



ATAWAS
Capacity
Development
Portfolio 2016 - 2019





Dear ATAWAS members and colleagues,

We are pleased to introduce our Capacity Development portfolio for the coming 2016 - 2019 to you.

Our ambition is to facilitate a comprehensive Capacity Development for the water sector in Tanzania that is aiming specifically at performance improvements of the organizations.

After six years of Capacity Development Programs under GIZ and with many lessons learned, the utilities have made considerable achievements to improve their capacities. However there are still many areas where water sector staff need to enhance their knowledge and skills to fully comply with the legal and license requirements and to handle water supply operations more professionally. This portfolio shows a selection of areas where ATAWAS is offering the facilitation for capacity development measures in the next years.

But facilitation goes beyond simply offering a range of modules. Of course utilities require training in different subjects. But we find that there are often *very different levels of capacity* and *different challenges within a single group of utilities*. Challenges, that inhibit progress in the utilities, might go beyond management training, so that the application of training content is not possible and the training virtually ineffective. This requests more *flexible and more demand-oriented Capacity Development interventions*. You will find this flexibility considered in the design of the modules, which is based on *legal requirements, previous performance data, general limitations* and the *individual demand* of the utilities.

Through the established expert pool, ATAWAS is able to react on specific demand and offer flexible small scale trainings, coaching sessions for specific topics at the right time to *foster implementation*. Our portfolio is presented to you in this document. You will find a wide range of demand-oriented and tailor-made CD measures, that address the challenges of your organization and that support utilities to implement the remedies. You will learn more about the flexibility of the modules below. We kindly ask for your feedback and your interest on which modules of our portfolio will bring improvement to your organisation.



Please follow the instructions below and fill out the **ATAWAS CD assessment matrix**:

1. Read through each module to decide what is interesting and helpful for
2. Select the topics where your utility needs to improve its capacities the most!
3. Fill out the accompanied matrix for the next 3 years. This is not the final application, but rather to assess where you have the biggest interest and demand.
4. If you cannot find what you are looking for please let us know

What to consider:

MODUL¶ A-3¶	Tentative date¶	Cost (TZS)¶ 600,000¶	SOPs¶
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Cost of the module:

Modules vary in cost and need to be financed by the utility (+DSA and transport cost)

▪ **NRW-Strategy¶**

Training area: → A-GENERAL-MANAGEMENT¶

Short summary¶	<i>The knowledge on reduction of NRW will help WSSAs to share experience and improve their strategies on how to reduce with Apparent and Physical Water Losses. In that way, WSSAs will be able to apply strategies shared and improve their revenue base which is the key success factor on WSSAs' operations.¶</i>		
Why this module?¶	<i>Reducing NRW will lead to improved revenue collection, reduced production & maintenance costs and revenue losses.¶</i>		
Who should participate¶	<i>Utility management team and other staff from commercial and/or technical departments¶</i>		
Which OUTCOMES are required¶	<i>Increased revenue collection and reduced production costs¶</i>		
Participants level¶	<i>Management – basics¶</i>		
Conditions to participate¶	<i>At least one year experience working in commercial or technical operations at WSSAs.¶</i>		
Training language¶	<i>English¶</i>		
Sessions number¶	<i>1st Session¶</i>	<i>2nd Session¶</i>	<i>3rd Session¶</i>
Duration of session¶	<i>3 days¶</i>	<i>2 days¶</i>	<i>1 day¶</i>
Sequence¶	<i>Find date above¶</i>	<i>2 month later¶</i>	<i>1 month later¶</i>
Number of participants¶	<i>30 per course¶</i>		

Who should participate

Select the right staff

Conditions to participate and participants level

Does the module work for your utility / your staff?

Number of session and days:

Most modules are delivered in more than one event

Use the CD assessment matrix to enter the staff that should attend a module in the field for **TRAINING** or **SUPPORT FOR IMPLEMENTATION**.

- A series of workshops, where topics are trained and application progress is discussed
- Regional measures with neighboring utilities that focuses on implementation
- Follow-up implementation e.g. if you have already prepared some part and you are stuck

Additionally we emphasize the use of SOPs in each CD measure where applicable.



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TRAINING AREA A: General Management

In the training area of General Management the following modules are offered as a standard:

CODE	MODULE NAME	LEVEL	RESULT	EVENT TYPE
A-1	STRATEGIC PLAN	Basic	Output-based	Series
A-2	CD PLAN	Basic	Output-based	Series
A-3	NON REVENUE WATER STRATEGY	Basic	Output-based	Series
A-4	HUMAN RESOURCE MANAGEMENT – OPRAS	Professional	Output-based	Single
A-5	HRM - RECRUITMENT & EMPLOYMENT CONTRACTS, LABOUR LAWS & GUIDELINES	Professional	Learning Process	Single
A-6	LIFE-CYCLE-COST CALCULATION	Professional	Learning Process	Series
A-7	PROCUREMENT	Professional	Output-based	Single
A-8	MANAGEMENT OF CONTRACTS	Professional	Output-based	Single
A-9	ROLE OF BOARD OF DIRECTORS (BoD)	Professional	Output-based	Single
A-10	MANAGERIAL SKILLS	Professional	Learning Process	Series
A-11	REPORT WRITING	Basic	Output-based	Series
A-12	WATER LAWS	Professional	Output-based	Single
A-13	CLUSTERING	Basic	Output-based	Series

MODUL <u>A-1</u>	Tentative date	Cost(TZS) 1,000,000	SOPs
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STRATEGIC PLAN

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>The module addresses the preparation and implementation approach of the five-years strategic plan according to Civil Service Department guidelines. It contains situational analysis including SWOT analysis and critical issues facing an organization; establishing its core values, mission and vision; identifying the (strategic) objectives, strategies, and key performance targets; and how the plan implementation is monitored and evaluated through key performance indicators. Strategic plan is a prerequisite for a good preparation of a three-years business plan and an annual open performance review and appraisal system (OPRAS).</i>		
Why this module?	<i>Required for all public organizations to identify the future with respect to their core functions tariff application, loan application, to have an agreed performance standard to achieve in the WSSA</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Full strategic plan prepared and approved by the WSSA Board</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	<i>3 days</i>	<i>2 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL A-2	Tentative date	Cost (TZS) 600,000	SOPs
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CD PLAN

Training area: A-GENERAL MANAGEMENT

GENERAL

Short summary	<i>This module addresses the preparation and implementation approach of the Capacity Development Plan in accordance with Ministry of Water guidelines. A simple method to assess the different capacity areas of an organisation will be presented. Certain capacity areas will be selected as areas for improvement to assist an organisation to plan interventions, and bundle these together as the capacity development plan. To implement the CD plan, different financing options will be explored and the implications of each reviewed. To monitor the progress of the CD plan and verify if the interventions are bringing the results that were expected and intended, a monitoring mechanism will have to be put in place and implemented.</i>		
Why this module?	<i>Required for all MoW-institutions to improve their capacity and that of the staff to offer the required services efficiently and effectively.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Capacity Development Plan prepared and approved by the WSSA Board</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	<i>1st Session</i>	<i>2nd Session</i>	<i>3rd Session</i>
Duration of session	<i>3 days</i>	<i>2 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL A-3	Tentative date	Cost (TZS) 600,000	SOPs ALL
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NRW Strategy

Training area: A-GENERAL MANAGEMENT

GENERAL

Short summary	<i>The knowledge on reduction of NRW will help WSSAs to share experience and improve their strategies on how to reduce with Apparent and Physical Water Losses. In that way, WSSAs will be able to apply strategies shared and improve their revenue base which is the key success factor on WSSAs' operations.</i>		
Why this module?	<i>Reducing NRW will lead to improved revenue collection, reduced production & maintenance costs and revenue losses.</i>		
Who should participate	<i>Utility management team and other staff from commercial and or technical departments</i>		
Which OUTCOMES are required	<i>Increased revenue collection and reduced production costs</i>		
Participants level	<i>Management – basics</i>		
Conditions to participate	<i>At least one year experience working in commercial or technical operations at WSSAs.</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>2 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL <u>A-4</u>	Tentative date	Cost (TZS) 300,000	SOPs
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HR - OPRAS

Training area: A-GENERAL MANAGEMENT

GENERAL

Short summary	<i>The module addresses the application of the OPRAS in the Organization according to guidelines issued by the President's Office Public Service Management in September 2011. The individual performance objectives and targets emanating from the Organization's corporate plans are cascaded to individual employee by forming the employee performance contract and appraises annually. The process creates linkage between individual objectives and Organization objectives which finally contributes to attainment of the Organization goal.</i>		
Why this module?	<i>Required by law (Public Service Act 2002 and its Regulation of 2004. The OPRAS is a systematic procedure which enables the employee and employer in planning, managing, evaluating and realizing performance improvement of the Organization. OPRAS administration enhances openness, ownership, accountability, participation and therefore effectively improves Organizational Performance.</i>		
Who should participate	<i>All Utility Managers and Heads of Sections</i>		
Which OUTCOMES are required	<i>Employees Performance Contracts in form of OPRAS filled and appraised annually.</i>		
Participants level	<i>Management – Diploma level and above</i>		
Conditions to participate	<i>Strategic Plan, Business Plan and CD Plan with Budget, Scheme of Service and Job Descriptions.</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>A-5</u>	Tentative date	Cost (TZS) 300,000	SOPs
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HR - RECRUITMENT & EMPLOYMENT CONTRACTS, LABOUR LAWS & GUIDELINES

Training area: A-GENERAL MANAGEMENT

GENERAL

Short summary	<i>This module is part of HR management which addresses the hiring and employment practices that are in compliance with the labor law. It ensures fair treatment of all employees by regulating consistency in policies and procedures. Labor Law is the basis of all HRM tools it elaborates the types of employment contracts, remuneration, leave, employment termination and conflict resolutions between employer and employee.</i>		
Why this module?	<i>To enable an organization to obtain at a minimum cost, the number and quality of employees required to satisfy its human resource needs.</i>		
Who should participate	<i>HR Manager or a person responsible for HR in the organisation</i>		
Which OUTCOMES are required	<i>Understanding recruitment procedures and labor laws. Human Resource policy/manual developed and approved by WSSA Board</i>		
Participants level	<i>Management - professional</i>		
Conditions to participate	<i>For utilities which have employed or have capacity to employ own staff</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>A-6</u>	Tentative date	Cost (TZS) 800,000	SOPs
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LIFECYCLE COST CALCULATION

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>Life cycle costs include all costs that are associated with the procurement, operation and disposal of a product. This is most relevant is not the initial investment for procurement, but the operation or disposal cost are the biggest cost factor. The module explores the concept and principles of LCC and trains the calculation by participants. The calculation is applied to a number of case studies that may also come from the actual utility context.</i>		
Why this module?	<i>The operating costs over the lifetime of a product may be much higher than costs for initial procurement of a product. (e.g. for most pumps). Life cycle costs provide the numbers how much money can be saved by using quality products with lower operation costs that works efficiently and lasts longer.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Life cycle cost calculation for case studies</i>		
Participants level	<i>Management - professional</i>		
Conditions to participate			
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>2 days</i>	-
Sequence	<i>Find date above</i>	<i>2 month later</i>	-
Number of participants	<i>15 per course</i>		

MODUL <u>A-7</u>	Tentative date	Cost (TZS) 500,000	SOPs G1
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PROCUREMENT

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>This module address all aspects of procurement regulations which are important for small or bigger Utilities. Included are methods and type of procurement, planning of procurement, tender procedures, PMUs, user committees, etc. But also issue of contract conditions as guarantee, liability periods, complain management, etc. will be trained and discussed.</i>		
Why this module?	<i>Proper procurement and handling of goods are important for assuring quality of goods and works and their cost efficiency.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Improved handling of procurement issues</i>		
Participants level	<i>Management - professional</i>		
Conditions to participate			
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>40 per course</i>		

MODUL <u>A-8</u>	Tentative date	Cost (TZS) 500,000	SOPs
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MANAGEMENT OF CONTRACTS

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>WSSAs procure goods, services and works in their day-to-day operations. They enter into contracts with suppliers, consultants and contractors for implementation. There are different procurement guidelines and tender documents from different financiers of the projects. That notwithstanding, it is the responsibility of the procuring entity (WSSA) to manage the contract appropriately. This module looks at the different types of contracts available for use by the procuring entities. It also looks at the role of Project Managers in managing the project through the contract documents. The roles of the Client, Consultant and Contractor during project implementation will be made clear. Numerous examples of real life disputes and how they were resolved will be given to help understand management of contracts better.</i>		
Why this module?	<i>Management of contracts is an important aspect of project management and utility operations. Capacities to manage contracts are required to comply with relevant procurement guidelines.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Increased capacity to manage contracts</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>A-9</u>	Tentative date	Cost (TZS) 300,000	SOPs
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ROLE OF BOARD OF DIRECTORS

Training area: A- GENERAL MANAGEMENT

Short summary	<i>The module addresses the preparation and training BOD and management team on their responsibilities, their related tools and guidelines required to well manage their water utility according to the water supply and sanitation act. This includes the national water policy, corporate governance and Government water programs. It also addresses Utility performance and related key performance indicators (KPIs).</i>		
Why this module?	<i>Required by Government Client Service Charter as familiarisation for new board members, utility management staff to their responsibilities and laws/guidelines required to well manage the water utility as well as to achieve the Utility performance</i>		
Who should participate	<i>Board of Directors and Utility management team</i>		
Which OUTCOMES are required	<i>Board and Management are clear on their functions and related tools</i>		
Participants level	<i>BOD and Management Team- familiarization</i>		
Conditions to participate	<i>Following plans/schedule available Professionally prepared Budget</i>		
Training language	<i>English and Swahili</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>50-70 per course</i>		

MODUL <u>A-10</u>	Tentative date	Cost (TZS) 900,000	SOPs
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MANAGERIAL SKILLS

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>The success of a manager is measured not by own output but by the output and productivity of the people s/he supervises. A manager therefore must be able to make employees deliver on their goals, using managerial skills for the success of the whole organization. This module deals with the managerial skills needed by a manager and these are grouped into human skills, technical skills and conceptual skills. These are mandatory skills which every manager must possess.</i>		
Why this module?	<i>Management skills are necessary to lead organizations and staff to achieve individual and overall goals. Thus, they are a key prerequisites for success in any organization.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Improved managerial skills</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>3 days</i>	<i>3 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>2 month later</i>
Number of participants	<i>30 per course</i>		

MODUL <u>A-11</u>	Tentative date	Cost (TZS) 500,000	SOPs
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REPORT WRITING

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>The module addresses on how reports are written. Reports are written for a purpose and to a particular audience. The structure of a standard report to include Table of Contents, Summary, Background, Introduction/Objective, Methods (Scope and Approach), Results (Findings), Discussion, Conclusions, Recommendations (Next steps) and Appendices will be elaborated and practiced. Types of reports, Quality assurance of reports, and Importance of Communicating effectively will also be discussed and practiced.</i>		
Why this module?	<i>The ability to inform is as important as the information itself, if not more. Report writing is an inevitability in any organization.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>A report of choice prepared</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>None</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>2 days</i>	-
Sequence	<i>Find date above</i>	<i>3 month later</i>	-
Number of participants	<i>30 per course</i>		

MODUL <u>A-12</u>	Tentative date	Cost (TZS) 300,000	SOPs
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WATER LAWS

Training area: A- GENERAL MANAGEMENT

GENERAL

Short Summary	<i>The module covers a number of legal aspects including the administrative and institutional set up of the MoW, Establishment and Management of WSSAs, powers and functions of WSSAs, powers of the Board of WSSAs, provisions governing establishment, operation and management of COWSOs and Regulation of Water Supply and Sanitation Service by EWURA. Besides the module will touch, in a nutshell, some aspects of the Water Resources Management Act.</i>		
Why this Module	<i>Facilitate efficient operations and management of Utilities, almost all key important aspects of operations of Utilities are governed by the WSSA hence the need to know them becomes imperative.</i>		
Who should participate	<i>All Utility Managers</i>		
Final Product/Outputs and Outcome	<i>Participants be informed about the legal and institutional framework governing the management of the Utilities in the water sector.</i>		
Participants level	<i>Board Members & Management</i>		
Precondition to participate	<i>None</i>		
Training Language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of Participants	<i>30 per course</i>		

MODUL <u>A-13</u>	Tentative date	Cost (TZS) 200,000	SOPs
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CLUSTERING

Training area: A- GENERAL MANAGEMENT

GENERAL

Short summary	<i>The Water Supply and Sanitation Act of 2009 allows two or more WSSAs to merge into one utility through a process called clustering. This module will give a better understanding to interested utilities about the clustering concept and how it can be implemented. Reference will be made also to the Clustering Regulations that support the WSS Act.</i>		
Why this module?	<i>Required by all WSSAs contemplating to cluster with other water utilities to achieve economies of scale and commercial viability.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Understanding of Clustering</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>1 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		



TRAINING AREA B: Financial Management

In the training area of Financial Management the following modules are offered as a standard:

CODE	MODULE NAME	LEVEL	RESULT	EVENT TYPE
B-1	BUDGETING	Basic	Output-based	Series
B-2	FINANCIAL PLANNING + PROJECTION	Basic	Output-based	Series
B-3	BUSINESS PLAN	Basic	Output-based	Series
B-4	INVESTMENT LOAN APPLICATION PROPOSAL DOCUMENT	Basic	Learning Process	Series
B-5	EXPENDITURE CONTROL	Basic	Learning Process	Single
B-6	FINANCIAL AUDITING	Professional	Learning Process	Single

MODUL <u>B-1</u>	Tentative date	Cost (TZS) 500,000	SOPs
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BUDGETING

Training area: B- FINANCIAL MANAGEMENT

Short summary	<i>Proper budgeting is indispensable for any functional organization. Annual budgeting must start from the annual plan of an organization. The annual plan is derived from the Business plan and hence from the Strategic plan. The annual budget contents include sources of income and expected expenditures. The assumptions and projections made for income and expenditure are clearly elaborated in the annual budget. This module addresses the approach to achieving a realistic budget for any WSSA.</i>		
Why this module?	<i>Financial management of any organization starts with the annual budgeting. The annual budget is an important tool that has to be prepared professionally to be of use to the utility to reach their business and strategic goals.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Knowledge on annual budgeting</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>None</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>2 days</i>	-
Sequence	<i>Find date above</i>	<i>3 month later</i>	-
Number of participants	<i>30 per course</i>		

MODUL <u>B-2</u>	Tentative date	Cost (TZS) 300,000	SOPs
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FINANCIAL PLANNING & PROJECTIONS

Training area: B- FINANCIAL MANAGEMENT

Short summary	<i>Financial planning is the task of determining how the organization will afford to achieve its strategic goals. The financial plan describes each of the activities, resources, equipment, and materials that are needed to achieve an organization's objectives as well as the timeframe. The necessary tools needed for adequate financial planning include the business plan, annual plan, annual budget, and pro-forma financial statements. This module covers all these areas to enable the Management of a WSSA to validate the business plan, set financial targets and reward staff for meeting objectives within the budget.</i>		
Why this module?	<i>Financial health of an organization depends on its financial plan and management. Without good financial planning the organization will not be able to afford to achieve their strategic goals.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Financial plan</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>None</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>B-3</u>	Tentative date	Cost (TZS) 1,000,000	SOPs
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BUSSINES PLAN

Training area: B- FINANCIAL MANAGEMENT

Short summary	<i>The module addresses the preparation and application of the business plan according to EWURA guidelines. The Business plan is a management tool which contains the current performance of the Utility, standard and performance targets to be achieved, three years forecast, the outlined investment and capacity development plans, the financial projections, asset management plan and the action plan. The Business plan is approved by the Board of Directors of a Water Utility and endorsed by EWURA. The Business plan facilitates performance management system such as OPRAS and financial stability of the Water Utility.</i>		
Why this module?	<i>The Business Plan is a legal requirement that any Water Utility should have and use. The Business plan is a requirement in application of multi-year tariffs to EWURA. The Business plan is very useful in monitoring and evaluation of the Utility performance in service delivery, financial projection towards full cost recovery and application to grants or loans.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Business plan prepared and approved by the WSSA board submitted to EWURA. Improved Utility performance and sustainability</i>		
Participants level	<i>Management - basic</i>		
Conditions to participate	<i>Strategic plan, Capacity Development Plan and Annual Performance Reports. Professionally prepared Budget</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	<i>3 days</i>	<i>2 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL <u>B-4</u>	Tentative date	Cost (TZS) 600,000	SOPs
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INVESTMENT LOAN APPLICATION PROPOSAL DOCUMENT

Training area: B- FINANCIAL MANAGEMENT

FINANCIAL

Short summary	<i>This module addresses the preparation of project proposal for loan application in accordance with Ministry of Water and Banks guidelines. It allows participants to understanding Loan Application Proposal and its application in water utility operations. The module will look at WSSA's ability to repay the Loan including its capability to partially finance the proposed project development costs (from internal and external sources). Project Financial and Economic Analysis will be done. How to link the proposal with the utility's Business Plan and Strategic Plan will also be discussed.</i>		
Why this module?	<i>Help water utilities to obtain external funds to finance water supply and sanitation projects through loans or grants</i>		
Who should participate	<i>Financial Managers, Commercial Manager, Business Manager, General Manager</i>		
Which OUTCOMES are required	<i>Loan Application Proposal Document</i>		
Participants level	<i>Management - professional</i>		
Conditions to participate	<i>Availability of Business plan</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>2 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL <u>B-5</u>	Tentative date	Cost (TZS) 300,000	SOPs
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EXPENDITURE CONTROL

Training area: B- FINANCIAL MANAGEMENT

Short summary	<i>The top management of an organization must understand the financials to assess organizational health and sustainability. Organizations need to have incomes in excess of expenses. This requires that the expenditure be controlled. The tools available for this include the Management being made to understand the key financial statements and how to interpret them, the concept of budgeting and adherence to budget and financial projections as a tool to predict the future. This module addresses financials for non-financial managers.</i>		
Why this module?	<i>Sustainability of any organization is dependent on its financial health.</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Knowledge on financial management and tools for expenditure control</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>None</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>B-6</u>	Tentative date	Cost (TZS) 400,000	SOPs
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FINANCIAL AUDITING

Training area: B- FINANCIAL MANAGEMENT

Short summary	<i>The module concerns the proper recording of financial statements in order to comply with international accounting and reporting standards. All financial reports and financial reporting processes must be evaluated in order to give reasonable assurance to regulators investors, directors and managers on the accuracy and completeness of financial statements. The definition of procedures, requirements and results of financial auditing will be addressed to have managers better understand and improve the financial auditing processes and results. All steps involved in the financial auditing process will be explained and the role of an auditor discussed.</i>		
Why this module?	<i>Financial auditing is a compulsory activity to be performed by all water utilities. In addition financial auditing plays a valuable role for water utilities to maintain integrity and attain specific goals and objectives by measuring overall performance.</i>		
Who should participate	<i>All Utility Managers, Technical Managers and Commercial Managers</i>		
Which OUTCOMES are required	<i>Understanding the financial auditing</i>		
Participants level	<i>Utility management team</i>		
Conditions to participate	<i>Utility management team and Accountant to participate fully, all at least FTC level</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>4 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		



TRAINING AREA C: Commercial Management

In the training area of Commercial Management the following modules are offered as a standard:

CODE	MODULE NAME	LEVEL	RESULT	EVENT TYPE
C-1	BILLING AND REVENUE COLLECTION STRATEGY	Basic	Output-based	Series
C-2	MARKETING STRATEGIES + CUSTOMER CARE	Basic	Learning Process	Series
C-3	METER MANAGEMENT	Basic	Output-based	Series
C-4	ON SITE CONTROL OF NRW	Basic	Output-based	Series
C-5	COMPUTERISED BILLING	Professional	Learning Process	Single

MODUL <u>C-1</u>	Tentative date	Cost (TZS) 600,000	SOPs C1-C14
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BILLING AND REVENUE COLLECTION STRATEGY

Training area: C- COMMERCIAL MANAGEMENT

COMMERCIAL

Short summary	<i>The module addresses the preparation and application of the improved billing and revenue collection strategy. Various methods to increase the billing efficiency and revenue collection efficiency will be analyzed. Internal factors influencing effective billing and collection strategies like improved customer data base, level of metered and unmetered customers, tariff, delivery of bills and facilities for customer payment will be discussed</i>		
Why this module?	<i>Billing and revenue collection strategies are key elements of successful water utility. Effective billing and revenue collection procedures have positive impact on financial stability of the utility, hence improve water utility performance. The module will help water utilities to understand and adopt mechanism that promote cost recovery and sustainable revenue collection strategies. Proper billing system will improve the billing value and motivate the customer willingness to pay</i>		
Who should participate	<i>All Utility managers, Commercial and Technical Managers</i>		
Which OUTCOMES are required	<i>Revenue improvement strategy document.</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>Utility management team to participate fully, all at least FTC level</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>3 days</i>	-
Sequence	<i>Find date above</i>	<i>2 month later</i>	-
Number of participants	<i>20 per course</i>		

MODUL <u>C-2</u>	Tentative date	Cost (TZS) 500,000	SOPs C7 -C12, T8
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MARKETING STRATEGIES + CUSTOMER CARE

Training area: C- COMMERCIAL MANAGEMENT

COMMERCIAL

Short summary	<i>The module addresses the persisting problem of customer care and its implication to WSSAs. Having acquired the knowledge of Marketing strategies and apply in WSSAs' routine undertakings, it will contribute to improved services offered by WSSAs, creation of customer trust which can enhance the relationship and hence WSSA's sustainability due to the fact that customers will be willing to pay for the good services offered.</i>		
Why this module?	<i>Market and customer orientation will improve services and thus revenue collection. WSSAs' will profit from a better public image and good stakeholder relationships</i>		
Who should participate	<i>Commercial managers</i>		
Final Products / Outputs and Outcome	<i>Improved customer services, Increased revenue collection</i>		
Participants level	<i>Management basic</i>		
Conditions to participate			
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>2 days</i>	-
Sequence	<i>Find date above</i>	<i>2 month later</i>	-
Number of participants	<i>30 per course</i>		

MODUL <u>C-3</u>	Tentative date	Cost (TZS) 500,000	SOPs T2,T3,T4, C1,C2
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METER MANAGEMENT

Training area: C- COMMERCIAL MANAGEMENT

COMMERCIAL

Short summary	<i>The module addresses the preparation and application of the meter management strategy that will be used by water utilities to manage their water meters in order to make their services sustainable. Also aimed to assist water utilities to achieve maximum operational efficiency and remarkable customer satisfaction. The module will include importance of domestic and bulk water meters, meter installation, water meter reading, billing and meter maintenance. Various meter management systems will be compiled and discussed for the benefit of the participants.</i>		
Why this module?	<i>Sustainability of water utility depend on among other things the willingness of customer to pay water bills and if possible according to consumption. The meter management will provide accurate information to customers thus motivate them to pay promptly. In addition bulk water meter will simplify the task of locating non revenue water when production amount is compared to the consumption. Furthermore assurance of meter accuracy is a tool for customer satisfaction and reduction of NRW</i>		
Who should participate	<i>All Utility managers, Commercial and Technical managers</i>		
Which OUTCOMES are required	<i>Meter management document prepared and approved by Board</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>Utility management team to participate fully, all at least FTC level</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>2 days</i>	<i>2 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL <u>C-4</u>	Tentative date	Cost (TZS) 500,000	SOPs all T and C
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ON SITE CONTROL OF NRW

Training area: C- COMMERCIAL MANAGEMENT

COMMERCIAL

Short summary	<i>This module addresses the Water Utilities facing water losses which occurs in all distribution networks, even new ones to be able to calculate the losses and develop strategies to minimize the losses. Moreover capacity to develop a water balance will be imparted to participants.</i>		
Why this module?	<i>The Benefits of NRW reduction, in particular of leakage reduction, Utilities shall realize the following:-</i> <ul style="list-style-type: none"> ✓ <i>financial gains from increased water sales or reduced water production, including possibly the delay of costly capacity expansion;</i> ✓ <i>increased knowledge about the distribution system;</i> ✓ <i>increased firefighting capability due to increased pressure;</i> ✓ <i>reduced property damage</i> ✓ <i>reduced risk of contamination</i> ✓ <i>More stabilized water pressure throughout the system</i> 		
Who should participate	<i>All Utilities Technical Personnel</i>		
Which OUTCOMES are required	<i>Methods of reducing Non Revenue water understood, water balance for the pilot area established</i>		
Participants level	<i>Utility management team to participate fully, all at least FTC level - basic</i>		
Conditions to participate	<i>Following plans available: Non Revenue Water Reduction Strategy & asset management plan Recommended for Utilities with NRW level greater than 25%.</i>		
Training language	<i>English</i>		
Sessions number	<i>1st Session</i>	<i>2nd Session</i>	<i>3rd Session</i>
Duration of session	<i>5 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>C-5</u>	Tentative date	Cost (TZS) 300,000	SOPs C1,C2,C3
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COMPUTERIZED BILLING SYSTEM

Training area: C- COMMERCIAL MANAGEMENT

COMMERCIAL

Short summary	<p><i>The module addresses the needs for water utilities to transform from manual billing system to user friendly computer based billing software. The module will also address tools and techniques for mapping all customers, preparation and compilation of various computerized billing systems, the associated advantages, available reports, experienced challenges, cost, after sales support contracts and mapping utility customers will be the major focus of the module.</i></p> <p><i>The participating utilities will receive inside knowledge of various computerized billing software and customer mapping techniques and advice the Board toward efficient and effective computerized billing software.</i></p>		
Why this module?	<p><i>Computerized billing system allows the water utilities to manage the billing process efficiently, analyze various report effectively and provides more control over bills and receivables. The billing activity can be done once and produce many outputs (reports) and also make it easy to locate customers and meter in the distribution line.</i></p>		
Who should participate	<p><i>All Utility Managers, Technical Managers and Commercial Managers</i></p>		
Which OUTCOMES are required	<p><i>Various computerized billing systems for decision making</i></p>		
Participants level	<p><i>Management - Professional</i></p>		
Conditions to participate	<p><i>Utility management team and Accountant to participate fully, all at least FTC level</i></p>		
Training language	<p><i>English</i></p>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	2 days	-	-
Sequence	Find date above	-	-
Number of participants	30 per course		



TRAINING AREA D: Technical Management

In the training area of Technical Management the following modules are offered as a standard:

CODE	MODULE NAME	LEVEL	RESULT	EVENT TYPE
D-1	ASSET MANAGEMENT PLAN	Basic	Output-based	Series
D-2	NETWORK MAPPING	Basic	Output-based	Series
D-3	GIS	Basic		Single
D-4	PREVENTIVE MAINTENANCE	Basic	Output-based	Series
D-5	ENERGY EFFICIENCY	Basic	Output-based	Series
D-6	CONSTRUCTION PROJECTS PREPARATIONS AND MANAGEMENT	Basic	Learning Process	Single
D-7	O&M MANUAL	Basic	Output-based	Series
D-8	WATER QUALITY	Basic	Learning Process	Single
D-9	PUMP TECHNICIAN WORKSHOP	Basic	Learning Process	Single
D-10	PUBLIC SANITATION SERVICE	Basic	Learning Process	Single
D-11	WASTE WATER TREATMENT & SLUDGE MANAGEMENT	Professional	Learning Process	Series
D-12	HYDRAULICS	Professional	Learning Process	Single
D-13	WATER TREATMENT	Professional	Learning Process	Single

MODUL <u>D-1</u>	Tentative date	Cost (TZS) 600,000	SOPs T2,C11
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ASSET MANAGEMENT PLAN

Training area: D- TECHNICAL MANAGEMENT

Short summary	<i>The module addresses the preparation and application of the asset management plan according to EWURA guidelines. It also includes strategic vision of assets, asset inventory, standard of service, current asset condition (owner, age, existing life, remaining life), asset valuation and cost, risk management of assets and principles of asset lifecycle management. The benefit and limitation of asset management plan will also be covered.</i>		
Why this module?	<i>Required by law as input to the business plan. It also provides appropriate balance between cost, risk and performance of assets in the utility.</i>		
Who should participate	<i>All Utility Managers</i>		
Which OUTCOMES are required	<i>Document on asset management plan prepared and approved by the WSSA board submitted to EWURA</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>Availability of Network map and/or asset register</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>2 days</i>	<i>2 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		

MODUL <u>D-2</u>	Tentative date	Cost (TZS) 600,000	SOPs T8
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NETWORK MAPPING

Training area: D- TECHNICAL MANAGEMENT

TECHNICAL

Short summary	<i>The module highlights the importance of network mapping in the area of water management/distribution system. With a well mapped and documented water supply system the utility will be in a better operational position and able to conduct asset management- water and sanitation infrastructure.</i>		
Why this module?	<p>To enable utilities to prepare maps of their water and sewerage network, especially for:</p> <ul style="list-style-type: none"> ✓ Planning, designing and construction of water supply system. ✓ Budgeting ✓ Asset management ✓ Operation & Maintenance (O & M) 		
Who should participate	Technical Managers or comparable competence		
Which OUTCOMES are required	<ul style="list-style-type: none"> ✓ Water and sanitation network paper maps / GIS established or improved ✓ Knowledge / Agreement on application of maps 		
Participants level	Management - basics		
Conditions to participate	None		
Training language	English		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	3 days	1 days	1 days
Sequence	Find date above	2 month later	1 month later
Number of participants	20 per course		

MODUL <u>D-3</u>	Tentative date	Cost (TZS) 500,000	SOPs
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GIS FOR WATER SUPPLIER

Training area: D- TECHNICAL MANAGEMENT

Short summary	<p><i>The main objective of the training module is to provide training of using open source Quantum GIS to Water utilities staff.</i></p> <p><i>The training contains:</i></p> <ul style="list-style-type: none"> • <i>Introduction to GIS and basic functions,</i> • <i>GIS data collection and input methods and techniques</i> • <i>GIS Data processing and Analysis</i> • <i>Data output and visualization</i> • <i>Exercises on GIS applications in Water utilities and management</i> 		
Why this module?	<p><i>Visualization of assets, customer, OM data and others, can support the management of water supply network and easy controlling and network analysis.</i></p>		
Who should participate	<p><i>Technical management or Engineers, in Planning, Construction, O+M responsible in water supply utilities or departments</i></p>		
Which OUTCOMES are required	<p><i>Action Plan for implementation GIS station in the utility</i></p>		
Participants level	<p><i>Technical Management, Engineer or comparable qualification - professional</i></p>		
Conditions to participate	<p><i>Computer knowledge</i></p>		
Training language	<p><i>English</i></p>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	<i>3 days</i>	<i>2 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>30 per course</i>		



MODUL <u>D-4</u>	Tentative date	Cost (TZS) 700,000	SOPs T5,T6,T7, T8.T10
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PREVENTIVE MAINTENANCE

Training area: D- TECHNICAL MANAGEMENT

TECHNICAL

Short summary	<i>The module highlights the great importance of maintenance of water and sewerage infrastructure for the betterment of water and sanitation services.</i>		
Why this module?	<p><i>Why preventive maintenance:</i> <i>Well designed and proper preventive maintenance has the following positive impacts</i></p> <ul style="list-style-type: none"> • <i>Low down running cost</i> • <i>Increase durability of the infrastructure</i> • <i>Increase productivity of services provided</i> 		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<ul style="list-style-type: none"> ✓ <i>Better techniques of preventive maintenance established/improved</i> ✓ <i>Schedule for preventive maintenance is in place</i> 		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>Following plans available: Knowledge on preventive maintenance on water supply and sanitation services</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>1 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<i>20 per course</i>		

MODUL <u>D-5</u>	Tentative date	Cost (TZS) 600,000	SOPs T11
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ENERGY EFFICIENCY

Training area: D- TECHNICAL MANAGEMENT

Short summary	<p><i>The module addresses the recording of pumping station data on water discharge, energy consumed and pressure. This will be followed by analysis of the pump operation data that includes specific power consumption and recommendations from the analysis. The module will provide an introduction to protective equipment in pumping stations and methods to improve energy efficiency.</i></p> <p><i>After verification of the monitoring data, advanced participants can determine the operating point of pumping unit(s), calculate the system head losses to create the system curve and determine the best efficiency point (BEP).</i></p>		
Why this module?	<p><i>Determination of energy efficiency of the pump(s) on performance and assurance of its durability for economic operation.</i></p>		
Who should participate	<p><i>Utility managers and technical managers.</i></p>		
Which OUTCOMES are required	<p><i>Availability of accurate pump operation data and possible improvements. Operating- and system curve. Best efficiency point.</i></p>		
Participants level	<p><i>Technical – basic</i></p>		
Conditions to participate	<p><i>Pumping system. Availability of operational data as per ATAWAS log book or water utility logbook with data on water discharge, electricity consumption and pressure.</i></p>		
Training language	<p><i>English</i></p>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>2 days</i>	<i>2 days</i>	<i>1 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<p><i>30 per course</i></p>		

MODUL <u>D-6</u>	Tentative date	Cost (TZS) 500,000	SOPs
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CONSTRUCTION PROJECTS PREPARATIONS AND MANAGEMENT

Training area: D- TECHNICAL MANAGEMENT

Short summary	<i>Construction projects are continuously implemented in the WSSAs to improve service delivery. The utility management staff and in particular the Technical Manager needs to have the knowledge of how to prepare and manage construction projects. In this module essentials of project preparation will be taught as well as how construction projects are managed.</i>		
Why this module?	<i>Construction is one important aspect of WSSAs on their way to improving their service delivery. Capacities to prepare and manage this type of projects are required for successful implementation.</i>		
Who should participate	<i>All utility managers</i>		
Final Products / Outputs and Outcome	<i>Understanding of Construction Projects preparation and management</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>D-7</u>	Tentative date	Cost (TZS) 1,000,000	SOPs T2- T13, C4
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O & M MANUAL

Training area: D- TECHNICAL MANAGEMENT

Short summary	<p><i>The Water Utilities share common operations and technologies in their endeavor to abstract water , treat water where applicable, pump and/or gravitate water, transport water and distribute it to customers. The infrastructure requires not so different types of operations and maintenance approaches from one utility to another. The purpose of this module is to develop a manual that can be used by many utilities with some minor customization for individual consumption here and there. The process involves identifying types of technologies in use, the operations procedures, the maintenance procedures and compiling them into O&M manual to be published.</i></p> <p><i>This module produces a manual to be used by all water utilities in Tanzania.</i></p>		
Why this module?	<p><i>Utilities need to apply professional operation and maintenance procedures for the durable use of their infrastructure. This calls for documentation in a comprehensive O&M manual.</i></p>		
Who should participate	<p><i>All Utility managers& experienced technical personnel</i></p>		
Which OUTCOMES are required	<p><i>O&M Manual</i></p>		
Participants level	<p><i>Management - professional</i></p>		
Conditions to participate	<p><i>Asset register available</i></p>		
Training language	<p><i>English</i></p>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	<i>5 days</i>	<i>3 days</i>
Sequence	<i>Find date above</i>	<i>2 month later</i>	<i>1 month later</i>
Number of participants	<p><i>30 per course</i></p>		

MODUL <u>D-8</u>	Tentative date		SOPs T9,T13
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WATER QUALITY

Training area: D- TECHNICAL MANAGEMENT

Short summary	<i>The module addresses ways of monitoring quality of drinking water and waste water effluents according to EWURA guidelines. water sampling (sample number, site, frequency, sample handling, preservation). Test methods and water quality reporting. Additional options of water disinfection will be discussed and introduce.</i>		
Why this module?	<i>It is a requirement for water utilities to supply water which is within the national standards</i>		
Who should participate	<i>All Utility managers</i>		
Which OUTCOMES are required	<i>Water quality monitoring schedule for drinking water supply and wastewater effluent discharges developed.</i>		
Participants level	<i>Management - basics</i>		
Conditions to participate	<i>none</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>D-9</u>	Tentative date	cost	SOPs T11
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PUMP TECHNICIAN TRAINING

Training area: D- TECHNICAL MANAGEMENT

TECHNICAL

Short summary	<i>The module addresses matters concerning Pump Operations and Maintenance, knowledge on clear procedures in the organization to deal with operations and maintenance of Water Supply scheme and to adhere to operation manual guidelines.</i>		
Why this module?	<i>Enable participants to do appropriate and timely operation and maintenance of pumps and drives for reducing maintenances costs, sustainability of water supply projects and optimize pump life.</i>		
Who should participate	<i>Engineers, Technicians, Assistant Technicians and Pump Operators of Water Supply projects</i>		
Which OUTCOMES are required	<i>Understanding of pump components and pump mechanics. Prepared pump maintenance schedule for implementation</i>		
Participants level	<i>Certificate -professional</i>		
Conditions to participate			
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>5 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>30 per course</i>		

MODUL <u>D-10</u>	Tentative date	cost	SOPs
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PUBLIC SANITATION SERVICES

Training area: D- TECHNICAL MANAGEMENT

Short summary	<p><i>This module targets an integrated approach to improve public sanitation services. It includes environmental sanitation, importance of sanitation, possible sanitation technologies, enabling environment and integrating solutions into utilities</i></p> <p><i>Regulatory Framework - what is the law in Tanzania and how to use it or adapt it to improve sanitation services in Tanzania will be addressed.</i></p>		
Why this module?	<p><i>Access to Sanitation is one Sustainable Development Goal. Water supply and sanitation authorities need to recognize roles and responsibilities within their legislative environment</i></p>		
Who should participate	<p><i>Wide range of Stakeholder participation: Utility management team, Health officer, Planning officer and respective responsible functions from LGA or RS to enroll an implementation plan</i></p>		
Which OUTCOMES are required	<p><i>Local agreement of responsibilities and Implementation plan and definition of further "CD and training" needs</i></p>		
Participants level	<p><i>Management - basic</i></p>		
Conditions to participate	<p><i>None</i></p>		
Training language	<p><i>English</i></p>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>2 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<p><i>30 per course</i></p>		

MODUL <u>D-11</u>	Tentative date	cost	SOPs
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WASTE WATER TREATMENT & SLUDGE MANAGEMENT

Training area: D- TECHNICAL MANAGEMENT

Short summary	<p><i>This module will focus on different technical solutions waste water treatment, sludge management and public sanitation services. It includes technical and economical aspects and will support the participant in planning and decision making process. In specific included are:</i></p> <ol style="list-style-type: none"> 1. Integrated waste water systems: 2. Fecal Sludge Management <ul style="list-style-type: none"> <i>* Introduction to FSM treatment solutions</i> <i>* Business opportunities for privet service provider</i> 3. Nexus approach <ul style="list-style-type: none"> <i>* Different integrated sanitation solutions and benefits of re-use: effluent, sludge and biogas</i> 4. Financial aspects for decision makers to implement waste water treatment systems 		
Why this module?	<i>Water Supply and Sanitation Authorities are responsible for the treatment of waste water and sludge.</i>		
Who should participate	<i>Technical Manager of Water Utilities, Technical staff of other involved institutions</i>		
Which OUTCOMES are required	<i>Draft scenario for specific utility shared with LGA</i>		
Participants level	<i>Management – professional - Engineers or comparable qualification</i>		
Conditions to participate	<i>Participation in Public Sanitation Services or basic knowledge of components of Sanitation. With application a pre-assessment of the specific situation will support the training</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>2 days</i>	<i>2 days</i>	-
Sequence	<i>Find date above</i>	<i>2 months later</i>	-
Number of participants	<i>30 per course</i>		

MODUL <u>D-11</u>	Tentative date	cost	SOPs
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HYDRAULICS FOR PROBLEM SOLVING

Training area: D- TECHNICAL MANAGEMENT

TECHNICAL

Short summary	<i>Water supply and distribution is physically based on hydraulics, which can be used to understand and improve various aspects of water supply. Basic hydraulics can help to understand service quality, pump / energy efficiency, Non-revenue water and the selection of appropriate equipment among other issues. Out of this sound technical solutions can be identified and implemented.</i>		
Why this module?	<i>The application of basic hydraulic considerations and tools can help to understand various problems of water supply and provide the right solutions to address them</i>		
Who should participate	<i>Technical Managers, Technicians</i>		
Which OUTCOMES are required	<i>Application handbook and tools</i>		
Participants level	<i>Management – professional</i>		
Conditions to participate	<i>Network mapping – good knowledge of hydraulic network</i>		
Training language	<i>English</i>		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	<i>3 days</i>	-	-
Sequence	<i>Find date above</i>	-	-
Number of participants	<i>20 per course</i>		

MODUL <u>D-11</u>	Tentative date	cost	SOPs
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OPERATIONAL ASSISTANCE AND CAPACITY DEVELOPMENT FOR NEW WATER TREATMENT PLANTS IN TANZANIA

Training area: D- TECHNICAL MANAGEMENT

TECHNICAL

Short summary	<p><i>Accompanying Capacity Development (CD) measures and initial operational assistance are the prerequisites for successful commissioning of newly built/rehabilitated water treatment plants. The package comprises of 3 phases:</i></p> <p><i>Start phase: Operational assistance at the WTP CD: WTP processes and optimization strategies</i></p> <p><i>Follow up: Monitoring/accompanying of plant operation (optional)</i></p> <p><i>The measures start after the construction works have been completed and the plant started its operation.</i></p> <p><i>In close collaboration with the staff members at the plant their task is to:</i></p> <ul style="list-style-type: none"> <i>• Perform a baseline assessment of the plant and of operational processes</i> <i>• Structure and implement efficient operation processes</i> 		
Why this module?	Water Supply and Sanitation Authorities are responsible for safe water supply. An optimized treatment can save energy and maintenance costs		
Who should participate	Technical Manager of Water Utilities		
Which OUTCOMES are required	Improved treatment plant operation		
Participants level	Management – professional - Engineers or comparable qualification		
Conditions to participate	Network map and measured production		
Training language	English		
Sessions number	1st Session	2nd Session	3rd Session
Duration of session	3 days	2 days	1 days
Sequence	Find date above	2 month later	1 month later
Number of participants	On site for selected utilities		



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