and small repairs. The CWSP also trains a few mechanics in each district to carry out repairs that are too difficult for the communities to do themselves. Communities have to pay for repairs carried out by these mechanics, and also for any spare parts they used.

1.5 CWSP Components



a) Water Supply:

- *Communal facilities* providing a *basic level of service*, with communities paying *5% of the capital cost* (in cash or kind or a combination of the two) for:
  - * Communities with populations ranging from 75 to 10,000;
  - * Maximum of 300 people per water point;
  - * Dug wells and boreholes with handpumps for communities below 2,000 population;
  - * Mechanised boreholes for some communities above 2,000 population;
  - * Pumped, piped systems for some communities above 5,000 population;
  - * Gravity flow piped systems for some smaller communities where technically feasible.



b) Sanitation

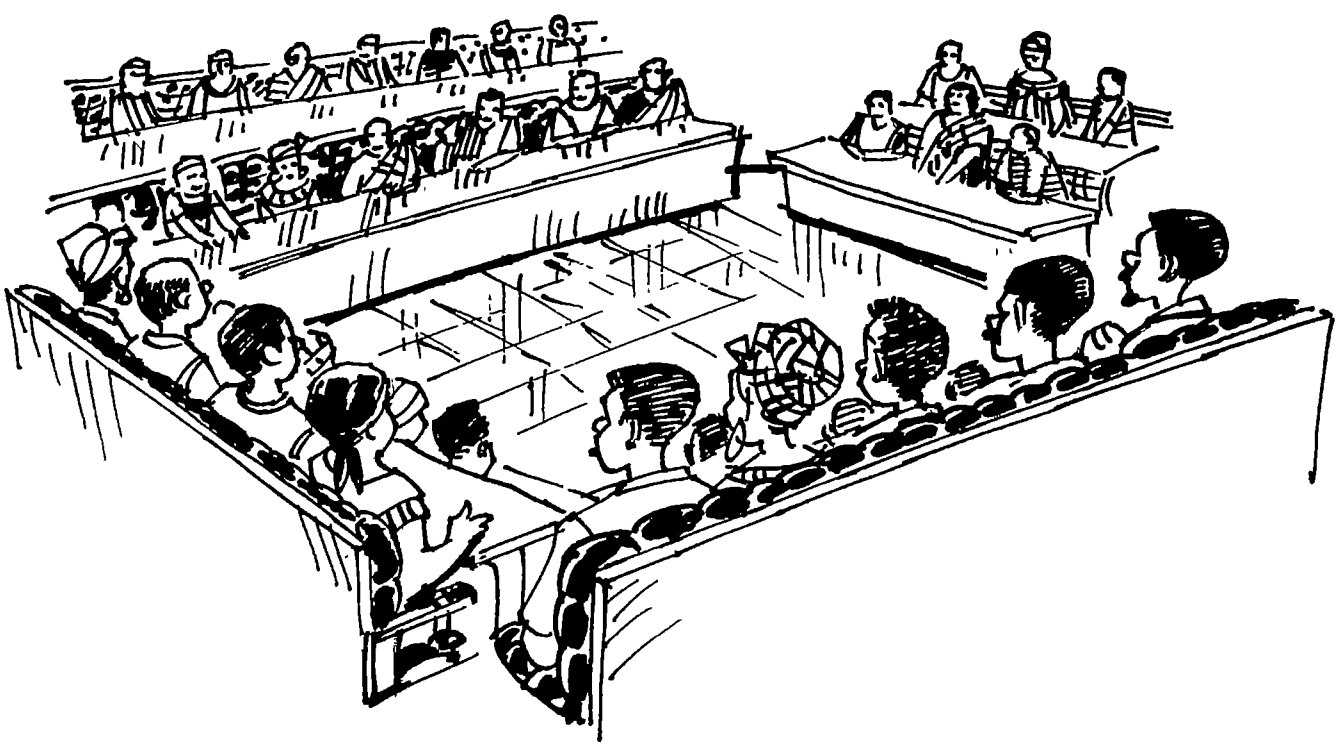
- For *households*, VIP latrines, with owners paying 50% of the costs;
- For *schools*, KVIP latrines, with the schools making in-kind contributions;
- For *clinics*, KVIP latrines, under community ownership with payment of 5% of the capital cost, and all recurrent costs.

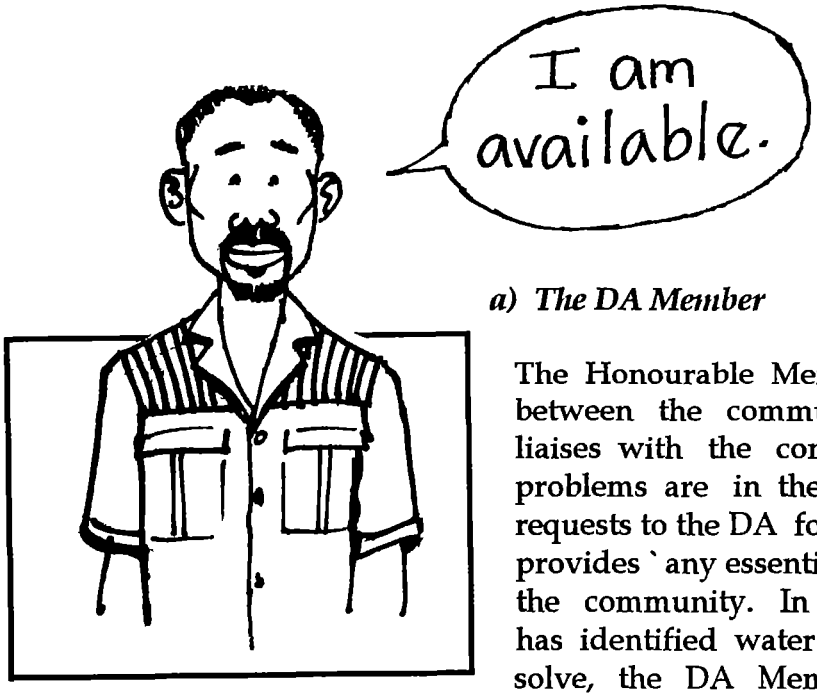
c) Hygiene Education

- For *communities*, as part of the organisation and planning process for water supplies;
- For *schools*, linked both to assistance for communities and to the schools sanitation programme.

1.6 Role of the District Assembly

The District Assembly is the key actor at the district level. They have the major responsibility for planning, supporting and monitoring project implementation at the district level. The CWSP takes advantage of the important place of the DAs as elected representatives and the general responsibility for the development of the districts legally assigned to them. In locating implementation of the programme within the DA structure, the project design has recognised the essential role of the DAs in district and therefore rural development. What specific roles then are the DAs expected to perform? To answer this question properly, it is necessary to look at the various parts of the DA and what is expected of each one.



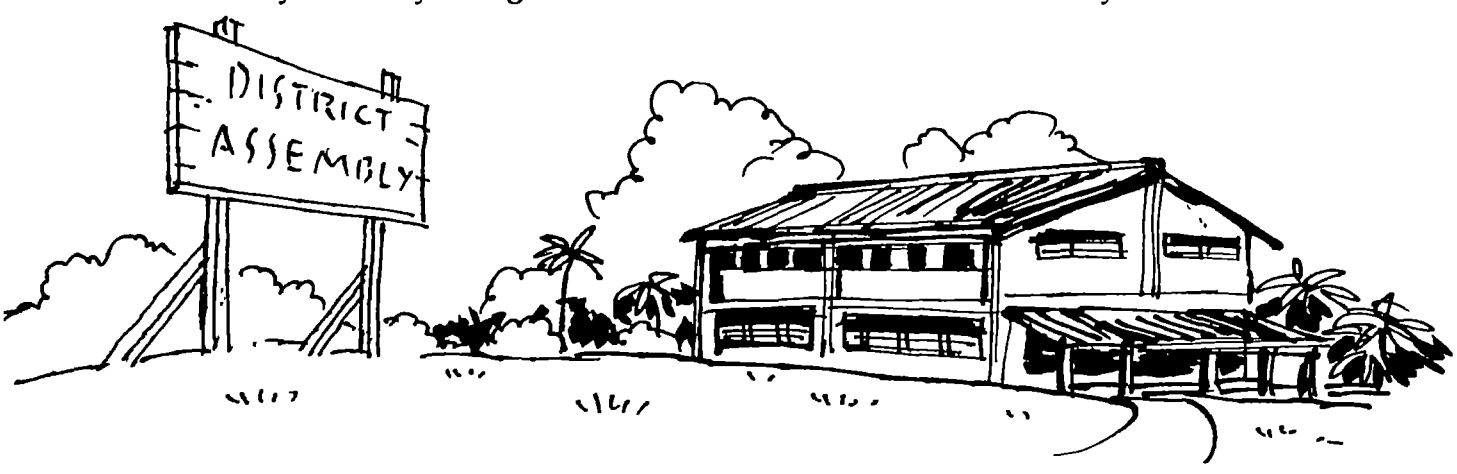


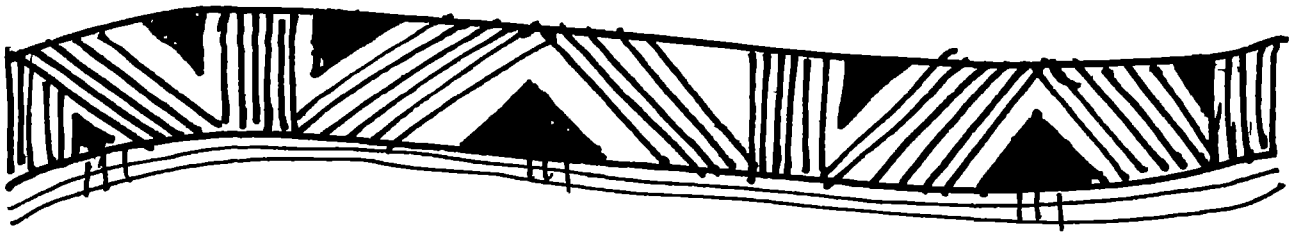
a) The DA Member

The Honourable Member of the DA is the link between the community and the DA. He/she liaises with the community to find out what the problems are in the community and sends their requests to the DA for any assistance. He/she also provides ` any essential information from the DA to the community. In this case, if the community has identified water as the problem they want to solve, the DA Member will have to brief the community on the CWSP and help them apply to the DA. He/she may make any necessary follow ups to the District Assembly and the DWST and be available to put his/her community's case across during the Assembly debate.

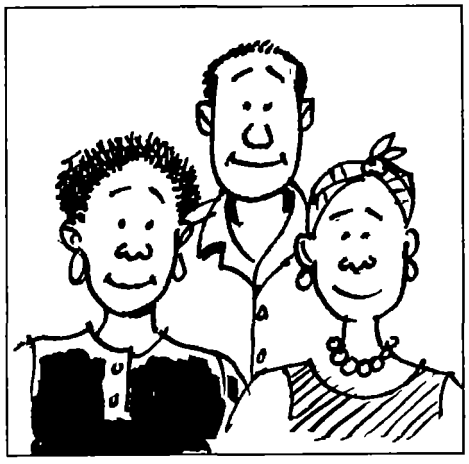
b) The Relevant Sub-Committee

Each DA has a sub-committee which handles its water and sanitation issues. In some districts it is the Social Services Sub-Committee, in others it is the Works Sub-Committee and some districts have formed sub-committees solely responsible for water and sanitation. Whichever applies in a particular district is not the issue. The important thing is that the DA has recognised the important place of water and sanitation in the district and has assigned one of its committees to focus on water and sanitation on a regular basis - and report to the General Assembly. This committee will discuss policy issues in relation to water supply and sanitation and make proposals on the allocation of resources in the district. Their advice is still subject to the debate of the General Assembly. The important thing here is that they make the decision process of the Assembly easier by doing some essential work before the Assembly meets.

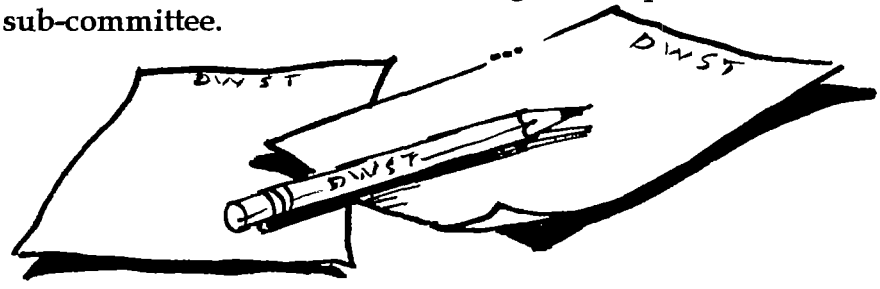




c) The DWST

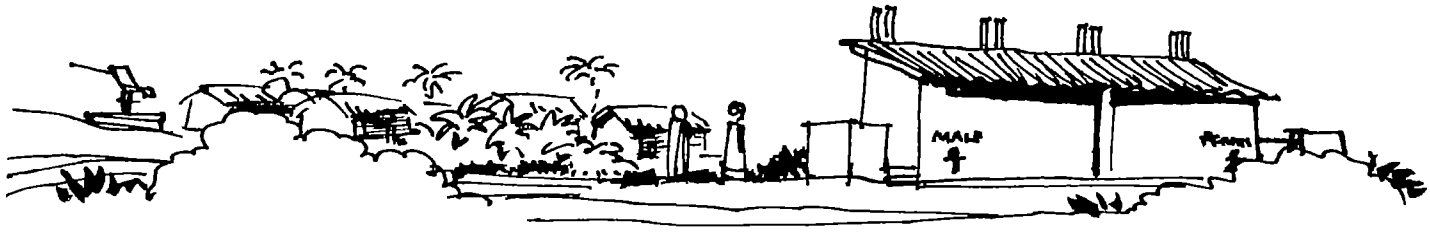


The DWST is the DA's secretariat on water and sanitation in the district. At the moment, it is like any other decentralised department in the district even though its role and existence is not explicitly spelt out in the Local Government Act. However, when the Local Government Service Bill is passed, likely in 1998, the DWST will become a unit in the enlarged Works Department. The DWST will report to the head of the Works Department who will in turn report to the District Co-ordinating Director. The DWST as a decentralised unit of the DA is an advisory body. It will advise the sub-committee on issues relating to water and sanitation. To do this, it has to collect the relevant data, process it, store it and make it available to the DA as and when needed. With other relevant departments, the DWST will also manage the implementation of the decisions made by the sub-committee.



1.7 The District Water Supply and Sanitation Program

The Common Fund expects that each DA should have a five year development plan which will be the basis of resource allocation and development in the district. This plan may have been drawn up before the DA joined the CWSP, or the District may already have been participating in the programme before the development plan was made. Whichever the case may be in your district, the important thing to note first is that a District Water and Sanitation Program (DWSP) is a part of the district's development plan. The DWSP is a detailed elaboration of the development plan. They are not two separate plans. In the five year development plan, all the details about the problem and the necessary solutions may not have been adequately explained. The DWSP will thus give a detailed outline of what the district wants to do as far as water and sanitation are concerned.



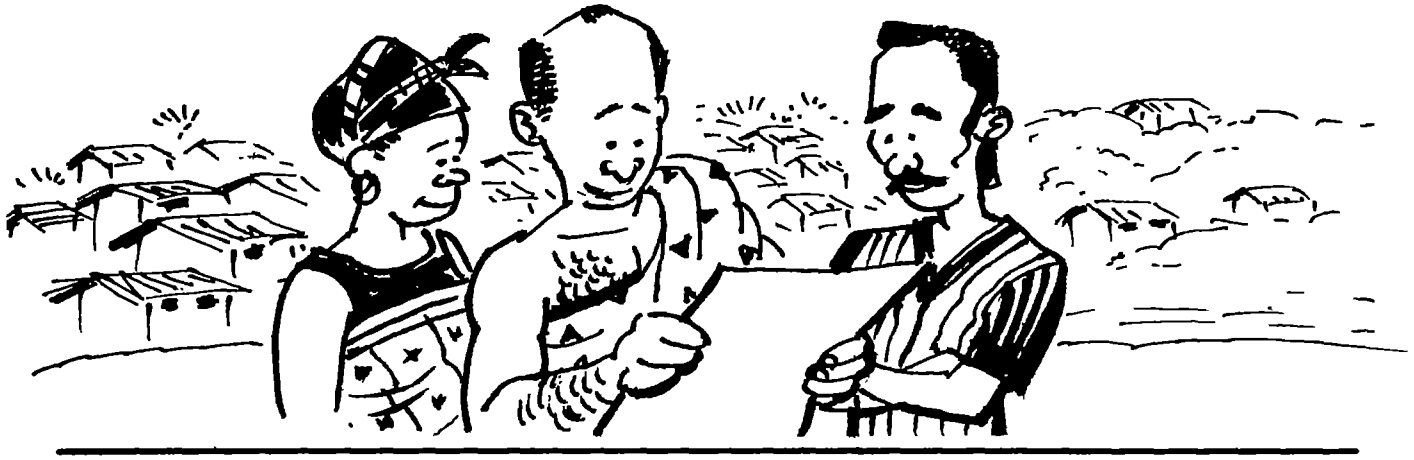
1.7.1 *Drawing up the DWSP*

Before the district joins the CWSP, the DA sub-committee responsible for water and sanitation, the district planner and other key DA staff meet with representatives from the Community Water and Sanitation Agency (CWSA) for detailed discussions. These include a review of existing facilities in the District, (idealy plotting these on a detailed map of the District) water and sanitation problems in the district, previous and current efforts of the DA and other organisations to solve these problems, the level of demand, and how the DA proposes to tackle the problems. In other words, it is an opportunity for the district to adapt the CWSP to the district's particular requirements. The results of this interaction are then presented to the DA for approval and adoption. This plan now becomes the DWSP.

1.7.2 *Delivery strategy in the district*

The activities of other donors or agencies active in the district may come up as part of the initial discussions between the DA and CWSA. Before the national CWSP was introduced, many of these organisations were doing some work in the districts. Each had its own set of conditions and expectations from the DA and the communities. For example the EU Micro-Projects required that communities pay 25% of the capital cost, in the form of labour. On the other hand CWSP asked communities to pay 5% of capital cost and all of the operational costs. Some DAs are providing water and sanitation from their own resources and Common Fund, in most cases without any real contribution from the communities. And, apart from the CWSP which is encouraging the private sector to do the implementation in the communities, no other organisations are using this strategy. The different policies are confusing to communities. All they *know* is that these projects are coming from the District Assembly. If that is the case, then the question is what will be the effect of all these different strategies and expectations of projects on the communities?

It is likely that many of the communities which pay directly will wonder why they should make such cash contributions to the DA while others get it free. This is a legitimate question. As part of the process of developing the DWSP, the DA will have to work towards a *common* system of conditions and expectations from the communities. Here you have an important role to play in terms of data collection. You have to identify the various agencies working in the district and classify their strategies. This information is provided to the DA who will in turn work towards a common system.



2. Water Supply Management

2.0 Introduction

This Chapter describes the procedures for managing community water supply projects. Whilst one or two particular procedures may be specifically for projects funded through CWSA, the procedures described are generally applicable to all projects where the District Assembly has a major role in management. The District Water and Sanitation Plan should cover all government-sponsored water supply and sanitation projects in the district, and should aim for co-ordination with privately and NGO-funded projects as well.

The Chapter starts with an overview of the sequence of activities in identifying, planning and executing water supply projects, referred to as the Project Cycle. This overview also describes how information should be recorded and filed. In the following sections, the process of promotion, animation, validation, data collection and community selection leading up to the implementation of individual community projects is described in more detail. This is important because the proper involvement of the communities and the District Assembly at this stage is essential in establishing a sound basis for community ownership and management.

Later sections go on to describe monitoring procedures for checking the progress of community mobilisation and project planning by POs, the production of Facilities and Management Plans, and the construction of hand dug wells.

Finally, this Chapter outlines DWST activities in providing long-term support to WATSAN Committees, and describes the programme for converting handpumps to community ownership and management.

2.1 Project Cycle for Water Supply - Overview

Promotion and Animation

District Assembly Members meet with their communities to help them identify their problems, raise their awareness of what they can do about them through their own efforts, and give them enough information to make a good decision on what action to take. At the same time they provide basic information about the CWSP, outlining what it offers and what the community's role would be. Although the Assembly Members who are the official representatives of the communities should take the lead, the DWST, line agencies and NGOs working in the area should also help with promotion. In particular, the DWST should make sure that Assembly Members and others working with the communities have clear information on the CWSP and how it works.

Community Application

If a community decides that water supply and sanitation is a priority, it sends a letter to the District Assembly requesting assistance. This application may be made through the Assembly Member, but could also be from any other community leader or group. For each community, you should do the following:

- **File the application in chronological order in the "Community Applications for Water Supply - Pending Validation" file**
- **Mark the community on the map.**

Need Validation and Data Collection

The next step is to check on the level of community interest in developing new water facilities and collect other information to help with selection.

You should find out the population of each community and set aside for later consideration those below 75 population. However, care should be taken not to rule out communities on the basis of old information. For example, population estimates from the 1984 census will certainly be much lower than the actual population. Communities where there are chieftancy or other conflicts should also be set aside until they are solved. If the District Assembly has decided to spread the projects equally between zones within the district, a similar number of communities in each zone should be visited. Within each zone, communities that applied earlier should be visited first.

You should then visit the communities to:

- **Assist** the community to rank its needs in order of priority;
- **Confirm** the real interest of the community in improving its water supply arrangements;
- **Further explain** the CWSP; and
- **Gather** basic data to be used in community selection.

This is done by observation, discussion with individuals and groups and holding one or more community meetings. When the validation is completed, you should:

- **Record** the data on the "**Basic Community Data**" forms (see Annex 2.1);
- **Fill** in a "**Community Scoring Sheet**" form (see Annex 2.2);
- **File** the data form and scoring sheet with the original application and any other documents relating to the community in the "**Community Applications for Water Supply - Validated for the Committee**" file;
- **Fill** in a "**Summary of Community Data and Progress**" form (see Annex 2.3) for the community, and file it in the "**Community Data Summary and Progress**" file; and
- **Update** the map to show the communities whose applications have been validated.

Review and Selection

Before data collection starts, the District Assembly must decide how it will select which communities will be served first. It does this by assigning weights reflecting the relative importance of each of the selection criteria used, and making a clear decision on the final authority for community selection: is it the full District Assembly, or is this authority delegated, and to whom?

When you have collected the data, you should then calculate the priority ratings of the communities using the scoring sheets and the weights decided upon by the District Assembly. The highest priority communities are recommended for selection, either for the whole district or on a zone by zone basis. The relevant sub-committee reviews the selection and alters it if necessary. The proposed communities are presented to the next meeting of the District Assembly, which debates and officially confirms (or modifies) the selection. Once the community selection has been confirmed, you should:

- **Establish** a file for each selected community, containing the forms and documents accumulated to date;
- **Record** the date of selection in the "**Community Data Summary and Progress**" file and update the map to show the communities selected;
- **Draft** a letter from the District Assembly to the RWST, informing them of the communities selected; and
- **Provide** a copy of the **Basic Community Data** in each of the selected communities for use by the PO.

Mobilisation

While selection is going on, the District Assembly, with the support of the RWST, selects a PO and awards it a Project Preparation Contract. Once the communities have been selected, you should then introduce the PO to them.

As a first step, the PO discovers the technically feasible options for water supply. If necessary, you and/or RWST may assist in this process. The PO then moves on to community mobilisation, including:

- **Explaining** the technical choices;
- **Building community awareness and commitment** to the change to new facilities;
- **Ensuring** women's and minority group involvement in planning;
- **Strengthening/establishing** WATSAN Committees;
- **Initiating** collection of funds; and
- **Promoting** hygiene and sanitation awareness.

You and the RWST should monitor the PO's work and assist in solving problems as they arise. When the PO feels the community is ready to go on to the planning stage, you and the RWST should then perform the Mobilisation Assessment and, if satisfied, approve the interim payment to the PO.

Planning

The PO trains the Watsan Committee and works with them to help the community decide on the type, number and location of water supply facilities, and to prepare a Facilities and Management Plan (FMP) specifying costs, community contributions and operation and maintenance arrangements. The PO then submits the FMP to you, which should note the date in the "Community Data Summary and Progress" file.

You should then check the FMP, including making a community visit to confirm that it is realistic and that the community has been fully involved in preparing it. If the FMP is satisfactory, you should forward it via the water supply and sanitation sub-committee to the RWST for final checking. If it is not satisfactory, the PO is asked to do further work.

Once the FMP is approved by the RWST, designs are finalised as follows:

- **Dug wells:** the DWST and RWST will do this together
- **Boreholes:** siting by geophysical consultant contracted by CWSA; and
- **Piped systems:** designed by consultants contracted to CWSA.

The PO and Watsan should be informed and asked to be present when siting is carried out, so as to represent the community's interest and agreed priorities.

Tender and Award of Contract

Dug well contracts are awarded by the District Assembly. First, the RWST assists the District Assembly to prepare tender documents. The District Tender Board (DTB) then requests prequalified contractors to submit tenders. After the tenders have been opened, you and the RWST should make a technical evaluation report for the DTB, and the District Assembly awards the contract.

Contracts for other systems (boreholes and piped systems) are handled by CWSA. Once contracts have been awarded, the RWST should inform you of the planned construction programme. Drillers and contractors should also inform you of their planned activities so as to allow monitoring.

Construction

During the construction phase, the PO provides follow-up and continues preparing the community to manage the facilities and assists in ensuring timely delivery of community contributions. You and the PO help to ensure that boreholes are drilled and wells dug in the agreed locations. You should monitor the construction of dug wells, and checks claims from the contractor.

When the facilities have been completed, tested and commissioned, you, the WATSAN Committee, and RWST sign a certificate of completion. The RWST or District Assembly make the final payment to the contractor (less the retention, which acts as a guarantee for the first year's operation). At this stage, the community pay their cash contribution (if applicable), to CWSA or the District Assembly, whichever financed the construction.

Follow-up

After the facilities are completed, the PO provides follow-up training for WATSAN Committee and caretakers and assists the WATSAN Committee to carry out user education. You should monitor the PO and check that the facilities are properly managed and used before authorising final payment to the PO. The RWST arranges training of handpump area mechanics, who provide training in turn for Community pump caretakers.

Twelve months after construction, you and the PO should make a joint visit to the community to evaluate the PO work and let the community know about DWST follow-up support. You should provide on-going support, helping WATSAN Committees to solve management problems and to find spare parts and services in the open market.

2.2 Promotion and Animation

This is the first stage of the water supply project cycle. It calls for specific actions from the you and the DA Members. Promotion is to let people know about something so that they will be able to decide whether they want it or not. Consider that in our everyday lives, we do not know about the various kinds of soap on the market and their prices. How will we be able to choose the kind of soap we want and can afford? It will be difficult. This analogy can be extended to communities and their water supply. If communities do not know about the CWSP (DWSP) and how it can improve their lives, how will they be able to choose? Programme promotion then is to provide the essential information to the communities so that they can make informed decisions and apply for the water facilities.

Promotion is your job - but it is also the job of the District Assembly members, who visit the villages in their constituency. Your job is to make sure the DA member understands the basic information on CWSP, so that he delivers the correct information

The animation process begins with village level education to make people aware about their conditions of life and the steps they need to take to improve their lives. In the case of water and sanitation, the animation will help the community to see if water is a problem and how they can organise themselves to do something about it. As a result of the animation process communities will get to know about existing procedures and structures by which development agencies (Governmental and Non-Governmental) assist communities in their development efforts -- in this particular case, the CWSP. The Assembly Member is the best person to carry out this animation process and help the community apply for the facility.

In other words, while you are busy promoting the programme, you need the Assembly Member to do the required animation so that the community can make an informed decision. How then should the team carry out programme promotion in the communities?

2.3 Need Validation, Data Collection and Community Selection

When applications for water supply have been received from communities, it is up to the District Assembly to respond to them. It will not be possible to help every community immediately, due to limitations on funds and manpower. Before starting community mobilisation and project preparation, you need to

a) check that the applications are *genuine,*
b) *find* out something about the communities who have applied, and
c) choose which of the communities will be served *first.*

The CWSP is based on the principle of responding to community demand. It also aims to improve the quality of life for rural dwellers, especially those whose poor water supply causes diseases and forces them to go on long and tiring water collection journeys. How should you choose who gets assistance now and who has to wait until later, in the light of these objectives?

If you have to make such a choice, you need to have a set of rules for allocating the resources available, and everybody concerned needs to agree on these rules. Otherwise, there will be disputes between those selected and those not selected. **It is up to the Assembly Members, as representatives of the communities, to decide and agree on the rules.**

In line with CWSP objectives, the selection should take the following into account:

- The strength of community demand and interest;
- The likelihood of the community being able to manage new facilities successfully;
- The community's current water supply situation; and
- The level of disease due to poor water supply.

In order to be able to look at all these factors together, you need to be able firstly to measure them, and secondly to combine the different measurements into a single number that allows us to rank the communities in order of priority. A clear agreement on the rules for doing this is also needed, so that all concerned will accept the decisions that are made.

In order to make the measurements needed to select communities, all those who apply must be visited to collect information. This data collection and analysis is called "validation". The data collected will also help to establish a profile of the communities, for use in project planning. The data to be collected is given in the **Basic Community Data Form** in the Annex 2.1 (Pg 80). A scoring system has also been established to convert the observations into numbers.

To combine these numbers into an overall score for each community, you need to decide which factors should be included and how important each factor is -- so that the more important factors have a bigger influence on the final result. You can double or triple the score for them before adding up the total score for the community. You may also decide to ignore other factors entirely. This process is known as "weighting".

2.3.1 Pre-Selection

It is the District Assembly's duty to follow up on all requests from communities. Every community should have an equal chance to enter into the selection process to compete for inclusion in the current year's programme. However, to reduce the number of validation visits to manageable proportions, it is sensible to make an initial screening to set aside the least likely candidates. Several factors should be taken into account:

a) First Come, First Served

You should try and work down the list of communities applying in the order in which they applied, so that the earliest applications are followed up first. Obviously, your validation visits will be affected by the need to divide your time between different zones, or to combine validation with other field work in nearby communities. However, wherever you happen

to be working, follow up first on the communities in that area that applied first.

b) Geographical Distribution

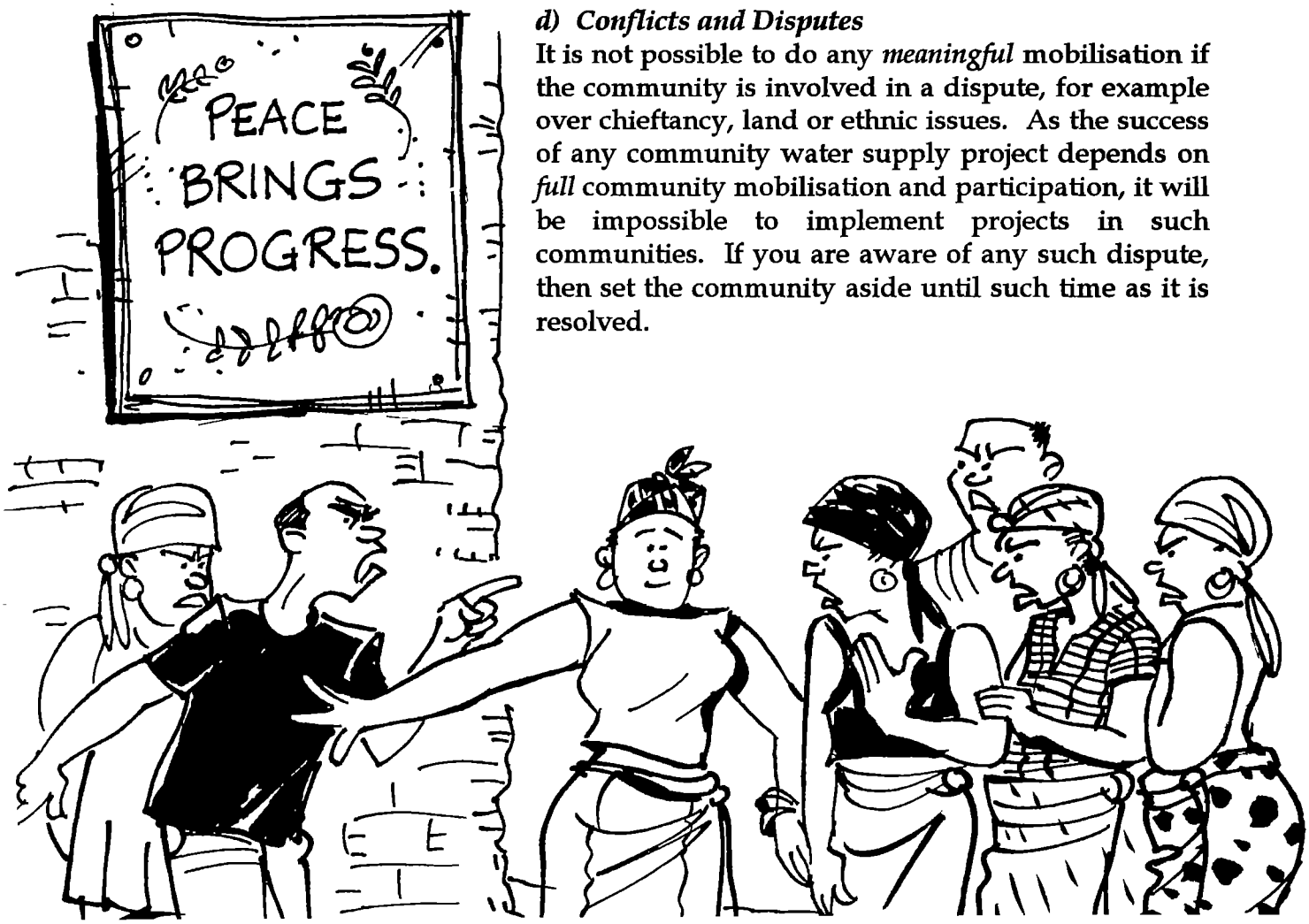
Many District Assemblies have decided to spread investments in water supply around the district to avoid being accused of unfairness or favouring one area over another. Very often this is done on the basis of zones defined within the district by the District Assembly. If your DA has decided to do this, make sure that you validate an approximately equal number of communities in each zone.

c) Population

Because providing very small communities with water supply facilities costs more per person than larger ones, the CWSP has set a lower limit of 75 for the population of communities eligible for assistance. You should therefore find out the populations of the communities from District Assembly records, and leave those with populations below 75 off the list for validation. However, you should be careful to make sure that the figures are up-to-date. If they are not, try and find an up-to-date estimate. If that is not possible, leave the community on your list for the time being.

d) Conflicts and Disputes

It is not possible to do any *meaningful* mobilisation if the community is involved in a dispute, for example over chieftancy, land or ethnic issues. As the success of any community water supply project depends on *full* community mobilisation and participation, it will be impossible to implement projects in such communities. If you are aware of any such dispute, then set the community aside until such time as it is resolved.



2.3.2 Data Collection and Validation

The main purpose of the validation visit is to collect the data necessary for community selection and to build up the community profile. It is also an opportunity to explain to the community more about the CWSP and to answer any questions they may have. When you are planning your visit, arrange for a community meeting, but also leave enough time to observe conditions, interview some individual community members and conduct some group discussions.

It is relatively straightforward to collect information on water supply, sanitation and health, but assessing community demand and interest, and the level of community activity and organisation are more difficult.

One measure of community demand and the priority they give to improving their water supply is the ranking the community gives to its various needs; is water supply the top priority, or do they consider other services such as electricity or a school as more important? Other indicators are the collection of money towards a water project or any self-help improvements they may already have made to their water supply. The community's readiness to attend and participate in meetings can also give some indication of their level of commitment.

Indicators of community organisational and management capacity include the number of active community-based organisations (CBOs), the number of community projects undertaken recently, and the extent to which these have been maintained. Another important factor is the level of women's participation in community affairs, since their participation in water supply and sanitation management is essential for sustainability.

Annex 2.2 (Pg 83) gives a guide to collecting the information required. You should fill in the information on the "Basic Community Data" form (Annex 2.1) to build up the community profile, and note scores for each factor on the "Community Scoring Sheet" form (Annex 2.3, Pg 88).

2.3.3 Scoring

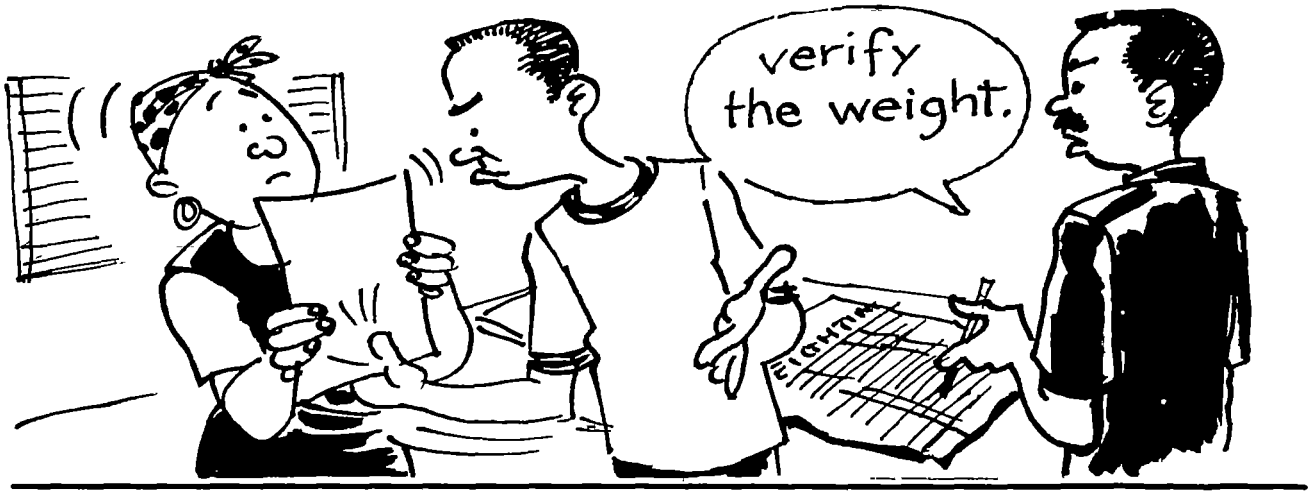
The first stage in calculating the priority ranking of any community is to note the score for each factor on the "Community Scoring Sheet" form (Annex 2.2). This form lists all the factors under consideration, and indicates for each factor how you should assign 1, 2 or 3 points according to what you find. This score should be written in the appropriate box in the first column of empty boxes on the form, headed "Score".

Referring to Annex 2.2, imagine two communities. One community has a borehole with handpump situated 700m away from its centre. You would assign 2 points for "distance from community", since 700m is between 500m and 1km. You would assign 1 point for "water supply type", as this is the score for a handpump. Another community relies on a stream running right through the village. It would score 1 point for "distance from community", since this is less than 500m, but 3 points for "water supply type", as this is the score for the category including river, stream, pond etc. You would assign points in a similar way to each community for all the factors listed on the scoring sheet, filling in one sheet for each community.

2.3.4 Weighting

The next column is headed "Weight". The weight is used to take account of how important each factor is when combining the scores for the individual factors into an overall score for the community. The weights should be decided and agreed by the water supply and sanitation sub-committee and the District Assembly. They should allocate a weight of 1, 2 or 3 according to whether they consider the factor concerned to be slightly important, quite important or very important. These weights are the same for all the communities. Once the DA has decided on them, the RWST can help you by making forms with the weights printed in place on every form.

Suppose the DA has decided that community commitment and demand is very important. It may have decided to assign a weight of 3 to "ranking given to water supply" and a weight of 2 to "action taken to improve water supply" and also to "response to calls for meeting". It regarded health problems as less important, except for Guinea Worm, which is a major problem in part of the district, and so assigned a weight of 3 to Guinea Worm, but 1 for each of the other diseases.



2.3.5 Setting Priorities

To calculate the final score for each factor, you should multiply the original score (determined as a result of field observations) by the weight (assigned by the DA), and enter it into the third column. The sum of all these final scores gives a total score for that community.

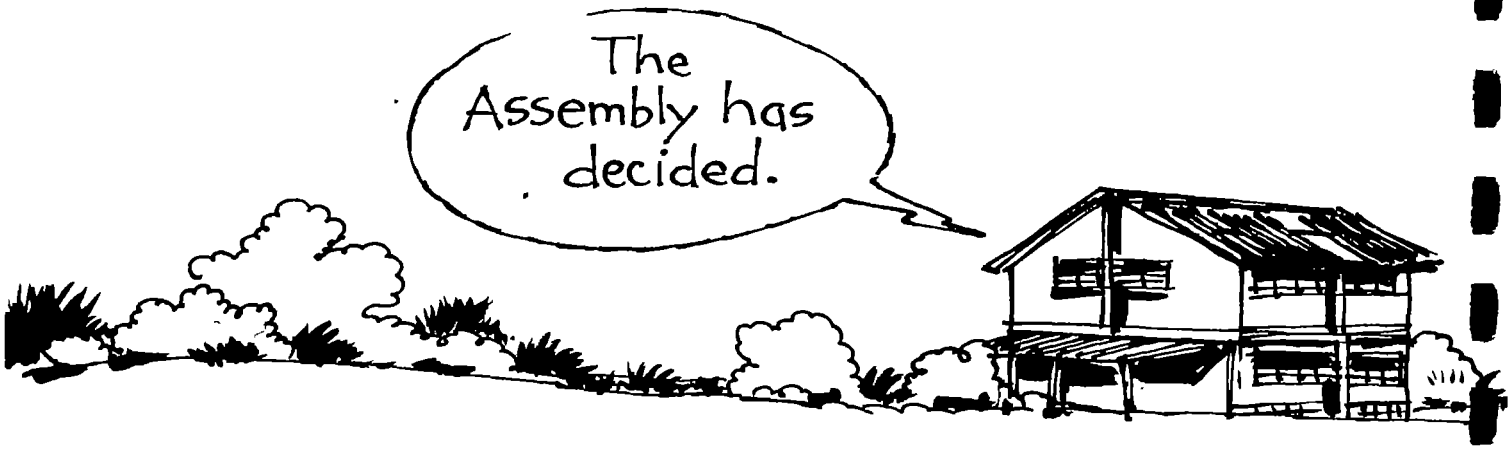
Once the final scores have been calculated, you should enter them on a "Community Ranking and Selection" form (see Annex 2.5). On each line you can enter the final scores and the total for each community. Keep this form in the "Community Applications for Water Supply - Validated for the Committee" file, as it is the final list that will be used for selecting the communities.

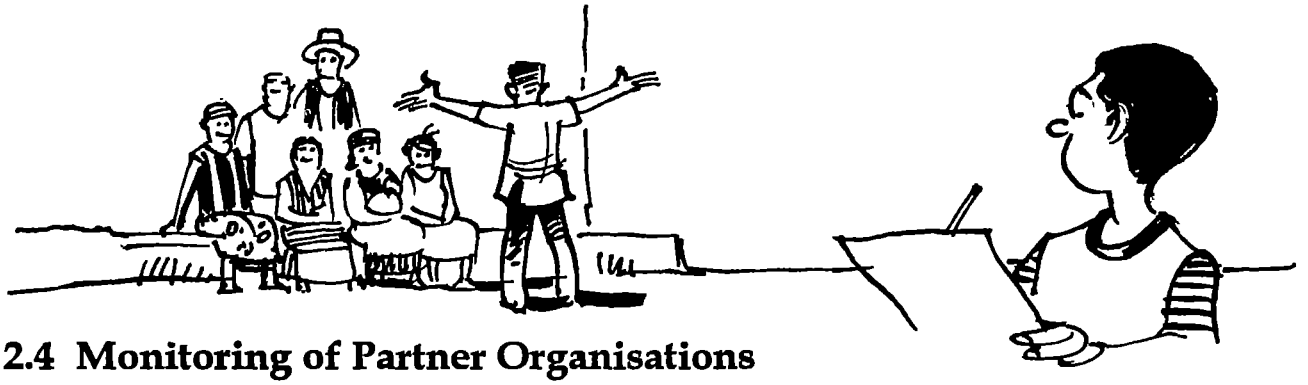
When the sub-committee is about to meet and consider community selection, you should go through the list on the "Community Ranking and Selection" form and pick out the required number of communities with the highest total scores. Write a note with a list of these communities, together with their total scores, recommending them for selection. Some Assembly Members may want to follow up and see why one or other particular community was recommended or not, and you should be able to show them the data collection and scoring forms and explain how your recommendation was made.

The sub-committee will review the recommendations and make any alterations it finds necessary. It will then prepare a submission recommending a list of communities for debate and final selection by the full Assembly.

2.3.6 Debate and Final Selection

The final selection is made by the full District Assembly, so that all Assembly Members are aware of which communities were chosen and why. The sub-committee's recommendations are debated, and any changes agreed upon. Once the Assembly has passed a resolution naming the selected communities, the PO contracting and mobilisation process can go ahead.





2.4 Monitoring of Partner Organisations

The Partner Organisations are contracted to help communities mobilise and organise themselves and prepare a Facilities and Management Plan. In order to do this, they have to carry out a series of planned activities, which they should adapt to the actual circumstances of each individual community. The purpose of monitoring is to see if what actually happens corresponds to what was planned. However, it does not stop there. Monitoring also aims to find out why planned activities were not carried out and suggest how to rectify the situation.

Monitoring is therefore *not a policing operation aimed at stopping the PO from cheating.* It is simply a way of trying to get the job done as well as possible. As you are not directly involved from day to day in facilitating the community's mobilisation and planning effort, you may be able to notice things that the PO has not. If so, get together with them, point out what you have observed, and try to work out together what should be done. Remember, you don't have time to do it yourselves, due to all the DWST's other responsibilities, and if you start giving orders, the PO will probably object and just ignore them. The result will be that the job is not well done, and the District Assembly may hold you responsible.

You should also be careful not to contradict or conflict with the PO in public. This will end up in the community becoming confused by hearing contradictory messages, and may damage the relationship between the PO and the community.

If you are unable to solve problems immediately by discussions with the PO, then call on the SBDU or the RWST to help out. Of course, in the unlikely event of serious problems such as the PO extorting money or behaving improperly towards certain community members, you should immediately contact your superiors in the District Assembly, as well as the RWST.

2.4.1 What to Monitor

The PO's activities are divided into four phases: mobilisation, planning, construction and follow-up. The first runs into the second, culminating in the FMP. The other two phases are quite distinct. At each stage there are specific things you should look out for. They can be broken down into four main areas: organisational, technical, financial and hygiene education.

These factors as they apply at each stage have been formulated as groups of questions and listed on the PO Monitoring Checklist (Annex 2.6, Pg 90). We need not stick rigorously to these and only these questions; they are more by way of a guide to the type of questions we might ask, and when an issue or a problem starts to emerge, we should follow up with more questions to find out exactly what is happening.

2.4.2 How to Monitor

As mentioned earlier, monitoring is working *with* the PO to get the best possible result. You should arrange to go with the PO on some of their community visits. Equally, you should also arrange to go sometimes when the PO is not around, and community members may feel more able to voice any criticisms they might have of the PO. This means that you should be sure to be in regular contact with the PO and know their planned itinerary.

At least one of you should try to visit each community at least once a month during the mobilisation and planning phase. If you fail to do this, problems that could have been identified early and easily corrected may end up getting out of hand and require drastic measures to be taken. You should make one or two visits during construction, and follow-up visits two or three times during the year following completion of the facilities.

You will be reporting directly to your designated superior in the District Assembly, and also to the water supply and sanitation sub-committee. However, you should also make sure to discuss regularly with the PO and the RWST. Whenever the RWST wants to visit a community, one of you should always go with them.

2.4.3 Monitoring Activities

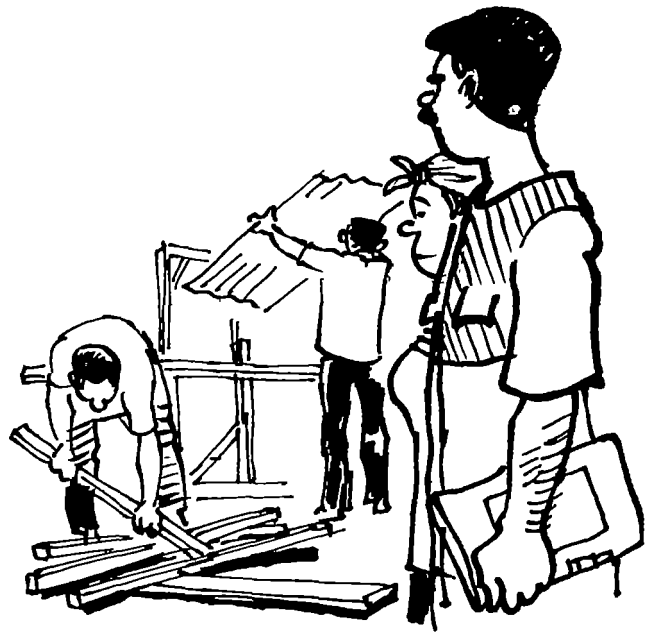
Your main tool is to ask questions. You can discuss with individuals, groups, community leaders, the WATSAN Committee or a full community meeting. Try to get a good cross-section of the community -- women, men, young, old etc.

Be a good listener, and follow the lines of the discussion as it develops. If there is anything you feel you have missed out, you can come back to it later. Remember, you are not asking questions for their own sake, but trying to uncover any problems there may be. So, if one area seems to be OK after you have discussed it with a few different people or groups, concentrate on other areas. Conversely, if a problem appears to exist, probe to find out more.

The monitoring checklist can be used to record your observations in each community. Use one copy for each community whenever you go on monitoring. The best way to use it is to be familiar with its contents and only use it

after your visit, just before you leave the community, to write down your observations. People may be put off if you are always taking notes, and it may distract you from following up on certain issues as they arise.

Some of your monitoring you can do by observation; the physical condition of the environment or water supply and sanitation facilities, or the records of the PO and the WATSAN Committee. These records may indicate where problems are being experienced, and you can follow up on them. The PO and WATSAN Committee records should also agree on when the PO visited and what was done.



2.5 Validation of Facilities and Management Plans (FMPs)

When the FMP is submitted, you should check to see if it is complete. That means that all parts that should be filled in have been filled in, and that the community and the PO have signed off on the last page. See if it corresponds to CWSP norms, such as a maximum of 300 people per water point. Also check that it is realistic; for instance, will the proposed tariff or other operation and maintenance fund-raising mechanism raise enough money to keep the planned facilities running?

You should visit the community to verify that:

- ☑ The WATSAN Committee or other group designated to manage the water supply is in place and functioning;
- ☑ Self-help activities to improve community hygiene and the environment have been carried out;
- ☑ The community's cash contribution is complete, and deposited, wherever this is feasible, in a bank account;
- ☑ It is likely that the community will be able to raise the proposed amounts of money for operation and maintenance;
- ☑ Caretakers have been selected and accepted by the community; and
- ☑ Any other planned activities have been carried out.

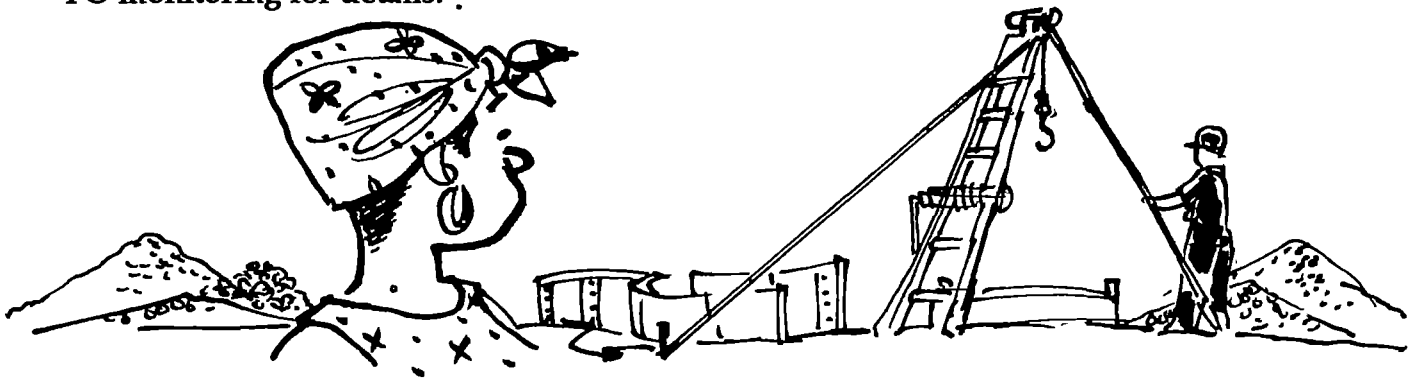
Individual interviews and focus group discussions should also be held to check that the community is fully aware of and in agreement with the decisions taken, and to evaluate the work of the PO. This should include one or more groups of women. The main thrust of the questions should be to find out if they are fully informed, organised and prepared for managing the water supply facility. Related topics might include: immediate changes resulting from the PO's work; whether they did all they should have done; whether they did it well.

The evaluation of the PO's work should also take into account the on-going monitoring you have carried out. If any problems were noted during mobilisation and planning, check to see that they have been addressed and resolved.

If the conditions are fulfilled and the evaluation is acceptable, the FMP should be submitted to the RWST for checking. If not, it should be returned to the PO for further work. Documents recording the FMP evaluation should be placed in the community's file and the date entered in the "Community Data Summary and Progress" file.

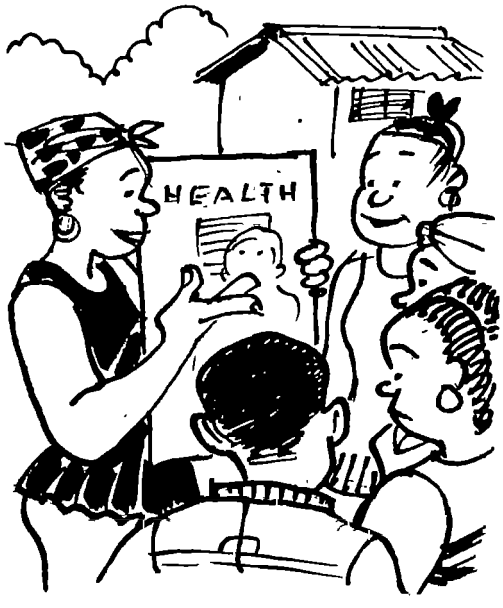
2.6 Monitoring Hand Dug Well Construction

Monitoring HDW construction is as much a technical matter as a social one. The technical things to look out for are presented in the checklist (Annex 2.7, Pg 94). The social considerations follow the same lines as PO monitoring so turn to the section on PO monitoring for details.



2.7 Long-term Support to WATSAN Committees

Even after the POs have done their work and the facility is in place, communities will continue to require some form of support from you. Part of this support could be on hygiene education and providing information. This section gives more details on how to do this.



2.7.1 *Hygiene Education*

Hygiene education and latrine promotion will be part of your work in the community especially after the POs have left. You will have to continue the education on the integration of these activities with the development of water supply and community management. For more information on hygiene education, see the PO **Manual**. There is also a hygiene reference in the Annex.

2.7.2 *Providing Information and Facilitating Access to Services*

As you will remember, many of the water systems before CWSP came into effect broke down and there was very little effort at repairing them. Many of the beneficiary communities could not repair the pumps because they did

not have proper access to information on water and sanitation systems. There was no outside group to help communities. Your team is in a good position to fill this vacuum.

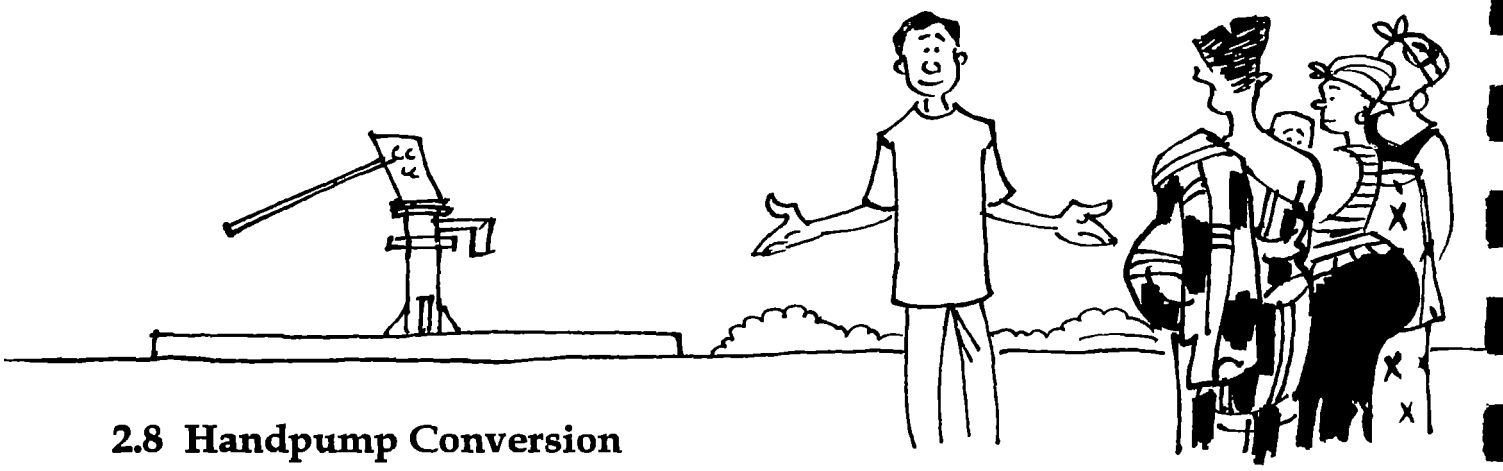
You are well located at the district capital. You visit the communities, they know you and you have good rapport with them. You also have access to current information on water and sanitation issues in the district and the nation at large. You are therefore in a good position to provide information and facilitate access to services. How will you go about providing the information?

There are three main ways of doing this:

- **First** is through the Assembly Members. Each time you meet an Assembly member, either individually or at an Assembly meeting, you *should* let them know about what is available, issues about spare parts, repair etc. They will in turn go back to their communities and pass on the information.

- A **second** way of providing information is, each time you visit a community on any issue at all, you should take the opportunity to *update* them on the latest news on water and sanitation. In this you will be reinforcing the efforts of the Assembly member.

- A **third** way of ensuring access of communities to information is to *encourage* them to contact your office when in doubt about a particular issue. This means that there must always be at least one person in the office at any time. It also means that the team as a whole should be *friendly* so that people will be encouraged to approach you for any information.



2.8 Handpump Conversion

The conversion programme is a strategy to convert existing centrally maintained hand pump systems into the community managed systems. The aim is to ensure that all the small water points are under Community Management, all adopting the same system.

The objectives of the conversion programme are to:

- **Change** the form of management from centralised maintenance to community ownership and management;
- **Create** an enabling environment so that community ownership and management is sustained;
- **Transfer** skills and knowledge from current service providers to the private sector;
- **Promote** the concept of District Ownership and Management;
- **Ensure** continuous sustainability of facilities; and
- **Ensure** affordability of the maintenance system and cost of spare parts and of delivery.

Other NGOs (e.g. Catholics, World Vision etc.) will be encouraged to join the conversion programme.

In promoting this programme at the community level, you should explain the following :

Definition of Conversion -- Moving away from centralised maintenance system to COM and village level operation and management of maintenance

Money from the Community is as follows:

Arrears

- Agreement on the actual figure to be negotiated between Community and CWSA;
- Billing from January 1992;
- Payment within 6 months will be given 50% reduction;
- Full payment beyond 6 months;
- All payments should be made within 2 years; and

- Billing stops on entering of a District.

Capital Contribution

- The payment of the equivalent of $65 is for new pumps only;
- Cedi equivalent of US $65 as actual figure is to be set on an annual basis by Technical Forum. For 1997, ¢ 130,000.00 is suggested; and
- Bank deposit of the capital contribution should be one of the conditions for exchange of pump. This capital contribution is for payment of cost of delivery and installation of new pump.

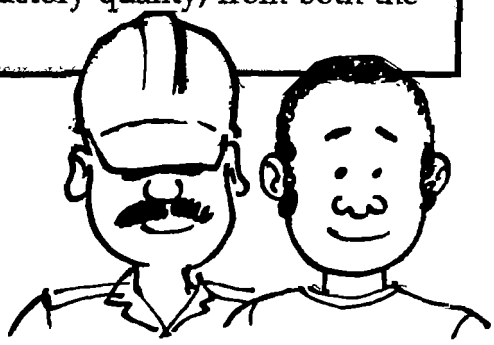
Operation and Maintenance

- A community should deposit an equivalent of $100 (Two Hundred Thousand Cedis) per pump in WATSAN accounts within 3 months of first WATSAN Training;
- Community should agree on how to collect money for O and M. $100 per pump (or equivalent value in spare parts) should be raised at start of programme; and
- Payment of O and M contribution should not be a condition for conversion. However, if such payment is not satisfactory, follow-up work will be done to put pressure on the community to establish an O and M fund.

3. Sanitation Management

This Chapter describes the procedures for latrines subsidised through the CWSA. However, latrine artisans trained under the CWSP, and indeed any others, should also be encouraged to build latrines independently and without subsidies. Full coverage will only be achieved when people come to regard latrines as a normal and *essential* part of a house, and it would be too expensive to provide a latrine subsidy for every household in the country. **Your role is to:**

- **Promote** latrine construction and use;
- **Assist** in recruiting and training latrine artisans;
- **Manage** the CWSP latrine subsidy programme;
- **Co-ordinate** CWSP initiatives with other sanitation projects in the district; and
- **Make sure** that any latrines constructed are of a satisfactory quality, from both the safety and hygiene points of view.



3.1 Latrine Artisan Recruitment and Training

1. The first activity is to recruit and train latrine artisans. You and the Assembly Members should inform communities that experienced builders interested in receiving training on latrine construction should apply to the District Assembly

2. Select about 40 for interview, on the basis of their existing skills, dynamism and a good geographical distribution across the district.

3. Agree with the RWST on a date for interviews, which will be carried out by the DWST with RWST support.

4. Choose 20 candidates to attend the preliminary 3-day classroom training. Plan and manage this event jointly with the RWST. Your job is to arrange for a hall and accommodation for the trainees, and the RWST, supported if necessary by consultants, should provide the trainers, programme and funding.

After the classroom training, you and RWST should select the ten most promising artisans from the group for further practical training a few weeks later. Agree on a date for the training session and clearly assign responsibilities for the various tasks necessary in preparing it.

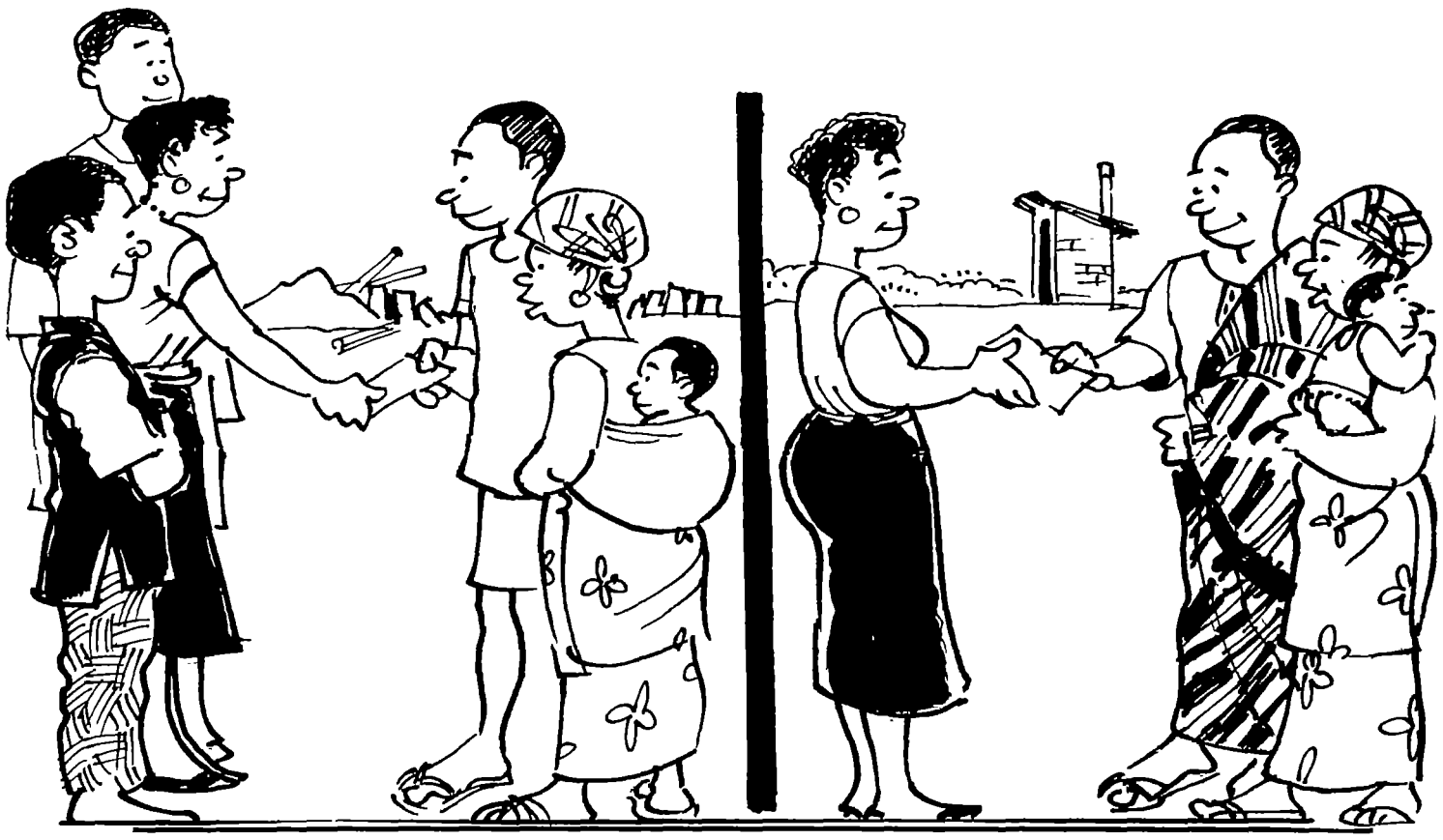
In general, your job is to select sites for demonstration latrines in a village near the district capital, where a number of demonstration units of various types and finished to various degrees (pit excavated, slab cast, superstructure partly built, etc.) will be built prior to the training session. You will also supervise the construction of the demonstration units, and make arrangements for trainees' accommodation.

3.2 Subsidy Management

a) Application

It *is* the responsibility of the artisans to look for potential customers. However, if you receive applications directly or any other District Assembly Members or staff, they *should* be referred to one or other of the artisans.

On completing their training, artisans should be given a plentiful supply of "Latrine Construction Contract" forms (see Annex 3.1, Pg 95) and taught how to fill them in correctly. To simplify the release of subsidies, artisans should bring about five applications at a time. Each application must be made in 3 copies on a



Latrine Construction Contract form, all signed by the beneficiary and the artisan.

You should:

- **Open** a file for each artisan;
- **Fill** in a "Latrine Summary Information" form for each application; and
- **Keep** the three copies of each application in the artisan's file, next to the summary form.

b) Verification

You should visit all applicants to verify that:

- They *really* need a latrine and have a serious intention of fulfilling their part of the agreement;
- There is *no* dispute over the site proposed for the latrine;
- The site chosen is *suitable* (see "Latrine Supervision Checklist" in the Annex) ;and
- The right type of latrine has been chosen.

If the answers to all these points are satisfactory, then one of you should:

- **Make** any alterations or corrections that might be necessary;
- **Sign** all three copies of the application in the space marked "verified by"; and
- **Note** the date of verification on the summary form.

If the application is *not* accepted:

- **Attach** a note explaining the reason; and
- **File it** in the **"Rejected Latrine Applications"** file.

c) Approval and Contract

You should pass verified applications to the water supply and sanitation sub-committee for final approval. A designated District Assembly officer signs the applications and they become contracts. Once this is done, You should:

- **Record** the date of approval on the relevant summary forms; and
- **Update** the map to show the approved applications.

d) Release of Subsidy

Once a batch of applications is approved, you can apply for the first part of the subsidy. The amount of the subsidy is determined each year by CWSA, and is a fixed sum per latrine. It is given in two equal parts, one on starting the latrine, and the other when it is finished. The request for funds is therefore calculated as half of the subsidy due on the latrines to be started.

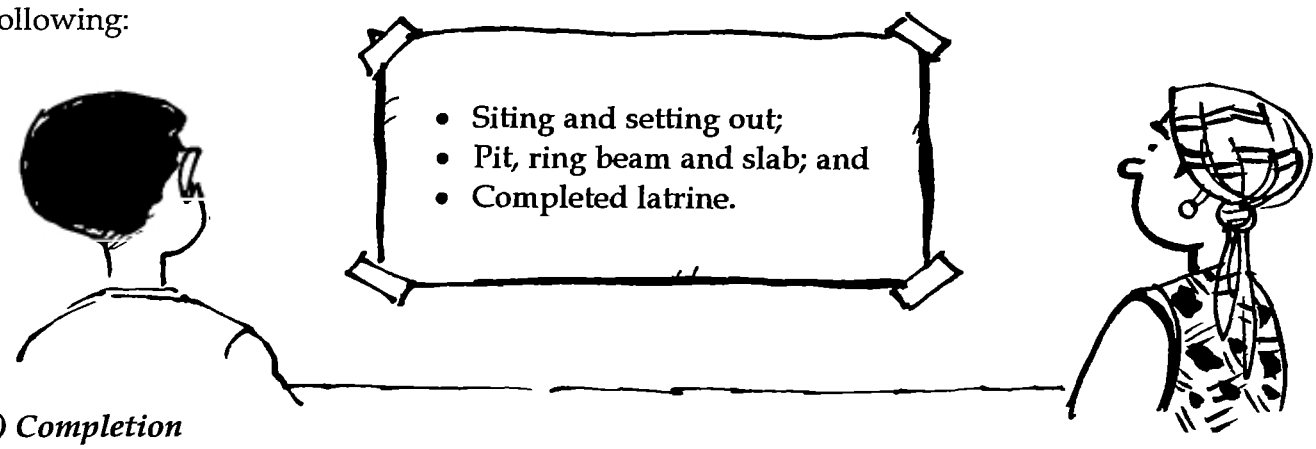
you should fill in a "Request for Release of Funds for Latrine Construction" form (see Annex 3.3) in duplicate. This should be submitted to the Finance Department of the District Assembly, with one copy of each contract. Keep the other two copies of the contracts (for the artisan and the beneficiary) and the copy of the request for funds, which is kept in the "Latrine Subsidies" file.

When the funds have been obtained, you should pay the artisans in the presence of the beneficiaries concerned, in the communities where the latrines are to be built. The artisans should sign for the money they receive, in the relevant spaces on the Request for Funds form. At this stage you should also:

- **Give** the artisans and beneficiaries their copies of the contract; and
- **Record** the date of payment on the relevant summary forms.

e) Construction

The artisan builds the latrine, with the beneficiary providing the agreed cash and in-kind inputs set out in the application/contract. While you are in or around that community, you should try and visit the site during construction to check the following:



f) Completion

On completion, you should check each latrine to make sure it is complete and of satisfactory quality. If these conditions are met, they prepare two copies of a certificate

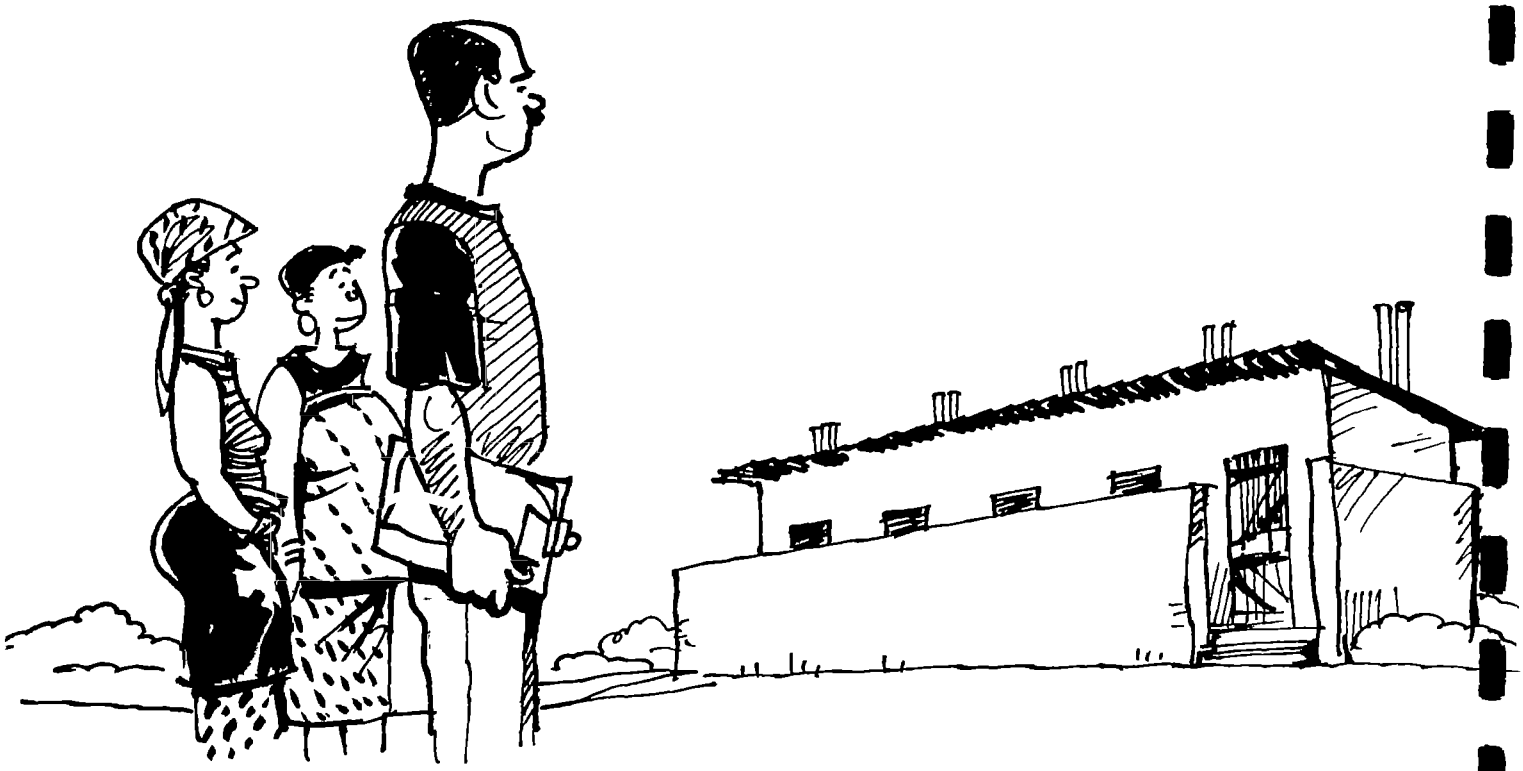
of completion (see Annex 3.4, Pg 99). The DWST then prepares another Request for Funds form, to obtain the second half of the subsidy for the completed latrines.

You should submit the request to the Finance Department of the District Assembly, accompanied by one copy of each Certificate of Completion. Payment should be made, as in the previous case, to the artisan in the presence of the beneficiary. The other copy of the Certificate of Completion should be pasted up inside the latrine, in a place where it is not likely to get wet and fall off. You should make final records, on the Latrine Summary Form and in the Community Data Summary and Progress file.

- **Record** the dates of completion and final payment on the relevant summary forms;
- **Update** the map to show the completed latrines; and
- **Note** the completion of a latrine on the relevant **Community Data Summary Form.**

g) Reimbursement

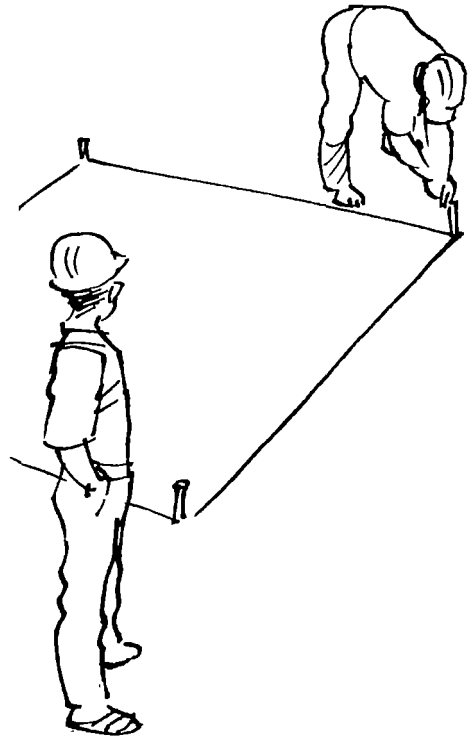
After making the second and final subsidy payment, the District Assembly can apply to RWST for reimbursement of the funds. A standard form for this purpose is provided in Annex 3.5 (Pg 100). The request should be approved by the Regional Sanitation Engineer. However, this does not mean that he will check every single latrine before giving his approval; rather, he will inspect the completed latrines on a random spot-checking basis. The RWST should effect payment within a month of receiving the request for reimbursement unless there are exceptional reasons that make this impossible.



3.3 Latrine Construction Monitoring

A Latrine Monitoring Checklist is given in Annex 3.6 (Pg 101). It is a series of questions to be asked at each stage. One copy of the checklist can be used to record the answers to these questions for each individual latrine and ensure that nothing important has been overlooked.

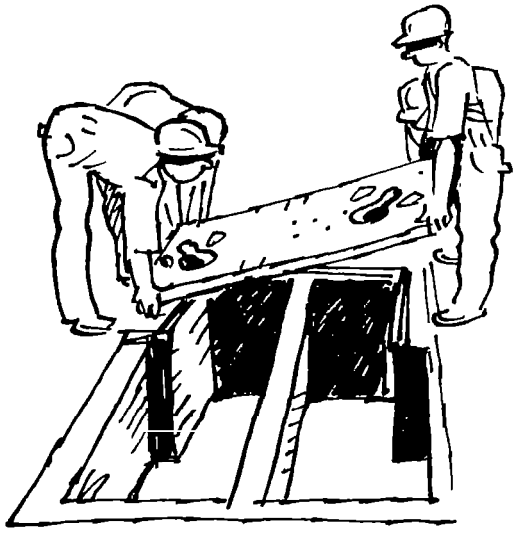
The checklist is in four parts. Each part lists the items to be checked at each stage in construction. Note that various technical details will have to be cross-checked in the technical manual for the particular type of latrine being built. You should always carry a copy of the technical manuals and a measuring tape when monitoring latrine construction.



a) Siting and Setting Out

This part of the checklist should be used during verification, when the site and the type of latrine will be decided, and again when construction starts. Some of the items can be checked by observation, whilst others (such as soil type, water table, prevailing wind direction etc.) depend on interviewing long-time residents of the area.

If at all possible, the setting out and the trench for the ring beam should be checked before construction starts. Without a strong, accurate, well-located foundation, the latrine can never be a good one.



b) Ring Beam, Pit and Slab

Proper casting of the concrete items (ring beam and slab) are essential for the safety and proper functioning of the latrine. This is important not just for the latrine owner, but also for the success of the whole sanitation programme; a collapsing latrine will not encourage other community members to build one.

For the first five units built by each artisan, efforts should be made to monitor the casting while it is being done (items 1 and 2 of stage 2 in the checklist). Later, when he has shown himself to have mastered the process properly, the castings can be checked after completion. The checklist for this stage is mostly self-explanatory.

The curing process is very important for the concrete to reach its full strength. If the castings dry out before they have finished curing, they will be weak and likely to crack. Householders should be questioned closely to see if the ring

beam and slab were kept permanently wet for the required period after casting. (Beam 3 days, slab 7 days)

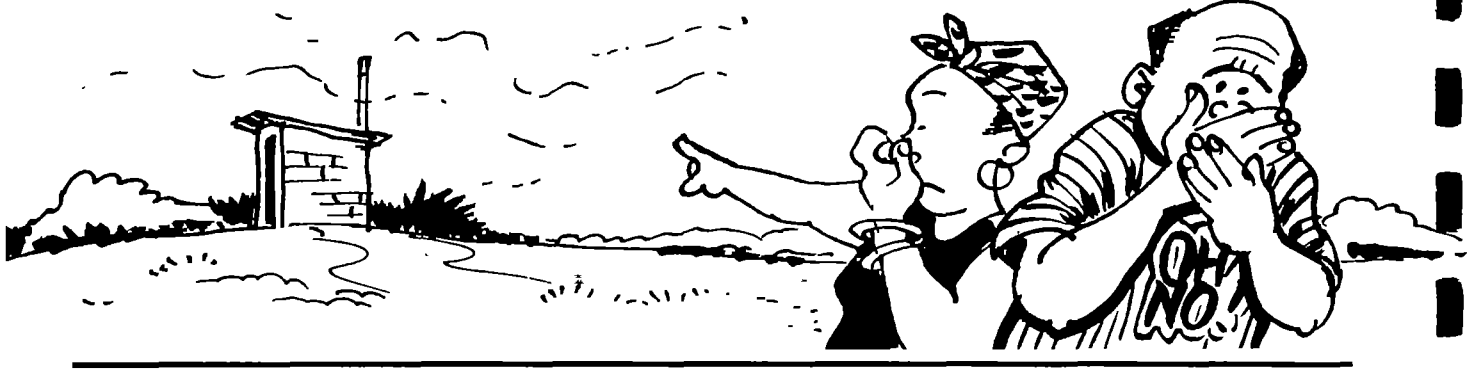
If test blocks are made to check the suitability of the water used for mixing concrete, this need only be done once for each new source of water. The blocks can be small (perhaps a quarter of the size of the blocks usually used for building), and should be made of the same concrete mix as the ring beam (1:3:6 of cement:sand:stones). The small quantities required can be measured using an empty tin instead of a headpan. Care should be taken to cure the test blocks properly.

c) Completed Latrine

There are two main advantages that VIP latrines have over other types of pit latrine: the control of odours and the reduction of fly breeding. Both of these advantages are due in different ways to the vent pipe.

Odour control is caused by the wind blowing over the top of the vent pipe and sucking smelly air out of the pit, which is replaced by fresh air flowing into the superstructure and down the squatting hole. This can be checked using the smoke test. **Problems with the ventilation can occur if:**

- **The latrine is badly sited** near taller buildings or trees, which can cause eddies in the air which may blow downwards into the ventpipe, bringing odours into the superstructure;
- The **vent pipe** is *not* high enough (at least 2 feet) above the roof of the superstructure, so that the eddies caused by the latrine structure itself affect the air flow over the top of the ventpipe;
- The **vent pipe is too narrow** for the air to flow easily. This means not only the ventpipe itself, but also where the ventpipe enters the pit. It should be possible to see straight down the ventpipe into the pit; and
- The **superstructure** does *not* allow **enough air** to flow in.



Fly breeding is controlled by a combination of factors. Less flies get into the pit because they are attracted by the smell, but this comes from the vent pipe, and they cannot go down it into the pit because of the fly screen. If flies do get into the pit to lay their eggs, the young flies that emerge are attracted to the light coming down the ventpipe, but cannot pass the fly screen and eventually die of exhaustion and lack of water as they keep on trying. **It is therefore important you check that:**

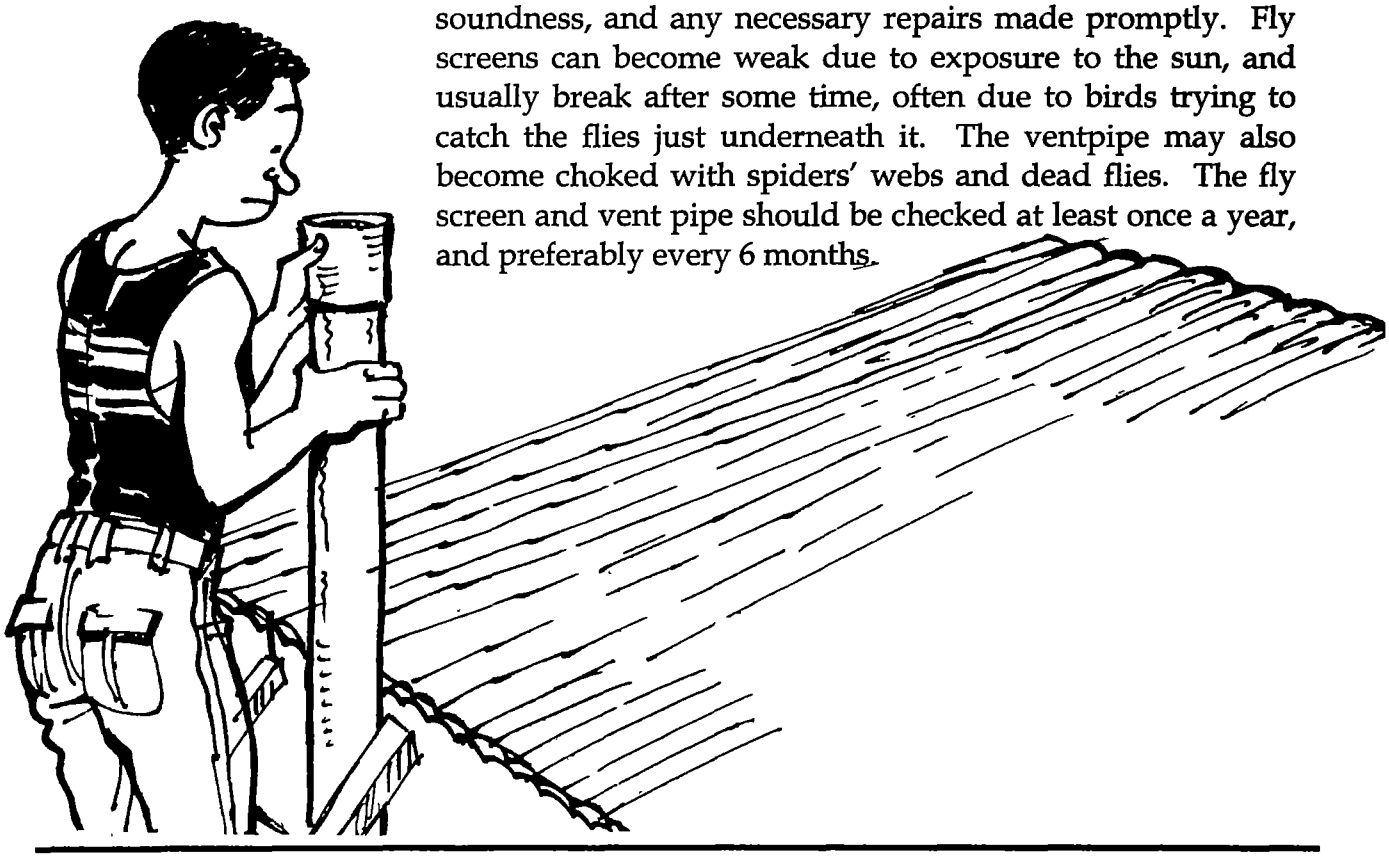
- The **fly screen** is not damaged and is securely attached to the top of the ventpipe;
- **Light** from the ventpipe falls directly into the pit; and
- The **superstructure is dark** so that flies are not attracted to leave the pit by the squatting hole.

These factors, plus the general quality and strength of the structure, are the items you should check at this stage.

d) Follow-Up and User Education

Artisans are supposed to provide users with guidelines (being developed by Trend) for using the latrine. Once a latrine has been in use for some time, you should check to see if it is being used properly. If it is not, then you should explain the right practices to the users. If you find that latrines built by a particular artisan are consistently not being properly used, then you should inform and help him to improve his user education.

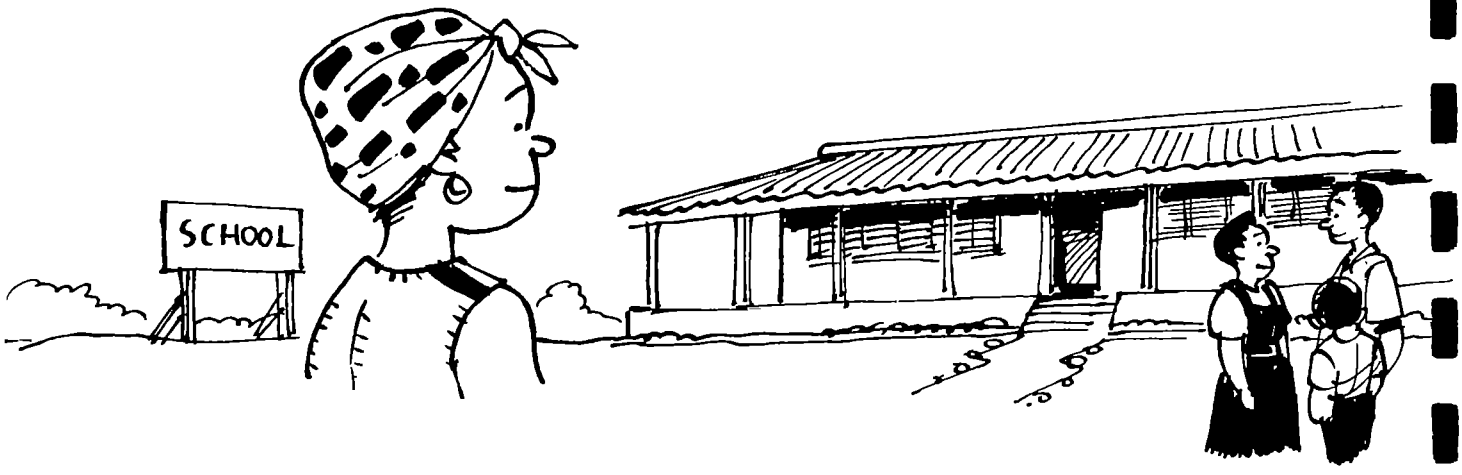
From time to time, check older latrines for structural soundness, and any necessary repairs made promptly. Fly screens can become weak due to exposure to the sun, and usually break after some time, often due to birds trying to catch the flies just underneath it. The ventpipe may also become choked with spiders' webs and dead flies. The fly screen and vent pipe should be checked at least once a year, and preferably every 6 months.



4. Schools Programme

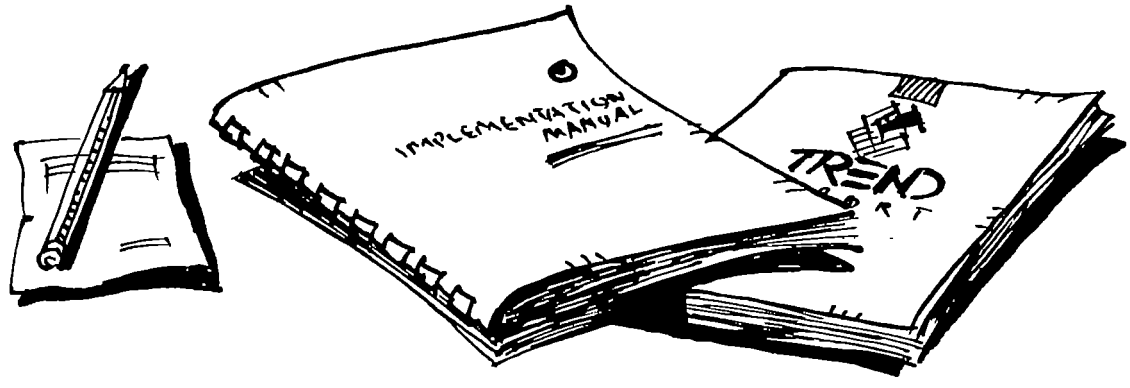
CWSP feels that proper hygiene and sanitation practices can take long term roots if school children are introduced to them properly. Hygiene and sanitation practices are related to the custom of people and when people have long acquired certain habits, it is difficult to change. Children are in a good position to change their practices because of their youth and the encouragement and regenuration that can be provided at schools.

It is believed that when they do change, they will not only cultivate proper habits for life but they will also pass these on to their parents and relatives at home. In the long run, the whole community will benefit from the activities of the school children. It is for these reasons that the program is extended to cover schools. You should note that essentially, this is not a separate program. It is a part of the whole CWSP.



What then is the schools program all about?

The schools program is to encourage schools to have their own water and sanitation facilities and to enhance hygiene practices by educating the children in them. A number of schools will be selected at a time to benefit from the program. (Details on the Schools Program can be found in the Implementation Manual and TREND Report).



What then is your role in the schools programme? The main things you will be expected to do are :

- **Conduct sanitary survey** in all the schools in the district -- this will assess the water and sanitation situation in all the schools in the district;
- **Assist in the selection** of schools in the district based on the survey results;
- **Set up/strengthen School Health Committees** in all selected schools;
- **Assist** in carrying out training needs assessment for the selected teachers;
- **Help** the schools fill in construction grant applications;
- **Assist** in the pre-testing of appropriate hygiene education materials for schools;
- **Assist** the schools to develop their **Facilities Management Plans; and**
- **Supervise** the construction of urinals and toilets in the schools.

5. Office Management

5.1 Information Flow Within the DWST

One of the important things which holds the team together is the circulation of information. Suppose that a message came from the RWST that the DWST should come for a workshop at the end of the week and this is not passed on to the whole team. It will mean that part of the team will know and prepare while the other will not.

The usual way of circulating information in the team is by word of mouth. This is fine. However, in a situation where at any time not all the team members are in the office, if the one receiving the message forgets to inform the others, the team will not work properly. It is important then to have a system which allows everybody easy access to the information at any time. This system is referred to as information flow within the team. It works like this:

- The **DWST member** receiving the letter writes **"Received"** and notes the date;
- He/She then places it in a file one may call **"float file".** This file is placed at a place accessible to every team member;
- The **next person** who comes and reads it **writes his/her initial** and the **date of seeing** the document;
- The **process continues** ***until*** **the last person** in the team has seen the document and initialled it; and
- **He/She** then **places the document** on the **appropriate file** or if a secretary is available, indicates the appropriate file for her to do the filing.

5.2 Filing System

Having received documents and ensured that everybody within the team has seen them, it is important to store them in such a way that it is safe and easily retrievable when needed. You may also have generated documents and other correspondence with other organisations and individuals. Without a copy of these documents on file, you will not have a record of our correspondence properly stored. Reference in the future will be impossible. And even if they are stored properly, retrieving documents may be very difficult if there is no particular system or order. These are some of the main reasons why the team needs its own filing system.

There are many ways to file documents. What you need is a quick system of storing and retrieving data easily. The following filing system is what can be described as a subject matter system but essentially based on the activities of the DWST. Below is a list of the various files and a description of what each contains.

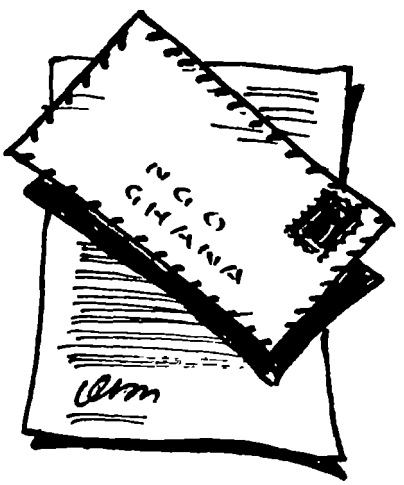
a) Administrative Correspondence with the DA.

This should preferably be an arch file. It will contain all the administrative letters coming from the DA to you and copies of correspondence from you to the DA. For example if you write to the DA complaining about the irregularity of payment of allowances, you should place a copy of this letter on this file. When the DA replies to this letter, you should also put it on the same file. Please note that these are only correspondence between you and the DA.

b) Correspondence with the RWST.

The next group with whom you are likely to have a lot of correspondence is the RWST. Here again, like the DA, when the RWST writes to you, that letter is placed on this file. When you write to the RWST, a copy of that letter is also placed on this file. For example the RWST sends a letter requesting you to attend a workshop, that letter is put on this file; and when you reply say on this same topic, a copy of the letter is also put on this file.

c) Correspondence with Other Organisations.



Other organisations, for example government departments such as MOH, Department of Community Development, or NGOs like Water Aid, Oxfam etc. may write to you. These are organisations which do not write very often to the DA/DWST. When they do, there is the need to keep a record of their correspondence. When the you also write, to them, a copy of the letter is kept on the same file. Judging that there is not much traffic between you and these other organisations, it may be prudent to use one arch file for all these organisations.

d) Community Applications for Water Supply - Pending Validation.

This file contains the initial applications from communities to the DA for water supply. They are termed **"raw applications".** These indicate a community's interest to have the facility and form the basis for which you visit the community to validate the application.

e) Response to Community Applications

When communities have sent their initial applications, it is good to acknowledge receipt of their application and give an indication of when you are likely to visit them. A copy of your letter to this effect needs to be kept on file for future reference. This file, preferably an arch file, will hold all your initial responses to community applications.

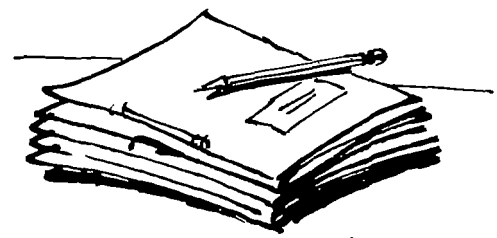
f) Community Applications for Water Supply - Validated for the Committee.

After you have gone to the applying community and collected the necessary data using the forms and scoring sheets provided, place this form on this file. This is made for the sub committee. Because of the large numbers an arch file is preferable.

g) Selected Communities (Community Data)

After the DA, assisted by the sub-committee and you have selected the required number of communities for the year, open a file for each of the selected communities. All materials pertaining to this community -- raw application, response, verified forms and score sheets are now transferred to this file. During mobilisation through to planning, you should place any material or record specific to this community on this file. Flat files, are recommended one for each community.

h) Community Data Summary and Progress File.



This file will have all the community data summary sheets.

I) Latrine Applications.

In some districts, people wanting to have the latrines may write direct to you or the DA. These applications may not necessarily be the forms which the artisans have been given. (They should be allocated to the latrine artisan for that zone to follow up.) However, you need to keep them on file while you send the standard application forms to the applicant directly or by the artisan.

j) Latrine Artisan File

The latrine artisans are operating in specific zones. This makes it easy to follow developments on each zone through the specific artisan. Open an arch file for each artisan and place all correspondence and forms relating to the artisan or his zone on this file. **The following are some of the items which should go on this file:**

- *Verified Latrine Applications* -- applications which you followed up to ensure that the signatories are the real applicants and are ready for the facility.
- *Approved Latrine Contracts* -- When the DA representative has signed the application/contract forms, it becomes a contract between the DA, the artisan and the beneficiary. Note that there are three copies. One for each party to the agreement. It is the DAs copy which you keep on this file.
- *Latrine Summaries* -- These are the summary forms provided in the Annex.

k) Reports and Workplans

It is important for you to keep records of your workplans and reports. Since the reports are based on the workplans, it may be useful to put these together in one file. An arch file is suggested.

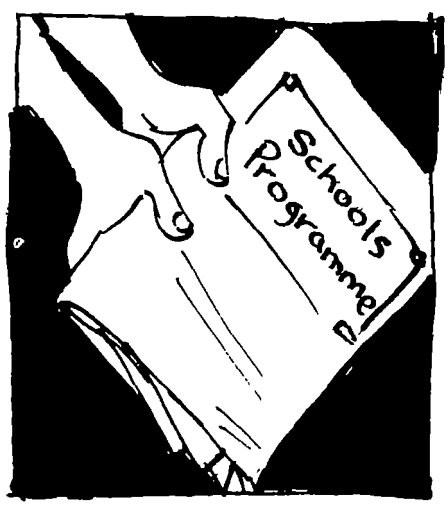
l) PO File

This file contains all the correspondence between you and the PO and your monitoring reports on the PO. For example, if the PO writes to you about its workplan for the month, place both the letter and the workplan for the month on this file. Similarly, when you respond to this letter, put a copy of this letter on the file. For the likely high volume of exchange between you and the POs, an arch file is recommended.

m) Dug Well and Borehole Contractors.

This is another group of people you are likely to deal with often in the district. Just like the PO case, you should place any correspondence from these contractors on this file. Similarly put a copy of any letter you write to these contractors on this file. An arch file is suggested.

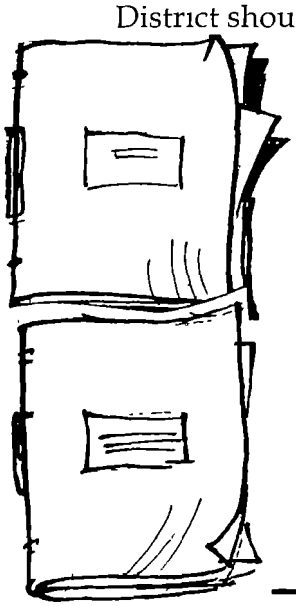
n) Schools Programme



This file will contain all matters relating to the schools programme. If the District Director of a school writes to you, the appropriate place for it is this file; and when you receive a letter about the schools survey, put it on this file. Other items which you can place on this file are results of the schools survey and school selection process

o) Small Towns Programme

Any correspondence or material relating to the Small Towns Programme in your District should be put on this file.



r) Conversion Programme

Any correspondence or material relating to the programme on Conversion in your District should be put on this file.

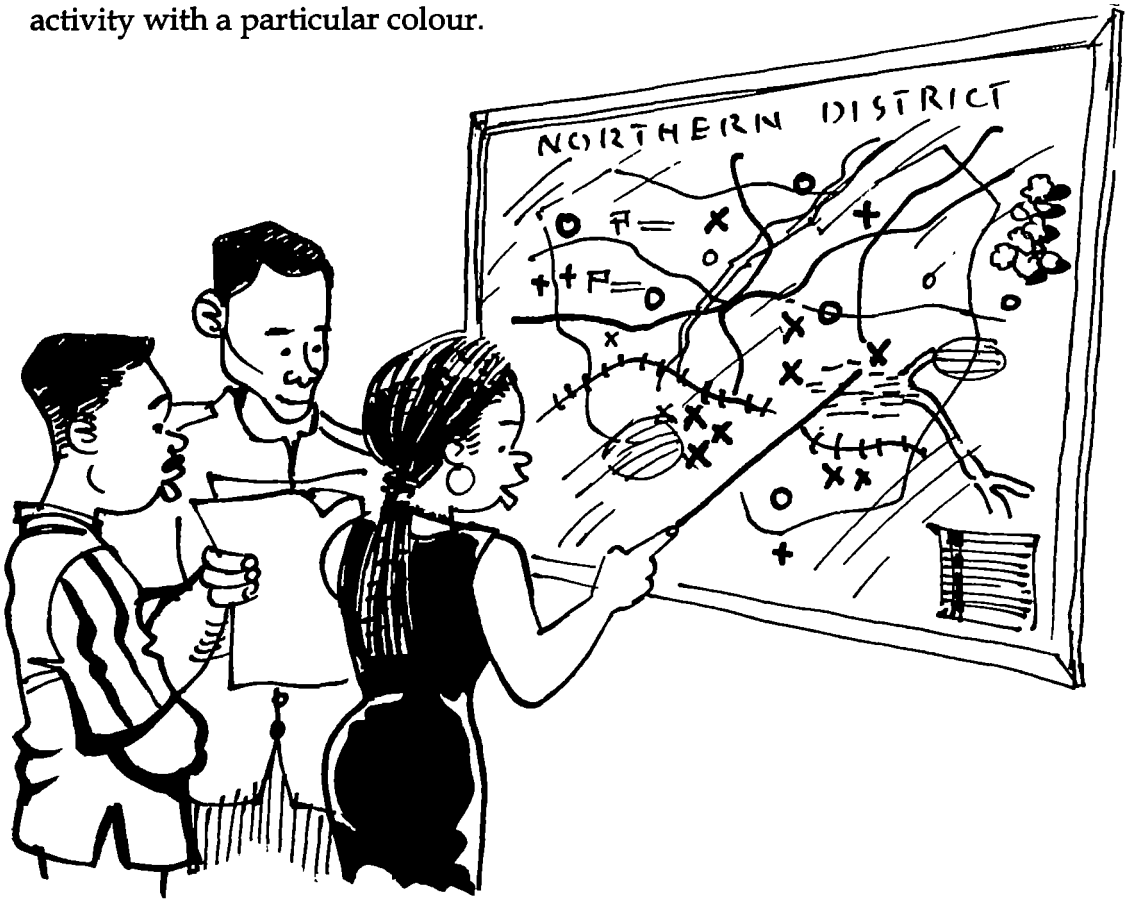
s) Training File

Very often, you are called for one form of training or the other. Materials and handouts from these workshops need to be kept and shared among other team members. This file, preferably an arch file will serve this purpose.

5.3 Use of Maps

It is possible to locate every community that has applied for a certain facility on the district map. Using maps in the identification of applying communities is essential for a number of reasons. It helps you to zone the communities, quickly identify applying communities and it gives a colourful differentiation and presentation of communities at various stages of the process. Thus, suppose a visitor, say the DCE and his entourage visit your office, it should be possible for any of you to explain the team's activities using the map alone. The following section gives some ideas on how to go about a pictorial presentation of your activities on the map.

What materials are needed for this activity? They are two or more large district map which you can get from the DA or the Town and Country Planning Department; an assortment of colour pins and markers of different colours and soft boards or pin boards fixed on your office wall. The markers should then be used to identify the various zones in the district. Having done that, the task then is for you to identify each activity with a particular colour.



For example, in the case of water supply, red can stand for all communities which have applied but have not been validated; green for communities which have been validated; and blue for communities which have been selected and approved by the DA for the year. A key denoting what each colour represents is put on the map. It is possible for you, depending on the availability of colours, to differentiate between on-going projects and those which have been completed in the communities. Similarly, you can use another map for sanitation facilities in the district. Red could represent the initial applications in each community, green for applications which have been verified, blue for ongoing facilities and white for those which have been completed.

Thus at a glance, it is possible for you to tell the number of communities which have applied for one facility or the other, the number of communities in which you did the validation and the number of water facilities which have been completed and those which are ongoing. A third map can be used to show all water supply systems including those that predate the CWSP as well as facilities built each year under CWSP. The importance of these is not only for you but any visitor who wants to have a good understanding of the water and sanitation work in the district without having to read too many documents.

5.4 Workplanning

Every year the DA will meet with your DWST to jointly set targets for your work. The DWST must then plan how it will meet these targets.

Planning your work enables you to sequence activities in such a way that you make maximum use of the available resources and time. Workplanning also enables you to monitor progress against your targets. When these plans are well drawn and put on the wall or board, it gives an impression that your office takes its work very seriously. How then do we go about drawing our workplan?

Our workplan should answer the following questions -- What is it that the team has agreed to do within the period? How will it be done? who is primarily responsible? When should the task be accomplished? What resources are needed to carry out the task? **Let's take each of these questions in detail.**

a) What

Your annual workplan needs to be divided into shorter periods, such as quarters and months. In one month for example, you may want to visit ten communities on validation, monitor three artisans who are casting slabs, go on CWSP promotion in five communities, and accompany the PO into six communities where they are doing participatory planning.

b) How

Most of your work involves meeting community members in large or small groups. It is good to plan whether during the promotion you want to meet the whole community or meet them in sections. In monitoring the artisan or the PO, are you going to meet them in the field as a joint visit or one member will go alone? These are some of the issues to consider on how you are going to achieve a particular task.

c) When

Within the month, when do you as a team want to start and complete a particular activity? How long will it take for you to, say, visit the ten communities, given that you have only one motor bike? Can you perhaps combine some of the activities, say do the verification for water and at the same time monitor the six latrine artisans? Study the locations for your activities on the map. Can you plan the route in such a way that you go in one direction or visit one zone and finish the work there before moving to another zone? These are some of the questions which are likely to affect when you can complete a particular task.

d) Who

Your team is made up of three people. For each activity, do you all need to be there to ensure that the work is carried out or can you actually divide the work so that there is one person principally responsible for the completion of activity? For example, for monitoring latrine artisans, could you make the Technical Officer principally responsible so that others can see to the POs and some other tasks? It should be noted that you should operate as a team where each of you can handle one another's job. The important thing is to share the work in such a way that optimum use is made of your resources and time.

e) Resources

What level of resources do you need to accomplish the task? For example, do you have the motor bike and the fuel to go to all the communities? If no, then what can you do about it? Do you cut down on the number of communities or look for more resources?

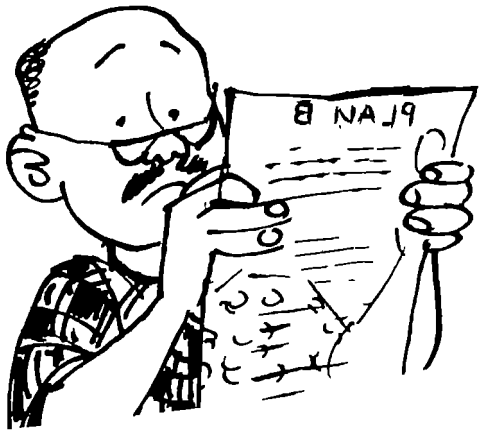
These are some of the questions which you are likely to come up as you set out to do your workplan for a particular period. For all these questions to be properly treated, there is the need to bring all of them together in a systematic manner.

Blank forms are attached in Annex 5.1 which you should photocopy and fill as appropriate. Each of you should have a copy, while you should all ensure that an enlarged copy is made and pasted on the wall or notice board every month.

5.5 Reporting and Reporting Format.

To carry out your work, you need resources from the DA and sometimes from the RWST, who will have an interest in knowing how their resources are being used. A report on your activities is also a marketing tool for you. It is a chance for you to tell the DA the good work you have been doing and how extra support from the DA can enhance this work. How then should you go about writing this report?

Aways remember that the DCE, is a busy person. He/she has many things to read from other departments and must carry out many other essential assignments. It is important that you organise very well, write just the facts and keep the report fairly small. If it is poorly organised and too long, the DCE and the other DA leaders may not read it. And if it is not read, the messages you want to convey will not be received so the desired changes and assistance requested will not be achieved. To help your team write well organised but simple reports, the following format is suggested (see Annex 5.2 for the format). **Each of the points is elaborated below:**

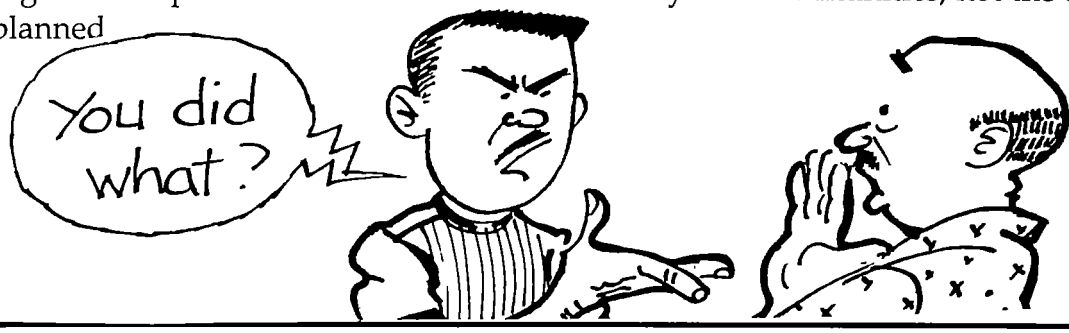


a) Planned Activities

This is a brief recap or summary of the important things you planned to do during the reporting period. It is important to present this information early in the report because it helps the DCE remember what the team said it was going to do. He/she may not have the time to go back to the previous report to find out you planned. Once he/she knows your plans, he/she will then be in a position to compare the plan to what was actually carried out.

b) Activities Carried Out

The principal question in this section is: **what did you actually do?** The tasks carried out within the period are outlined. It may be that you did what you planned to do or it may differ to some degree. The important thing here is to report on what you actually accomplished, and explain any variance. Thus, it may turn out that the team had to be at a training workshop so the validation was done in only five communities, not the ten you had planned



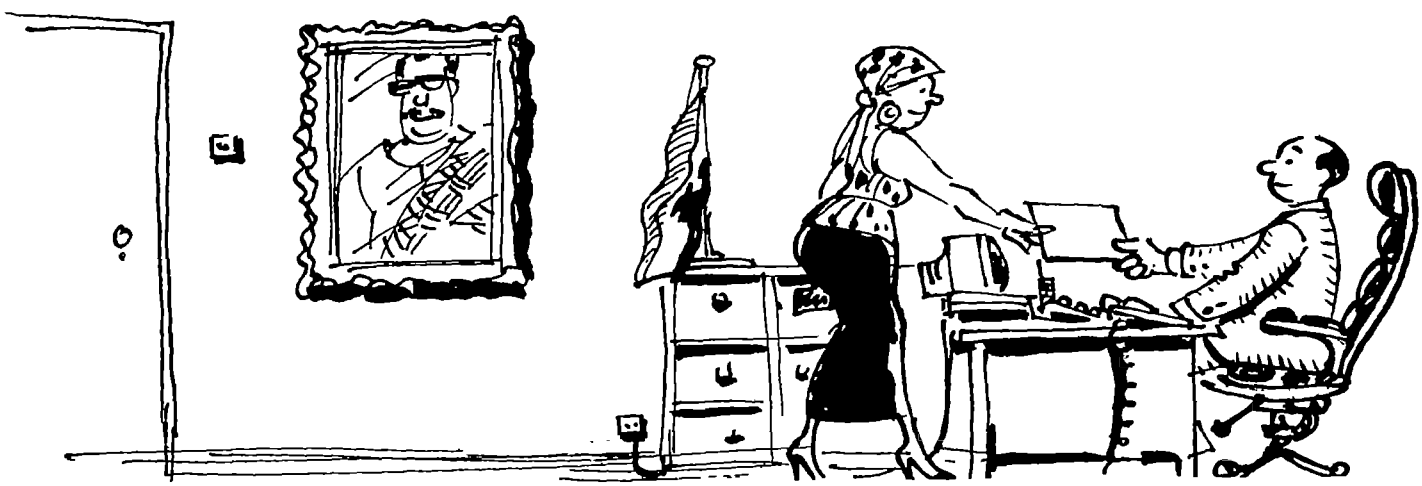
c) Problems and Recommendations

It may turn out that you did not achieve some targets because of certain problems. The report is your opportunity to draw these problems to the attention of the DCE. For example, the team could not visit six communities on verification because fuel was not available. Here, you need to make a recommendation on how the problem can be solved. That is, you are suggesting to the DCE how best to improve the work. If you fail to achieve targets out of your own negligence, you cannot make any recommendations to the DCE. For example, if you were to meet a community at 8.00 am but got there at 10.00 am because you overslept, then the solution to that problem lies with you rather than the DCE. You will have to separate things which can be done at your own level and handle them as such and only make recommendations to the DA on matters beyond your control.

d) Activities Planned for the Next Period

Finally, it is important to you give the DCE an idea of what you intend to do in the next reporting period. Essentially, this is a summary of the workplan for that period. In fact, it will be helpful to attach a copy of the workplan to the report. This will help the DCE and the DA to make the right preparations for you. This section becomes the opening section for the next reporting period.

The above gives a simple outline for the report. The report should not be more than two pages and should get to the DCE on the last day of the reporting.



6. Skills

6.1 Organising and Running Meetings

A lot of your work in the community will be meeting the community as a whole or various groups in the community. Meetings become the engines which turn out various decisions. The ability to guide the meeting, make everybody participate and come out with fruitful decision is an important skill. You may have been holding community meetings already but let's go through the main things to do when holding a meeting.

Preparation

Some of the things you need to do before the meeting are:

- **Inform the community** well in advance about the meeting ;
- **Agree** on the date, time and venue with them;
- When you arrive, **inform the elders and opinion leaders** so that they can mobilise the people;
- When everybody is ready, **introduce yourself** again and **explain** the purpose of the meeting; and
- **Make sure people understand your message** and open the discussions.

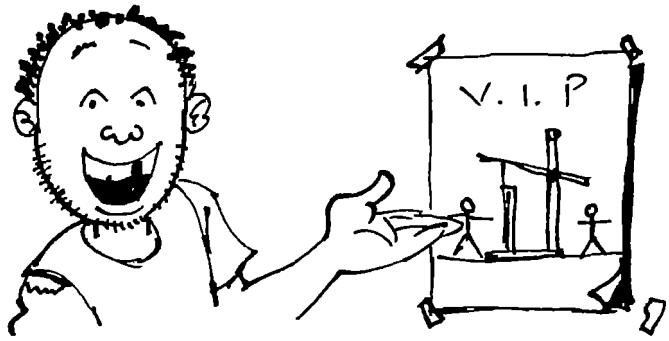
Allow people to discuss the issue and ensure that there is a balance in the discussion that the women participate. All ideas are important so encourage everybody to say something.

6.2 Effective Listening

To handle a meeting well, you need to know the group or community. One of the means of getting to know the community is to listen to all interest groups. The community is composed of various people - leaders, men, women, children, small businesses, natives and settlers, Christians and other religious groups etc. All these may have different interests when it comes to the provision of water.

For example while many people may want water for drinking and therefore prefer a hand dug well or borehole, cattle owners may think of a dug out. However, if the community must commit its resources, they need to agree. You will help the process of reaching agreement by listening and understanding the concerns of all the different groups. This "inside" knowledge will help you to guide meetings in the community.

How do you listen effectively? One of the first things to do is to identify the various groups in the community and talk to them. While talking, you may take notes. The important thing is to ask questions and let the individual/group do the talking. Assure them of confidentiality such that they will feel free to talk. Listen hard, ask questions to help clarify and treat people with respect. When you have finished thank that person and move on to another person or group.



6.3 Presentation

One of the key things you will be doing is presenting your work to people. Imagine that you are in your office and a team of visitors come and want you to tell them about your programme, your results and targets; or imagine another situation where you finished shortlisting beneficiary communities and you have to present these to the DA general assembly. Both examples are situations which require presentation skills. You want to get particular messages across to the audience and you have to do it in such a way that the message is well received and understood. The skills to do this kind of thing is what is called presentation skills. To understand this skill well let us break it down to three main areas - **preparation, delivery and response to questions.**

Preparation

A key to a successful presentation is background preparation. In some cases, the presentation may be spontaneous and you may not have done any specific preparation. For visitors wanting information on the District Water and Sanitation Plan, you should be able to discuss the maps and workplans - items prepared to help you do your work. In making a presentation to the District Assembly on the way you selected beneficiary communities for a particular year, you will do specific preparations.

This is a presentation to a large audience. Some of the issues are technical. It will thus be useful to put most of the items on flip charts so that people can see and follow. Write boldly in bright colours and place the paper where everybody can see.

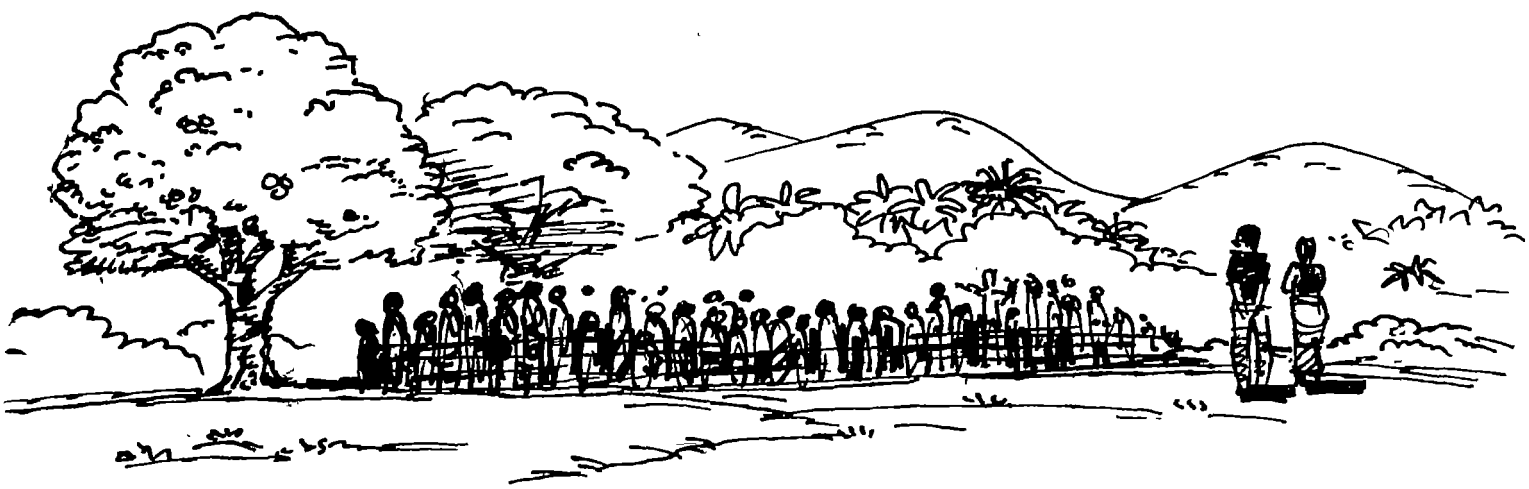
Delivery

When you are about to start, stand at a place where you do not block anybody's view. Refer to the chart as and when necessary using a pointer. Gradually take the audience through the data collection, scoring and weighting and the final shortlisting, then invite questions. Focus on the important points and let details come out in questions from the audience.

Response to Questions

It is natural for the audience to ask questions after a presentation. The questions may be for clarification of details or simply to test your understanding and confidence. If you are talking about community selection, all DA members would like their communities to be selected. So when a community is not shortlisted, you can expect to

be questioned. The important thing to note is "asking questions do not make the individual an enemy". What this means is you should try to understand the questions before responding. If the question is not clear, ask him/her to repeat. While he/she is talking, you have some extra time to understand the question and come out with a suitable response. You can also clarify the question by repeating it and confirming you have clearly understood it before you start to reply.



7. Information Reference

Your work requires that you know a number of general things about water and sanitation and the decentralisation system in the country. This chapter is designed to provide information on water supply technology, a quick hygiene reference and a summary of the new local government administration system.

7.1 Water Supply Technology

7.1.1 Technology Choice

This section looks at technical issues and planning. It provides the information you need about the various options the programme offers. Due to hydrogeological differences between districts, not all the options may be relevant to your district. However, it will be important for you to know all types of facilities to be developed, their siting, and maintenance.

It is divided into the following sub-sections:

- Surface Water and Groundwater
- Hand Dug Wells and Boreholes
- Spring Development and Piped Water Systems
- Site Selection
- Pumps
- Construction and Community Involvement
- Caretakers and Maintenance
- Site Maintenance
- Latrines

Surface Water and Groundwater

Many rural communities depend on surface water - water from streams, ponds, or dams. Surface water, unless treated, is not safe for consumption - it gives people diseases, such as diarrhoea and guinea worm.

The alternative source of water is groundwater. This water was originally rainwater but it has seeped into the ground. Groundwater is a safer source of water because it has travelled down through several layers of soil and sand and is cleaned by natural filtration.

Ground water can be:

- tapped by sinking wells into the ground water
- protected at places where it flows out in the form of springs.

There are two types of wells -

- Hand dug wells - wide wells that are dug by hand that are relatively shallow.
- Boreholes - narrow wells that are drilled by machines that are normally deeper than hand dug wells.

Hand Dug Wells

Hand dug wells are shallow wells ranging from 5 to 20 metres. They are constructed in areas where groundwater is close to the surface. To protect the quality of the water hand dug wells should be at least 6 metres deep and the top 3 metres should be sealed to prevent contamination by surface water.

Hand dug wells have a large diameter, ranging from 0.8 metres to 1.3 metres. The large diameter ensures that people can enter the well for digging; water can be drawn out by bucket; and water is stored for use during peak collection times.

Hand dug wells are much cheaper to construct than boreholes. They can be dug with simple hand tools (e.g. modified picks, digging hoes, rope and buckets) using local labour. Digging a hand dug well takes much longer to construct than a borehole (2-4 weeks for a team of 3-4 workers).

Water can be drawn out of the well with a handpump or a bucket (through an access hole in the cover slab). If a pump is installed, it will protect the well water from contamination. When the pump breaks down, the access hole in the cover slab can be opened so that a bucket can be used to draw water until the pump is repaired. This ensures a continuous supply of water.

The big risk with hand dug wells is that the village digs for 2 or 3 months and then hits rock and doesn't find water. Hand augers are one way of quickly testing a site to make sure water is there. A community can auger down to 50 feet in few days.

HAND DUG WELLS ARE NOT A NEW TECHNOLOGY! Many communities have been using them for a long time. Traditional wells, however, had some problems:

- Some were poorly lined and they often collapsed.
- They did not go deeper than the water table and dried up in the dry season.
- The top part of the well was left unprotected, so there were dangers of people falling in or the well becoming contaminated.

Modern construction methods have helped to overcome these problems:

- Caisson rings, improved digging tools and de-watering pumps are used to deepen the well in loose soils and below the water table - this helps to ensure water year round;
- The top part of the well is protected to avoid contamination; and
- A hand pump is added to make collection easier and minimise contamination.

Boreholes

Boreholes are deep wells which are drilled with a machine. They are particularly suited for areas where the water table is below 20 metres and where the ground is too hard for hand digging. They can be drilled quickly and use little labour, because they require specialist skills and equipment. They are much more expensive to construct than hand dug wells.

Boreholes are narrow in diameter - ranging from 10 to 20 cm. This means that they are too small for a bucket to enter the hole. Instead a pump is installed to draw water out of the borehole. A concrete pad is constructed to hold and protect the pump. The top 2-4 metres of the hole is sealed with cement to prevent contamination from the surface.

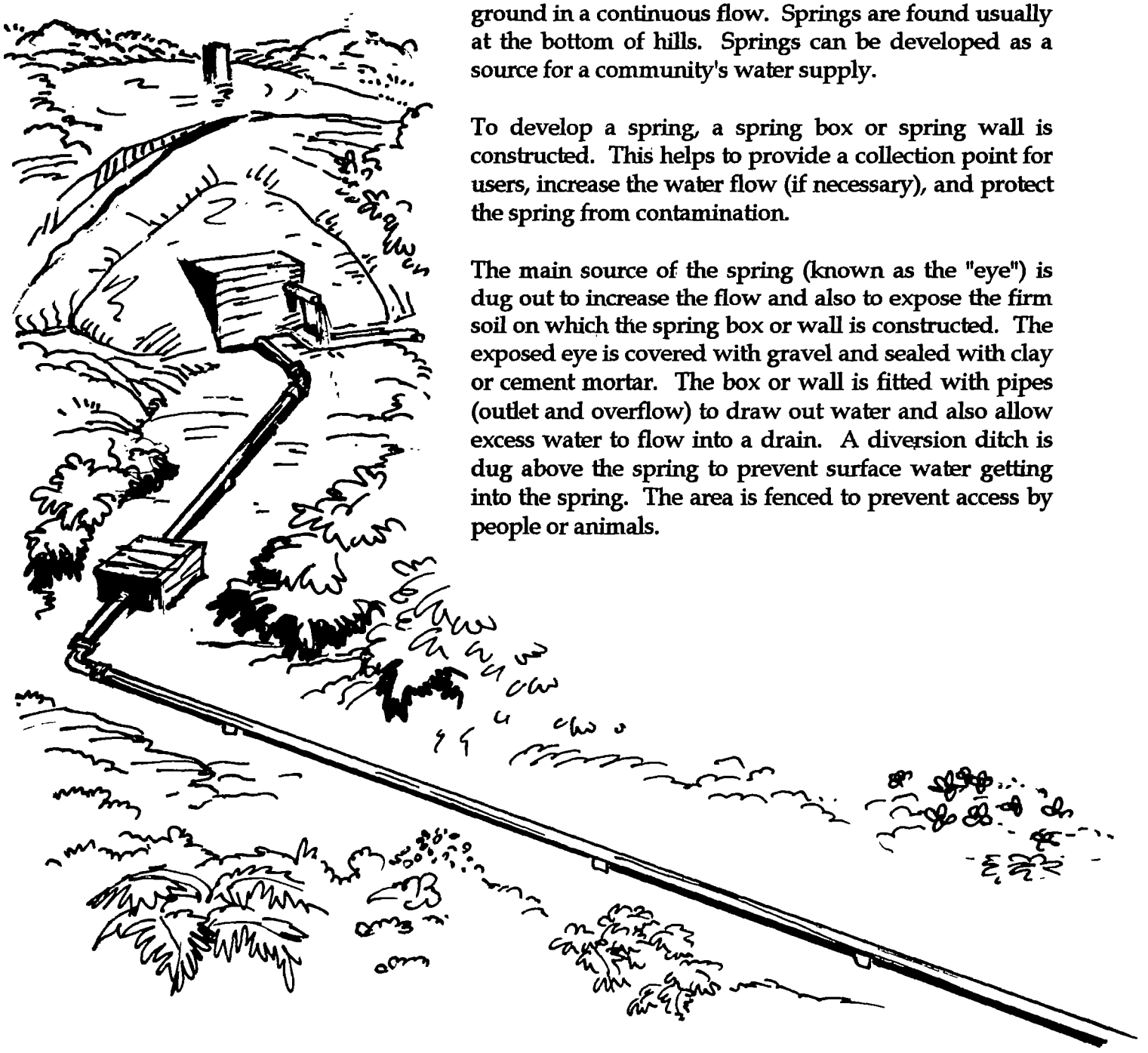
A borehole allows the drawing of clean water from deep underground, but a pump is needed to lift the water to the surface. After drilling the hole is lined with plastic casing to prevent collapse and slotted screens at the bottom of the hole to allow water to flow into the well.

The PLASTIC CASING is placed at the top part of the hole where there is no water flow into the well. This keeps the soil from caving in. The casing also serves as the housing for the pump cylinder.

The SCREENS are placed lower down at the water bearing zone. The slots in the screen allow water to flow into the well from the water bearing zones. The slots are small so that soil particles cannot enter the well and damage the pump.

A borehole will require maintenance about once in ten years. Over time the screen becomes blocked with sand and silt and the borehole no longer produces sufficient quantities of water. When this happens, the borehole needs to be cleaned and redeveloped: the cleaning is done by blowing air down the hole (with a compressor) to dislodge sand and silt from the screen and then blow out the dirty material that has been dislodged. This will help to improve the flow of water from most boreholes.

Spring Development



Springs occur at places where water bubbles out of the ground in a continuous flow. Springs are found usually at the bottom of hills. Springs can be developed as a source for a community's water supply.

To develop a spring, a spring box or spring wall is constructed. This helps to provide a collection point for users, increase the water flow (if necessary), and protect the spring from contamination.

The main source of the spring (known as the "eye") is dug out to increase the flow and also to expose the firm soil on which the spring box or wall is constructed. The exposed eye is covered with gravel and sealed with clay or cement mortar. The box or wall is fitted with pipes (outlet and overflow) to draw out water and also allow excess water to flow into a drain. A diversion ditch is dug above the spring to prevent surface water getting into the spring. The area is fenced to prevent access by people or animals.

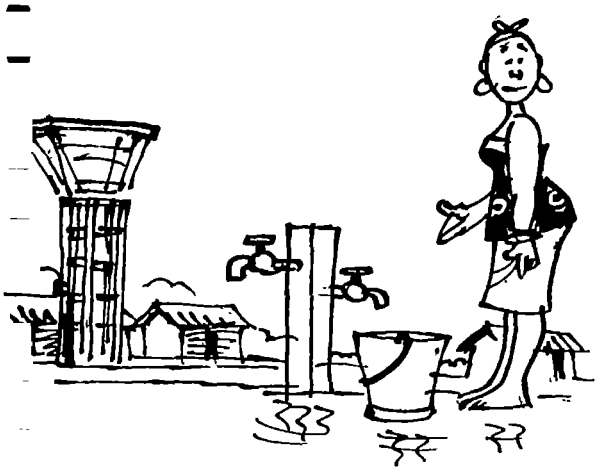
Before developing a spring, check on two things -

- **Quality:** Conduct a survey to identify all possible sources of contamination (e.g. latrines, refuse dumps, use of insecticides, etc.)
- **Quantity:** Measure the flow of the spring in the dry season to see if it produces enough water for the community. To do this dam the spring, redirect the water into a container with a known volume, and time the filling rate.

Example: The example below shows that the spring is producing enough water on a daily basis for the present population.

WATER PRODUCED BY SPRING		WATER NEEDED BY COMMUNITY	
Volume of container:	10 litres	Needs per person per day:	20 litres
Filling rate:	10 seconds	Village population:	500 people
Volume per minute:	60 litres/minute	Total needs per day:	7500 litres
Volume per hour:	3600 litres/hour		
Volume per day:	86400 litres/day		

Piped Water Systems



A piped water system is built to carry water from the source to the community in pipes. Water is pumped (or flows by gravity) into a tank and then distributed by gravity through pipes to standposts at different points in the community.

Under the CWSP a piped water system is recommended for small towns with a population between 2000 and 15000.

The parts of a piped water system are:

Source of Water: The best source is a good yielding spring. A borehole or hand dug well with a good yield could also be used. A stream is okay if it flows year-round. (If a stream is used, the water may need to be treated.) The source of the water should be protected.

Water Treatment Tank: A special tank using a sand filter is built to remove dirt from the water. This is only required if the source is surface water.

Storage Tank: The storage tank fills up during the night and stores the water for use during the day. It is built with concrete, aluminium, or galvanised steel. It should be elevated to enable water to flow to the standpipes by gravity.

Pump: Where the water source is lower than the tank, a pump may be needed to pump water up into the storage tank.

Main Pipeline: The main pipeline carries the water from the source to the storage tank. The pipeline is buried in the ground but may be above ground in some places. Burying the pipe protects it from damage.

Pipe Network: This is a series of pipes of smaller diameter than the main pipeline that take the water from the pipeline to the standposts in the community. All the network pipes are buried underground so trenches will need to be dug.

Choosing the Technical Option

Help the community discuss the advantages and disadvantages of each option:

OPTION	ADVANTAGES	DISADVANTAGES
HAND DUG WELL WITH A BUCKET	• Cheap to construct - uses simple tools • Stores lots of water • Allows easy access so it can be cleaned	• Risk of contamination • Prone to accidents in uncovered wells • May dry up in dry season - needs to be deepened
HAND DUG WELL WITH A PUMP	• Can be opened to use a bucket if pump spoils • Cheaper than borehole • Little contamination because water taken through pump	• Contamination when pump breaks down and people use a bucket • If water table too deep, hand dug well is not possible
BOREHOLE WITH A PUMP	• Some contamination during drilling. Borehole chlorinated to eliminate this contamination. • Suitable for deep water table and hard ground • Less time and labour to construct	• Expensive - 3 times cost of hand dug well • If pump spoils, no alternative to get water; people may return to old sources • May wait a long time for drilling rig to come
SPRING DEVELOPMENT	• No contamination - source is covered • Year round supply - no reversion to old source	• Farming activities around the spring can use up the water
PIPED SYSTEM	• Water brought closer to community • Use of local labour	• Expensive - cost depends on the amount of pipe used

Site Selection

After deciding on the type of facilities, the next step is to CHOOSE THE SITES. The community should take an active part since they know their own environment. The selection will be based on both SOCIAL and TECHNICAL CRITERIA.

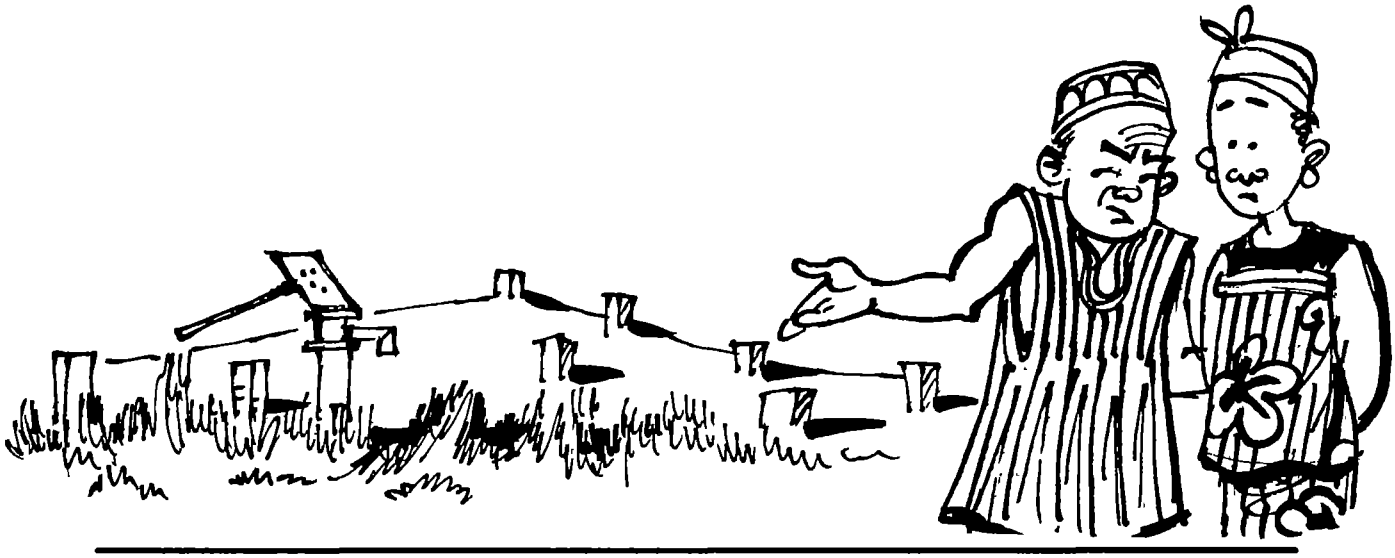
Social Criteria

The community should start the selection process. Let them select 2-3 optional sites for each facility. The sites should provide easy access for everyone. They should be centrally located and well distributed over the settlement. They should be as close as possible to people's houses, since a major objective is to reduce walking distance.

> Women, who fetch the water several times a day, want to have the new facility as close to the house as possible. If it is located further away from an old source (river or pond), they may continue to use the old source, especially if they are not convinced it is unsafe.

The community will also know places that should be avoided - e.g. sacred groves or cemeteries.

> In one village PAMSCAD sited a borehole in the main lorry park, hoping this would help the community who were suffering from guinea worm. But no one talked to the community about where it should be sited. If they had, they would have discovered that the lorry park was the site of an old cemetery. When the borehole was completed, no one in the community used it. It remains unused to this day, even though people still suffer from guinea worm.



Technical Criteria

Once the community have selected a number of optional sites, the PO should visit each site with the community to check on their suitability. This review can be based on technical criteria, which are given below.

PLACES TO AVOID

Site wells at least 100 metres away from places that could contaminate the wells -e.g. latrines, septic tanks, refuse dumps, cattle/goat kraals, farms that use chemicals, and cemeteries.

You should also *avoid* siting the well too close to:

- Places which are low and may get flooded in the wet season; and
- Rocks - it will make digging difficult.

SIGNS OF A GOOD SITE

Technical people need to be consulted on the siting of the wells so that they are located on good aquifers which can supply lots of water. Their job is to look at each of the sites proposed by the community and make the final selection, based on technical criteria.

Some of the indicators of good aquifers include:

- Layers of gravel and sand ;
- Weathered rock zones;
- Valleys and river beds;
- Many ant hills;
- Deposits of clay for making pots; and
- The presence of traditional wells

Certain types of trees and bushes are also good indicators:

- Baobab, mango, nim, and teak indicate that groundwater is deep;
- Banana, sugar cane, and evergreen areas indicate shallow ground water; and
- Grass and the salty taste of sugar cane indicate salty water underground.

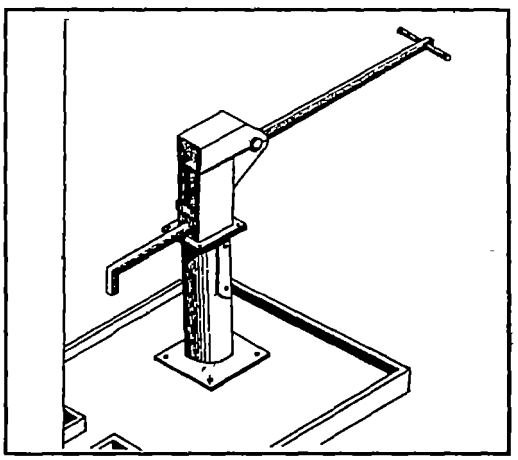
Pumps

CWSD has selected the following four pumps for use in the CWSP:

- AFRIDEV
- NIRA AF-85
- GHANA MODIFIED INDIA MARK II
- VERGNET

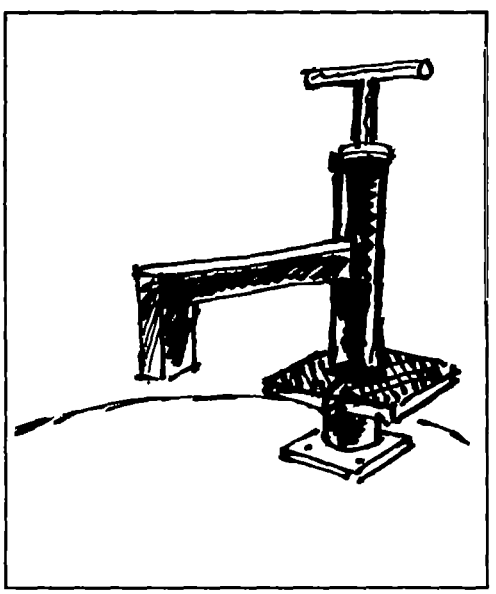
NIRA is used for shallow boreholes and hand dug wells, the other three for deep wells. All four pumps are designed to serve a population of up to 300 people.

AFRIDEV



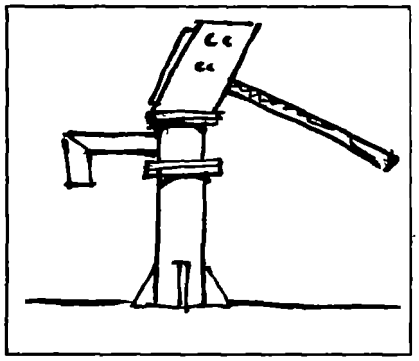
- Deep well reciprocating pump
- Pump head - galvanised steel.
- Pump rod - stainless steel. Can be easily removed without tools.
- Rising main, pump cylinder, piston, foot valve - plastic.
- Wearing parts - U-Seal, O-ring, bobbins - rubber.
- Top cylinder is open - plunger and foot valve can be withdrawn through rising main.
- Recommended installation depth - 16.5 to 30 metres. If deeper than 30 metres, frequent breakage of plastic pipes.
- Cheaper than other 3 pumps.
- Local manufacture now by ITTU.

NIRA AF-85 PUMP:



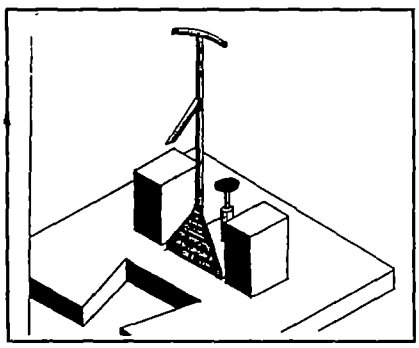
- Direct action pump - water is lifted to the surface by plunger assembly.
- Limited to pumping lifts of maximum 16 metres.
- Pump head is made of galvanised steel to protect it against corrosion.
- Pump rod, rising main, piston, foot valve are made of strong plastic.
- Wearing parts - sealing ring, collar bearing, valve bobbin - rubber.
- Open top cylinder allows the plunger and footvalve to be pulled out easily.
- Minimal maintenance - no hydraulic system to be greased.
- Partly manufactured and partly assembled in Ghana.

GHANA MODIFIED INDIA MARK II



- Deep well reciprocating pump: water lifted to the surface by reciprocating action of the plunger assembly.
- Pump head is made of galvanised steel to prevent corrosion.
- Pump rod and rising pipes are made of stainless steel.
- Cylinder and other parts are made of brass.
- Recommended installation depth - 16.5 to 50 metres.
- Maintenance requires outside help from trained mechanics.

VERGNET



- Hydraulic operated pump.
- Operating principle: water is forced into an expandable bag within a closed and valve-operated stainless steel cylinder. The bag increases in size and forces the water out into the discharge hose. When the pedal is released, the bag contracts and sucks water into the cylinder.
- The pump head is made of galvanised steel.
- Corrosion resistant.
- Maintenance requires help from trained mechanics.

All four pumps are **strong and reliable** - they may be "used and abused" by pump users but they won't break easily. They are also **cost effective** - the pumps and their parts are cheaper than other pumps. Some of the pumps and their spare parts are being manufactured in Ghana.

Afridev and Nira are VLOM Pumps - Village Level Operated and Maintenance. Villagers can be trained and supplied with tools to perform routine maintenance.

Site Maintenance

Site maintenance is a way of protecting the community's investment - the new facility. It is their responsibility and should be organised at their initiative, not just to satisfy the PO. A dirty site makes it difficult for women to fetch water, may contaminate the water, and will attract mosquitoes.

What Needs to be Done?

- **Keep the Site Clean:** Keep the site free from mud, weeds, and excess water. Sweep the pad and the area around it daily. Weed it whenever necessary. Scrub the pad and pump stand to remove the green slime.

- **Drain Spilled Water away from the Site:** Standing pools of water around the well will attract mosquitoes and pollute the well. Make sure that gutters are swept so that water flows away from the pump pad into the cattle trough.

- **Protect the Pad against Erosion:** When a pad is not protected, the cement will crack. The pump will then become loose and get damaged, causing expensive repairs. To avoid this, pack stones firmly around the pad. (This is called BACKFILLING.) Protecting the pad keeps the pumpsite drained.

Latrines

This section provides information on types of latrines. Chapter 7 explained what you do to promote the building of household latrines (pages 112-114).

In the past the most common type of latrine built in Ghana was the PIT LATRINE. This type of latrine has a number of problems:

- ☹ It is often poorly constructed
- ☹ and can easily collapse.
- ☹ Flies breed in the pits.
- ☹ The latrines have a bad smell.

CWSP is promoting a new design for latrines, called the Ventilated Pit Latrine (VIP). This type of latrine has the following features:

- It has a vent pipe, which helps to reduce flies and the bad smell. Foul air is sucked out of the pit through the vent pipe.
- The vent pipe has a fly screen, which prevents flies from entering or leaving the pit.
- It uses a cover slab which is strong and feels safe to use.

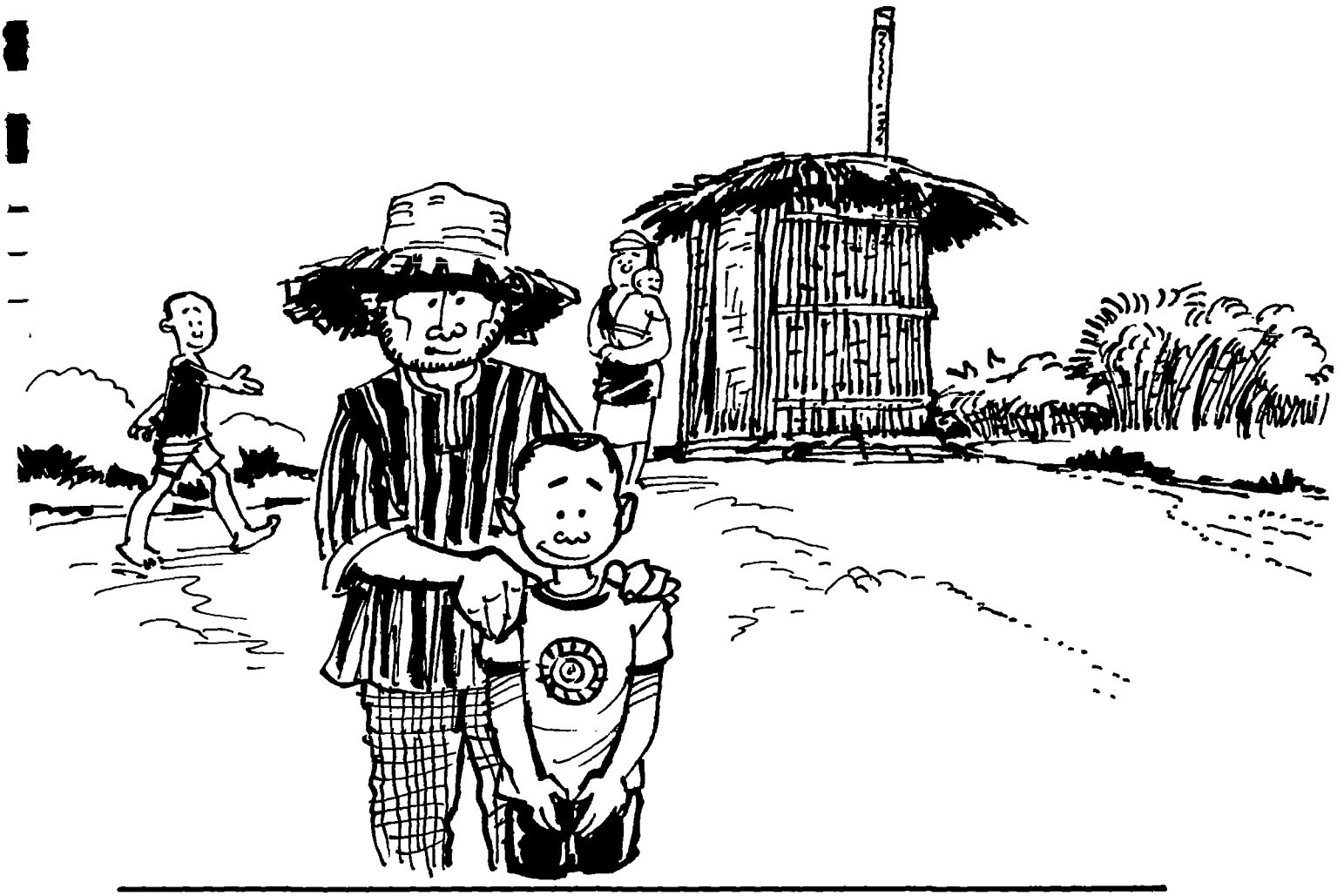
There are two different designs for the cover slab promoted by CWSP - Rectangular and Mozambique (a circular dome-shaped concrete slab). The Rectangular slab uses iron rods as reinforcement; the Mozambique slab does not. Some people are unsure about the safety of the Mozambique design because of the lack of reinforcing iron rods. However, the Mozambique slab is as strong as the rectangular slab.

Ring Beam and Slab

Proper casting of the concrete items - ring beam and slab - are essential for the safety and proper functioning of the latrine. This is important not just for the latrine owner, but also for the success of the whole sanitation programme: a collapsing latrine will not encourage other community members to build one. The curing process is very important for the concrete to reach its full strength. If the castings dry out before they have finished curing, they will be weak and likely to crack. Households should be encouraged to keep the ring beam and slab permanently wet for 3 days after casting.

Superstructure

The super structure is the room built around the VIP. Each family should choose its own materials for the superstructure. The walls could be built out of sandcrete, landcrete, mud-wattle, sun-dried bricks, or bamboo; the roof out of thatch, corrugated roofing sheets, or burnt bricks. Encourage the use of locally available materials.



Siting a Latrine

Where should the latrine be sited?

- At least 30 metres away from any water supply so that waste from the latrine does not contaminate the groundwater.
- Close to the house so that it is convenient to use by everyone in the house.
- On firm soil so that the pit and latrine building will not collapse.
- On a slightly raised ground so that rainwater can drain away from the site.

Latrine Maintenance

It is important to keep the latrine clean and well maintained to get the full health benefits. A clean latrine will encourage people to use it!

- Sweep the cover slab regularly and clean with water to remove faeces.
- Do not cover the squat hole. Covering the hole interferes with the circulation of air which is responsible for fly and odour control.
- Put all anal cleansing materials into the pit.
- Keep the latrine door closed at all times. This will keep the latrine dark which helps to prevent flies.
- Check the fly screen regularly. If the fly screen is torn or has holes, flies will escape from the pit and spread disease.
- Check vent pipe regularly. Make sure it is not blocked or broken. Cut off tree branches that prevent light or wind movement over top of vent pipe.

For more information, see Manuals on Latrine Construction produced by TREND.

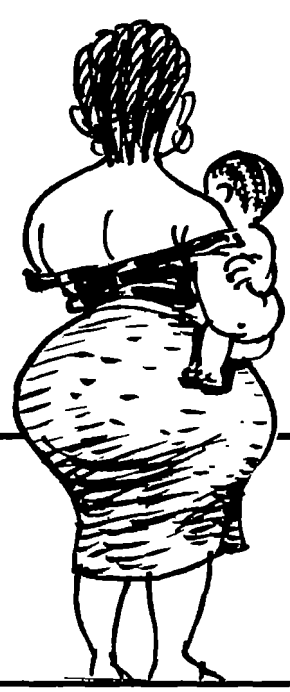
7.2 Health and Hygiene Reference

The table below provides information on the main water bound diseases, how they can be prevented. As from time to time you will be making some hygiene education, it is important to go through this table and get familiar with the diseases. (The table is adapted from Watsan Handbook developed by IGIP, Accra.)

Health and Hygiene Table

DISEASES	HOW DO I GET IT?	HOW DO I PREVENT IT?	
BILHARZIA	• A person sick with Bilharzia urinates into water. With the urine, small Schistosomiais (Bilharzia) eggs go into the water. The Small Schistosomiasis (Bilharzia) eggs enter a snail. The snail releases small Schistosomiasis (Biliharzia) babies who swim in the water. • Another person walks or swims in this water and will get Bilharzia, because the Schistosomiasis (Bilharzia) babies will enter the person through the skin. If this person urinates in water the process continues. **Bilharzia transmission:** Person (faeces or urine) - Water - Snail - Water - Person	The use of safe toilets	The long lasting and best solution for the prevention and control of Bilharzia is the use of safe toilets
		Don't defecate in or near water	
		Build bridges	The use of bridges helps people to cross stagnant water safely
		The use of boots	The use of boots while crossing stagnant water will help prevent the bilharzia larvae from penetrating your skin
		Avoiding stagnant water and washing places at the riverside etc.	If you avoid stagnant water you avoid the places where bilharzia is spread

DISEASES	HOW DO I GET IT?	HOW DO I PREVENT IT?	
GUINEA WORM	• A person gets infected with Guinea Worm by drinking water containing very small Guinea worm germs. • Once a person has drunk the water containing Guinea Worm germs, it takes about one year for the Guinea Worm to develop. The Guinea Worm then moves to a position where it begins to come out of the body. • When a person with Guinea Worm comes into contact with water, thousands of Guinea worm eggs are released from the worm into the water. Once Guinea Worm eggs are in the water the process continues <u>Guinea worm Transmission</u>: Person with Guinea Worm - Water - Guinea Worm germs - Person ***How do I know that I have Guinea Worm?*** There are no signs of the disease until the worm is ready to come out of the skin. This is shown by swelling at the spot where the worm will emerge or come out. The swelling is accompanied by intense burning or itching and a blister develops. When the blister breaks (especially when the person suffering from Guinea worm steps into water) the worm is seen coming out of the wound.	Drink hand pump water	The long lasting and best solution for the prevention and control of Guinea Worm disease is to fetch drinking water from the hand pump.
		Protect water source from infected people	Persons with Guinea Worm should not walk through water sources where sources other community members collect water.
		Filter drinking water eggs	Filtering water through clean cloth removes Guinea Worm The filter must be wash and kept clean after each use.
		Boil drinking water	Boiling water kills Guinea Worm eggs

DISEASES	HOW DO I GET IT?	HOW DO I PREVENT IT?
DIARRHOEA	A possible way of diarrhoea transmission: 1. A man with diarrhoea defecates. He washes/cleans his anus. Some stool remains on his hand. He leaves the place where he defecated without washing his hands. 2. He wants to drink some water. He dips into the water. Some stool remains in the water. 3. Others come to drink. 4. And soon, the whole family has diarrhoea. ***Diarrhoea and Cholera are transmitted through:*** • faeces • dirty hands • flies • polluted drinking water • polluted food 	Drinking clean hand pump water Always wash your hands Wash your hands Cover food and drinking water Use the latrine The long lasting best solution for the prevention and control of diarrhoea and cholera is to drink clean water a from the hand pump. While washing your hands, you avoid the contamination of water and food. After using the latrine Before preparing food Before eating To prevent diarrhoea always cover food and drinking water to prevent flies from feeding on them. The use of a safe latrine prevents the spread of contaminated faeces or urine through flies, pigs etc. **If a child is dehydrated, he/she loose a lot of body fluid (water) through diarrhoea and cholera.** The symptoms are: • The child is thirsty and has a dry mouth • The child has sunken eyes • The child has regular diarrhoea • The child has loss of skin elasticity **As an immediate remedy** • Give the child an oral rehydration fluid such as ORS • Add one full sachet of ORS to the water and mix well And see the doctor immediately!!!

DISEASES	HOW DO I GET IT?	HOW DO I PREVENT IT?	
ROUNDWORM	• A person sick with Roundworm defecates outside A fly sits on roundworm infected faeces • Fly lands on food and puts worms' eggs on it The food is eaten with the worms' eggs • The person who has eaten this infected food will soon have roundworms. Roundworms live in the gut and take food away from the infected person. Roundworms damage the gut so that food is not absorbed and used . When this person leaves his faeces it will contain roundworm eggs.	Use latrines Wash your hands Protect your food against flies	The use of safe latrine prevents the spread of contaminated faeces through flies. While washing your hands, you avoid the contamination of water and food. To prevent roundworm infections always cover your food to prevent flies from feeding on them.
MALARIA	Mosquitoes are the transmitters of malaria • A mosquito bites a person having malaria The mosquito sucks blood and takes in malaria parasites at the same time. • Later this mosquito will bite another person The mosquito will inject the malaria parasites into this person and suck blood. The process continues.	As mosquitoes are the transmitters we have to fight them. All the places which are liked by mosquitoes must be eliminated: • Dispose of all open cans at the solid waste disposal site • Fill all small pools of water within the community with earth • Cut the grass next to the household • Make sure that your living environment is always clean	

7.3 The New Local Government System

The new local government system has been spelled out in 5 legal or statutory documents, namely the Constitution itself, Local Government Law 1993 (Act 462) which is the basic document, Local Government (Urban, Zonal, Town and Area Council and Unit committees) Establishment Instrument (L. I. 1589). Various Legislative Instruments establishing each District Assembly and the model standing orders are also important documents. Other laws that impact on the new local government system are the Civil Service Law, 1993 (PNDC Law 327) which seeks to decentralise civil service and administration and the National Development Planning Systems Law.

Structure and Functions

The new local government system is a four level structure consisting of Regional Co-ordinating Council (RCC), Metropolitan, Municipal and District Assembly, Urban, Zonal, Town and Area Councils and Unit Committees at the base. The new local Government Act (Act 462) has created 3 Metropolitan Assemblies, 4 Municipal Assemblies, 103 District Assemblies, 34 Urban Councils, 250 Town Councils, 826 Area Councils, 107 Zonal Councils and 16,000 Unit Committees.

The Regional Co-ordinating Council (RCC)

The RCC is composed of the Regional Minister as Chairman, his deputies, Presiding Member and District Chief Executive (DCE) of each District Assembly within a region, two chiefs from Regional House of Chiefs and regional heads of decentralised ministries in the region but without a vote. The main duties of the RCC include:

- monitoring, Co-ordinating and evaluating performance of District Assemblies in the region;
- monitoring use of all monies allocated to the DAs by any agency of central government; and
- reviewing and co-ordinating public services generally in the region.

The District Assemblies

District Assemblies in Ghana are either Metropolitan (population over 250,000), Municipal (one-town Assemblies with population over 95,000) or District (population 75,000 and over).

The District Assembly shall be composed of the District Chief Executive (DCE) of elected members (70%), the member or members of Parliament from the District (but without a vote) and nominated members (30%) by the President in consultation with chiefs and organised economic groupings in the district. The DA is non-partisan, that is parties can not endorse candidates. The members of the Assembly will elect from

among their own number a chairperson, who is designated presiding member, and commanding the support of at least two-thirds of the members, for a two year term, and may be re-elected.

The District Assembly is the highest political authority in the district. Section 10 of the Local Government Act, assigns deliberative, legislative and executive functions to the DAs. These functions include:

- Overall development of the District and ensuring the preparation and submission for approval of the development plan and budget for the district;
- Promotion and supporting productive activity and social development in the district and removing any obstacles to initiative and development;
- The development, improvement and management of human settlement and the environment in the district;
- Initiating programmes for the development of basic infrastructure and providing municipal works and services in the district; and
- Maintenance of security and public safety in the district.

Urban, Zonal, Town/Area Councils and Unit Committees

Below the District Assemblies are the Urban, Town, Zonal and Area Councils and the Unit Committees. Their composition and functions have been incorporated in the Legislative Instrument 1589. Some of the functions of Urban, Zonal and Town/Area Councils are -- to take over as appropriate, all the functions previously performed by the Town and Village Development Committees; to enumerate and keep records of all rateable persons and properties in the Urban, Zone, Area or Town and to assist any person authorised by the Assembly in the collection of revenue due to the Assembly.

The Committees of the District Assembly

The Executive Committee

Two important arrangements have been made to facilitate the effectiveness of the DAs. The first is the establishment of an Executive Committee by each of the 110 District and Metropolitan Assemblies. The Executive Committee is the most powerful committee of the DA. It acts as the executing secretariat of the Assembly and is responsible for its day-to -day administration. It consists of the DCE as Chairman and one-third of the members of the whole Assembly and it is elected by other members.

Where a DA is dissatisfied with the performance of an Executive Committee, the Assembly may by resolution of two-thirds of the members dissolve the Executive Committee and elect another. The Executive Committee works through the following sub-committees of the Assembly -- Social Service Sub-Committee; Works Sub-Committee; Economic Development Sub-Committee; and Justice and Security Sub-Committee.

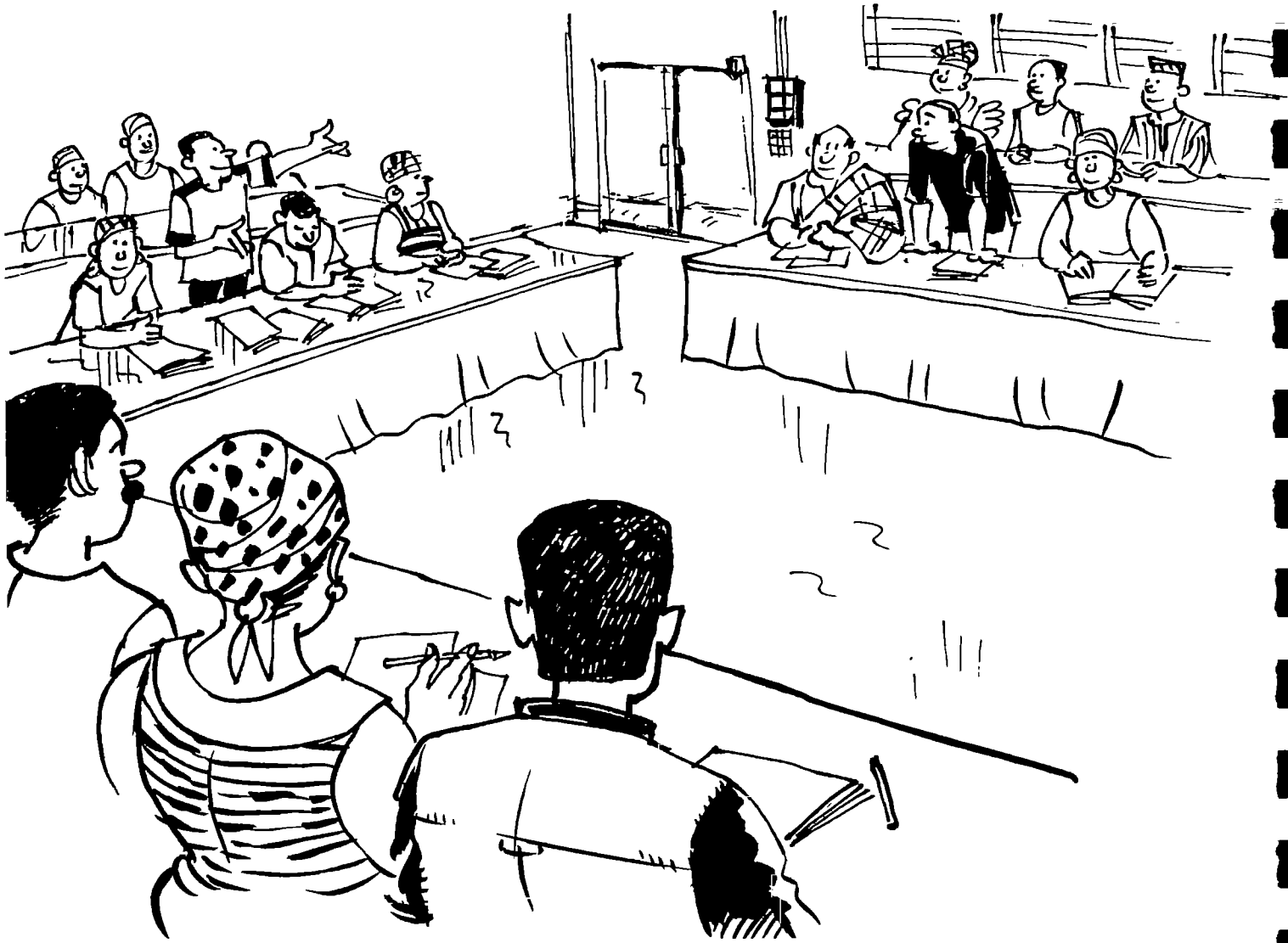
To ensure maximum participation in the Assembly's deliberations, every Assembly member is required to serve on at least one sub-committee during that member's term of office. Heads of the relevant sectors and decentralised government departments or organisations are to attend the meetings of the sub committees in an advisory capacity, but without voting rights.

The District Decentralised Department and Organisations

The second arrangement deals with the decentralisation of eleven (11) (formerly 22) implementing departments and organisations, listed in the First Schedule of 1993 Local Government Act. These departments are:

Central Administration; Finance; Education; Youth and Sports; District Health; Agriculture; Physical Planning; Social Welfare and Community Development; National Resources Conservation; Forestry; Game and Wildlife; Works; Industry and Trade; and Disaster Prevention.

These departments and organisations have been placed under the control and direction of the DAs. This integration is intended to emphasise the strategic role these decentralised departments have to play in facilitating the rapid development of DAs.



Annexes

Community

2.1 "Basic Community Data" form
2.2 Data Collection Guide
2.3 "Community Scoring Sheet" form
2.4 "Summary of Community Data and Progress" form
2.5 "Community Ranking and Selection" form

PO

2.6 PO Monitoring Checklist

HDW

2.7 Hand Dug Well Monitoring Checklist

Latrines

3.1 "Latrine Construction Contract" form
3.2 "Latrine Summary Information" form
3.3 "Request for Release of Funds for Latrine Construction" form
3.4 Certificate of Completion
3.5 "Request for Reimbursement of Latrine Subsidy" form
3.6 Latrine Monitoring Checklist

Planning and Reporting

5.1 Workplanning Forms
5.2 Reporting Form

Basic Community Data

Community Name _____ Date _____

Area/Zone _____ Community ID No. _____

Region _____ District _____

Nearest town _____ Distance (km) _____

Accessibility by *all year* ☐ *difficult in wet season* ☐ *difficult all year* ☐
Vehicles:

No. of Houses _____ Approximate Population _____

Date of Application _____

Water Sources:

Type	No.	Dist. (m)	Quality OK? Yes	Quality OK? No	Yield OK? Yes	Yield OK? No	All Year? Yes	All Year? No	Condition (G/F/P)*

* Good/Fair/Poor

Remarks _____

_____

_____

Sanitation Facilities:

Type	No.	Remarks

Health:

Does the community suffer from:	Yes	No	Remarks
Guinea worm?			
Cholera?			
Frequent outbreaks of diarrhoea?			
Bilharzia?			

Level of Community Interest

Ranking of Problems:

1.
2.
3.
4.
5.

Remarks _____

Money raised for water supply: _____

Actions taken by the community to improve water supply and sanitation:

Responsiveness, commitment and interest displayed by the community:

Community Management Potential

Community organisations:

1.
2.
3.
4.
5.
6.

Remarks _____

Any conflicts in the community: _____

Community projects in last 3 years:

Year	Project	Financial and other community inputs

Successes and problems:

Who decided on the projects and how:

How women were involved in management:

Evidence of a strong maintenance culture:

General remarks:

Background Factors

Population

Obtain up-to-date estimates from the District Planning Officer. You can cross-check this in the community by asking community leaders and by counting houses and multiplying by the average number of people per house in your area. The District Planning Officer may also be able to help you with this.

Accessibility by Vehicle

The reason for this question is that construction of wells and boreholes generally requires that vehicles are able to get to the water point site. However, inaccessible communities should not be excluded altogether -- if they are highly motivated they may clear an entry route for a drilling rig, or agree to carry materials and equipment for dug well construction from the nearest road.

Time Since Application

This is included so that communities who have waited the longest will be given priority.

Water Supply

Type

Some of the main types include:

- borehole with mechanical (electric or diesel) pump, with or without a piped distribution system
- treated water, where surface water is purified and distributed in pipes. Do not classify water as treated if the plant has been broken down for a long time, or chemicals for treatment are often not available
- borehole with handpump
- dug well with handpump
- protected spring, where a concrete box has been placed round the spring and water emerges through a pipe, either directly or to a piped distribution system
- protected well, with a built-up wall around the top and a covered area around the well so that water cannot seep back down the outside of the well shaft.
- spring
- river, stream or pond
- dugout or dam
- traditional unprotected well.

Distance from Community

Estimate the average distance a person has to walk from their house to the water source. One way of doing this is to find a point that lies about half way between the nearest houses and the furthest ones. If there are just a few outlying houses

that are much further away, do not include them in your estimate. You can estimate the distance by counting paces; one long stride is about 1 metre.

Quality

Water quality depends principally on the type of facility. Boreholes or dug wells with handpumps, protected springs and treated water all represent high quality sources. However, do not put sources into this category if the pump is broken down, or if a treatment system is not functional or often lacks the necessary chemicals.

Other sources are usually highly contaminated, although they may look clean and clear. These include rivers, streams and ponds, dugouts and dams and traditional unprotected wells. Free-flowing springs or protected wells with a headwall and apron may have slightly better quality, but cannot be considered as fully acceptable.

In addition, note any obvious contamination with organic matter or problems with salinity, iron and other contaminants that can give the water a bad taste or make it otherwise unsuitable for use.

Yield

Ask community members if the water in the source is enough, or if it is too little or they often have to wait and queue for it.

Yield in Dry Season

Some sources may dry out in the dry season, or become severely reduced. Ask if this happens every year, sometimes, or if there is always water available from the source.

Condition

Note if the source is well looked after, or run down and neglected.

Sanitation

Where there are no latrines, or people do not use existing latrines, record "free range".

The main types of communal latrine are:

- trench latrine, usually a long trench with logs or boards across it, a low roof and sometimes a partial wall
- KVIP, with concrete slabs over a pit, vent-pipes and a superstructure with doors.

Note the general condition of the latrines. Where some individual households have built latrines, record the approximate number, type and condition.

Water-Related Diseases

Ask community members, especially the women, about cases of the diseases mentioned below that have occurred in the community over the last three years.

For *Guinea Worm*, communities tend to be completely free of it, or have cases regularly every year. The third, intermediate category is where there are a few cases from time to time, but not every year. Remember also that there has been a Guinea Worm eradication programme in operation for some time, and that there will be communities which had it some years ago but which are now free from it.

For *cholera*, try and make the difference between an outbreak, where a number of people all fell ill within a short period of time (a few weeks or less) and isolated cases, where one or two people were infected and several months passed before any other case occurred, if at all.

Frequent outbreaks of *diarrhoea* are a good indicator of water supply and sanitation problems. However, it is difficult to measure this factor. Try to find out if there are outbreaks when many families in the community are affected at the same time. Also try to find out if such outbreaks are common, and occur once or more every year, or if they occur only occasionally, every few years or if there are no major outbreaks at all.

Bilharzia is a disease that can build up in a person over time, as they become infected by more and more of the worms that cause it. The main symptom is for blood to appear in the urine. If there are few cases, people may be aware of them because it is unusual. In communities where there are many cases, it may well be considered as normal.

Level of Community Interest

Ranking

One way of gauging community interest in water supply is to compare the priority they place on it compared to other community services they may want such as a school, a clinic, an improved road, electricity etc. Sometimes, different groups within the community will have different priorities -- for instance, the women may regard water supply as their highest priority, whilst the men are more interested in electricity and the chief and elders want a school for the community.

It is therefore important first to identify each group's priorities, then to allow them to explain them to the others, and finally to facilitate a discussion leading to agreement. This can be done by holding some group discussions and then trying to reach consensus in a community meeting.

Action Taken to Improve Water Supply

Two factors can be examined in this regard. Firstly, whether the community has collected any money towards a water supply project. Be sure to find out if any such fund was really collected for water supply, and if it is firmly committed. Sometimes community funds are allocated to any project that happens to come

along, which does not necessarily reflect a high degree of commitment to water supply.

The second factor to examine is whether the community has undertaken any concrete actions to improve the water supply situation. This may take a physical form such as improving or fencing the source, or other actions such as establishing rules to protect the water supply from contamination or abuse. Many different actions are possible.

Responsiveness

Community response can be gauged partly by the speed and size of attendance at community meetings. If people are keen to come, come in large numbers and contribute actively to the meeting, then they are clearly interested. A poor response would be when few people attend the meetings, and then only much later than planned and after making strenuous efforts to gather them. The intermediate case would be when attendance is reasonable, but it still takes some time and effort to bring people together for the meeting. If the turnout for a meeting is poor, however, remember to check that the community had sufficient notice and that the meeting is at a convenient time.

Potential for Community Management

CBOs

Nearly every community has a Unit Committee and a 31st December women's group. Try to see if there are other community groups operating, such as market associations, religious-based groups working in the community at large, youth associations etc.

Conflict

Some communities may have been ruled out at the pre-selection stage because of serious conflicts. However, it may be that the community lacks unity and cohesiveness because of a high proportion of recently arrived families or a certain lack of communication between different ethnic, religious or other groupings. This may not amount to conflict, but may require special attention when the PO prepares a project. The relevant facts should be noted so that they are not overlooked later during project preparation.

Community Projects

Find out not only the type of each project, but also what the community had to provide in terms of labour, materials and cash. Note which projects were successful, and the nature of any problems that arose. Also try and discover how decisions regarding the projects were taken; was it the chief and elders, a wider group of community leaders, some other particular group or individual, or was the whole community involved?

Maintenance Culture

Look at the way community facilities of all kinds are maintained, such as water points, schools, clinics, environmental cleanliness, etc. This includes both observation and talking to people to get some idea of their attitude towards their communal facilities and the arrangements for looking after them.

Is there evidence that repairs are carried out whenever necessary, and that the facilities are well used and generally looked after? Is there some sense of pride in the facilities? At the opposite extreme, does it appear that they are neglected and allowed to fall into disrepair? The intermediate case is when facilities are maintained to the minimum possible extent to keep them functioning.

Women's Participation

Discuss with groups of women their own perception of their influence over community decision-making and management of community facilities. Even if it appears that they have little influence, if they believe they do have some influence, they will be more inclined to participate in project planning and management.

Other clues can be gathered during community meetings. Do a fair proportion of the community's women attend, and do they contribute actively to the debate? Do the men listen to the women and encourage them to express their views, or do they tend to ignore them?

Community Scoring Sheet

Community: _____

Parameter	Points 1	2	3	Score	Weight	Final Score
Background Factors						
Population	75-300	300-1,500	more than 1,500			
Accessibility by vehicle	difficult throughout the year	difficult in the wet season	accessible throughout the year			
Time since application	less than 1 year	1-2 years	more than 2 years			
Principal Source of Drinking Water Supply						
Distance from Community	less than 500m	500m to 1km	more than 1km			
Type	handpump, protected spring, treated water	protected well, spring	river, stream, pond, dugout, traditional well			
Yield in dry season	normal or slightly reduced	greatly reduced, occasionally dries out	dries out every year			
Water-Related Diseases in Last 3 Years						
Guinea worm	no cases	at least one case	several cases every year			
Cholera	no cases	isolated cases	an outbreak			
Diarrhoea	isolated cases	occasional outbreaks	outbreaks every year			
Bilharzia	no cases	a few cases	common			
Community Commitment						
Ranking given by community to water supply	third or lower	second	first			
Action taken to improve water supply	none	either self-help or fund-raising	both self-help and fund-raising			
Response to calls for meeting	difficult to call meetings, poor attendance	meetings slow to gather, fair attendance	ready and waiting, good attendance			
Potential for Community Management						
No. of CBOs	1 or 2	3 or 4	5 or more			
Community projects done in last 3 years	1	2	3 or more			
Maintenance culture for communal facilities	necessary repairs not carried out	occasional repairs	well and regularly maintained			
Women's participation	virtually nil	moderate	high			
TOTAL						

Community Ranking and Selection

Community	Background			Water Source			Diseases				Commitment			Com. Management				TOTAL
	Population	Accessibility	Waiting Time	Distance	Type	Drying up	Guinea Worm	Cholera	Diarrhoea	Bilharzia	Ranking	Action Taken	Response	CBOs	Com. Projects	Maintenance	Women	

PO Monitoring Checklist

Community _____ Date _____

1. Mobilisation and Planning Phases

1.2 Relations with Community

Is there a good relationship between the PO and the community? Who are the main opinion-leaders? Have they been properly involved? Does the PO have good relations with them? Does the PO visit too often/not enough/about right?

_____

_____

_____

_____

_____

1.2 *Community Understanding of Basic concepts*

Does the community understand the CWSP and their role and responsibilities in it? Does the community understand the roles of the other institutions in the CWSP?

_____

_____

_____

_____

_____

1.3 *WATSAN Committee*

Are women effectively involved in the WATSAN Committee? Do they hold positions of responsibility? Are there representatives of all different subgroups on the WATSAN Committee (men, women, youth, elders, different religious and ethnic groups) or is it dominated by one leader or faction? Is the WATSAN Committee enthusiastic and energetic; does it meet regularly, does it do its job quickly and efficiently? Are there good relations between the WATSAN Committee, PO and community?

_____

_____

_____

_____

_____

1.4 *WATSAN Committee Selection*

Was the WATSAN Committee selected in an open, public and democratic process? Was it based on choosing effective leaders and organisers? Are there any conflicts with existing community organisations? Were existing community organisations taken into account when deciding what kind of WATSAN Committee to set up? Is it well accepted by the community?

1.5 WATSAN Committee Records

Are there clear records of meetings, activities undertaken with the PO and other events? Do the records appear to be true? Do they correspond with the PO records?

1.6 Community Meetings

Are meetings well managed? Are people properly informed in advance? Does everybody get a chance to speak? Are decisions clearly defined and recorded?

1.7 Collection and Management of Funds

How is money collected? How does the WATSAN Committee account to the community for it? Are there proper records (receipts, cash book etc.)? Is there a bank account? Has the agreed amount been collected? Is it likely to be collected?

1.8 Community Mobilisation

Are meetings well-attended? Do people arrive on time? Do plenty of women attend? Do they participate actively? Have any community activities been agreed upon? Were they properly planned? Were they successfully carried out?

1.9 Hygiene Education

Have you discussed hygiene? Have you discussed clean water? Have you identified hygiene risks in your environment? What did you decide to do? Have you or others started to do it? Why/why not? Do you think someone will check up on it? Have WATSAN Committee members been trained in hygiene education? Is the environment clean? Is refuse dumped at designated sites? Are people constructing and using toilets and soakpits? Are toilets well maintained? Are men aware of hygiene matters? Are women aware?

1.10 Technology Choice

Were different technical options discussed? Which? What type of system was chosen and why? How were the decisions taken? Do you agree with the choice? What is your general opinion about the new water supply? What do you know about it: where will the water point(s) be? who will own it? how much will it cost? how will it be maintained? who brought it? Were women fully involved in the decision-making?

1.11 Data and Map

Full inventory of water sources used. A reasonably accurate population estimate. Map showing type and selected sites for water points, areas occupied by housing, main sources of pollution, cemetery, access routes, chief's house, contact person's house.

2. Construction Phase

Were community labour and material inputs provided in a timely and organised manner? Did the selected caretakers participate actively in construction? Did the WATSAN Committee carry out any hygiene education work?

3. Follow-up Phase

3.1 *WATSAN Committee*

Does the WATSAN Committee meet regularly? Does it report back to the community? Does it carry out user education? Does hygiene education continue?

3.2 *Collection and Management of Funds*

Are sufficient funds collected? Are the records kept properly?

3.3 *Operation and Maintenance*

Have the caretakers been trained? Are the facilities clean and well-maintained? Is routine preventive maintenance (e.g. greasing, tightening of bolts etc.) carried out? Are repairs carried out promptly? Are spare parts purchased as and when required?

Checklist for HDW Monitoring

1. Site Selection

* Indicators and procedures for site selection
* Estimation of likely depth and flow (wet and dry season)
* Was community fully consulted?
* Distances and situation in relation to pollution sources and soil type

2. Quality and Quality Assessment of Materials

- Sand
- Coarse aggregate
- Concrete mix
- Water (should be potable quality)
- Cement (ensure proper storage)

3. Excavation

- Diameter of well
- Verticality of well
- Soil sampling techniques
- Ensure contractor takes soil samples during excavation

4. Safety on Site During and After Daily Operations

- Safety equipment used
- Site to be covered and protected at the close of the day's work

5. Well Lining

- Must be well centred
- Compaction must be well done
- Caisson rings must be properly centred
- Quality and thickness of filter media must be as specified

6. Headworks

- Cover slab and apron must be constructed according to specification, with particular attention to:
  * Slopes should drain water away from the well to prevent pollution
  * Lips/edges must be sound and of the correct dimensions
  * Dimensions of apron
- Handpump installation

7. Reporting and Records

- Measurement of works
- Project reports
- Certificates
- Site records

Latrine Construction Contract

Contract No.....

1 Beneficiary's name: _____

House address: _____

Community: _____ District: _____

Artisan's name: _____

2 No. of users: _____ Currently used latrine facility: _____

Reason for building a new latrine: _____

_____

Latrine Type:

Mozambique non-reinforced slab with unlined single pit ☐

Mozambique non-reinforced slab with lined single pit ☐

Rectangular reinforced slab with unlined single pit ☐

Rectangular reinforced slab with lined alternating double pit ☐

San-plat type with unlined single pit ☐

3 **Conditions of Contract:**

Definitions:

The Beneficiary and Artisan are those specified in section 1 of this contract. The District Assembly is that with authority over the District specified in section 1 of this contract.

The Artisan will:

a) Construct a latrine facility of the type indicated in section 2 above for the Beneficiary.

b) Use the subsidy released to him/her by the District Assembly solely for the construction of the said latrine.

c) Carry out the work to a good and acceptable standard.

d) Complete the work within three months of the signing of this contract by an authorised representative of the District Assembly.

e) In default of (c) and (d) above, refund to the District Assembly and the Beneficiary any payments they have made to him, unless there is reasonable cause. Such reasonable cause may include war, general instability, fire, outbreak of epidemic, bad weather conditions, poor health of the Artisan or other factors mutually acceptable to the signatories of this contract.

The Beneficiary will:

a) Provide the sum of _____ Cedis to the Artisan.

b) Provide the following in-kind contributions to the construction of the latrine:

_____

_____

_____

_____

_____

_____

c) In default of (a) and (b) above within one month of the signing of this contract by an authorised representative of the District Assembly, forfeit the subsidy provided by the District Assembly, and pay to the District Assembly a surcharge of _____ Cedis to cover processing costs.

The District Assembly will:

a) Provide a subsidy of _____ Cedis to the Beneficiary through the Artisan.

b) Release the subsidy only when the Beneficiary has provided the agreed cash and in-kind contributions within one month of the signing of this contract by an authorised representative of the District Assembly.

c) Reserve the right to terminate the contract if the Beneficiary fails to meet the obligations set out in this contract without reasonable cause.

Disputes:

Any dispute arising from the execution of this contract shall be settled amicably by the parties hereto, namely, the Beneficiary, the Artisan and the District Assembly. If it is not possible to reach an amicable settlement, the dispute shall be resolved by an arbitration committee set up by the RWST, whose decision shall be final.

Agreed by _____ on the _____
(Beneficiary) (Date)

Agreed by _____ on the _____
(Artisan) (Date)

Verified by _____ on the _____
(DWST) (Date)

Agreed by _____ on the _____
(District Assembly representative) (Date)

Latrine Summary Information

Contract No. _____

Beneficiary's name: _____

House address: _____

Community: _____ District: _____

Artisan's name: _____

Latrine type: _____

Status	Date	Name	Signature
Application received			
Application verified			
Application approved			
First half of subsidy paid			
Supervision visits			
1.			
2.			
3.			
4.			
5.			
6.			
Completed			
Final payment and certificate			

Request for Release of Funds for Latrine Construction

Artisan	Community	Beneficiary Name	Contract No.	Amount in Cedis	Received by (Artisan's signature)

Prepared by: Date: _____

_____

Total Requested	

Certificate of Completion

Contract No. _____

Beneficiary's name: _____

House address: _____

Community: _____ District: _____

Artisan's name: _____

Latrine type: _____

This latrine has been certified as complete.

_____ _____

(for DWST) (Date)

Request for Reimbursement of Latrine Subsidy

District: ______________________________ Date: ____________

Community	Beneficiary Name	Contract No.	Amount in Cedis

Total Requested	

Signed: ______________________
(District Finance Officer)

Approved: ______________________
(Regional Sanitation Engineer)

Latrine Monitoring Checklist

Contract No. _____	Artisan _____
Community _____	Beneficiary _____

Stage 1: Siting and Setting Out

Siting

Site SHOULD be	Yes	No	Site should NOT be	Yes	No
Is it slightly raised and well-drained?			Is it low, marshy or subject to flooding?		
Is it conveniently located near house?			Is it on a disputed area, road reserve or old rubbish pit?		
Does it allow flow of air to superstructure and vent pipe?			Is it under shady trees or near tall buildings?		
Is it at least 100' from any water source?					

Taking the above into account, is the site satisfactory?

Pit Type

	Yes	No
Is the soil stable?		
Is the water table more than 20' below ground level?		

If the answer to either of these questions is no, the pit should be lined. Alternatively, twin alternating pits might be used.

Yes	No

Has a suitable type of pit been chosen?

Pit type:

_____

Setting Out

	Yes	No
Is the internal radius (or length and width) of the ring beam as specified in the construction manual?		
Is the external radius (or length and width) of the ring beam as specified in the construction manual?		
Are the corners square (if applicable)?		
Is the trench for the ring beam of the correct depth (i.e. 6")?		
Are the dimensions of the moulds and formwork as specified in the construction manual?		
Is the door placed to conform with the general orientation of the doors in the house to allow for maximum comfort?		

Stage 2: Ring Beam, Pit and Slab

Materials

		Yes	No
Cement	Is normal Portland cement being used?		
	Is the cement dry and free of lumps or cakes that cannot be easily crushed with the fingers?		
Sand	Is the sand clean?		
	Is the sand well-graded (i.e. containing grains of many sizes)?		
Stones	Are the stones sharp, hard nd clean?		
	Are the stones well-graded (¼" to 1")?		
Water	Is the water from the source used for drinking?		
	If the water is from another source, have test blocks been made, and were they found to be strong after 7 days?		
Iron Rods	Are the iron rods 3/8" diameter?		
	Are the iron rods free of rust?		

Items to Monitor during the Casting of Slabs and Ring Beams

		Yes	No
Concrete Mix	Are the correct mix ratio and the right quantity of materials being used, as specified in the construction manual?		
	Has the minimum amount and no more of water required to make the concrete fluid enough and workable been used?		
Moulds	Are the dimensions of the squat/key-hole mould and vent pipe mould as specified in the construction manual?		
	If rectangular slabs are being cast, are the internal dimensions of the formwork as specified in the construction manual?		
	Is the formwork of uniform thickness and (for rectangular slabs) with perfect square corners?		
	Is the mound uniform (for the Mozambique slab)?		
	Is the squat hole mould positioned at the centre of the mound prepared (for the Mozambique slab)?		
	Is the ventpipe mould held vertically in position and at the correct distance from the edge of the slab?		
Reinforce-ment	Have the iron rods been correctly cut to the lengths specified in the construction manual?		
	Are the rods correctly arranged and spaced as specified in the construction manual, with the longer ones on the lower side?		
	Are the rods firmly tied together with binding wire?		
	Is there 1" cover at the bottom and all round the slab?		

Items to Monitor during the Casting of Slabs and Ring Beams (cont.)

		Yes	No
Casting	Was the concrete compacted to a uniform thickness?		
	Was there any bleeding on the slab surface after casting?		
	Were the edges of the squat hole and footrest bevelled and trowel/spoon finished?		
	Was the cover slab float/foam finished?		
	Was the footrest trowel finished, leaving the surface of the footstep rough?		

Finished Concrete

		Yes	No
Curing	Was the ring beam cured for at least 3 days?		
	Was the slab cured for at least 7 days?		
	Were they sprinkled with water at least 3 times a day?		
	Were they covered with heavy duty polythene, wet sacking or wet sand or sawdust 1" thick?		
Finished Items	Was all the concrete used up in the casting?		
	Is the finished concrete hard and resistant to crumbling?		
	Are all iron rods fully covered up?		
	Is the surface smooth and free from holes and porosity?		
	Is the concrete free from cracks?		
	Is the surface free from any marks of bleeding?		
	Are the dimensions as specified in the construction manual?		

Pit

		Yes	No
Shape	Is the pit dug *within* the ring beam and not *under* it?		
	Is the top half of the pit sides vertical?		
	Is the bottom half of the pit sides (unlined pits only) sloped gently inwards to the bottom?		
Depth	Is the pit at least 15' deep (unlined pits only)?		
	Is the pit of the depth agreed between the artisan and the beneficiary (lined pits only)?		

Slab Installation

	Yes	No
Is the slab correctly aligned (facing the doorway)?		
Is the slab well bedded and sealed on the ring beam with a layer of mortar about 1" thick?		
Are there cracks on the slab or damage to the ring beam?		
Does the slab support 6 people, without rocking?		

Stage 3: Completed Latrine

Structural

		Yes	No
Super-structure	Do the air spaces face the direction of the prevailing wind in the area?		
	Are there two air spaces of size 4"x8", each placed 15" from the outer wall (except when the door faces the windward direction, in which case it is placed above the door)?		
	Are there no other gaps in the wall or door or between the roof and walls of the superstructure apart from the vent hole?		
	Is the area around the latrine compacted and mounded so that run-off water heads away from the latrine walls?		
Roof	Are the roofing members properly anchored into the walls?		
	Is the difference in height between the front and the back of the roof at least 9"?		
	Are there side laps of at least 3"?		
	Is there an overhang of at least 12" at the front and back?		
	Is the roof sloped so that rainwater falls on the downhill side and drains away from the latrine?		
Vent Pipe	Is the vent pipe at least 2' above the apex or tip of the highest roof in the surrounding area?		
	Is there a good watertight joint at the ventpipe/roof interface?		
	Is the diameter of the vent pipe 4"?		
	Is it securely held in a vertical position?		
	Is there a well mortared joint at the ventpipe/slab interface?		
	Is there a flyscreen installed on the ventpipe?		
	Does light from the ventpipe fall on the bottom of the pit?		
	Does a smoke test show that air flows down the squatting hole and up the ventpipe?		

Stage 4: Follow-Up

User Education

	Yes	No
Is the door closed at all times?		
Is the squat hole always kept open?		
Is all cleansing material dumped in the pit?		
Is the squat slab washed regularly?		
Do all members of the household use the facility?		
Is the pit kept free of disinfectants so as to allow biological digestion to occur?		

Maintenance

	Yes	No
Has the flyscreen been replaced if torn or damaged?		
Have any leaks around ventpipe/roof interface been fixed?		
Have any cracks in the superstructure been repaired?		

MONTHLY WORKPLAN

DWST, _____ District

Workplan for the Month of _____

Activities (what)	Period (when) week 1	2	3	4	5	Strategy (how)	Responsibility (who)	Resources

QUARTERLY WORKPLAN

DWST, _____ District

Workplan for the _____ Quarter of _____

Activities (what)	Period (when) month 1	2	3	Strategy (how)	Responsibility (who)	Resources

ANNUAL WORKPLAN

DWST, _____ District

Workplan for the Year _____

Activities (what)	Period (when) Month												Strategy (how)	Responsibility (who)	Resources
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			

Reporting Format

DWST, _____ District

Report for the Period _____ to _____.

Date: _____

1. Activities Planned for the Period

2. Activities Carried out and Reasons for Variance

3. Problems and Recommendations

4. Activities Planned for Next Period