



# RURAL PIPED SYSTEM WATER SUPPLY OPERATION AND MAINTENANCE MANAGEMENT



## Part A: Module A- Session A&B

A Facilitator's Guide for Technical Operation and  
Maintenance Management for Rural Piped System



**DEMEWOZ CONSULTANCY**

P.O.BOX 20023 CODE 1000

ADDIS ABABA ETHIOPIA

TEL: +251-(0)118-60 80 12 / 0911-15861

E-mail: d.consultancy02@gmail.com

October, 2015



**THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA**  
**MINISTRY OF WATER IRRIGATION AND ELECTRICITY**



# **A Facilitator's Guide for Operation and Maintenance Management of Rural Water Supply**

**Ministry of Water, Irrigation and Electricity  
November, 2015**

**The production of this manual was funded by Finland  
Government through COWASH Project**

This manual was prepared under contract by:



**Demewoz Consultancy**

P.O.BOX 20023 CODE 1000

ADDIS ABABA ETHIOPIA

TEL: +251-(0)118-60 80 12/0911-158613

E-mail: [d.consultancy02@gmail.com](mailto:d.consultancy02@gmail.com)



# A Facilitator's Guide for Operation and Maintenance of Rural Piped System

## Table of Contents

List of Tables	iii
<b>1 SESSION – 1: FACILITATOR'S GUIDE</b>	<b>5</b>
1.1. Session Outline	5
1.2. What for the Facilitator Guideline	5
1.3. Introduction to the Process of Training	5
1.4. What is a Training Program?	6
1.5. Characteristics of a good Trainer	6
1.6. Different ways of encouraging Participation	8
1.7. Understanding Adult Learning Techniques	10
1.7.1. Learning Objectives	10
1.7.2. Description of Adult Learning Techniques	10
1.7.3. The Adult Learning Cycle	12
1.8. How to develop and conduct individual training sessions	13
1.8.1. Developing individual training sessions	13
1.8.2. How to conduct a training session	14
1.8.3. Developing the Training Materials	15
1.8.4. Selection and training of facilitators	15
1.8.4.1. Selection of facilitators	15
1.8.4.2. Training facilitators	16
1.8.4.3. Planning and implementing the training course or event	16
1.9. Monitoring the learning process during the training	17
1.10. Evaluating the Training Course	18
1.11. Mentoring as part of the training program	21
1.12. Challenges	21
1.13. Overview Session Plan	22
1.14. Flexibility of the Training Manual	24
1.15. Who is this manual for?	24
List of Tables	
Table 1-1: Summary of Facilitator's Checklist	19

## Acknowledgements

**1 SESSION – 1: FACILITATOR’S GUIDE**

<p><b>1.1. Session Outline</b></p>	<p>The Facilitator’s Guide provides a general discussion on different aspects of designing, developing and undertaking training activities.</p> <p>The following are address under this session:</p> <ul style="list-style-type: none"> <li>▪ Introduction to the process of training</li> <li>▪ Defining a Training Program?</li> <li>▪ Characteristics of a good trainer</li> <li>▪ Different ways of encouraging participation</li> <li>▪ Understanding Adult Learning Techniques</li> <li>▪ Described the ways to develop and conduct individual training sessions</li> <li>▪ Methods in selection and training of facilitators</li> <li>▪ Monitoring and Evaluating the training course</li> <li>▪ Overview Session Plan</li> <li>▪ Flexibility of the Training Manual</li> <li>▪ Who is this manual for?</li> </ul>
<p><b>1.2. What for the Facilitator Guideline</b></p>	<p>This Facilitators Guide is designed to assist the facilitators to train Water Boards, WASHCOs, Water Administration Office staff (Fiance, Administration, Technical) on rural water supply operation and maintenance managment to enable them effectively and efficient dispose their responsibilities to thier communities. The facilitator’s guide is to be used as a detailed reference guide during the training. It supports the training manual by giving more information on the topics being handled.</p> <p>Each session of the overall training program has its own objective, duration, materials, group work, lectures, role play, demonstration and procedure for conducting the sessions.</p> <p>For some units, we have added ‘Facilitators. Notes’ outlining important points about the topic for additional background. Facilitators should use these notes to help them carry out the training and facilitate discussion for each topic. Some topics also have presentations which are also inserted in this guide to help facilitators carry out the workshop.</p> <p>Moreover, the facilitator make them ready by reading and understanding the master manual which developed prior to these training manuals. These training manuals are drieved from the comprehensive manual to suit fot the training.</p>
<p><b>1.3. Introduction to the Process of Training</b></p>	<p>Training is the process of imparting knowledge, skills and competence to an individual or group of people (e.g. one to five networking, “<i>Buna Tetu</i> ceremony” etc) with a view to improving their performance in urban health extension workers. In UHEps, key areas requiring attention include:</p> <p><b>Governance issues</b> – Issuing of legislation (Proclamation, Regulation,</p>

	<p>Directive, for urban health extension program, compliance to the urban sanitation Act and subsidiary legislation, performance monitoring, etc..</p> <p><b>Urban Health Extension Workers relations</b> – how the UHEPs involve in urban sanitation aspects and what could be the relationship with the public health sector, even the relation with the urban community. The roles and responsibilities of each of the actors that can help to improve the health of the urban people through close house to house education.</p> <p><b>Cross-cutting issues</b> – These are issues related to urban health which ought to be addressed in order to provide better health e.g. gender, elderly, disables, HIV considerations in health education provision; poverty-related issues and accessibility of the service by poor and vulnerable households in the community; environmental, sanitation and hygiene issues, etc.</p> <p>Proper training should lead to improved performance if carefully designed and implemented. Training materials, approaches to training and methodologies used become important issues to consider when planning specific training programs.</p> <p>This guide will provide some suggestions on how training materials can be developed and how training approaches and methods can be tailored to meet the needs of the participants. Remember that the key point in training is to impart new knowledge, assist participants to develop their skills and encourage them to change their attitude towards specific aspects of Urban Health Extension.</p>
<p><b>1.4. What is a Training Program?</b></p>	<p>A training program is a set of activities and tasks that are carefully put together in a manner that aims to impart knowledge and/or instruction to improve the recipient's performance or to help them attain a required level of knowledge or skill.</p> <p>A good training program is one that:</p> <ul style="list-style-type: none"> <li>▪ Is tailored to the needs of the participants in order to ensure that the training is beneficial to them;</li> <li>▪ Is scheduled to suit participants' own plans and schedules;</li> <li>▪ Allows the participants to practice the new technology or skill as much as possible;</li> <li>▪ Adopts methods and approaches to suit the learning style of the participants.</li> </ul>
<p><b>1.5. Characteristics of a good Trainer</b></p>	<p>To be a good trainer you should have the following qualities and attributes:</p> <ul style="list-style-type: none"> <li>▪ <b>Be well organized:</b> Read the trainers guide before training so that you are well prepared and know how to handle your sessions.</li> <li>▪ <b>Practice beforehand:</b> Know how to conduct the sessions in the local language. You will have to get used to translating phrases.</li> <li>▪ <b>Be friendly:</b> Make everyone feel comfortable and part of the group.</li> <li>▪ <b>Be observant:</b> As well as listening closely, pick up information about the situation from non-verbal cues.</li> </ul>



**Use open questions:** these are questions that encourage people to give their own opinions, rather than a —yes/no or single response. Example —what problems do you have with your water sources? Or or How can you raise money for the new facility?” How would perform your scheme O&M? These questions facilitate open discussion. They allow people to express their own ideas and find their own solutions without fear of giving a wrong answer.

- **Wait for responses:** Give people time to think and come up with an answer. Do not bombard them with more questions.
- **Do not rush:** Find the pace that people feel comfortable with.
- **Do not do all the talking:** Remember your job is to ask questions and get participants to do the talking.
- **Encourage everyone to contribute:** Make eye contact, use hands, walk close to shy people and use names. Try to draw out the silent and control the talkative.
- **Use minimal encouragers:** – —yes ..... I see .... And then? ..... “tell me more” They help to keep the person talking.
- **Listen actively:** Use eye contact and body language. Praise and encourage but do not over praise.
- **Re-phrase:** briefly restate what people say in your own words, to make sure you have heard and understood. When you rephrase make sure to do two things – 1) verify with the speaker if you have understood correctly, and 2) see if others want to add something.
- **Be gender aware:** Encourage women to be active in the discussions.
- **Probe:** Do not be satisfied with one answer. Ask follow up questions to explore issues and make it clearer – —Why? What else? ... Tell me more. Can you explain further?
- **Redirecting** is a way of building on one person’s answer in order to get others involved in the discussion. Example: —She said ..... What do others think?
- **Watch level of participation:** Look around and see who is participating and who is left out. Are people still interested?
- **Summarize:** Restate what people have said in a simple, brief form. This will make it easier for people to contribute.
- **Watch the ELECTRICITY level:** Look for signs of tiredness or boredom. When people get tired, change the activity, introduce a song, or take a break.
- **Be a good time manager:** Estimate how much time each activity takes, watch the time and set an appropriate pace for the group;
- **Be flexible in planning:** Create an atmosphere of flexibility, creativity and experimentation and develop insight into the learning process of the participants while using time efficiently to organize learning situations in a good sequence;
- **Be open and self-reflective:** Be open to feedback from the participants about the way you work and take time to examine your

	own attitudes, values and ideas.
<p><b>1.6. Different ways of encouraging Participation</b></p>	<p>There are various different techniques to get information from a group and encourage participation. Whilst some are better for certain situations and according to group size and sensitivity of issues being discussed it is probably best to try to vary techniques to keep the sessions as exiting and interesting as possible.</p> <ul style="list-style-type: none"> <li>▪ <b>Use warm-ups and energizers:</b> Warm-ups and energizers are not training techniques but they form an essential part of training. They are used to change the tempo of a session and encourage participants to move about and relax after spending time sitting in a discussion. Energizers should be active and humorous. Always be aware of the mood of the participants.</li> <li>▪ <b>Use of questions during training:</b> The effective use of questions is one of the most important skills needed by trainers. By asking questions, you help the participants to think for themselves and it stimulates a process of discovery. If participants think about a problem and come up with an answer themselves, they are much more likely to remember the information than if you just told them that information as the trainer.</li> <li>▪ <b>Use practical instruction:</b> Practical instruction is used to teach participants a skill, such as how to service generators, pumps and what safeguard is needed, how to operate pumps and generators using different equipment or how to develop O&amp;M schedule, or what tools are requires for O&amp;M etc. Practical instruction is based on the principle that people learn by doing. Practice time for every participant forms a major part of the training session.</li> <li>▪ <b>Use discussions, hum groups and buzz groups:</b> There are various types of discussion techniques used in participative training courses. The most common are the paired discussion (sometimes called a hum) and the group discussion (sometimes called a buzz group).  A paired discussion involves dividing participants into pairs and asking them to discuss a problem or task such as: —<i>List the factors that limit the availability of de-sulding equipment spare parts in your area of operation.</i> During the plenary discussion for both hum and buzz groups you as the facilitator should ask probing questions to stimulate debate, share experiences and encourage participants to come to a consensus on issues, or agree to differ.</li> <li>▪ <b>Encourage brainstorming:</b> One type of discussion method is brainstorming. This is a lively method used for gaining a rapid overview of participants' knowledge or ideas on a particular issue. A brainstorm should be run in 10-15 minutes. It is used to switch to a new subject; examine a subject very broadly; obtain 5-10 ideas quickly and to create a lively atmosphere and wake people up.</li> <li>▪ <b>Use the debate:</b> The debate is useful for encouraging participants to think for themselves and identify key points for and against a particular issue. The participants also have to work as a team, decide which points to present during the debate and select a speaker to forward their views. An example of a debate can be technology choice between a solar powered or diesel powered</li> </ul>

water pump.

- **Come up with plays and drama for participants:** Plays and drama are extremely useful training techniques because they can be used to focus on real-life problems in an active way, especially where participants are encouraged to act out issues themselves. For example problem plays are used specifically to pose a problem or issue. A short play depicting a problem and lasting only two to three minutes is enacted at the beginning of the session. Participants are then asked to draw out and analyze the causes of the problems, discuss how it related to their life situation and then to suggest solutions or strategies for tackling that problem.
- **Use pictures:** Pictures can be used to analyze issues that are difficult to depict in a play, such as overgrazing around a borehole, overflowing of reservoir etc. The picture used should show only one problem and should not show possible solutions. It should be a simple line drawing, avoiding too much shading and color, and with no abstract symbols that might confuse the picture.
- **Give participants exercises:** Exercises are used to give participants practice in certain skills and knowledge they have learnt. Examples include calculations of revenue to be expected at the end of the month based on volume of water consumed and number of consumers, etc. You as a facilitator can prepare hypothetical problems and tasks and then ask participants to work through them. These exercises can be used to test the skills and knowledge of individual participants and so you can ask each person to work alone. When everyone has finished the exercise, these can be discussed in plenary.
- **Use training visits:** During training visits, participants are taken to a specific site outside the training venue e.g. a public water point for livestock. Training visits are very useful for putting theory into practice in a real situation. It is important that the visit is well-structured with specific learning objectives.
- **Stories, songs, fables and poetry:** Many rural or pastoral communities belong to societies that have a strong oral tradition in which stories, songs, fables and poetry form an important part of cultural life. Stories can be told by the facilitator or the participants, and can be an effective way of raising important issues during training.
- **Use games:** Games can be used to raise issues about behavior and attitudes, such as how people behave in groups, conflict resolution, cooperation and team work. Games can also raise participants' awareness about how their behaviour as individuals and as a group affects others in both a positive and negative way. The session should be structured with clear objectives and key learning points drawn out.
- **Use of training aids:** Training aids are used to help illustrate and reinforce key learning points during training. A wide variety of training aids are available such as flip-charts and colored markers, chalkboard and chalk, photographs, pictures, models, computer presentation systems e.g. video, slides and overhead projectors. The choice of training aids depends on many factors such as cost,

electricity supply, literacy of the participants, the subject being covered in the training, etc.

## 1.7. Understanding Adult Learning Techniques

### 1.7.1. Learning Objectives

By the end of the session, participants will be able to:

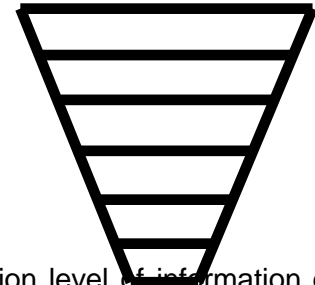
- Identify key principles of adult learning.
- Explain the adult learning cycle and how adult learning techniques are used to enhance learning.

### 1.7.2. Description of Adult Learning Techniques

As the facilitator, the UHEps need to be conscious of the best approach for conveying messages to adults. The method chosen for training adults influences the rate of learning and retention of new knowledge and skills. A combination of approaches is strongly recommended.

The following learning provides an indication of the relationship between the training approach and the level of information that is retained.

1. Teaching others skills & knowledge immediately 90 - 100%
2. Practice by doing 80 - 100%
3. Discussion - 50%
4. Demonstration - 30%
5. Audio-visual - 20%
6. Reading - 10%
7. Lecture - 5%.



Pyramid of Learning indicates the retention level of information given to adults based on the method in which the information is given to the adults.

#### Example from the field:

Five borehole attendants being trained to service diesel engines in ===== Woreda in Oromia Region were far more confident and competent in simple servicing diesel engines and in identifying which parts were to be replaced because the trainer had demonstrated the process while they were all watching. After the demonstration, the most confident one was encouraged to demonstrate to others how to service the engine and explain the process clearly. Each one of them got the opportunity to demonstrate and explain to others the process. The trainer assisted the trainees with any problems, and checked that each individual had acquired the relevant skills by the end of the training session. When trainees understood the role of each spare part and which tools to use in the process, they were more eager to service the engines properly. Their increased confidence also showed itself in reduced engine breakdowns.

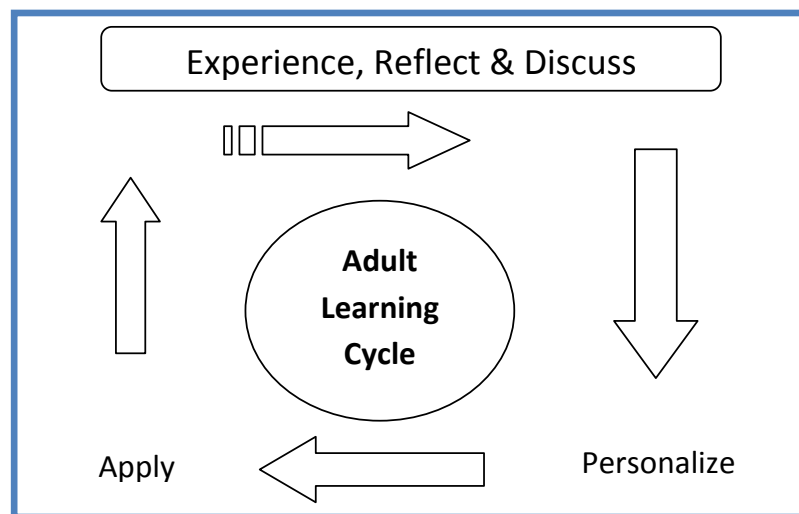
**Lesson:** Adults learn best when they do things practically and are able to teach others and use the skills and knowledge they have acquired immediately.

The following are various points related to adult learning:

- 1. Adults are often concerned that participating in a group will make them look weak, either professionally or personally**
  - Design training sessions that help people feel **safe** enough to ask questions and **confident** that they will be respected.
  - Do not ask people to take **risks** too early in a workshop or course (for example, engaging in a role play exercise) unless they already know each other well.
  - Provide opportunities and allow time for people to establish themselves in the group.
- 2. Adults bring a great deal of experience and knowledge to any learning situation**
  - Show respect for participants' experience by asking them to share ideas, opinions, and knowledge. Verbally recognize that they may be a good resource for reaching your teaching goals.
  - Carry out a needs assessment before the training. This can tell you more about the individuals in the group or, if you already know the participants, you may realize that particular individuals can provide helpful input before, during, or after your session(s).
- 3. Adults are decision-makers and self-directed learners**
  - Do not seek to make people obey you. Adults will do what they need to do.
  - Be the **"guide on the side"** rather than the —sage on the stagell.
  - Listen to what they want and need and **be flexible** in your planning. **Seek feedback** from the group. Change your approach if your agenda or methods are not working
- 4. Adults are motivated by information or tasks that they find meaningful**
  - Conduct some type of training **needs assessment** so that you are aware of what people want (and need) to learn, how much they already know, and the kinds of "generative themes" that might affect their attention span.
- 5. Adults have many responsibilities and can be impatient when their time is wasted**
  - Be thoughtful and kind.

- Begin and end your session on time.
- Understand who is in the audience and why they are participating.
- Learn what questions they have about the subject.
- Don't cover material they already know unless there is a good reason for it.
- Recognize that your subject is only one of many that participants may be interested in learning more about.

### 1.7.3. The Adult Learning Cycle



#### 1. Dialogue:

- Adult learning is best achieved through dialogue.
- Adults have enough life experience
- They learn new attitudes or skills best when in relation to their life experience.

#### 2. Safety in environment and process:

- Both physically and psychologically comfortable.
  - Physical surroundings (temperature, ventilation, overcrowding and light) can affect learning.
  - Learning is best when there are no distractions.

#### 3. Appreciate learners

4. **Sequence and reinforcement:** Start with the easiest ideas or skills and build on them.

5. **Relevance to previous experience:** People learn faster when new information or skills are related to what they already know or can do.

6. **Practice:** Practice first in a safe place and then in a real setting.

#### 7. CLARITY

- Messages should be clear.



	<ul style="list-style-type: none"> <li>▪ Words and sentence structures should be familiar. Technical words should be explained and their understanding checked.</li> </ul> <p><b>8. Play the role of good facilitator!</b></p> <ul style="list-style-type: none"> <li>▪ Usually:-</li> <li>▪ “We teach the way we were taught”</li> <li>- Communication was a one way process from the “teacher” to the “learner”</li> </ul> <p><b>But, as a facilitator, you need to remember:</b></p> <ul style="list-style-type: none"> <li>▪ Adults are independent</li> <li>▪ Decide what to do and how to do things based on their situation or if presented with a problem</li> <li>▪ Have trouble accepting information and ways of doing that contradict their experience, beliefs, and habits</li> </ul> <p><b>The role of the facilitator:</b></p> <ul style="list-style-type: none"> <li>▪ Respect the life experience of participants</li> <li>▪ Sound out participants about their ideas in order to share their experience</li> <li>▪ Help participants to develop new skills by building upon their experience</li> </ul>
<p><b>1.8. How to develop and conduct individual training sessions</b></p>	<p>From the overall timetable of the training course, each session in that timetable ought to be planned for in detail both for theoretical and practical sessions.</p> <p><b>1.8.1. Developing individual training sessions</b></p> <p><b>Step 1: Set the objective for each session:</b></p> <p>The objectives of a session define exactly what it is you would like the participants to be able to do by the end of the session. This keeps the session focused and ensures all the learning points are covered, with you being able to assess the extent of learning by participants. The objectives of each session are presented and should be reviewed during the offering of the training based on local context.</p> <p><b>Step 2: Ensure that the objectives are measurable:</b></p> <p>This means that the objective should detail a specific action that the participants will be able to perform at the end of the training session. Objectives should include words like, —“list”, —“explain”, —“describe” or —“construct”. Avoid words like —“know” or — “understand”. They are ambiguous.</p> <p><b>Step 3: Decide the content of the session:</b></p> <ul style="list-style-type: none"> <li>▪ Brainstorm with colleagues all the important subjects and learning points;</li> <li>▪ Arrange the subjects into a logical order;</li> <li>▪ Break the session into a series of clear, simple steps that can be assimilated easily by the participants;</li> </ul>

- Ensure each subject is linked to the next to ensure a step-by-step process; and
- Write down the key learning points for each subject.

**Step 4: Decide which training techniques to use during the session:**

- Throughout the training course, use a variety of techniques to make the training as interesting and stimulating as possible;
- Use role plays, exercise, games, case studies, drama and puppets, etc. instead of relying on one or two methods alone;
- Use practical instruction where you are teaching or imparting a skill – —people learn by doing||;
- Where participants are illiterate, use appropriate training techniques which do not rely on reading and writing;
- Add more details to the session plans e.g. plan open questions for the participants, write out key learning points, note the timing for each section of the session, and list what equipment and training aids will be used.

**Step 5: Write final version of the session plan in detail:**

- Write down the session plans clearly and neatly so that they can be read easily;
- Using a highlighter pen, make key points stand out and where appropriate use capitals to make the session plan easier to use.

**1.8.2. How to conduct a training session**

- a. Tell participants what you are going to cover. Introduce your session with a brief overview of the session's main points;
- b. Tell them the information. In the main portion of the session, explain key points, go over policies, demonstrate procedures, and relate any other information participants need to know;
- c. Tell them what you told them. Conclude with a summary of your opening overview. Use repetition to help participants grasp and retain information;
- d. Always explain what participants are going to see before you show a multimedia portion. This practice creates a better learning environment by guiding participants to know what to look for and what to remember. Explaining the purpose of the multimedia ensures an effective reception for its information;
- e. Use as much hands-on training as possible. The most effective training uses all the senses to affect learning. Demonstrate and apply teaching points to create greater understanding and knowledge of the subject;
- f. Test frequently. Tests are most effective when students know they will be quizzed, because they'll pay close attention to the material. Testing is an objective way to determine whether training achieved its goals;
- g. Involve participants. For example, ask participants to share their experiences with the session's topic. Many participants are experienced people who have valuable information to contribute. All participants will get more out of sessions by hearing about the experiences of other participants on the



subject —and not just the trainer's lecture points. Hearing different voices also keeps sessions varied and interesting. Structure interaction time into all your sessions;

- h. Repeat questions before answering them. This practice ensures that all participants know what the question is so they can make sense of the answer;
- i. Analyze the session as you go. Always be on the lookout for what works best. When you discover a new technique or method that clicks with the group, note it on your training materials so it can be incorporated into the training outline to be used in future sessions;
- j. Keep your session on track. Start on time and finish on time. Don't hold up class waiting for late arrivers. Run the class according to the schedule and don't get too far off course. Opening up discussion among participants may lead to some pertinent tangents, but don't let side issues take over. Ask if there's enough interest to pursue a separate session on that topic, but get this session back to the learning plan;
- k. Put yourself in their shoes. Give frequent breaks, especially for half-day or all-day sessions;
- l. Solicit feedback on the training session. Critiques work best when they are written and anonymous, unless a participant volunteers to discuss his or her thoughts in person. Participants' input is vital for making the next session—and the overall training program—more effective.

### **1.8.3. Developing the Training Materials**

Training materials are the materials that the facilitator uses as a guide during the training to ensure that he/she covers the topics using the approaches that he/she has identified as being most appropriate for conveying key messages.

Training materials will include the following:

- Training timetable for the whole course;
- Individual sessions plans written down in detail, including specific activities and exercises in each session;
- Handouts;
- Case studies – written down and made available for each participants;
- Visual aids such as pictures, photographs, models, videos, etc.
- Presentation slides on power point presentations;
- Equipment and other materials such as writing materials, pens, markers, flip chart paper and stand, power point projector, etc.

Prepare all these materials and equipment before the training and ensure they are at the venue on or before the day the training course commences. You need to know which materials and equipment will be required for which session.

### **1.8.4. Selection and training of facilitators**

#### **1.8.4.1. Selection of facilitators**

Good facilitators should have the following qualities and attributes:

- Ensure the individual has the right behaviour, attitude and facilitation skills necessary for effective facilitation. This can be achieved through interviews, observation, etc;
- As much as possible, ensure the facilitator is of the same ethnic group as the participants. This facilitator would know the local language and understand the local culture and sensitivities;
- The facilitator ought to be humble and approachable;
- Have a warm, open, friendly and polite personality;
- Considers him/herself on an equal level to the participants;
- Respects the culture, traditional beliefs and practices of the participants, even if he or she does not share these beliefs;
- Respects the experience, knowledge and skills of the participants;
- Is able and willing to listen to participants and to learn from them;
- Has a genuine desire for the participants to learn;
- Is able to create a safe learning environment so that participants feel confident to express their views and to ask for help if they do not understand something;
- Is flexible and able to respond to participants' needs;
- Has good technical knowledge of WASH;
- Is well-organized and a good planner;
- Has good rapport with participants.

#### **1.8.4.2. Training facilitators**

Training of Facilitators or Trainers (TOT) is a training course that is designed and conducted specifically to provide participants with knowledge and skills to be effective trainers. A TOT course is frequently used to raise the facilitation skills of people with technical knowledge and skills.

A training of facilitators program should include the following:

- Facilitation skills;
- Participative training techniques;
- How to design training courses;
- How to plan different sessions in a training course;
- How to plan and implement a training event;
- Training on WASH management;
- Cross-cutting issues as specified above.
- Some technical aspects of WASH e.g. different technology choices;
- WASH related policies, regulations, standards, guidelines etc.

#### **1.8.4.3. Planning and implementing the training course or event**

A good training program is one that is geared towards meeting the training needs of the participants as much as possible. The following seven steps should be followed in designing and implementing a training course or event:

**Step 1: Host Arrangements:** You need at least two resource persons to work with i.e. to select the venue and agree on participants, resource requirements, etc.

**Step 2: Selection of participants:** A total of 18-24 participants are recommended. They may be more when conducting awareness creation. Selection criteria agreed with Woreda's or Zone's Water Offices

**Step 3: Venue and room layout:** Select a convenient and secure venue easily reachable by participants, preferably as close to the areas as possible.

**Step 4: Resource Requirements:** Writing materials, flip charts, marker pens, pictures, models, slides, post-its, colored cards, camera, models, etc.

**Step 5: Timing and Agenda:** Training outline provides agenda. Timing of sessions to include breaks, time for energizers, time for practical sessions, exercises, recap of the day's work, etc.

**Step 6: Prepare training materials:** Name tags, training timetable, handouts, logistics, administration, etc. in advance.

**Step 7: Running the training:** Participatory, group discussions, question and answer in plenary, energizers and ice breakers between sessions, monitor learning, evaluate training.

**1.9. Monitoring the learning process during the training**

Monitoring the training/learning process is essential to making the training meaningful and keeping it on track.

- Monitor those components of training that are the focus of that particular training course or session;
- Before the training, develop a baseline for the participants with regard to their knowledge, skills and attitudes on the training course content so that you can monitor progress in learning against this baseline;
- Develop a progress monitoring score card e.g. of 0-10 points and

	<p>score for knowledge, skills and attitude for each session or day of the training. Maintain consistency in the use of the score card;</p> <ul style="list-style-type: none"> <li>▪ Ask questions, assess how well each individual answers questions and carries out exercises, tasks and performs skills;</li> <li>▪ Ensure each participant takes part in the training sessions;</li> <li>▪ For assessment of knowledge – have a question list based on the topic or session covered; for assessment of skills – use observation. Watch the participant practice the skill; to assess behavior and attitude- use observation: observe the participant working with EWB/WASHCO members; observe communication skills; how well the participant asks questions and is able to gather information on the water facility as well as the general behavior towards community members in general (open, friendly, respectful).</li> </ul>
<p><b>1.10. Evaluating the Training Course</b></p>	<p>Courses are rarely perfect and there is always room for improvement. Evaluating the course provides invaluable information on how the training can be made more effective and should form an integral part of the training cycle. When evaluating a training course, ask yourself the following two questions:</p> <ul style="list-style-type: none"> <li>▪ What do I want to know about the training from the evaluation?</li> <li>▪ How will the information from the evaluation feed into the course, and help me to improve the training?</li> <li>▪ It is important that the evaluation of the training is carried out in a sensitive and participative manner so that the participants do not feel they are being examined.</li> <li>▪ Explain to participants that you are evaluating the training to make sure they have learnt what is required for them to carry out their work, to improve the course for next time and to arrange for follow-up and refresher training;</li> <li>▪ Evaluate the training with reference to the course and session objectives.</li> </ul> <div style="border: 2px solid green; border-radius: 25px; padding: 10px; margin-top: 20px;"> <p><b>An example of areas of the training course that should be evaluated:</b></p> <ol style="list-style-type: none"> <li>7. Ask whether the specific objectives of the training course have been met;</li> <li>8. Ask whether the course was relevant to the participants' work and if so why;</li> <li>9. What did you like about the overall design and structure of the course?</li> <li>10. How do you think the design and structure of the course can be improved?</li> <li>11. What is your assessment of the presentation and facilitation of the training (poor; adequate; good; very good?);</li> <li>12. What are your comments on the trainer/facilitator in terms of delivery of training and facilitation of learning?</li> </ol> </div>

- 13. Which session did you find most useful and why?
- 14. Which session did you find least useful and why?
- 15. Was there anything not included in the training that should have been included? What is it?
- 16. How would you rate this training course? (poor, adequate, good, very good);
- 17. Any further comments?

Table 1-1 presents the facilitator’s checklist which should be referred before offering the training.

**Table 1-1: Summary of Facilitator’s Checklist**

Facilitator Checklist	Description
Make eye contact	<ul style="list-style-type: none"> <li><input type="checkbox"/> A couple of seconds per person</li> <li><input type="checkbox"/> Be sure to look at everyone</li> </ul>
Movement	<ul style="list-style-type: none"> <li><input type="checkbox"/> Don’t stand still for too long</li> <li><input type="checkbox"/> Get close to your audience</li> </ul>
Get everyone involved	Ask: “could I have a response from ... (side of room, table, group)”
Use your voice	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use volume to keep people’s attention</li> <li><input type="checkbox"/> Change tone to keep people’s interest</li> </ul>
Keep reading Your audience	It’s O.K. to stop the meeting if: <ul style="list-style-type: none"> <li><input type="checkbox"/> There is an issue that needs to be resolved before going ahead</li> <li><input type="checkbox"/> The audience is tired, lost or unfocused (Maybe consider taking a break if necessary)</li> </ul>
Handle difficult behaviour	<ul style="list-style-type: none"> <li><input type="checkbox"/> Make eye contact with the person</li> <li><input type="checkbox"/> Stand / sit close to the person</li> <li><input type="checkbox"/> Speak to the person at break</li> <li><input type="checkbox"/> To get buy-in give them a “role” to play</li> <li><input type="checkbox"/> Sometimes the group may take care of it for you!</li> </ul>

	Use Different Types of Tools and Methods	<b>Tools</b>	<b>Methods</b>
		Flip charts	Lecture style
		Overheads	Individual exercises
		Video	Small group discussions
		Audio	Role plays
		Multimedia	Case studies
			Simulations
	Ask Open-Ended Questions	Yes / No answers often don't help, for example ask "what questions do you have?" rather than "does anyone have any questions"!	
	Know your audience	Remember to provide the information that your audience requires (not the information that you want to give)	
	Everyone is important	Make sure that everybody feels included and that their input is valuable	
	Don't call on specific people	Try not to call on people directly, because it can put them on the spot	
	Don't forget to take breaks	For every hour and a half, you should take a 10-minute break.	
	Capture appropriate comments on flipcharts	This makes the attendees feel they have input which will help gain consensus	
	Never disagree with any input	All ideas are welcome in a training environment	
	Capture issues / concerns and actions on separate flipchart sheets	Have flipchart sheets ready prepared stuck on the wall entitled "Issues/ Concerns" and one entitled "Actions". You won't get side tracked as a result. It means if someone does raise an issue you can park it and not spend too much time discussing it during the training.	
	Don't use yellow or red markers to capture requirements on flipcharts	Yellow can't be seen and red is upsetting! Use at least two different marker colours on your flipcharts	
	Be very strict on time keeping	Enforce penalties to latecomers e.g. sing a song!	
	Be aware not to allow one person to "hog" the session and ensure full participation from	Also watch out for non-participants and make sure they participate!	

	everyone	
	Do not show emotion or try and force your own ideas	Remember the facilitator is neutral!
	For some topics that require a bit of thought and teamwork, do not try and facilitate this onto a flipchart.	Divide the participants into groups and within a given timeframe, get them to document their ideas onto post-its, which they then post onto a flipchart. A nominated leader can then present their findings back to the group. This is particularly useful when defining future "To-Be" process flows or future user requirements.
<p><b>1.11. Mentoring as part of the training program</b></p>	<p>The objective of mentoring or coaching is to ensure effective knowledge retention; imparting of skill and change in the way the trainees do things (change in attitude). Mentoring is therefore a combination of activities over time that aims to bring about change in the way those who have been trained perform their tasks or responsibilities.</p> <ul style="list-style-type: none"> <li>▪ After the first training, agree with participants on a performance scorecard based on the objectives of the concluded training;</li> <li>▪ Develop SMART indicators with the trainees to monitor performance of tasks e.g. improvements in record keeping; less breakdowns in borehole equipment; increased revenue collection, etc.</li> <li>▪ Agree with the trainees how regularly you need to visit, say once every three months, and how often you need to keep in touch by phone and how the trainees can access you when they need support;</li> <li>▪ Go back and visit the trainees as agreed with them so that you can assess their skills and knowledge based on the indicators developed with them;</li> <li>▪ Conduct the assessment in a methodical way, with each trainee being asked the same questions;</li> <li>▪ Remain in constant communication with all the trainees in order to provide instruction or advice and to find out how they are doing. Develop a trust relationship with the trainees so that you are able to influence their learning and way of doing things.</li> <li>▪ Agree on indicators that will show that the training has accomplished its objectives. Once these indicators have been met, the disengagement phase is imminent.</li> </ul>	
<p><b>1.12. Challenges</b></p>	<p>Here are also some of the challenges which may appear during training facilitation:</p> <ul style="list-style-type: none"> <li>▪ run out of time,</li> <li>▪ keeping the agenda and objectives in the participant's mind,</li> <li>▪ some participants rush to make decisions,</li> <li>▪ participants don't want to participate,</li> </ul>	



- when one or two participants take over the discussion
- participants doing their work during the meeting,
- not knowing the entire background of the training (trying to catch the hidden issues on spot),
- dealing with conflicts (when the person in charge has different objectives/views than the participants)

**1.13. Overview Session Plan**

**PART - A: TECHNICAL OPERATION & MAINTENANCE MANAGEMENT**

MODULE NO.	SESSION	SESSION TITLE	ESTIMATED TIME (Hours)
MODULE – A	Session – A	Facilitator's Guide for Rural Water Supply Operation & Maintenance Management	4
	Session – B	Introduction to the training: objectives and expectations	2
	Session – C	Introduction of Rural Piped System and Pastoral areas Water Supply Technologies	2
MODULE – B	Session – A	Description of Water Sources for Water Supply	2
MODULE – C	Session - A	Introduction of Rural Piped System Operation and Maintenance	2
	Session - B	O&M Requirements for Water Sources to Water Supply	4
	Session - C	O&M Requirements for Intakes	4
	Session - D	O&M Requirements for Electro-Mechanical Equipment	32
	Session - E	O&M Requirements for Pipelines	8
	Session - F	O&M Requirements for Storage Tanks/Service Reservoir	4



	Session - G	O&M Requirements for Consumer Points	4
<b>Sub Total for this Module</b>			<b>58</b>
MODULE – D	Session - A	Spare Parts Supply and Management	36
	Session - B	Equipment and Tools Management	8
	Session - C	Asset Management	16
	Session - D	Human Power and Capacity Building	8
MODULE - E	Session – A	Water Audit and Leakage Detection	16
MODULE - F	Session – A	Water Quality Monitoring and Surveillance	24
MODULE - G	Session – A	O&M Requirements for Solar ENERGY	6
	Session –B	O&M Requirements for Wind ENERGY	4
MODULE - H	Session – A	O&M Requirements for Sand Dam	6
	Session – B	O&M Requirements for Haffir & Berkads	6
	Session – C	O&M Requirements for Rain Water Harvesting	4
		<b>TOTAL</b>	<b>202</b>

A minimum of 25 days is estimated to offer these 8 training modules and 21 sessions which do not include any preparation period.

#### **PART – B : COMMUNITY BASED SCHEME MANAGEMENT FOR RURAL PIPED SYSTEM AND PASTORAL AREAS**

MODULE NO.	SESSION	SESSION TITLE	ESTIMATED TIME (Hours)
MODULE – A	Session – A	Community Based Scheme Management for RPS	8
	Session – B	Community Based Financial Management for RPS	12

		Session – C	Monitoring, Evaluation, MIS and Reporting System	8
			<b>TOTAL</b>	<b>28</b>
<b>1.14. Flexibility of the Training Manual</b>	<p>The training manual is prepared to assist trainers to conduct the sessions in appropriate manner to achieve the training goal and objectives. It is better to strictly follow the guide to achieve desired goal.</p> <p>However, considering the level of participants, education, knowledge, skill and expectations the following flexibilities are acceptable.</p> <ul style="list-style-type: none"> <li>▪ Methodologies can be changed to make the sessions more participatory.</li> <li>▪ Time for different sessions may be readjusted but it should not exceed the total training time.</li> </ul>			
<b>1.15. Who is this manual for?</b>	<p>This manual provides to fill the gaps on the existing training packages for Executive Water Boards, WASHCOs, Water Administration Offices, Operators and Technicians as innovative approaches and tools to help to improve the training of rural water supply O&amp;M management staff. Firstly, it provides background information on a number of concepts that are related to WASH. It has also chapters that help to plan training programmes and training sessions. Lastly it describes a number of useful tools to help participants internalise key concepts and skills crucial to support and create awareness on WASH – O&amp;MM.</p> <p>This manual is also provide background on key concepts and skills which all relevant stakeholders, but particularly colleagues who work with rural piped system, pastoral water supply technologies and point water sources, need to be familiar with. They also need to internalise these concepts and the skills discussed in order to promote genuine community participation in, and management of WASH aspects.</p> <p>This manual is very brief to the comprehensive manual developed prior to this training manuals and to be utilized along with those manuals.</p>			