# Curriculum



International Federation of Red Cross and Red Crescent Societies

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## Curriculum for training field officers, extension workers and community volunteer leaders involved in water, sanitation and hygiene programmes

Developed by International Federation of the Red Cross and Red Crescent Societies-Eastern Africa Zone Watsan Unit and supported by Netherlands Red Cross (NLRC) 2009

## Water, Sanitation and Hygiene Promotion Manual

## Part 1: Manual

Module 1: Community Entry

Unit 1: Introduction Unit 2: Community Participation in Water, Sanitation and Hygiene

#### **Module 2: Technologies and Approaches to WASH**

Unit 1: Water Unit 2: Sanitation Unit 3: Hygiene Unit 4: Emergency Water and Sanitation

#### **Module 3: Sustainability in WASH**

Unit 1: Operations and Maintenance

#### **Module 4: Planning, Monitoring and Evalution**

Unit 1: Needs Assesment Unit 2: Monitoring and Evaluation

## Part 2 Volunteer Tools

- Tool 1 Community Participation
- Tool 2 Water
- Tool 3 Sanitation
- Tool 4 Hygiene

Tool 5 - Operations and Maintenance

Tool 6 - Needs Assesment

Tool 7 - Monitoring and Evaluation

Tool 8 - Emergency Water and Sanitation

## Part 3 Curriculum

The training course comprises the key aims and objectives, session plans and handouts for training the field officers, extension workers and community volunteer leaders. The materials for training are based on the WatSan Manual and WatSan toolkit as well as other relevant Toolkits of IFRC.

## **Overall training course objectives**

The course is designed to enable field officers, extension workers and community volunteer leaders to:

- Enable field officers, extension workers and community volunteer leaders manage water, sanitation and hygiene programmes.
- Enable communities develop and sustain awareness of and sensitivity to water, sanitation and hygiene issues.
- Ensure sustainability of water, sanitation and hygiene facilities through promoting community ownership, community decision-making in their design and management.

## SUMMARY OF CURRICULUM COVERAGE

Training session /Units	Aims	Topics	Expected results
Water unit	Ensure that participants hold a common understanding of safe water chain and appropriate water technology.	Water resources, Water quality, Water borne/ related diseases, Water technology, Water demand, Water projects financing.	By the end of the training, participants will be able to: - Identify the constraints in accessing water, identify the common water sources, choose a water source, understand water quality, identify the different water borne/related diseases, learn the different water technologies, calculate water demand, learn the various ways for financing water projects.
Sanitation unit	Designed to ensure that the participants understand what is sanitation, the different technology options and requirements for proper sanitation.	Sanitation linkages, requirements of sanitation, sanitation promotion, household waste disposal, discussion on sanitation ladder, requirements of good sanitation in reference to solid waste, implementation of the construction of a pit latrine.	By the end of the training, participants will be able to identify:- Appropriate sanitation technology options, strategies for sanitation in difficult situations, technical designs of sanitation facilities.

Training session /Units	Aims	Topics	Expected results
Hygiene unit	Designed to ensure that the participants hold a common understanding of the terms and definitions used in hygiene promotion and learn how to design a hygiene promotion program.	Hygiene linkage with health, illustrations on the five hygiene domains, faecal oral routes- the barrier diagram, design of a community hygiene intervention program.	By the end of the training, participants will be able to:- Differentiate hygiene education and promotion, understand the five hygiene domains, identify the key faecal oral routes, develop a barrier chart, design a hygiene promotion intervention.
Operation and maintenance (O & M)	Designed to ensure that participants hold a common understanding of what is operations and maintenance and the common terms and definitions used.	Requirements for O & M, technical aspects of O & M, community sources of funds, production costs, maintenance costs and future expansion costs of a water supply project, basic guidelines for computing cost of water, requirements for hygienic sanitation facilities, cost recovery factors to consider when setting tariffs, institutional capacity for O&M, accounting and budgeting.	By the end of the training, participants will be able to understand: - The requirements of project sustainability, the requirements for operations and maintenance, requirements for hygienic sanitation facilities, the cost recovery process, methods of tariff settings, institutional capacity for O&M, project accounting and the budgeting process.

Training session /Units	Aims	Topics	Expected results
Needs assessment	Designed to enable participants to understand needs assessment and be able to conduct needs assessment.	General approach to needs assessment survey, needs assessment tools, steps or processes in needs assessment.	By the end of the training, the participants will be able to understand: - Why needs assessment is important in a project; The needs assessment tools and techniques.
Monitoring and Evaluation (M&E)	Designed to ensure that participants hold a common understanding of what is monitoring and evaluation.	Definitions of M&E, why monitoring and evaluation before project implementation, simple monitoring and evaluation processes, importance of indicators in monitoring and evaluation, reporting and documentation, M&E parameters for WatSan facilities, tracking progress, post project.	By the end of the training the participants will be able to:- Define and differentiate monitoring and evaluation, understand the levels of monitoring in a community project, develop monitoring indicators, understand the importance of monitoring and evaluation, understand the importance of reporting and documentation.

Training session /Units	Aims	Topics	Expected results
Emergency water and sanitation	Designed to enable participants develop appropriate WASH emergency strategies.	Classification of emergencies, priorities in emergency phase response, response sequence in displaced large populations, water and sanitation kits and emergency response kits (ERU), general considerations in emergency water supply, sanitation and hygiene promotion.	By the end of the training, the participants will be able to: Determine the level of emergency, prioritise the interventions needed, understand the available water and sanitation emergency kits, respond to displaced population.

## Structure and length of the course

The course should be structured such that the participants ideally cover the above 4 modules before the project starts. Each of the above modules can be treated as a stand alone module or, a pick and mix approach can be adapted, although it would be good for each module to be taught separately starting with the main units (i.e. participatory approach and community development, water sanitation, hygiene promotion, operation and maintenance). For these units the expected duration for training is at least 1 week for each if at the community level but at the workshop setting this can be tailor-made to a one-week workshop.

It is important that the training draws on examples from the existing situation and allows participants time to practice new skills in the field. It should be remembered that the participants will usually be working and undertaking the training at the same time and it should therefore be possible to ensure follow up and supervised practice in the field.

#### Resources

In addition to the session outlines there are also accompanying handouts and the manual containing useful material referred to in the session outlines.

The key modular highlights from the manual can be summarized into PowerPoint slides which can be used as handouts or copied onto flip charts and are not intended to be

used as presentations. Where resources allow, a few short Power Point presentations could be included in the sessions but beware of the danger of 'death by PowerPoint' as presentations can easily turn into lengthy lectures! Where possible, the photographs should be replaced by photographs from the actual situation.

Note that, the handouts have been adapted to the context but not all will be pertinent to the specific situation and should be distributed with this proviso.

## **Number of participants**

The ideal number of participants is about 15 to 20 and the facilitator should not work with more than 25 participants, as this will increase the amount of time needed for discussion. With larger groups there is often a greater tendency to feed participants information rather than to facilitate discussion.

## **Background of participants**

The course is designed for field officers, extension workers and community volunteer leaders who are involved in water sanitation and hygiene programmes. It is expected that participants will be literate and will be able to undertake a certain amount of self directed study such as reading and applying the information in the written handouts.

## **Course facilitators**

The course has been designed for experienced community development workers or health promoters who have practical experience of working with communities and have a good knowledge of adult learning and facilitation techniques. An assumption is made that the people using this training material will know how to structure and time a training session according to the learners needs.

## **Preparation time**

The time required for preparation is usually suggested to be double the teaching time. However, this can sometimes take longer, especially if the material is new to the facilitator. The logistical arrangements such as organizing the venue, food, photocopying etc. will also need to be scheduled into preparation time.

	MORNING HOURS						AFTERNOON AHOURS	AHOURS			
	8.00-8:45	8:45- 9.30	9:30-10:15	10:15-10:30	10:30-12:15	12:15-1:00	1:00-2:00	2:00-3:45		3:45- 4:00	4:00-4:45
Day I	Registration	Introduction to community participation (PowerPoint and Group discussion)	Community entry -Joharis Window? Community participation	۵	Participation ladder, Cup exercise	Gender roles in community participation (PowerPoint and group discussion)	۲	Community management and development (Power Point and group discussion)	Conflict resolution (Power Point and Group discussion)	ß	Recap of the day's program
Day II	Introduction to water (Power Point presentation)	Water resources, Group discussion on safe water cycle and water ladder	Water quality (Power Point presentation question and answers)	۲	Water quality: Group discussion and groups present their conclusions in plenary	Water technology: In groups list the available technologies and equipment in use. (PowerPoint presentation on technology choice	D	Water born/related diseases: Major water related infection and mode of transmission	Water demand,determination of discharge for water sources, computation of community water demand.	۲	Recap of the day's program
Day III	Construction consideration, check list of requirements for the construction of a hand dug well, requirements for the construction of a water kiosk (PowerPoint and Group discussion)	Introduction to financing water projects, determination of project costs, community sources of project (PowerPoint and Group discussion)	Sanitation: Introduction to appropriate sanitation and technical designs (Power Point)	ш	Sanitation ladder (Group discussion and presentations)	Present the different sanitation options available in different conditions including emergency emergency (PowerPoint and Group discussion)	z	Introduction to hygiene promotion, definitions of terms, Group discussion	The five hygiene domains, faecal oral routes, and the barrier (PowerPoint presentation)	ш	the day

A SAMPLE OF FIVE- DAY WATSAN TRAINING WORKSHOP

Recap of the day's activities	Closing of the workshop
<	2
Elementary bookkeeping, (Power Point presentation)	Water and sanitation in emergency situations (Power Point presentation) Recap of the day's proceedings
Tariff setting and cost recovery (Power Point presentation) and group exercise.	Introduction to needs assessment (Power Point presentation) Group discussion on needs assessment tools and plenary presentation
U	т
Computation of cost of supplying water, (power Point presentation)	Group discussion on evaluation group to present it's conclusion (PowerPoint presentation)
In groups discuss the requirements of O&M. Each group presents to plenary their conclusion.	Power Point: Project reporting and cumentation, Group discussion and plenary presentation
٩	<u>۲</u>
Introduction to the importance of O&M (Power Point presentation). In group work identify the advantages of O&M, and each group presents its findings in plenary.	Developing monitoring indicators, PowerPoint presentation (WatSan monitoring indicators) discussion of discussion of monitoring indicators for the project objectives)
Ask each group to draw a barrier matrix and have each group present to plenary their conclusion, powerPoint presentation (design of community hygiene promotion)	Introduction to determination of project objectives (PowerPoint presentation). Setting project objectives (Group discussion)
In groups, discuss the definition of the given terms. Briefly introduce participants to the care materials available. In group work , identify the diarrhoea diarrhoea barriers barriers (Plenary).	Introduction to Monitoring & Evaluation (PowerPoint presentation)
Day IV	Day V

	MORNING HOURS	ss					AFTERNOON AHOURS	I AHOURS			
	8.00-8:45	8:45- 9.30	9:30-10:15	10:15-10:30	10:30-12:15	12:15-1:00	1:00-2:00	2:00-3:45		3:45-4:00	4:00-4:45
Day I	Registration	Introduction to community participation	Community participation		Gender in community participation	Advantages of community participation		Community management	Conflict resolution	F	Recap of the days program
Day II	Introduction to water Inter-linkages in water, sanitation and hygiene, constraints in accessing water	WATER RESOURCES General information on sources, typical water resources in the region, choosing a water source	WATER RESOURCES Protection of water resources from ontamination, conservation of water sources	ш	WATER QUALITY Why water quality is important. What affects the quality of our water	WATER QUALITY Actions to improve the quality of water at sources	5	WATER QUALITY Steps in the protection of a water spring, Water quality surveillance	WATER QUALITY Water treatment	ш	Recap of the days program
Day III	MDG links to hygiene, sanitation and water	Introduction to water technology, checklist to appropriate technology	Water technology, steps in water supply technology choice	œ در	Water borne/related diseases, major water related diseases	Water borne/related diseases, infection and mode of transmission	z	Water demand, etermination of discharge for water sources	Water demand, computation of community water demand	٩	Recap of the days program
Day IV	Construction consideration	Check list of requirements for the construction of a hand dug well	Requirements for the construction of a water kiosk		Introduction to financing water projects	Determination of project costs	U	Community sources of project funds	Financing water projects, cost recovery	89 26	Recap of the days program
Day V	Tariff setting	Exercise	Exercise	шФУ	Reporting and ocumentation	Reporting and documentation	т	Recap of the days program	Evaluation of the workshop	ЧЧ	Closing of the workshop.

## **Facilitator's role**

Ideally the training would be run by at least 2 facilitators especially if the training is held on consecutive days. There may also be other organizations interested in running training courses and willing to collaborate on the facilitation of these courses.

Take responsibility for keeping participants on track. During exercises, discussions and practice sessions, it is important to circulate throughout the room to catch problems and assist or encourage people as needed.

Be aware of the time. Make sure that presentations and exercises don't run on for too long. Several minutes before an exercise or practice session is to end, facilitators should alert participants about the amount of time left.

Be aware of how teams are working together. It may take some time for the teams to get comfortable with each other if the participants do not know each other. However, if participants do know each other, experience has shown they may spend time chatting and not concentrate on the task. Be prepared to help the teams stay on task.

Use real examples and anecdotes to make your points come alive. Encourage participants to share relevant experiences as well.

Create a safe, comfortable learning environment. Participants should enjoy the sessions and feel that they can speak their mind without the fear of feeling that their contribution may be seen to be inadequate.

Encourage participants to get acquainted during breaks. Tea breaks and meals allow participants to network and learn from each other and compare notes.

Help participants review the content of each day's activities. An important aspect of training is providing participants with the "big picture" of what they're learning. Be sure to allow a few minutes at the end of each day to summarize key points so that participants recognize how much they have learned and done.

## MODULE 1: COMMUNITY ENTRY

## Session 1: 4 ½ hours

## Introduction to participatory approaches and community development

## Aims

The session is designed to ensure participants: -

- Hold a common understanding of the terms and definitions used in community development;
- Identify ways to facilitate community participation and management in WASH interventions;
- Are able to address and mainstream gender in WASH interventions.

## Outcomes

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

- Share a common understanding of existing terminology used in WASH.
- Describe the constraints and opportunities for community participation and management in WASH interventions.
- Understand what is gender and how we can mainstream gender in WASH interventions.

## Methods

Presentation with Q & A Visual aids Plenary/group discussion Brainstorming

## **Resources/Materials**

PowerPoint: Introduction to participatory approaches

M1S1 - Practical exercise 1: Community entry -Joharis Window

M1S2 - Practical exercise 2: Community participation

M1S3 - Practical exercise 3: Participation ladder

M1S4 - Practical exercise 4: Cup exercise

M1S5 - Practical exercise 5: Gender roles

M1S6 - Practical exercise 6: Community management and development

M1S7 - Practical exercise 7: Conflict resolution

## Handouts/Background reading

- List of definitions for common terms used in participatory process
- Gender mainstreaming
- WatSan manual
- WatSan toolkits

#### **Exercise 1-20min Joharis Window**

In the group discussion which is the most open window for working with communities, discuss facilitation of community process. Each group to present in plenary.

#### Exercise 1 - 25 min

In groups, discuss the definition of the given terms. Clarification of terms – provide handout and discuss.

Briefly introduce participants to the care materials available.

#### Exercise 3 – 25 min

In group work, discuss which step of the participation ladder can be reached in a community managed program. Ask each group to mark with an arrow the step in the ladder. Each group present to the plenary their conclusion.

#### Exercise 4 -20 min

In group work, discuss the best cup for working in the community. Each group to present in plenary.

#### Exercise 5 – 30 min

In pairs, discuss gender roles. Each group present to the plenary their conclusion. **PowerPoint presentation: - 20 min** Gender mainstreaming. **PowerPoint presentation: - 20 min** Community management.

#### Exercise 6- 30 min

In groups, discuss the community management structure and roles. Each group to present in plenary. PowerPoint presentation: - 20 min Conflict resolution.

#### Exercise 7-25 min

In groups, discuss the major causes of conflict and possible ways of resolving it. Each group to present its conclusion in plenary.

#### **Recap of learning points - 5 min**

- Emphasize on the participatory role of a facilitator.
- Talking and listening to communities is the basis for ensuring participation with an adequate gender perspective.
- Different levels of participation are possible depending on the stages of the project intervention.

## UNIT 1: MODULE 2: TECHNOLOGIES AND APPROACHES TO WASH

## Session 1: introduction to water - 6 hours

## Aims

The session is designed to: -

• Ensure that participants hold a common understanding of safe water and appropriate water technology.

## **Outcomes**

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

- Identify the constraints in accessing water.
- Identify the common water sources in the country.
- Choose a water source.
- Understand how to maintain good water quality at the source.
- Understand the different water borne/related diseases.
- Differentiate water technologies and prioritize the technology to adapt.
- How to calculate water demand.

#### **Methods**

- Presentation with Q & A
- Visual aids
- Plenary/group discussion
- Brainstorming

## **Resources / Materials**

PowerPoint: Presentation of the different water sources and appropriate technology, water borne related diseases.

M2S1 -Practical exercise 1: Safe water cycle

- M2S2 Practical exercise 2: Water ladder
- M2S3 Practical exercise 3: Proportional piling
- M2S4 Practical exercise 4: Technology choice
- M2S5- Practical exercise 5: Water quality
- M2S6 Practical exercise 6:Computation of water demand
- M2S7- Practical exercise 7: Community water points
- M2S8 Practical exercise 8: Financing of community project

## Handouts/Background reading

List of definitions for common terms used in water supply. Safe water cycle

WatSan manual water unit

- How do you choose a water source
- Water technology options
- Water quality
- Water treatment
- How to calculate water demand
- The construction considerations of water points
- Sources of community project funds

WatSan toolkits

#### Exercise 1 - 25 min - Safe water cycle

In groups, discuss barriers to safe water cycle. Present in plenary.

#### Exercise 2 – 25 min - Water ladder

In groups, discuss which step of the water ladder can be reached in the community. Discuss the level of the community. What are the barriers to moving up the ladder?

Each group presents to the plenary their conclusion.

#### Exercise 3 – 30 min - Proportional piling

In groups, identify and analyze the different water borne disease in the area.

**PowerPoint presentation: - 45 min** Water quality, water treatment and protection of water sources from contamination.

#### Exercise 5 - 30min - Water quality

In groups, discuss environmental and community actions that affect water quality. Each group present to the plenary their conclusion.

#### Exercise 4 – 30 min - Water demand

In groups, identify and analyze the amount of water used daily per person, compute the amount for a given community say 100 families with average of 3 children each. Compute projections for future population say after 20 years and calculate the demand for this population.

Each group present to the plenary their conclusion.

#### PowerPoint presentation: -20 min

Present water demand considerations and calculations.

#### Exercise 4 – 30 min - Technology choice

In groups, list the available technologies and equipment in use.

Each group to present their list in plenary.

PowerPoint presentation – 15 min

Present the different water sources, water technologies and water related diseases in the community.

#### **PowerPoint presentation – 20 min**

Construction consideration of a dug well and a water kiosk.

#### Exercise 1 - 15 min - Community water points

In groups, discuss the possible community sources of water (water points) and supply systems.

Each group to present in plenary. PowerPoint presentation – 20 min Financing community projects.

#### Exercise 2 - 25 min - Financing of community projects.

In groups, discuss the possible ways of raising funds for community projects. Each group to present in plenary.

Recap of learning points -10 min

- Emphasize on water resources available in the region.
- Emphasize that protection of water sources is for all.
- Emphasize on options for low cost technology for the community.
- Emphasize on need to incorporate the population projection while determining water demand for a community.
- Water point should be strategically placed at a central place.
- Emphasize on the requirement for sustainability of the water projects.

## UNIT 2: MODULE 2: TECHNOLOGIES AND APPROACHES TO WASH

## Session 2: Sanitation - 2 Hours 15 Minutes

## Aims

• The session is designed to ensure that the participants understand what sanitation is and the different technology options and requirements.

## Outcomes

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

- The appropriate water points for their community and ways of generating project funds.
- Appropriate sanitation technology options.
- Strategies for difficult emergency situations.
- Technical designs.

## **Methods**

- Presentation with Q & A
- Visual aids
- Plenary/group discussion
- Brainstorming

## **Resources/Materials**

PowerPoint: Introduction to appropriate sanitation and technical designs

M3S1 - Practical exercise 1: Community water points

M3S2 - Practical exercise 2: Community sources of funds

M3S3 – Practical exercise 3: Identification of appropriate sanitation technology

M3S4 – Practical exercise 4: Requirements for construction of a VIP latrine

## Handouts/Background reading

WatSan toolkits

WatSan manual: Sanitation unit

- Sanitation ladder on selection of sanitation options
- Sanitation technologies in the region

**PowerPoint presentation – 20 min - Introduction to sanitation.** 

**Exercice 3 - 25 min - Sanitation terminologies** In groups, discuss the definition of the given terms.

Exercise 4 – 25 min - Sanitation ladder
In groups, identify which level is used by the community and why?
Which level is their ideal?
Plenary presentation of their conclusion.
PowerPoint presentation – 20 min
Present the different sanitation options available in different conditions including emergency settings.

**Recap of learning points - 5 min** 

- Emphasize on proper waste disposal in relation to health.
- Emphasize use of affordable and appropriate sanitation technology.

## UNIT 3: MODULE 2: TECHNOLOGIES AND APPROACHES TO WASH

## Session 3: Hygiene promotion - 2hours: 30 Minutes

## Aims

The session is designed to ensure that the participants: -

- Hold a common understanding of the terms and definitions used in hygiene promotion
- Learn how to design a hygiene promotion program.

## **Outcomes**

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

- Differentiate hygiene education and promotion.
- Understand the five hygiene domains.
- Identify the key faecal oral routes.
- Develop a barrier chart.
- How to design a hygiene promotion intervention.

## Methods

Presentation with Q & A

- Visual aids
- Plenary/group discussion
- Brainstorming

## **Resources/Materials**

PowerPoint: Five hygiene domains, faecal oral routes, and how to design a hygiene promotion intervention.

M4S1 - Practical exercise 1: Definitions and terms used

M4S2 - Practical exercise 2: Identify water related/borne diseases

M4S2 – Practical exercise 3: Designing a hygiene promotion program

## Handouts/Background reading

WatSan manual:

- Hygiene promotion unit
- WatSan toolkits

#### Exercise 1 – 25 min

In groups, discuss the definition of the given terms. Clarification of terms – provide handout and discuss.

Briefly, introduce participants to the care materials available.

#### Exercise 2 – 25 min

In group work identify the diarrhoeal transmission routes and barriers. Each group present to the plenary their conclusion.

#### **Exercise 3 – 30 min** Ask to each group to draw a barrier matrix.

Each group present to the plenary their conclusion.

#### **PowerPoint presentation – 5 min** How to design a hygiene promotion intervention.

Recap of learning points - 5 min

- Emphasize on the linkages between hygiene and health.
- Emphasize on proper use of toilets/latrine.
- Emphasize on protecting water sources from contamination.

## UNIT 4: MODULE 2: TECHNOLOGIES AND APPROACHES TO WASH

## Session 4: Emergency setting - 1 Hour

## Aims

• The session is designed to enable participants develop appropriate WASH emergency strategies.

#### **Outcomes**

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

- Determine the level of emergency.
- Prioritise the interventions needed.
- Understand the available water and sanitation emergency kits.
- Respond to displaced population.

## Methods

- Presentation with Q & A
- Visual aids
- Plenary/group discussion
- Brainstorming

## **Resources/Materials**

Power Point presentation: Considerations for provision of water and sanitation facilities during emergencies and disasters.

## Handouts/Background reading

- WatSan manual emergency water and sanitation unit
- WatSan toolkit number 5

## **Session plan**

#### Exercise 1 – 30 min

In groups, discuss the list of emergency situations that leads to displacement. Clarification of emergency response units strategy– provide handout and discuss.

Briefly introduce participants to the emergency response constraint and strategies. PowerPoint presentation – 20 min Emergency water and sanitation. Recap of learning points - 5 min

- Proper WatSan facilities and hygienic conditions.
- Protection of water supplies from contamination.
- Necessary knowledge to avoid disease outbreaks.
- Emphasize on community participation.

## UNIT 5: MODULE 3 : SUSTAINABILITY IN WASH

## Session 6: Operations and Maintenance - 2 Hourrs 45 Minutes

## Aims

The session is designed to:-

- Ensure that participants hold a common understanding on what is operations and maintenance, the terms and definitions used.
- Ensure that participants are aware of project financing and cost recovery for sustainability of the project.

## **Outcomes**

By the end of the session participants will be able to understand: -

- The requirements of project sustainability.
- The requirements for operations and maintenance.
- Requirements for hygienic sanitation facilities.
- The cost recovery process.
- Methods of tariff settings.
- Institutional capacity for O&M.
- Project accounting and budgeting process.

## Methods

- Presentation with Q & A
- Visual aids
- Plenary/group discussion
- Brainstorming

## **Resources/Materials**

PowerPoint presentation: Operation and maintenance in project management and long-term sustainability of the project.

M5S1 - Practical exercise 1: Terms and definitions

M5S2 - Practical exercise 2: Advantages of O&M

M5S3 -Practical exercise 2: Requirements for O &M

M5S4 -Exercise 4: Consideration for tariff setting

PowerPoint presentation: Book keeping and documentation

## Handouts/Background reading

• WatSan manual: Operation and maintenance unit

#### Exercise 1 – 25 min

In groups, discuss the definition of the given terms. Clarification of terms – provide handout and discuss.

Briefly introduce participants to the importance of O&M. PowerPoint presentation: 10 min Requirements for O & M

#### Exercise 2 – 25 min

In group work identify the advantages of O&M. Each group present to plenary their conclusion.

#### Exercise 3 – 30 min

Ask each group to discuss the requirements of O&M Each group present to the plenary their conclusion.

PowerPoint presentation – 20 min

Basic guidelines for cost recovery and tariff setting.

Exercise 4 - 30min

In groups, undertake an exercise on computation of cost of supplying water, and tariff setting.

Each group to present in plenary their conclusions.

PowerPoint presentation-30min

Elementary book keeping and documentation.

Recap of learning points 10 min

- Emphasize on the role of O&M for sustainability of water supply and sanitation facilities
- Emphasize on the need for:
  - Cost recovery
  - Tariff setting
  - Book keeping
  - Reporting and documenting

## Unit 6: MODULE 4: PLANNING, MONITORING AND EVALUATION

## Session 7: Needs Assessment, Monitoring and Evaluation - 3 hours

#### Aims

The session is designed to:

- Ensure that participants hold a common understanding of what is monitoring and evaluation.
- Ensure that the participants are aware of the importance of monitoring and evaluation.

## **Outcomes**

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

- Define and differentiate monitoring and evaluation.
- Understand the levels of monitoring in a community project.
- Develop monitoring indicators.
- Understand the importance of monitoring and evaluation.
- Understand the importance of reporting and documentation.

#### Methods

- Presentation with Q & A
- Visual aids
- Plenary/group discussion
- Brainstorming

#### **Resources/Materials**

PowerPoint: Monitoring and evaluation M7S1 - Exercise 1: Setting project objectives M7S2 - Exercise 2: Developing monitoring indicators M7S3- Exercise 3: Reporting and documentation

## Handouts/Background reading

• WatSan manual: Monitoring and evaluation unit.

PowerPoint presentation –1.30 min What is monitoring and evaluation?

#### Exercise 1 – 20 min

In groups, have each group set objectives of a project e.g. one group for water project another group for sanitation project.

Each group to present to the plenary their objectives.

#### Exercise 2-25min

Ask each group to identify the indicators of progress for each objective. Each group present to the plenary their objectives. Power point: 25 min Project reporting and documentation

#### Exercise 3-20 min

Each group to identify the advantages of reporting and documentation Each group to present their conclusion in plenary. Recap of learning points- 5 min

- Setting project objectives.
- Developing monitoring indicators.
- Evaluation process.
- Reporting and documentation.