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MOROGORO/SHINYANGA RURAL WATER AND SANITATION PROGRAMMES

COST-RECOVERY OF VILLAGE WATER SUPPLIES:

A TRAINING GUIDE

FOR

COMMUNITY DEVELOPMENT ASSISTANTS

September 1989

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## **IRC, INTERNATIONAL WATER AND SANITATION CENTRE**

IRC is concerned with knowledge generation and transfer, and technical information exchange for water supply and sanitation improvement in developing countries. The emphasis is on innovative approaches to prevailing problems. The target groups are management and technical staff concerned with planning implementation and use of water supply and sanitation facilities in rural and urban fringe areas.

The centre works together with partners in developing countries, United Nations organizations, bilateral donors and non-governmental organizations. Its multidisciplinary staff provides support through development and demonstration projects, evaluation and advice, training and education, publications, and general information exchange.

Activities integrate technical and non-technical issues in water supply and sanitation and include community participation particularly the role of women, hygiene education, appropriate technology, operation and maintenance, community-based financial management, and development of technical information exchange.

IRC is an independent, non-profit organization. It is supported by and linked with the Netherlands Government, UNDP, UNICEF, the World Bank, and WHO for whom it acts as a Collaborating Centre for Community Water Supply and Sanitation.

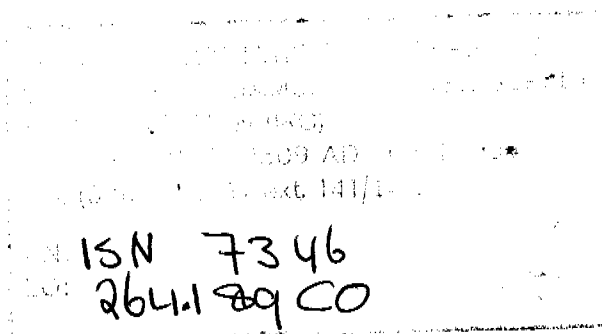
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## CH.1. WHY GOOD PAYMENT ARRANGEMENTS ARE NEEDED

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"Uzipoziba ufa, utajenga ukuta"

### A discussion story

In the past there were no pumps in Kilima. Women and children had to climb a steep slope from the river with heavy buckets of water. The villagers drank water from the open river, ponds or wells. They knew this open water may be contaminated. People had bathed and washed and helped themselves by it. The rain could have washed the dirt into the water which they drank. They could not always see this dirt because it dissolves in very small particles, but they knew it can be there.

Now the village has safe pumpwater. This water comes from deep under the ground in a closed pipe. Dirt from people and animals cannot enter. Women and children can go to the pumps all day and even at night. They do not have to walk far. They are less tired and have more time to cook food, go to school or health classes and work in the fields.

At first the pumps are new and doing well. The people are well and the population grows. Over the years the pumps get older and the village continues to grow. But the people of Kilima do not worry. One day a visitor comes and sees that four pumps are broken. The water committee would like to repair them, but they have no money to pay the mechanic. Spare parts must be bought in the town first. For this they also need money.

The committee is now trying to raise funds. But this is not easy. It is the end of the dry season and people have little cash. Some people say the village government should pay. Others refuse to pay because they prefer to go to the river. Some talk about money that has disappeared in the village before. The visitor sees that there are also no pumps in the newer parts of the village. Nearly all women and children have gone back to collect water from the river. Things are the same as before .....

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### QUESTIONS FOR DISCUSSION:

- \* Consider the situation of Kilima.  
Do you have similar problems in your village(s)?

- \* What will happen to the health of the people, when they go back to drinking water from open water sources after some years of water from the protected pumps?
- \* What does the breakdown of the handpumps mean for the work and time of women and children?
- \* Will the situation affect the development of the village?
- \* Will the pumps be repaired quickly?
- \* What will the people think of the water committee? Will they have trust in it in future?
- \* What could the committee do? How could you help them to take action?

## CH. 2. WHAT COST TO BUDGET FOR, AND HOW TO DO IT

An efficient water committee makes financial provisions for PRESENT village needs, and for the village needs in the future.

Initially, funds are needed for:

1. Regular maintenance of the handpumpwells/piped scheme.
2. Timely repair.

In the future, funds will also be needed to:

3. Make new wells or taps in newly settled areas of the village.
4. Renew the water supply system, when it gets too small, or gets too many repairs.

### QUESTIONS FOR DISCUSSION:

- \* Can you explain for each activity why it is important?

As a CDA you will have to help the committee to make a good annual budget to maintain and repair the village water supply, and expand it when the population grows.

Lists A and B tell you what items to include in the budget, their current price and the average period they will last.

Together with the committee you can now calculate how much money needs to be collected as a minimum each year to meet the costs of the village water supply.

Exercise 1 is an example of a budget in Mlanga village, which has 7 handpumps.

Exercise 2 is an example for a piped supply village, Lipanga, with 12 public taps.

In exercise 3 you can work out your own example for one of your villages. To fill in the village-specific costs, such as the payment of the village mechanic, read chapter 3 first.

LIST A

BUDGETTING ITEMS FOR HANDPUMP MAINTENANCE

Requirement	Item	Number needed	Average lifetime	Current cost	Annual cost per well	Total annual cost
-------------	------	------------------	---------------------	-----------------	----------------------------	-------------------------

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Spare parts

Tool kit VM

Incentive VM

Fee special  
repairs

Well  
disinfectant

Transport  
(to buy spares)

Stationaries

Other  
(specify)

TOTAL

5% Contingency

GRAND TOTAL

LIST BBUDGETTING ITEMS FOR PIPED SYSTEMS

Requirement	Item	Number	Average lifetime	Current cost	Annual cost per scheme	Total annual cost
-----						
	Tools Intake Caretaker					
	Incentive Intake Caretaker					
	Toolkit VSA					
	Incentive VSA					
	Spare parts					
	Fee special repairs					
	System disinfection					
	Transport (to buy spares)					
	Fuel					
	Stationaries					
	Other (specify)					
	TOTAL					
	5% Contingency					
	GRAND TOTAL					



Exercise 1 Budget for village water supply in Mlanga village, 1989

Incentive VM

Replacement  
worn parts

Replacement  
worn tools

Repair fees

(Example will be worked out by programme)

Chemicals  
for well  
disinfection

Cement

Paint

Stationaries

Transport

Total

5% Contingencies

GRAND TOTAL

Exercise 2 Budget for village water supply in Lipanga village, 1989

(Example will be worked out by programme)

Exercise 3 Budget for village water supply in ..... village, 19..

Incentive VM

Replacement  
worn parts

Replacement  
worn tools

Repair fees

Chemicals  
for well  
disinfection

Cement

Paint

Stationaries

Transport

Total

5% Contingencies

GRAND TOTAL

QUESTIONS FOR DISCUSSION:

- \* How much money should your example village collect this year?
- \* Does the water committee know how much money to collect?
- \* Has the committee already collected enough funds?
- \* Does the committee realize that the costs of the water supply will increase when the system gets older?

Preparation for future expansion and renewal of the water supply

In the story of Kilima in Chapter 1 we saw how important nearby and good water is for village health and development.

When the population grows, the number of wells and taps must therefore increase also. Otherwise large parts of the village will in future have no good water sources.

The Village Water and Sanitation Committee is responsible to see that the village water system is expanded in time to the new settlement areas.

As a CDA you will have to discuss the following questions with the VWSC and VHW:

- \* Does the committee know that it is not always possible to make wells / build taps at every place in the village?
  - for wells: in some places there is not enough or good groundwater.
  - for taps: some places are too far or too high for the water to reach.
- \* The survey teams have surveyed where the village could build new wells / taps and identified the sites on a map of the water supply system. Does the committee know the map and the sites?
- \* Are people encouraged to settle in these areas? Or do they also settle in other parts of the village?
- \* How many people are settling in the planned expansion areas? Do they use safe water now? If yes, from where? If no, what could be done?
- \* How soon will these areas need their own handpump well / waterpoint?
- \* Does the committee know how much this will cost?
- \* How does the committee plan to build and finance the expansion?

- \* When people also settle in other parts, why do they do this? Do they use unsafe water sources in these areas for drinking and (in case of bilharzia) washing/bathing? What could be done?

Note on expansion financing:

One way to finance the new pumps/net expansion is to make some reservations every year in the budget plan and keep the money in the bank as part of the water account. However, construction prices usually increase faster than the money in the bank will grow, due to lowering value of the shilling (inflation).

The VWSC may therefore prefer to look for other forms of financing of future expansions, such as:

- trying to increase general village income from other sources, so that by the time the system needs expansion, the funds will be available;
- holding a general fund-raising;
- dividing unskilled labour and financing over the village households;
- asking only the new users for a financial contribution, comparable to the labour contribution given by the other villagers to the construction of the earlier wells/pipelines.

### CH.3. SPECIFYING LOCAL COSTS

Some of the budget costs vary from village to village, because they depend on the individual decisions of the water committee. These decisions are:

1. Payment of an incentive to the mechanics/scheme attendants
2. Replacement of maintenance tools and equipment
3. Payment of incentives to other water functionaries

The water committee can make different choices, each with its own advantages and disadvantages. The committee knows the local circumstances best, but you may help them to make a wise decision. Some choices the committee has are:

- they may pay the VM/VSA a fixed fee, say Tsh. 200 a year, for the monthly maintenance rounds, and Ts. 40 for each additional repair job;
- or they may pay the VM/VSA according to the time spent on each repair;
- they may pay the VM/VSA per month, or per quarter/half year/year, depending on what is most practical. In villages where people pay for water once or twice a year, after the harvest, it may be easier to pay the VM/VSA also at that time, especially when there is no nearby bank;
- they may decide not to pay the second VM/VSA trained as a stand-by;
- or they may decide to give this person a small retainer fee;

For lasting maintenance, the project trains not one but two people per village as VM/VSA. Some committees decide that these should share the work and get both paid. Others keep the second as a stand-by and either do not pay them or give them a small retainer fee. Again others train a husband and wife and pay the one who does the work.

Some villages decide to use a good mechanic in a neighbouring village and pay him/her per visit. There is however a temptation to call only for his/her services when the water supply breaks down and omit visits for maintenance.

The VM/VSAs also need tools and spares. The tools get worn, may get misplaced, etc. and then need to be replaced. The spares get used and also need to be replaced. One option is that the committee buys the initial set of tools and spares and hands them to the VM/VSA.

The amount of money needed to replace the tools is then included in the VM/VSA's salary. The spares the committee may buy, or the VM/VSA may buy them and charge the committee for them either immediately or upon use. The other option is that the committee keeps the tools and spares and replaces them when needed.

Depending on local conditions, some other people may also need a small compensation for their work. In piped schemes, a caretaker at the intake is important to clean the screen and prevent clogging, especially in the rainy season.

In group schemes, it may be decided that each village pays this person's fee for one year. Here again, payments may, but do not have to be, per month.

Other persons who may need to get some compensation for their work are the storekeeper (in case a separate person keeps the tools and spares at his/her house and is responsible for them) and the treasurer of the water committee, especially when he/she has to spend a lot of time on fee collection, trips to the bank, administration, etc.

To decide how much to pay each person, the committee can look at:

- how many hours/days of work are needed for the job;
- the physical labour required (distances, heaviness of work);
- how much other functionaries in the village get for how many hours/days of work

---

"Mpanda ovyo, hula ovyo"

A role play

Purpose: To choose good mechanics and set realistic fees village mechanic

Setting: A water committee meeting

Participants: Members of village water committee;  
2 schoolleavers; Village chairman; CDA

Procedure: The water committee has to choose two candidates for training as VM. The village chairman suggests they choose his youngest son and a nephew. Some of the committee members are in favour. They want the chairman's support for the collection of maintenance funds. Other members are against. They think the boys unsuitable. The committee has to make a choice. It must also decide when and how much to pay them after their training. The official minimum wage is Tshs 920 a month. The boys themselves are eager to get the training. Both are secondary school leavers without technical experience. Their aspiration is to become car or aeroplane mechanics. The CDA helps the committee to make wise decisions by pointing out possible advantages and disadvantages of each choice.

Background information on Mpanda village:

The village has 8 handpumps. They must be checked once a month. The roundtrip takes about half to one day, depending on the work to be done on each pump. The village employs two other persons: the shop attendant and the village health worker. They are paid Tsh. 400 a month. The other village functionaries are volunteers. The shop is the only source of village income. Some years it makes a profit, other years it makes a loss. The villagers are not very wealthy. They can only pay a small water rate.

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#### CH.4. CHOOSING THE TYPE OF FINANCING SYSTEM

In Chapters 2 and 3 you have estimated with the water committee of a village how much money should be set aside each year to maintain the water supply. You will now have to decide with the committee how this money will be raised.

There are TWO WAYS of getting money for keeping the water supply running and serving the whole village:

1. Using a communal fund
2. Collecting regular user payments

##### OPTION 1 : USING A COMMUNAL FUND

###### 1.1. Reserving money from the village income

Some villages have their own sources of income. From these they may set aside enough money every year in a separate bank account to cover the running costs of the water supply.

Advantage: Easy. No need to do a separate collection and registration of payments for the water supply.

Disadvantage: Village income may be too little or unreliable to cover all water supply costs. There is no relation with actual water use.

Exercise: With the village leaders review the income and expenditures of the village.

##### QUESTIONS FOR DISCUSSION:

- \* Is the reserve large enough to pay also for the village water supply?
- \* How reliable is the reserve? (changes over the years)
- \* Are there ways of increasing the income if necessary?
- \* Are those using much water also contributing most to the village income?

## 1.2. Organizing occasional fund-raisings

To raise maintenance funds, the committee may also decide to organize a voluntary fund-raising after the water supply is completed. The money collected is put in the bank and used until nearly finished. Then a new fund-raising is organized.

Advantage: Easy. Only occasional large effort required. Can be timed after harvest, when people have time and cash.

Disadvantage: Amount that will be collected uncertain. Some people may pay very little or not at all. People may distrust the need to raise cash when the water supply is still working.

### POINTS FOR DISCUSSION WITH THE COMMITTEE :

Could this system could work in the village?

Are there ways in which this system could work better:

- If the committee explains how the money collected earlier was spent, would people be more ready to pay again?
- If the committee calculated how much an adult or household should contribute on average, and set this amount as a guideline, would it help people to pay enough?
- Would registering and putting up the names and amounts contributed help to get contributions from all? Would it also stimulate wealthier and greater water users to pay more than the average amount?

## 1.3. Establishing a revolving village fund

A more complex way of raising money for the water supply is to establish a revolving village fund. In its simplest way, this is done as follows:

- After the completion of the water supply, a maintenance fund is created from village income or through fund-raising.
- Part of the money is then used to give short-running loans to individual households. The households pay back the loan with interest after the agreed time. This money is put back into the fund and used to give out new loans. Pressure from other households (no new loans given out when old ones not paid back) can stimulate timely repayment.

Advantage: Water fund increases, so that more money becomes available to expand the water supply. Stimulates enterprising individuals in villages with good economic opportunities.

Disadvantage: More complex and open to misuse.

## OPTION 2 : COLLECTING REGULAR USER PAYMENTS

### Who are the users?

Before getting regular user payments it will be necessary to determine who are "regular users". The easiest way is when the wells and taps are so well-distributed over the village that everyone can easily make use of them. This means that ALL VILLAGERS are the users of the water supply. It is more difficult when not all village sections are served, or when some people live quite far from the waterpoint or have their own private well.

The committee can then decide to make a LIST OF USERS for each waterpoint. The list can be made by the pump/tap caretaker, and a copy given to the water committee. The caretaker also informs the committee on any changes in the list of users. With the lists, the water committee knows how many households in the village are using the waterpoints and who should pay water rates.

### POINTS FOR DISCUSSION WITH THE COMMITTEE :

- \* Will the registration be carried out properly?
- \* What about unregistered users who still collect water?
- \* What to do with people using the waterpoint only when their own well falls dry? Register them as part-time users and charge them only during those months?
- \* What to do with users living far and only collecting water for drinking?

In the next chapter, it is discussed how the VWSC can set the rate to be paid by each user household.

## CH. 5. HOW TO SET WATER RATES

It has already been calculated how much money is needed for the running costs of the village water supply and how this amount will be raised.

You will now have to calculate with the committee HOW MUCH and HOW OFTEN the people will pay.

Here also, the committee has to make its own decisions, depending on the actual situation in their village. Your role, as a Community Development Assistant is to help them make a wise and practical choice.

For the USER PAYMENTS they can choose from:

- a flat water rate per user household
- a flat water rate per adult in each user household
- a graded water rate for different types of people

### 1. Flat water rate per user household

With flat water rates, each user household pays the same amount for the use of the pump/tap. This is an easy and fair system when there are no great differences in water use and distance to the waterpoints between the households.

The rate is calculated as follows:

- The committee determines the total number of user households in the community.
- The committee divides the total amount needed for the water budget of this year by the total number of user households.
- The resulting amount is the rate each household should pay per year.
- For monthly payments, the yearly rate is divided by 12. For half-yearly payments, the rate is divided by 2, etc. (See Section 2 below on how often to collect water payments)

### 2. Flat water rate per adult user

The advantage of this rate is that households with many adults (e.g. in-living relatives) which use more water and contribute to the household income will also pay a higher fee. Disadvantage: more work and regular registration of changes required when a child turns 15.

Calculation is as follows:

- The committee or pump/tap caretaker lists how many persons over 15 there are in each household using the water supply;
- Then the total yearly amount needed for the water supply is divided by the total number of user adults;
- The resulting amount is what each adult should pay per year;
- Taking the original user list, the committee and caretaker now write down how much each household should pay per year;
- The yearly amounts can be broken into smaller amounts (half-yearly, monthly) when required.

### 3. Graded water rates per household

There will be villages with considerable differences in water use between the families. Some for example may use water also to water cattle, wash lorries or taxis, or grow marketing products. Others may be well-to-do and have servants to collect and use much water to wash clothes, clean the house, water the yard, etc.

In those cases the committee may decide to charge an extra fee for those using much water. E.g. stock owners may have to pay an extra amount per animal per year.

Or the committee may decide to set several rate categories, and classify the households into large, medium and small users.

Classifying people into different rate categories can be done as follows:

- A list is made of all user households in the village;
- Each household is classified according to large, medium or small water use;
- The committee decides that the larger users will pay a double charge (or 1,5 a single charge), the medium users a single charge, and the small users half a charge;
- The number of large users is multiplied by 2 (or 1,5), the number of medium users by 1, and the number of small users by 0. The results are added up to get the total number of rates to be collected (see example below);
- The total amount budgeted for the water supply this year is then divided by the total number of rates;
- The resulting figure is the single rate to be paid by each household per year. Large users will pay double (or 1,5 times), small users half of this amount.

Example:

Total: 521 user households

Large users: 39 x 2 = 78 water rates

Medium users: 396 x 1 = 396 water rates

Small users: 86 x 0,5 = 43 water rates

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Total: 517 water rates

Water budget  
1989/90 Tsh. 150,000

Average water rate: 150,000 : 517 = Tsh. 300/year

Large users: Tsh. 30 x 2 = Tsh. 600/year

Medium users: Tsh. 30 x 1 = Tsh. 300/year

Small users: Tsh. 30 x 0,5 = Tsh. 150/year

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Exercise 1

Maswa village has 507 households. The annual maintenance costs for its piped water supply in 1989 are Tsh. 300,000. The committee decides to charge a flat rate per household once a year, after the harvest is sold. Six households have private wells, and use the water for three months only. The committee decides that they will together count for 2,5 families. Five families are too poor to pay, and may use the taps free of charge. How much will each family have to pay?

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Exercise 2

Lushoto village has 690 households. Forty families are below poverty level and are freed from payments. One hundred households are classified as larger users. They have cattle, or own a bar, or have high incomes and nice houses, so use more water. They are charged a double rate. The other users pay a single rate. Annual maintenance costs are Tsh. 150,000. What is the annual water rate for each group?

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## CH. 6. HOW TO COLLECT AND REGISTER PAYMENTS

Knowing how much and how often each user household will pay, it has now to be decided who will COLLECT the payments and how to REGISTER them.

For collection, the committee can choose from:

- home visits paid to all user households by the treasurer or rate collector;
- home visits paid to the users of each pump/tap by the pump/tap caretaker; he/she brings the money to the village office/treasurer before an agreed date;
- user households paying at the village office or house of the treasurer on a specified day/time
- user households of each pump/tap bringing their payment to the house of the caretaker; he/she brings it to the village office/treasurer before the agreed date;

The number of the payee, the name of the household, the amount and the date are written down in the PAYMENT REGISTER. In the payment register is also recorded who are behind in payment and how much they are due.

When the caretaker/collector collects and registers the rate payments, he/she finishes the collection and brings the money and the register to the treasurer on the agreed date.

He/she also informs the treasurer who has not paid and why, and discusses what follow-up action will be taken.





## CH 7. BOOKKEEPING AND ADMINISTRATION

The caretakers, rate collector or treasurer have collected and registered the water payments. For bookkeeping the treasurer now takes the following steps:

- The treasurer checks the total amount each pump/tap area should pay from the USER LIST;
- He/she writes the total amount received in the BALANCE book on the left hand page under INCOME;
- The total amount of arrear payments is written under DEBIT.
- Whenever the treasurer pays out money (fee mechanic, buying spares etc.), he/she writes out a RECEIPT;
- On the right hand page of the BALANCE BOOK, the treasurer enters all outpayments under EXPENDITURE, giving number of receipt, date, person paid, purpose of payment and amount;
- Before the monthly meeting of the water committee, the treasurer adds up all income and expenditure, and the outstanding payments of users and committee;
- He/she presents the totals and the balance (how much is left in the water account) in the meeting, and states whether enough funds are left to keep the water system functioning.

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### Exercise

With the group, practice filling in the various bookkeeping forms for an imaginary village.

---

### SAFEKEEPING OF THE MONEY

For safekeeping of the funds, the committee can open a separate bank account for the water supply. In addition, the treasurer may like to keep a petty cashbox for small payments.

Some villages may prefer to have two signatories for large deposits and withdrawals.

A separate water account also helps to ensure that the money budgeted and collected for the water system is not diverted to other purposes.

When there are few expenditures, and more money accumulates in the bank than needed, the village may decide to reduce the water rates or use the surplus for other village developments, such as better latrines at the village school, a new classroom etc. This is best decided during the annual meeting on the water supply (see Ch.8).



## CH. 8. CONTROL AND ACCOUNTABILITY

At least once a year, on a scheduled and pre-announced date, the committee should organize a general assembly of the user households.

Purpose of the assembly is to :

- account to the contributors for the running and administration of the water system during the past year;
- elect an AUDIT COMMITTEE to check the books of the water administration;
- present next year's budget and water rates for approval;
- elect new water functionaries when required;
- present an overview of water, sanitation and hygiene conditions in the village;
- discuss any problems and what could be done;
- discuss any other matters pertaining to water supply, sanitation and hygiene.

At the meeting, the treasurer presents an overview of the INCOME and EXPENDITURE of the water supply over the last year, for example on a blackboard or large paper.

The committee also explains how much money is needed in the years to come, and if the water rates need to be adapted.

The trust in the water administration is increased when the users can elect two other villagers as independent audit committee. This committee checks the books of the water supply in more detail and signs for accord. With this act the financial year concerned is closed and the treasurer can start a new year.

The annual assembly is very important in the proper running of the water system and the building of trust and understanding between the villagers and the committee.

It is therefore very important that a maximum of user households attend the meeting. In some countries, 80% of the user households must be present at the annual assembly to make its decisions binding.

In any case it will be important to note how many user household are represented at the meeting. This can be done by:

- reading out the LIST OF REGISTERED USERS and marking who are present;
- counting the number of participants and noting down how many men, women and children are present out of the total village population;

The presence of adult women in the assembly needs special attention. Women are the main users and beneficiaries of the water supply and therefore greatly support its proper maintenance and financing.

However, often there are practical and cultural barriers for women to attend assemblies and speak out at them.

#### QUESTIONS FOR DISCUSSION

\* How can the presence of women help the village to have a better water supply, sanitation and hygiene?

\* Can you list some of the constraints that women have in attending and speaking at village assemblies?

.....

.....

.....

.....

\* What steps can the committee take to help women attend and speak out?

.....

.....

.....

.....

---

"Panapo wengi, haparibiki neno"

A roleplay

Two CDAs acts as meeting convener/chairperson and treasurer. They arrange the meeting. The other CDAs acting as villagers. The chairperson opens the meeting and presents the agenda. The treasurer presents a financial report and announces a rate increase. The villagers react.

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QUESTIONS FOR DISCUSSION

- \* Was the meeting well arranged?
- \* Was the information clearly presented?
- \* Did all villagers get a chance to speak out?
- \* Did they voice real problems?
- \* Were the problems taken up by the committee?
- \* How was the meeting led?
- \* Were realistic conclusions achieved?
- \* Have you learned something?

CH. 9. ESTABLISHING THE PAYMENT SYSTEM WITH THE VILLAGE

In chapters 1 to 8 all decisions on financing and financial management have been discussed and practiced. Soon you will carry out similar discussions and practices with the water committees in the field.

Much will depend on your style of working with the committee.

Much will also depend on whether the villagers have chosen a good water committee, with dedicated and honest people in which they have full trust.

This trust will be further increased when:

- before final adoption, the chosen financing system is explained to the villagers, their comments are asked and an agreement is achieved;
- at the end of each financial year, the financing of the system is accounted for.

QUESTIONS FOR DISCUSSION

- \* How would you describe your way of working with the committee in the development of a financing system for the water supply?  
.....
- \* How will the arrangements chosen by the committee be laid down?  
.....
- \* How can the villagers be informed and comment on the proposed financing system for final approval?  
.....
- \* Can you list some common problems in the financing and administration of the water supply?  
.....  
.....  
.....
- \* Can you think of possible solutions?  
.....  
.....  
.....
- \* What could be done to prevent such problems in other villages?

CH. 9. ESTABLISHING THE PAYMENT SYSTEM WITH THE VILLAGE

In chapters 1 to 8 all decisions on financing and financial management have been discussed and practiced. Soon you will carry out similar discussions and practices with the water committees in the field.

Much will depend on your style of working with the committee.

Much will also depend on whether the villagers have chosen a good water committee, with dedicated and honest people in which they have full trust.

This trust will be further increased when:

- before final adoption, the chosen financing system is explained to the villagers, their comments are asked and an agreement is achieved;
- at the end of each financial year, the financing of the system is accounted for.

QUESTIONS FOR DISCUSSION

- \* How would you describe your way of working with the committee in the development of a financing system for the water supply?  
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.....  
.....
- \* How will the arrangements chosen by the committee be laid down?
- \* How can the villagers be informed and comment on the proposed financing system for final approval?
- \* Can you list some common problems in the financing and administration of the water supply?  
.....  
.....  
.....
- \* Can you think of possible solutions?  
.....  
.....  
.....
- \* What could be done to prevent such problems in other villages?





## CH. 10. MONITORING OF COST-COVERAGE

### "Liandikwalo halifutiki"

Keeping and checking financial records of the village water system is important for the village and for the programme. Some reasons are:

#### FOR THE VILLAGES:

1. The records help the treasurer to administer the funds well;
2. With the records he/she can prepare periodic financial overviews and show the village authorities and the users that the funds are used properly;
3. The records of the previous year make it easier for the VWSC to prepare a realistic budget for the next year;

#### FOR THE PROGRAMME:

1. The monthly reports of the VWSCs on coverage of maintenance costs from each village in the area gives the programme a picture of how successful it has been in training the VWSCs on financing and administration;
2. The monthly reports also make it easier for the programme to find out early which villages have problems with their financing and administration and need extra help;
3. When the CDAs visit the villages in their area the presence of records make it possible to see if the water financing system is well-kept, adequate and fair;

\* Can you mention any other reasons why monitoring is important?

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#### Exercise

As part of this course you got copies of the monitoring forms for village water management at each programme level (village, area, district and region).

- Fill in the village and area reports with data from your programme communities (you will have to bring the data from the villages where you work);
- Discuss why it is important to know the balance per waterpoint;
- With the whole group, and using the area sheets, fill in the district report;
- Discuss what implications the results have for the programme and your own activities;



## CH. 11. FINANCING OF LATRINE IMPROVEMENTS

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### "Mpemba akipata gogo hanyii chini"

In Lushoto village many stories are told about the people from Pemba. They don't run for a little rain, they keep things under the bed, and sometimes you will find not a thing but a person there. There are also stories about strong and modern latrines: Pemba people go for the best. But not all people have relatives from Pemba, or act as those from Pemba. There are for example several poor families in Lushoto. One family consists of a widow with four small children. Others are old couples or elderly people with no relatives in the village. None of them have enough money or help to build a good latrine, so they use the bushes near the house. The people of Lushoto are very proud of their piped water system. They know that more and safer water contributes to village health. But they also know that diarrhoea, hookworm and bilharzia will continue when part of the adults and children continue to use the bushes. So the VWSC decides to investigate the village latrine situation and see what improvements need to be made.

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### FINDINGS

This is what the VWSC, with the help of the HA, VHW and CDA found out:

- Ten households have no latrine at all. Six are too poor to build a latrine. Two have no labour, but are ready to pay some money if they can get help for construction. Two have money and labour, but refuse to build a latrine.
- Nineteen households have a latrine in a very poor condition. The roofs are leaking, the walls and floor are soiled. Some families do no longer use the latrine, because it is smelly and they fear the floor will collapse when the rains (which have just started) increase;
- The remaining sixty-two households all have a fairly good latrine. Half of them would however like to improve them. Some would only like a stronger slab, which is easier to clean. Others would like a whole new latrine. Some people even want to build one of the new ventilated improved pit (VIP) latrines.
- Most Muslim families use water for personal hygiene. Especially those living near the piped water system are interested in a water-seal latrine: no smell and water nearby for washing and handflushing;
- At the primary school there are only two latrines, one for boys, one for girls. They are dirty and children who use them often get worms. Many children rather help themselves along the road or in the bush near the playground.

- Villagers who have a farm far from the village stay there for planting and harvesting. They have no latrine in the farm. For drinking they use riverwater. The water gets contaminated during the rains, when their excreta and the excreta from settlements upstream are washed into the river;
- In Lushoto there are no other latrine problems like flooding or cavings-in, which require a special technology;

After thorough discussions, the VWSC of Lushoto decides to do the following:

- Each family will be stimulated to build a good latrine, or improve the latrine they already have;
- Improvement can vary from simple means which only cost labour, to spending money on specific improvements:

Examples of simple means are: cleaning, plastering, thatching, putting a fly-cover over the hole, putting in ashes against bad smells and flies, and keeping a bucket with water, a hand basin and soap near the latrine for personal hygiene;

Examples of improvements costing more money include strengthening the floor and plastering it with concrete for easy cleaning; putting on a mbati latrine roof; making a strong but mobile latrine slab (from ferrocement casted in a mould) and building a new latrine with the slab over the hole, or building a water-seal or VIP latrine with materials from outside the village.

- Each household will in principle finance its own latrine.
- The families who are too poor or have no labour will be helped by the village with cash and labour (neighbours, standard VII pupils) to construct a good latrine.
- The families staying on their farm will be stimulated to build a second latrine there, and boil the riverwater for drinking.
- The floor of the two school latrines will be covered with concrete, and two more school latrines built with moveable concrete slabs (When the pit gets full, it is easy and cheap to dig another pit, break down the outhouse, move the slab to the new pit, and rebuild the outhouse over it).
- The schoollatrines will be financed from the village funds. The pits will be dug by the students.

## QUESTIONS FOR DISCUSSION

- \* Why should improvement of village water supply and sanitation go hand in hand?
- \* Do you have a similar latrine situation in your villages?  
If yes: what is similar?  
If no: what is the difference?
- \* Do you know if people are satisfied with their latrines, or if they themselves have problems? If they have problems, are they the same for everyone, or are there different problems for different households?
- \* If you have not heard of problems, is that because there are none, or because people are not aware of them? (e.g. they are kept private, or people have always lived this way and think it normal, they do not think sanitation important, etc.)
- \* Would people be interested in improving their latrines?  
Would they be willing to spend some time/money/labour on it?
- \* Do people have more or less the same incomes, or are there differences in income levels and payment capacity?
- \* Can everyone afford the same type of latrine, or can some people pay more than others?
- \* Do some people want a more fancy latrine (e.g. a VIP latrine) and are they willing to pay its full price themselves?
- \* Do the people know the various types of improved latrines and how much they cost?
- \* Would they want to install such improved latrines?
- \* Do you think the VWSC, VHW and other village leaders are interested to investigate (with some outside help) the latrine conditions in their village, and find out and help solve village sanitation problems?
- \* Do the village leaders and richer people realize that the installation of a few improved latrines will make no difference to their health, as long as other villagers and the children in school do not have proper and hygienic facilities?
- \* Are the village leaders ready to undertake a village sanitation improvement campaign for the whole village and would they themselves set an example?



## CH 12. LEARNING FROM EXPERIENCE

"Kujikwaa si kuanguka, bali ni kwenda mbele"

It is a new situation that rural villages are trained to manage and finance their own improved water supply system and improve their own village sanitation and hygiene. It is therefore logical that much still has to be learned, by the villages as well as the programme.

The CDAs play an important role in this process. They learn from the VWSCs and the users what the problems are. They see which villages do well and which don't, and can find reasons for these differences. They learn what solutions work best in what circumstances. They help villages to solve problems and also learn from villages what solutions they found for certain difficulties.

It is very important to document these experiences and share them with the other CDAs, the DCDOI and the RCDOI. In this way everyone can benefit from individual lessons learned, and the programme as a whole can become better and better. One way to do this is to make notes in this manual under the chapter concerned whenever you learn things that are not covered in the text, or are different from it.

It is also useful to report on your experiences in your monthly reports (e.g. on the back of the reporting forms) and discuss relevant topics in the meetings of the fieldstaff and the DCDOI.

After some time, these lessons can then be used to rewrite this manual, and use it in departmental training programmes. This manual is just the first step, a discussion and training guide written to make the work with the VWSC more easy and organized. In the end, the programme staff will write its own manual, based on experiences and lessons from the villages.

For the regional staff a field-tested manual is also useful to exchange experiences on village water supply management with programmes in other Regions. Together with the programme monitoring results, this could result in a thorough and tested system for village-managed water supplies, which would be an example for other countries, where experience with village training and management is less advanced than in Tanzania.





ANNEX A      POSSIBLE SCHEDULE FOR A TRAINING PROGRAMME OF CDA'S

Requirements: If possible, participants should bring figures on maintenance expenditures and village income from one of their villages. The project will provide figures for Lists A and B, copies of the bookkeeping and monitoring forms for the group exercises, and a copy of the sanitation plan.

ANNEX A      POSSIBLE SCHEDULE FOR A TRAINING PROGRAMME OF CDA'S

<u>Monday</u>	Morning	Introduction. Purpose of the course. Experiences of participants with community financing. Why good payment arrangements are necessary.
	Afternoon	Group exercise on maintenance budgetting for maintenance for one piped system and one village with handpumps.
<u>Tuesday</u>	Morning	Roleplay on planning of local costs.
	Afternoon	Choosing the type of financing system.
<u>Wednesday</u>	Morning	Group exercise on rate setting.
	Afternoon	Collection and registration of waterrates Group exercise on filling in bookkeeping forms.
<u>Thursday</u>	Morning	Roleplay on organizing a village meeting and presentation of accounts, budget and proposed water rates.
	Afternoon	Discussion on how to work with the villagers. Why and how to involve women.
<u>Friday</u>	Morning	Group exercise on monitoring of village administration and financing of the water system.
	Afternoon	Presentation and discussion of sanitation plan. Discussion on financing of village self-improvements in sanitation.
<u>Saturday</u>	Morning	Discussion on learning from experience. Evaluation of the course by the participants. Closure of the course.