

**COMMUNITY WATER SUPPLY DIVISION (CWSD)  
MINISTRY OF WATER AND IRRIGATION (MoWI)**

**THE RURAL WATER SUPPLY AND  
SANITATION CAPACITY DEVELOPMENT  
PROJECT  
IN  
THE UNITED REPUBLIC OF TANZANIA**

**FINAL REPORT**

**AUGUST 2010**

**JAPAN INTERNATIONAL COOPERATION AGENCY  
EARTH SYSTEM SCIENCE CO., LTD.**

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**SEPARATE VOLUMES**

**Separate Volume 1**

Training Modular Guide for DWST, RWST and BWO

**Separate Volume 2**

DWST I: Identification of Present Status. For DWST and RWST

**Separate Volume 3**

DWST II: Project Planning. For DWST, Demand Responsive Approach in RWSSP Project

**Separate Volume 4**

DWST III: Project Planning. For DWST and RWST, Water Supply Planning

**Separate Volume 5**

DWST IV: Project Management. For DWST and RWST, Project Management

**Separate Volume 6**

DWST V: Project Management. For DWST and RWST, Sanitation and Hygiene Promotion

**Separate Volume 7**

DWST VI: Strengthening of Support Services. For DWST, Support Services for the Community Based O&M and Hygiene Promotion

**Separate Volume 8**

DWST VII: Strengthening of Support Services. For DWST, Supervision of Service Providers

**Separate Volume 9**

DWST VIII: O&M and Follow-up. For DWST

**Separate Volume 10**

BWO I: Identification of Present Status. For BWO

**Separate Volume 11**

BWO II: Project Planning. For BWO, Roles and Responsibilities of BWO in RWSS Project and Assessment of Water Resource Potential for RWSS

**Separate Volume 12**

BWO III: Project Management. For BWO, Optimization of Utilization of Water Resources for Rural Water Supply and Assessment of Design of Water Supply System

**Separate Volume 13**

BWO VI: Strengthening of Support Services. For BWO

**Separate Volume 14**

BWO V: O&M and Follow-up. For BWO

**Separate Volume 15**

RWST I: Project Planning. For RWST, Formulation of RWSP

**Separate Volume 16**

RWST II: Strengthening of Support Services. For RWST

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RWST III: O&M and Follow-up. For RWST

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## ABBREVIATIONS

AFDB	African Development Bank
AMCOW	African Ministers' Council on Water
AWW	African Water Week
BWO	Basin Water Office
CATA	Contractors Association of Tax Administrators
CBO	Community Based Organization
CBT	Capacity Building & Training Sub-section
CCI	Centre for Community Initiatives
CD	Capacity Development
COTC	Clinical Officer's Training Center
COM	Communication Ownership and Management
CORPS	Community Resources Personnel
COWSO	Community Owned Water Supply Organization
CS	Coast Region
CTLS	Community Total Led Sanitation
CWSD	Community Water Supply Division
DAHR	Division Administration Human Resources
DC	District Commissioner
DCDO	District Community Development Officers
DDCA	Drilling and Dam Construction Agency
DDP	District Development Plans
DED	District Executive Director
DEO	District Education Officers
DFT	District Facilitation Team
DHO	District Health Officers
DIP	District Investment Plans
DOM	District Operation Manual
DP	Development Partner
DPG-W	Development Partner Group – Water
DPLO	District Planning Officers
DRA	Demand Responsive Approach
DRW	Division of Water Resource
DSM	Dar es Salaam
DT	District Treasure
DWE	District Water Engineers
DWEO	District Water Engineer's Offices
DWRS	Division of Rural Water Supply
DWSF	District Water and Sanitation Fund
DWSP	District Water and Sanitation Plan
DWST	District Water and Sanitation Team
EEPCO	Environmental Engineering and Pollution Control Organization
EPWSS	Extensive Piped Water Supply System
ERB	Engineers Registration Board
FMP	Facility and Management Plan
FSP	Facilitation Service Provider
GIS	Geographical Information
GPS	Global Positioning System
GTZ	Gesellschaft für technische Zusammenarbeit. Muzukashii desu ne
HG	Hydrogeologist
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HRD	Human Resources Development
ID&CB	Institutional Development & Capacity Buildings
IET	Institution of Engineers Tanzania
JCC	Joint Coordination Committee

JICA	Japan International Cooperation Agency
JICE	Japan International Cooperation Centre
JOCV	Japan Overseas Cooperation Volunteer
JSM	Joint Supervision Mission
JWSR	Joint Water Sector Review
JWWA	Japan Water Works Association
LFA	Logical Framework Analysis
LGA	Local Government Agency
LGCDG	Local Government Capital Development Grant
LGRP	Local Government Reform Policy
LLGA	Lower Local Government Authority
M&E	Monitoring & Evaluation
MIS	Management Information System
MoEVT	Ministry of Education and Vocational Training
MoHSW	Ministry of Health and Social Welfare
MOU	Memorandum of Understand
MTEF	Medium Term Expenditure Framework
MoWI	Ministry of Water and Irrigation
NAWAPO	National Water Policy
NETWAS	Network for Water and Sanitation
NGO	Non Government Organization
NRWSSP	National Rural Water Supply and Sanitation Programme
NSGRP	National Strategy for Growth and Reduction of Poverty
NWSDS	National Water Sector Development Strategy
O&M	Operation and Maintenance
O&OD	Opportunity and Obstacle for Development
OJT	On the Job Training
PCT	Programme Coordination Team
PCM	Project Cycle Management
PDM	Project Design Matrix
PEVODE	People Voice for Development
PHAST	Participatory Health and Sanitation Transformation
PIM	Programme Implementation Manual
PMO-RALG	Prime Minister's Office - Regional Administration and Local Government
PO	Plan of Operation
POM	Project Operation Manual
RAS	Regional Administrative Secretary
RBM	Result Based Management
RCDO	Regional Community Development Officer
REO	Regional Education Officer
RHO	Regional Health Officer
RMO	Regional Medical Officer
PRA	Participatory Rapid Appraisal
RPO	Regional Planning Officer
RPL	Regional Planning Officer
RS	Regional Secretariat
RUWASA-CAD	Rural Water Supply and Sanitation Capacity Development
RWA	Regional Water Advisor
RWE	Regional Water Engineer
RWEO	Regional Water Engineer's Office
RWSP	Regional Water Supply Plan
RWST	Regional Water Sanitation Team
RWSS	Rural Water Supply and Sanitation
RWSSP	Rural Water Supply and Sanitation Programme
SH	Sanitation and Hygiene
SIWSS	Small-scale Independent Water Supply System
SSHE	School Sanitation and Hygiene Education

ST	Senior Technician
SWOT	Strength Weakness Opportunity and Threat
SWAp	Sector Wide Approach to Planning
TANGO	Tanzania Association of NGO
TASAF	Tanzania Social Action Fund
TAWASANET	Tanzania Water and Sanitation Network
TCBS	Training and Capacity Building Section
TOR	Terms of Reference
TSSM	Total Sanitation and Social Market
TSP	Technician Service Providers
TWG	Thematic Working Group
UCLAS	University Collage of Lands and Architectural Studies
VEO	Village Executive Officer
VWC	Village Water Committee
W&S	Water and Sanitation
WATSAN	Water and Sanitation Committee
WATSANET	Water and Sanitation in Tanzania
WEDECO	Water and Environmental Development Company
WEO	Ward Executive Officer
WEPMO	Water and Environmental Sanitation Projects Maintenance Organization
WR	Wami/Ruvu
WRI	Water Resources Institute
WRD	Water Resources Division
WRMP	Water Resources Management Plan
WRM	Water Resources Management
WSDP	Water Sector Development Programme
WSWG	Water Sector Working Group
WSS	Water Supply and Sanitation
WT	Water Technician
WUEs	Water Users Entities

In this report, project costs are estimated based on the price as of April 2010 with an exchange rate of US\$ 1.00 = Tanzanian Shilling (Tsh) 1,343 = Japanese Yen (¥) 92.7.

## CHAPTER 1 INTRODUCTION

### 1.1 BACKGROUND OF THE PROJECT

The Government of the United Republic of Tanzania (hereinafter referred to as “the Government of Tanzania”), sets the development of rural water supply as direct strategy for the poverty reduction, and makes a political target by revised National Water Policy (2002), and National Strategy for Growth and Reduction of Poverty (2005 - 2010).

According to the Policy, the government target is for “every person should get water within 400 meters distance by 2025”. Furthermore, as a reform of the operation system of the water supply projects, the measures consisting 1) community-owned management of the scheme, 2) participation of private sector organizations for the operation and maintenance of the scheme, 3) integrate water supply into the strategy for national hygiene promotion, 4) strengthening decentralized planning, project implementation and management through local government are promoting. Under the policy, the Ministry of Water and Irrigation (MoWI) has been trying the strengthening of the implementing system of water supply services.

Based on the Policy, the MoWI has finalized preparation of the National Water Sector Development Strategy (NWSDS), for implementing National Water Policy and National Strategy for Growth and Reduction of Poverty (2003). Following preparation of the Strategy, the Ministry has launched a Water Sector Development Programme (WSDP) in February 2007, in order to realize these policy and strategy. The Programme is designed under Sector Wide Approach to Planning (SWAp) to address shortfalls in urban and rural water supply infrastructure, to improve water resource management primarily through upgrading the country’s nine Basin Water Offices (BWOs), and to strengthen the sector institutions and their capacities.

Under the WSDP, the government has started devolving their rights of administrative services for water supply to the district level. The capacity building and training, therefore, is an important component of this new approach. Under such circumstance, the Government of Tanzania requested the Government of Japan to implement the technical cooperation project, in order to strengthen the capacities and system for implementation, operation and maintenance of the rural water supply in the target districts.

In response to the request of the Government of Tanzania for the technical cooperation of the Rural Water Supply and Sanitation Capacity Development (RUWASA-CAD) Project, the Government of Japan decided to conduct the Project in accordance with the Minutes of Meeting and the Record of Discussion agreed upon between MoWI and Ministry of Finance, and Japan International Cooperation Agency (JICA), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan.

The project commenced in September 2007, and scheduled to complete on July 2010. This is the Final Report which discusses all the activities and results of the five (5) project steps of Work in Japan, Work in Tanzania I, II, III and IV.

### 1.2 PURPOSE OF THE PROJECT

The purpose of the Project is to enhance the capacities of the target Districts providing RWSS (Rural Water Supply and Sanitation) services for rural community. In addition, the following goals and outputs are expected by the implementation of the Project.

<Super Goal>

Rural Water Supply and Sanitation (RWSS) services are improved under the Water Sector Development Programme (WSDP) by developing nationwide the training system to be established in the Technical Cooperation.

## Chapter 1 Introduction

### <Overall Goal>

Rural water supply and sanitation (RWSS) services in the target districts are improved.

### <Outputs>

1. Capacity of CWSD (Community Water Supply Division) / MoWI for managing capacity development programme on RWSS is enhanced.
2. A training system model for District Water and Sanitation Teams (DWST) in managing RWSS projects is established.
3. Capacities of the target Basin Water Offices (BWOs) for supporting Districts in managing RWSS projects are enhanced.
4. Capacities of Regional Water and Sanitation Teams (RWSTs) in the target Regions for supporting Districts in managing RWSS projects are enhanced.
5. The project cycle and procedures of the RWSS reviewed through the Project are applied to implementation of Rural Water Supply and Sanitation Programme (RWSSP) in the target districts.

## 1.3 PROJECT AREA

The project includes formulation of the capacity development plan and implementation of training activities for rural water supply and sanitation sector in all Local Government Authorities (LGAs) of Dar es Salaam, Coast, Lindi and Mtwara Regions (See, **Figure 1.1**).

These are 5 districts (Mtwara, Masasi, Newala, Tandahimba and Mtwara) and 1 Town (Mtwara) in Mtwara Region, 5 district (Liwale, Kilwa, Nachingwea, Ruangwa and Lindi) and 1 township (Lindi) in Lindi Region, 6 districts (Bagamoyo, Kisarawe, Mkuranga, Rufiji, Mafia and Kibaha) and 1 township (Kibaha) in Coast Region, and 3 municipalities (Kinondoni, Ilala and Temeke) in Dar es Salaam Region.

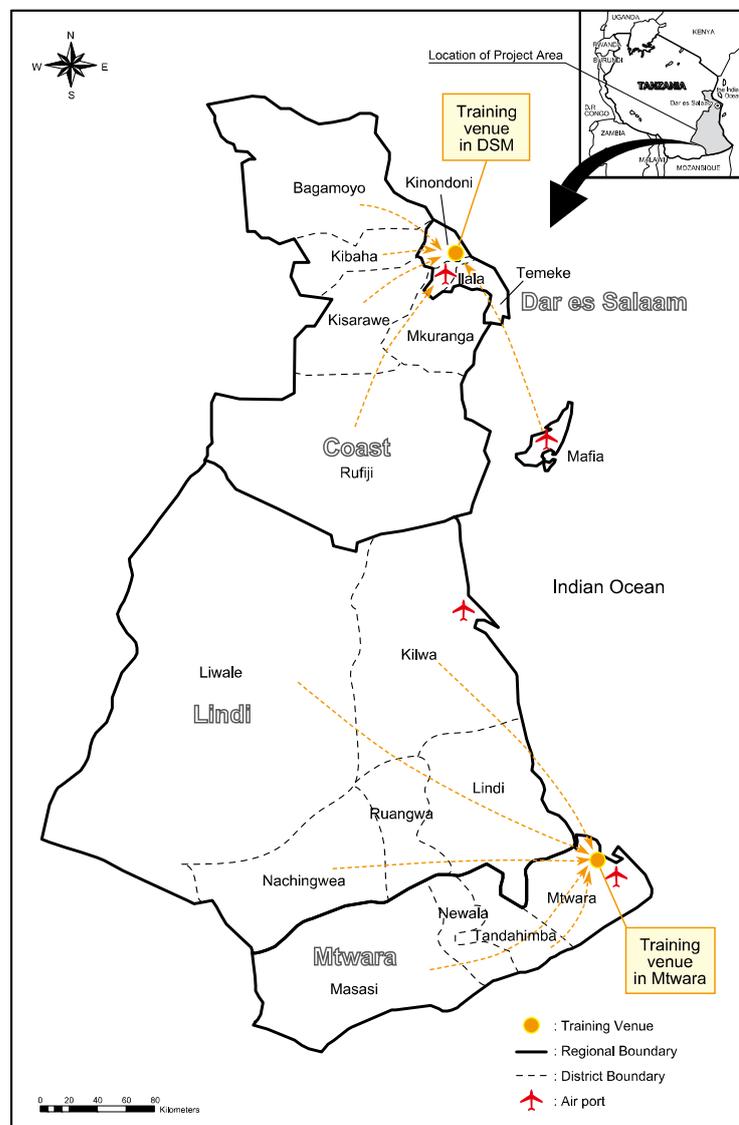


Figure 1.1 Project Area

## **1.4 PERSONS CONCERNED BY THE PROJECT**

### **1.4.1 PROJECT DIRECTOR AND MANAGER**

- Project Director: The Permanent Secretary of Ministry of Water and Irrigation (MoWI)
- Project Manager: Director of the Community Water Supply Division (DCWS), MoWI

### **1.4.2 TANZANIAN SIDE**

#### **(1) Community Water Supply Division (CWSD) of MoWI**

- Assistant Director of Community Management Support Section
- Staff of Community Management Support Section (Capacity Building and Training Sub-section)
- Assistant Director of Operational Planning Section
- Assistant Director of Technical Support Services

#### **(2) Water Resources Division (WRD) of MoWI**

- Director of WRD
- Assistant Director of WRD

#### **(3) Basin Water Offices (BWO)**

- Basin Water Officer of Wami Ruvu Basin Water Office
- Basin Water Officer of Ruvuma Southern Coast Basin Water Office

#### **(4) Regions**

- Regional Water Advisor (RWA) of Dar es Salaam Region
- Regional Water Advisor (RWA) of Coast Region
- Regional Water Advisor (RWA) of Lindi Region
- Regional Water Advisor (RWA) of Mtwara Region

### **1.4.3 JAPANESE EXPERTS**

The JICA Expert Team is composed of the following four (5) members.

Yuichi HATA	Chief Advisor / Community Water Supply Project Management
Hiroyoshi YAMADA	Deputy Chief Advisor / Water Resources management / Water Supply Planning
Mikiko AZUMA	Community Water Supply Facility Planning / Operation & Maintenance
Tomohiro KATO	Community Facilitation / Sanitary Promotion
Jun ONODERA	Training Equipment Planning / Project Coordinator

## 1.5 PROJECT DESIGN MATRIX (PDM)

### 1.5.1 PROVISION OF PDM<sub>0</sub> AND PDM<sub>1</sub>

The first version of PDM, namely PDM<sub>0</sub> was provided, and agreed by Minute of Meeting between Japanese Preparatory Study Team and MoW on 6<sup>th</sup> December 2006. Both side agreed to use the PDM as a tools for monitoring, evaluation and management of the activities of the Project. At the end of Preparatory Phase, PDM<sub>0</sub> and PO<sub>0</sub> (Plan of Operation) were review and discussed based on the results of the baseline survey, and also findings and observation from the 1<sup>st</sup> training phase. The PDM<sub>1</sub> and PO<sub>1</sub> were provided and agreed upon the meeting of JICA's Consultation Mission, MoW and Project Team on 22<sup>nd</sup> February 2008.

PDM<sub>0</sub>/PO<sub>0</sub>/PDM<sub>1</sub>/PO<sub>1</sub> are shown in *Annex 1*.

### 1.5.2 REVIEW OF PDM<sub>1</sub> AND PREPARATION OF PDM<sub>2</sub>

At the end of Work in Tanzania II, review of PDM<sub>1</sub> was carried out. The review of PDM<sub>1</sub> was discussed based on the sector performance report 2008, and also findings and observation from the previous activities. The PDM<sub>2</sub> and PO<sub>2</sub> indicate the direction of the further stage of the project, were provided and agreed upon the meeting of JICA's Mid-Term Evaluation Mission, MoWI and Project Team on 5<sup>th</sup> March 2009. The PDM<sub>2</sub> and PO<sub>2</sub> are shown in *Table 1.1* and *Table 1.2*, respectively. Both planned schedule and actual performance are shown in *Table 1.2* of PO<sub>2</sub>.

Table 1.1 Project Design Matrix (PDM<sub>2</sub>) (1/2)

<b>Project Title :</b>	Rural Water Supply and Sanitation Capacity Development Project (RUWASA-CAD)
<b>Duration of the Project :</b>	September 2007 to July 2010
<b>Project Area:</b>	22 districts in the Regions of Dar es Salaam, Coast, Lindi and Mtwara
<b>Implementing Agency:</b>	Ministry of Water and Irrigation
<b>Target Group:</b>	Staff of Ministry of Water and Irrigation; Division of Community Water Supply, Division of Water Resources, Basin Water Offices of Wami Ruvu and Ruvuma & Southern Coast, Regional Secretariat (RS) in four regions and Local Government Authorities in 22 districts

Version: PDM 2 Prepared on: 2<sup>nd</sup> March 2009

Narrative Summary	Indicators	Means of Verification	Important Assumption
<p><b>【Super Goal】</b></p> <p>1. RWSS services in the mainland are improved under the WSDP by developing nationwide the training system to be established in the Technical Cooperation.</p>	<p>By the year of 2025,</p> <ol style="list-style-type: none"> <li>Coverage rate of improved water supply increases in the rural part of the mainland from 53% (2003) to 90%.</li> <li>Percentage of water supply points working for more than 6 months a year increases from 82% (Dec. 07) to 100% in the rural part of the mainland.</li> <li>People who have access to improved sanitation in the rural area of the mainland increases from 55% (Dec.07) to Y%.</li> </ol>	<ol style="list-style-type: none"> <li>Sector performance report to be submitted to Joint Water Sector Review</li> <li>Sector Performance Report</li> <li>Sector Performance Report</li> </ol>	
<p><b>【Overall Goal】</b></p> <p>1. RWSS services in the target districts are improved.</p>	<p>By the year of 2015,</p> <ol style="list-style-type: none"> <li>Coverage rate of improved water supply increases in the rural part of the target districts from 57.8 % (Dec.07) to 75.6%.</li> <li>Percentage of water supply points working for more than 6 months a year increases from 73.5% (Dec.07) to 100% in the target districts.</li> <li>Number of legally registered Water User Entities (WUEs) increases compared to the present value in each target district.</li> </ol> <p>4 People who have access to improved sanitation in the target districts increases from X% to Y%.</p>	<ol style="list-style-type: none"> <li>Sector Performance Report</li> <li>Sector Performance Report</li> <li>Monitoring records of the districts</li> <li>Sector Performance Report</li> </ol>	<p>The system practiced in the Project is institutionalized in the WSDP framework.</p>
<p><b>【Project Purpose】</b></p> <p>1. Capacities of the target Districts providing RWSS services for rural communities are enhanced.</p>	<p>DWSTs which practices the following actions in implementation of RWSSP reaches to 80% (18 districts) by July 2010.</p> <ol style="list-style-type: none"> <li>To adopt selection procedures of candidate communities for the scoping survey based on the demand-responsive approach in the promotion phase.</li> <li>To examine and make comments to progress reports and other output reports to be submitted by the Technical and Facilitation Service Providers within the period agreed.</li> <li>To update information on water supply and sanitation conditions as well as operation and maintenance of existing water supply facilities in the district every year.</li> <li>To integrate the strategies and activity plans on water supply, sanitation and hygiene promotion for households and schools into DWSP and annual plan.</li> </ol>	<ol style="list-style-type: none"> <li>Records of the districts on appraisal of the community applications</li> <li>Records of the districts on comments made to the reports submitted by the service providers</li> <li>Monitoring records of the districts</li> <li>DWSPs and annual investment plans</li> </ol>	<p>RWSSP is implemented on schedule.</p>
<p><b>【Outputs】</b></p> <ol style="list-style-type: none"> <li>Capacity of CWSD/ MoWI for managing capacity development programme on RWSS is enhanced.</li> <li>A training system model for District Water and Sanitation Teams (DWST) in managing RWSS projects is established.</li> <li>Capacities of the target Basin Water Offices (BWOs) for supporting Districts in managing RWSS projects are enhanced.</li> </ol>	<ol style="list-style-type: none"> <li>1-1. Capacity development strategy for district, region and basin levels in implementation of RWSS projects is formulated within 6 months from the commencement of the Project in coordination with PMO-RALG and other actors.</li> <li>1-2. Annual work plans of TCB Unit are formulated every year.</li> <li>1-3. Activities are conducted by the counterpart personnel in accordance with the action plans attached to the annual work plan.</li> <li>2-1. Training plan is formulated within 9 months from the commencement of the project.</li> <li>2-2. Monitoring plan is formulated within 9 months from the commencement of the project to record and analyse satisfaction, attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training plan.</li> <li>2-3. Revision of training modular guides and development of course materials associated with training modular guides are finalized as the training package by July 2010.</li> <li>3-1. The preliminary hydrogeological maps are distributed to all the target districts by BWO by the second training phase.</li> <li>3-2. The updated hydrogeological data is distributed to all the target districts by BWO annually.</li> </ol>	<ol style="list-style-type: none"> <li>1-1 Project Progress Report</li> <li>1-2 Project Progress Report</li> <li>1-3 Outputs of the activities indicated in the action plans, Project Progress Report</li> <li>2-1. Project Progress Report</li> <li>2-2. Project Progress Report</li> <li>2-3. Training modular guides and course materials finalized</li> <li>3-1 Project Progress Report</li> <li>3-2 Project Progress Report</li> </ol>	<ul style="list-style-type: none"> <li>Trained staff remains in the originally assigned office.</li> <li>RWSSP is implemented on schedule.</li> </ul>

**Table 1.1 Project Design Matrix (PDM<sub>2</sub>) (2/2)**

<p>4. Capacities of Regional Water and Sanitation Teams (RWSTs) in the target Regions for supporting Districts in managing RWSS projects are enhanced.</p>	<p>4-1. RWSPs are formulated in all the target regions by July 2010. 4-2. Quarterly monitoring reports submitted by the districts are reviewed and responded to the districts by RWSTs in all the target regions within one month from receipt of the reports.</p>	<p>4-1. RWSPs formulated on comments made to the monitoring reports submitted by the districts</p>	
<p>5. The project cycle and procedures of the RWSS reviewed through the Project are applied to implementation of RWSSP in the target districts.</p>	<p>5-1. Community subprojects are formulated and designed in all the target districts based on advice and approval by RWST and BWO. 5-2. Proposals on the necessary revision for the existing RWSS project cycle and procedure are provided</p>	<p>5-1. Records of the districts on assessment of preliminary and detail designs of the requested subprojects 5-2. Proposals submitted from the Project Team to MoWI</p>	
<p><b>【Activities】</b> 1-1 Assess capacities and training needs of regional and district personnel in the target areas. 1-2 Examine current practices in capacity building of regional and district personnel. 1-3 Collect information on training resources. 1-4 Draft a capacity development programme for the target areas in line with the institutional framework of the WSDP. 1-5 Based on the capacity development programme of 1-4 above, draft an annual work plan for the programme. 1-6 Compile and improve the existing manuals and guidelines on RWSS services for Regional and District personnel. 1-7 Manage the implementation of the trainings courses including supervision of the training consultants. 1-8 Monitor progress of RWSS projects implemented by the target Districts. 1-9 Review the annual work plan based on the results of 1-6, 1-7 and 1-8 above. 1-10 Disseminate the training modules and materials revised through the Thematic Working Group for Institutional Development and Capacity Building and other channels. 1-11 Make contribution on revision and improvement of the Programme Implementation Manual (PIM) and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities. 2-1 Improve existing training plans for DWSTs in the target districts in managing RWSS projects and supporting communities in O&amp;M and sanitation promotion. 2-2 Develop training curriculum and materials for DWSTs based on 2-1 above. 2-3 Provide training for DWSTs in the target Districts based on 2-1 and 2-2 above. 2-4 Provide mentoring for DWSTs for improvement of their performance in management of RWSS projects through field visit to the districts for monitoring. 2-5 Monitor and evaluate attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training plan for improvement of the training plan. 3-1 Review and compile existing water resource data to be used effectively by the target BWOs. 3-2 Guide the target BWOs on analyzing and processing the water resources data. 3-3 Develop training plans for BWOs of the target Basin for improvement of support services for the local authorities in RWSS projects. 3-4 Provide training for BWOs based on the training plans of 3-3 above. 3-5 Monitor the implementation of support services by BWOs to the target districts. 4-1 Examine practices of the RWSTs of the target Regions pertaining to supporting and monitoring water supply services in the target Districts. 4-2 Examine the intercommunication mechanism between Regions, MoWI, PMO-RALG, BWO and Districts. 4-3 Develop training plans for RWSTs of the target Regions based on the examinations of 4-1 and 4-2 above. 4-4 Provide training for RWSTs of the target Regions based on the training plans of 4-3 above. 4-5 Monitor the implementation of support services by RWSTs to the target districts. 5-1 Review the existing RWSS project cycle and procedures and prepare proposal on the necessary revision. 5-2 Facilitate consensus building among Community Water Supply Division, regional secretariats, BWOs, and local government authorities on application of the revised project cycle and procedures in implementation of RWSSP in the target districts. 5-3 Report the progress of the project periodically to the meetings of Thematic Working Group of Institutional Development and Capacity Building.</p>		<p><b>【Input】</b> 1. The Japanese Side 1) Experts - Chief Advisor / Community Water Supply Project Management - Deputy Chief Advisor / Water Resources Management / Water Supply Planning - Community Water Supply Facility Planning / Operation &amp; Maintenance - Community Facilitation / Sanitary Promotion 2) Equipments - Equipment required for activities - Office equipment 3) Training in Japan 2. The Tanzania Side 1) Counterparts - MoWI - BWO - RAS 2) Offices Spaces - Office space(MoWI) - Spaces for training 3) Budget for operation</p>	<p>Budget for the Project are secured (MoWI, the target regions and districts).  ----- <b>【Pre-condition】</b> • Training and Capacity Building Unit in Division of Rural Water Supply, MoWI is established. • WSDP launches in March 2007 on schedule. • Decentralization policies on rural water supply sector are progressed.</p>
<p><b>【Abbreviations】</b> RWSS: Rural Water Supply and Sanitation, WSDP: Water Sector Development Programme, CWSDP: Community Water Supply Division, MoWI: Ministry of Water and Irrigation, DWST: District Water and Sanitation Team, BWO: Basin Water Office, RWST: Regional Water and Sanitation Team, WUE: Water User Entity, DWSP: District Water and Sanitation Plan, PMO-RALG: Prime Minister's Office – Regional Administration and Local Government, TCB Unit: Training and Capacity Building Unit, RWSP: Regional Water and Sanitation Plan</p>			

Table 1.2 Plan of Operation 2 (PO<sub>2</sub>) (1/3)

Activities of PDM	Component of Activity	2007/2008												2009/2010												2010		
		1st Year				2nd Year				3rd Year				4th Year				4th Year										
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
	Joint Coordinate Committee (JCC) Report	▲							▲																			
	Joint Water Sector Review (JWSR), Annually																											
	Water Sector Working Group (WSWG), Quarterly																											
	Thematic Working Group (TWG), Bi-monthly																											
	JICA Mission																											
	Seminar on Capacity Development Plan																											
	1-1-1 Conduct baseline survey	Planned																										
	1-1-2 Assess the capacity of the officials and training needs of districts and regions	Actual																										
	1-1-3 Conduct endline survey for the evaluation	Planned																										
	1-3-1 Collect information on existing training resources	Actual																										
	1-3-2 Prepare inventory of training resources	Planned																										
	1-4-1 Formulate training concept	Actual																										
	1-4-2 Formulate the framework of training plan in line with training concept formulated in 1-4-1 above	Planned																										
	1-5-1 Prepare an annual work plan	Actual																										
	1-6-1 Collect and analyze the existing manuals and guidelines (Programme implementation manual)	Planned																										
	1-6-2 Revise manuals and guidelines based on the result of analysis of 1-6-1 above	Actual																										
	1-6-3 Update revised manuals and guidelines through implementation of the Project	Planned																										
	1-7 Manage the implementation of the training courses including supervision of the training consultants	Planned																										
	1-8 Monitor progress of RWSS projects implemented by the target District	Actual																										
	1-9 Review the annual work plan based on the results of 1-6, 1-7 and 1-8 above	Planned																										
	1-10 Disseminate the training modules and materials revised through the Project to other stakeholders through the Thematic Working Group for Institutional Development and Capacity Building and other channels	Planned																										
	1-10-1 Disseminate the training modules and materials revised through the sector dialogue	Actual																										
	1-10-2 Publicise activities of the Project through Website of MoW	Planned																										
	1-11 Make contribution on revision and improvement of the Project Implementation Manual (PIM) and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities	Planned																										





## CHAPTER 2 PROJECT CONTENTS AND METHODOLOGY

### 2.1 WORK FLOW OF THE PROJECT

The Project consists of three phases of Preparatory and Training & Monitoring, and Monitoring & Evaluation. It starts in September 2007 and lasts for 35 months. The outline of the Project phases and steps are shown in *Figure 2.1*, and the entire work items and steps of the Project are shown in *Figure 2.2* (Work Flow Chart).

<u>Phase</u>	<u>Step</u>	<u>Activities</u>	<u>Period</u>	<u>Reports</u>
Preparatory	Work in Japan	Preparatory Work in Japan	September 2007 to March 2008	Inception Report
	Work in Tanzania I	Baseline Survey		Progress Report (1)
Training & Monitoring	Work in Tanzania II	Training Phase I	May 2008 to February 2009	Interim Report
		Training Phase II		
	Work in Tanzania III	Training Phase III	May 2009 to February 2010	Progress Report (2)
		Training Phase IV		Progress Report (3)
		Training Phase V		
Monitoring & Evaluation	Work in Tanzania IV	End Line Survey	May 2010 to July 2010	Final Report
		Seminar		

**Figure 2.1 Project Phases and Steps**

### 2.2 CONTENTS AND METHODOLOGY OF THE WORKS

#### 2.2.1 PREPARATORY PHASE (SEPTEMBER 2007 – FEBRUARY 2008)

The preparatory phase was planned to formulate the capacity development plan and work plans of the project. At beginning of the phase, the baseline survey and the assessment of capacity and training needs were carried out. Based on the results of baseline survey, the capacity assessed and the training needs analyzed, the capacity development plan was formulated. The preliminary hydrogeological maps were prepared as the part of training for Basin Water Office (BWO).

The works in Tanzania started upon completion of discussion of the Inception Report on 1<sup>st</sup> JCC (Joint Coordinating Committee) held on 25 September 2007. Minutes of Meeting of 1<sup>st</sup> JCC Meeting is attached as Appendix-1 of this report. The work items carried out as the Preparatory Phase are as follows;

#### < Work in Japan >

- Item [1] Collection and review of existing data
- Item [2] Examination of basic policy, contents and methodology of project
- Item [3] Presentation of Inception Report

#### < Work in Tanzania I >

- Item [4] Discussion about Inception Report
- Item [5] Arrangement of Training Facilities
- Item [6] Assessment of the capacity and training needs of the officials of districts and regions
- Item [7] Selection of the pilot districts for the monitoring purpose
- Item [8] Existing training resources in Tanzania



- Item [9] Examination of training system of the Project
- Item [10] Formulation of Capacity Development Plan and Annual Work Plans
- Item [11] Examination of supporting mechanism of the BWO to the districts
- Item [12] Preparation of the Preliminary Hydrogeological Maps
- Item [13] Review of PDM<sub>0</sub> and preparation of PDM<sub>1</sub> and PO<sub>1</sub>

### **2.2.2 TRAINING AND MONITORING PHASE I (DECEMBER 2007 – MAR 2008)**

The work items carried out as the training and monitoring phase I (December 2007 to March 2008) are as follows;

< Work in Tanzania I >

- Item [14] Training Phase I
- Item [15] Preparation, submission and discussion on the Progress Report 1

### **2.2.3 TRAINING AND MONITORING PHASE II (MAY 2008 – MAR 2009)**

The work items carried out as the Training and Monitoring Phase II (May 2008 to March 2009) are as follows;

< Work in Tanzania II >

- Item [16] Participation in the Sector Dialogue of WSDP
- Item [17] Coordination for application of the Project Cycle and Procedure on RWSS to implementation of DWSP in the Target Districts
- Item [18] Training phase II
- Item [19] First monitoring of pilot districts
- Item [20] Training phase III
- Item [21] Seminar on capacity development plan
- Item [22] Preparation, submission and discussion on the Interim Report

### **2.2.4 TRAINING AND MONITORING PHASE III (MAY 2009 – MAR 2010)**

The work items carried out as the Training and Monitoring Phase II (May 2009 to March 2010) are as follows;

< Work in Tanzania III >

- Item [23] Participation in the sector dialogue of WSDP
- Item [24] Coordination for application of the project cycle and procedures of the RWSS to implementation of DWSP in the target districts
- Item [25] Training phase IV
- Item [26] 3<sup>rd</sup> Monitoring of pilot districts
- Item [27] Review of Capacity Development Plan
- Item [28] Preparation, submission and discussion on the Progress Report 2
- Item [29] Training phase

<Collaboration with Terminal Review Mission>

- Item [30] Preparation, submission and discussion on the Progress Report 3

## 2.2.5 MONITORING AND EVALUATION PHASE

The work items carried out as the Training and Monitoring Phase II (May 2010 to July 2010) are as follows;

- Item [31] Participation in the sector dialogue of WSDP
- Item [32] Coordination for application of the project cycle and procedures of the RWSS to implementation of DWSP in the target districts
- Item [33] Monitoring of the organizations related to rural water supply project and O&M of rural water supply facilities (End line survey)
- Item [34] Seminar on capacity development plan
- Item [35] Preparation, submission and discussion on the Final Report

## 2.3 PROJECT ACTIVITIES

The activities to be taken in order to achieve the each output are summarized in PDM. In addition to the activities described in PDM, the project provided the component of activities in Plan of Operation (PO). The activities and component of activities are shown below and PO<sub>2</sub> is shown in *Table 2.1*.

### 2.3.1 ACTIVITIES FOR OUTPUT 1:

The expected output of the Output 1 is the “Capacity of CWSD (Community Water Supply Division) / MoWI for managing capacity development programme on RWSS is enhanced”. In order to achieve the expected output, following activities are taken in entire Project term.

- 1-1 Assess capacities and training needs of regional and district personnel in the target areas.
  - 1-1-1 Conduct baseline survey
  - 1-1-2 Assess the capacity of the officials and training needs of districts and regions
  - 1-1-3 Conduct baseline survey for the evaluation
- 1-2 Examine current practices in capacity building of regional and district personnel.
- 1-3 Collect information on training resources.
  - 1-3-1 Collect information on existing training resources
  - 1-3-2 Prepare inventory of training resources
- 1-4 Draft a capacity development programme for the target areas in line with the institutional framework of the RWSS sub-programme of the WSDP.
  - 1-4-1 Formulate training concept
  - 1-4-2 Formulate the framework of training plan in line with training concept formulated in 1-4-1 above
- 1-5 Based on the capacity development programme of 1-4 above, draft an annual work plan for the programme.
  - 1-5-1 Prepare the Plan of Operation (PO) as an annual work plan
- 1-6 Compile and improve the existing manuals and guidelines on RWSS services for Regional and District personnel.
  - 1-6-1 Collect and analyze the existing manuals and guidelines (Programme implementation manual)
  - 1-6-2 Revise manuals and guidelines based on the result of analysis of 1-6-1 above
  - 1-6-3 Update revised manuals and guidelines through implementation of the Project

- 1-7 Manage the implementation of the trainings courses including supervision of the training consultants.
- 1-8 Monitor progress of RWSS projects implemented by the target Districts.
- 1-9 Review the annual work plan based on the results of 1-6, 1-7 and 1-8 above.
- 1-10 Disseminate the training modules and materials revised through the Project to other stakeholders through the Thematic Working Group for Institutional Development and Capacity Building and other channels.
  - 1-10-1 Disseminate the training modules and materials revised through the sector dialogue
  - 1-10-2 Publicise activities of the Project through Website of MoW
- 1-11 Make contribution on revision and improvement of the Project Implementation Manual (PIM) and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities

### **2.3.2 ACTIVITIES FOR OUTPUT 2:**

The expected output of the Output 2 is the “A training system model for District Water and Sanitation Teams (DWST) in managing RWSS projects is established”. In order to achieve the expected output, following activities are taken in entire Project term.

- 2-1 Improve existing training programmes for DWSTs in the target districts in managing RWSS projects and supporting communities in O&M and sanitation promotion.
  - 2-1-1 Improve existing training programme for DWSTs in managing RWSS projects and supporting communities in O&M and sanitation promotion
  - 2-1-2 Update improved training programme
- 2-2 Develop training curriculum and materials for DWSTs based on 2-1 above.
  - 2-2-1 Revision of existing Training Module
  - 2-2-2 Provide the Training Materials for the each Training Phase
  - 2-2-3 Update the PIM (Project Implementation Manual) package as necessary
- 2-3 Provide training for DWSTs in the target Districts based on 2-1 and 2-2 above.
  - 2-3-1 Provide training for DWEs, DPLOs, DHOs and DCDOs of the target Districts in water supply planning
  - 2-3-2 Provide training for DWEs, DPLOs, DHOs and DEOs of the target Districts in project management
  - 2-3-3 Provide training for DWEs, DHOs, DCDOs, DEOs and Technicians in the target Districts in construction supervision of facilities
  - 2-3-4 Provide training for DWEs, DPLOs, DHOs and DCDOs in the target Districts in O&M of facilities
- 2-4 Provide mentoring for DWSTs for improvement of their performance in management of RWSS projects through field visit to the districts for monitoring.
- 2-5 Monitor and evaluate attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme for improvement of the training programme.
  - 2-5-1 Prepare contents to be monitored
  - 2-5-2 Monitor and evaluate attainment of skills and knowledge, and behavior change of trainees as well as impact of the training programme

### **2.3.3 ACTIVITIES FOR OUTPUT 3:**

The expected output of the Output 3 is the “Capacities of the target Basin Water Offices (BWOs) for supporting Districts in managing RWSS projects are enhanced”. In order to achieve the expected output, following activities are taken in entire Project term.

- 3-1 Review and compile existing water resource data to be used effectively by the target BWOs.
  - 3-1-1 Review and compile existing water resources information
  - 3-1-2 Conduct inventory survey on existing wells
- 3-2 Guide the target BWOs on analyzing and processing the water resources data.
  - 3-2-1 Training for basic skills of database and GIS
  - 3-2-2 Training for preparation of preliminary hydrogeological map
- 3-3 Develop training programmes for BWOs of the target Basin for improvement of support services for the local authorities in RWSS projects.
- 3-4 Provide training for BWOs based on the training programmes of 3-3 above.
  - 3-4-1 Guide the target BWOs on updating the water resources data regularly
  - 3-4-2 Guide the target BWOs on disseminating water resources data to relevant organizations
  - 3-4-3 Guide the target BWOs on supporting the District personnel to utilize the water resources data for planning RWSS projects
- 3-5 Monitor the implementation of support services by BWOs to the target districts.

### **2.3.4 ACTIVITIES FOR OUTPUT 4:**

The expected output of the Output 4 is the “Capacities of Regional Water and Sanitation Teams (RWSTs) in the target Regions for supporting Districts in managing RWSS projects are enhanced”. In order to achieve the expected output, following activities are taken in entire Project term.

- 4-1 Examine practices of the RWSTs of the target Regions pertaining to supporting and monitoring water supply services in the target Districts.
- 4-2 Examine the intercommunication mechanism between Regions, MOWI, PMO-RALG, BWO and Districts.
- 4-3 Develop training programmes for RWSTs of the target Regions based on the examinations of 4-1 and 4-2 above.
- 4-4 Provide training for RWSTs of the target Regions based on the training programmes of 4-3 above.
  - 4-4-1 Procure the trainer for training for RWST
  - 4-4-2 Provide training for RWST in target Regions in accordance with training programmes
- 4-5 Monitor the implementation of support services by RWSTs to the target districts.

### **2.3.5 ACTIVITIES FOR OUTPUT 5:**

The expected output of the Output 5 is the “The project cycle and procedures of the RWSS reviewed through the Project are applied to implementation of Rural Water Supply and Sanitation Programme (RWSSP) in the target districts”. In order to achieve the expected output, following activities are taken in entire Project term.

- 5-1 Review the existing RWSS project cycle and procedures and prepare proposal on the necessary revision.
  - 5-1-1 Examine the existing RWSS project cycle and procedures

- 5-1-2 Practice and measure the effectiveness of proposed cycle and procedures
- 5-2 Facilitate consensus building among Community Water Supply Division, regional secretariats, BWOs, and local government authorities on application of the revised project cycle and procedures in implementation of RWSSP in the target districts.
- 5-3 Report the progress of the project periodically to the meetings of Thematic Working Group of Institutional Development and Capacity Building.

## 2.4 PROJECT INPUTS

### 2.4.1 INPUTS FROM JAPANESE SIDE

The necessary project inputs from Japanese side planned by the PDM were executed by the Project. These are consisting from dispatch of Japanese Expert and procurement of equipment and training in Japan.

Dispatched Japanese Expert includes 1) Chief Advisor, 2) Deputy Chief Advisor / Water Resources, 3) Water Supply Facilities Planning / Operation and Maintenance, 4) Community Facilitation / Sanitary Promotion and 5) Training Equipment Planning / Project Coordinator. The equipment procured by the Project is consisting office building, office equipment, vehicles and the laptop computers for the counterpart personnel. The counterpart personnel training course in Japan was held during the period from 7th to 25th November 2009.

Moreover, apart from the project inputs planned by PDM, the chief advisor made a presentation of the activities taken by the RUWASA-CAD project on 2<sup>nd</sup> AWW (African Water Week) conference held at Pretoria, RSA, on November 2009.

### 2.4.2 JAPANESE EXPERT

The JICA Experts dispatched for the Project consists following four (5) members. The actual work performance taken by the JICA Experts are shown in *Table 2.1*.

Yuichi HATA	Chief Advisor / Community Water Supply Project Management
Hiroyoshi YAMADA	Deputy Chief Advisor / Water Resources management / Water Supply Planning
Mikiko AZUMA	Community Water Supply Facility Planning / Operation & Maintenance
Tomohiro KATO	Community Facilitation / Sanitary Promotion
Jun ONODERA	Training Equipment Planning / Project Coordinator

### 2.4.3 PROCUREMENT OF EQUIPMENT

The equipment procured by the Project is consisting office building, office equipment, vehicles and the laptop computers for the counterpart personnel. The List of Equipment procured by the Project is shown in *Annex 2* of this report.

### 2.4.4 COUNTERPART TRAINING IN JAPAN

As one of the results of the joint evaluation on RUWASA-CAD project by MoWI and JICA's Mid-Term Review Mission, it is pointed out that the improvement of the counterparts in the Project had not been satisfactory to build their capacity sufficiently. In this project step, as an input from Japanese side, 5 computers were procured in order to accelerate counterpart participation in the Project. Additionally, in this project step, 5 counterpart members were invited training course in Japan, in order to understand the capacity development system for rural water supply sector in Japan. Outline of the training is shown in below.

Table 2.1 Actual Performance Taken by the JICA Expert

Name	Function	Period	MM of the 1st Year (September 2007 - March 2008)	MM of the 2nd Year May 2008 - March 2009)	MM of the 3rd Year (May 2009 - March 2010)	MM of the 4th Year (May 2010 - July 2010)	
Yuichi HATA	Chief Advisor/Community Water Supply Project Management	9/9/2007 - 6/12/2007	4.50				
		26/1/2008 - 15/3/2008					
		4/5/2008 - 17/6/2008					
		1/9/2008 - 14/11/2008	6.33				
		5/1/2009 - 15/3/2009					
		9/5/2009 - 21/7/2009			7.50		
		21/8/2009 - 3/11/2009					
		8/11/2009 - 12/11/2009					
		5/1/2010 - 15/3/2010					
		3/5/2010 - 31/7/2010		5.00			3.00
Hiroyoshi YAMADA	Deputy Chief Advisor/Water Resources Management/Water Supply Planning	18/10/2007 - 15/3/2008					
		24/5/2008 - 7/7/2008					
		20/9/2008 - 3/12/2008		6.00			
		15/1/2009 - 15/3/2009					
		20/9/2009 - 12/12/2009			5.00		
		1/9/2010 - 15/3/2010					
		12/6/2010 - 31/7/2010					1.67
		17/11/2007 - 14/2/1008		3.00			
		1/7/2008 - 8/8/2008					
		10/9/2008 - 14/12/2008			6.50		
Mikiko AZUMA	Community Water Supply Facility Planning/Operation and Maintenance	15/1/2009 - 15/3/2009					
		16/5/2009 - 29/6/2009					
		26/8/2009 - 28/11/2009			7.00		
		5/1/2010 - 15/3/2010					
		14/6/2010 - 28/7/2010					1.50
		9/9/2007 - 21/12/2007		5.00			
		26/1/2008 - 15/3/2008					
		4/5/2008 - 17/7/2008			7.50		
		17/10/2008 - 15/3/2009					
		3/6/2009 - 3/9/2009				7.50	
Jun ONODERA	Training Equipment Planning/ Project Coordinator	4/11/2008 - 15/3/2010				3.00	
		3/5/2010 - 31/7/2010					
		8/9/2007 - 17/11/2007	2.36				
		Total of Each Project Year	19.86	26.33	27.00	9.17	
		Total of Entire Project Term				82.36	

### (1) Outline of the Training

Course Title : Training on the Capacity Development System for Rural Water Supply Sector in Japan

Course Organizer : Japan International Cooperation Agency (JICA)

Course Provider: Japan International Cooperation Center (JICE)

Training Coordinator : Earth System Science (ESS)

Period (Tentative) : 7th to 25th November 2009

Participants: Mr. Goyagoya J Mbenna (CWSD), Ms. Neema Siarra (CWSD), Ms. Kirenga D.A.T (CWSD), Ms. Dianna Kimbute (WRD), Mr. John Daniel (DHRA)

### (2) Contents of the Training

The purpose the training is to enhance the capacities of the counterpart personnel of the Ministry of Water and Irrigation providing the capacity development intervention for the LGAs, Regions and Basin Water Offices by learning capacity development system for the rural water supply sector in Japan. The contents was planned in order to understand the capacity development system for rural water supply sector in Japan. The details of the training is described Section 3.2 of Chapter3..

#### 2.4.5 PRESENTATION OF RUWASA-CAD ACTIVITIES ON 2<sup>ND</sup> AWW

The 2<sup>nd</sup> AWW (African Water Week) conference was held under the auspices of AMCOW (African Ministerial Conference on Water) on a period from from 9<sup>th</sup> to 13<sup>th</sup> November 2009, at Pretoria, Republic of South Africa. Dr. Hata, Chief Advisor of the Project, participated to the meeting, and made presentation of the activities taken and outcome by the Project.

The contents of the presentation are summarized as follow.

1. Background on WSDP (Water Sector Development Programme) in Tanzania
2. Implementation Structure of RWSS (Rural Water Supply and Sanitation) Sub-Component of WSDP
3. Outline of RUWASA-CAD Project
4. Participation and contribution on WSDP sector dialogue by the Project
5. Major activities of RUWASA-CAD Project
6. Supporting structure of WSDP in Tanzania
7. Expected output of the RUWASA-CAD Project

#### 2.4.6 LOCAL PROJECT COST

Regarding local project cost disburse during entire project period, the cost born by Japanese side is shown in **Table 2.2**, while the cost born by Tanzania side is shown in **Table 2.3**. As shown in the tables, the total expenditure of Japan is 135,400,295 Yen (approx. 1,991,180,809 Tsh) , and the total expenditure of Tanzania is 80,693,100 Tsh (approx. 5,567,800 Yen)

Table 2.2 Local Project Cost Born by Japanese Side

Item	1st Year (Japanese Fiscal Year) (achieved:JPY)	2nd Year (Japanese Fiscal Year) (achieved:JPY)	3rd Year (Japanese Fiscal Year) (achieved:JPY)	4th Year (Japanese Fiscal Year) (Planned:JPY)	Total (JPY)	Total (TZS)
1 General expenses	9,029,025	22,504,317	19,498,892	6,584,707	57,616,941	847,307,956
1.1 Labor cost	2,513,852	4,434,022	4,144,366	1,247,043	12,339,283	181,460,044
1.2 Equipment maintenance cost	68,802	169,504	378,682	29,478	646,466	9,506,853
1.3 Consumable cost	884,142	628,496	631,566	322,733	2,466,937	36,278,485
1.4 Transportation & travel cost	2,062,033	9,048,817	3,948,684	4,240,145	19,299,679	283,818,809
1.5 Communications cost	0	102,932	0	278,100	381,032	5,603,412
1.6 Document preparation cost	89,481	178,922	173,243	0	441,646	6,494,794
1.7 Rental cost (office space and venue for seminar)	395,096	356,764	0	467,208	1,219,068	17,927,471
1.8 Local training cost	3,015,619	7,584,860	10,222,351	0	20,822,830	306,218,088
2 Procurement cost (Project equipment)	4,145,363	0	700,000	0	4,845,363	71,255,538
3 Procurement cost (Vehicles)	7,797,560	0	0	0	7,797,560	114,670,000
4 Report preparation cost (Printing&binding)	70,000	0	0	3,835,000	3,905,000	57,426,471
5 Report preparation cost (Other than printing&binding)	11,000	0	0	1,523,000	1,534,000	22,558,824
6 Contract with local consultants	12,686,000	16,092,004	19,350,000	7,729,000	55,857,004	821,426,529
7 Contract with local NGOs	0	0	0	0	0	0
8 Construction cost	3,844,427	0	0	0	3,844,427	56,535,691
Total (tax exclusive)	37,583,375	38,596,321	39,548,892	19,671,707	135,400,295	1,991,180,809

**Table 2.3 Local Project Cost Born by Tanzanian Side**

						(Tsh)
	Cost Item	1st Fiscal Year of the Project (Sep 07 - Mar 08)	2nd Fiscal Year of the Project (May 08 - Mar. 09)	3rd Fiscal Year of the Project (May 09 - Mar 10)	4th Fiscal Year of the Project (May 10 - Jul 10)	Total Amount
1	Cost for Training					
1.1	1st Training Phase (Feb. 2008)					
	Allowance of the Counterpart	780,000				780,000
1.2	2nd Training Phase (Jun.-Jul. 2008)					
	Allowance of the Counterpart		1,170,000			1,170,000
1.3	3rd Training Phase (Nov. 2008)					
	Allowance of the Counterpart		1,290,000			1,290,000
1.4	4th Training Phase (Jul.-Sep. 2009)					
	Allowance of the Counterpart			3,520,000		3,520,000
1.5	5th Training Phase (Dec. 2009 - Jan. 2010)					
	Allowance of the Counterpart			1,360,000		1,360,000
	<b>Sut-Total</b>	<b>780,000</b>	<b>2,460,000</b>	<b>4,880,000</b>		<b>8,120,000</b>
2	Cost for Monitoring Survey					
2.1	1st Monitoring Visit (Sep.-Oct. 2008)					
	Allowance of the Counterpart		595,000			595,000
2.2	2nd Moitoring Visit (Jan. 2009)					
	Allowance of the Counterpart		690,000			690,000
2.3	3rd Monitoring Visit (Oct. 2009)					
	Allowance of the Counterpart			440,000		440,000
2.4	End Line Survey					
	Allowance of the Counterpart				480,000	480,000
	<b>Sut-Total</b>	<b>0</b>	<b>1,285,000</b>	<b>440,000</b>	<b>480,000</b>	<b>2,205,000</b>
3	Cost to Organize JCC Meetings					
3.1	1st JCC Meeting (Sep. 2007)					
	Allowance of the Counterpart (RWA, BW)	1,038,000				1,038,000
3.2	2nd JCC Meeting (Mar. 2008)					
	Allowance of the Counterpart (RWA, BW)	1,464,500				1,464,500
3.3	3rd JCC Meeting (Oct. 2008)					
	Allowance of the Counterpart (RWA, BWO)		661,000			661,000
3.4	4th JCC Meeting (Mar. 2009)					
	Allowance of the Counterpart (RWA, BWO)		1,050,000			1,050,000
3.5	5th JCC Meeting (Mar. 2010) *1					
	Allowance of the Counterpart (RWA, BWO)			1,890,000		1,890,000
3.6	6th JCC Meeting (Mar. 2010) *1					
	Allowance of the Counterpart (RWA, BWO)				1,280,000	1,280,000
	<b>Sut-Total</b>	<b>2,502,500</b>	<b>1,711,000</b>	<b>1,890,000</b>	<b>1,280,000</b>	<b>7,383,500</b>
4	Costs to Organize RUWASA-CAD Seminar					
4.1	1st Seminar: Allowance of the Counterpart		120,000			120,000
4.2	1st Seminar: Allowance of the participants		13,136,000			13,136,000
4.3	1st Seminar: Transport of the participants		17,006,000			17,006,000
4.4	2nd Seminar: Allowance of the Counterpart				600,000	600,000
4.5	2nd Seminar: Allowance of the participants				0	0
4.6	2nd Seminar: Transport of the participants				26,528,200	26,528,200
	<b>Sut-Total</b>	<b>0</b>	<b>30,262,000</b>	<b>0</b>	<b>27,128,200</b>	<b>57,390,200</b>
5	Electricity, Telephone, Water for the Office					
5.1	Electricity	1,499,400	2,142,000	938,000	235,000	4,814,400
5.2	Telephone	0	0	0	0	0
5.3	Water	210,000	300,000	216,000	54,000	780,000
	<b>Sub-Total</b>	<b>1,709,400</b>	<b>2,442,000</b>	<b>1,154,000</b>	<b>289,000</b>	<b>5,594,400</b>
6	Others					
	<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total</b>	<b>4,991,900</b>	<b>38,160,000</b>	<b>8,364,000</b>	<b>29,177,200</b>	<b>80,693,100</b>

### 2.4.7 PARTICIPATION OF COUNTERPART PERSONNEL

On September 2007, the Project was started by the Japanese Experts with two Tanzanian counterpart personnel. The MoWI increased the number of counterpart personnel, responding to the request from the Project. The increased counterpart personnel are including the staff from other division such as WRD (Water Resources Division) and DAHR (Division of Administration and Human Resources). Consequently, since June 2008, although some of staffs are transferred, constantly four or five counterpart personnel have been participating to the Project. As shown in **Table 2.4**, at the termination phase of the project, four counterpart personnel of Ms. Kirenga D.A.T and Ms. Neema Siarra from CWSD, Ms. Diana Kimbute from WRD, Ms. Flora W. Mlege from DAHR are remained as the project counterpart personnel. Among those personnel, Ms. Kirenga D.A.T has been participating to the Project through the entire project period.

**Table 2.4 Transition of Counterpart Personnel of the Project**

Division	Name	Accession	Present Status
CWSD	Ms. Kirenga D.A.T	Sep. 2007	RUWASA-CAD Project Member
	Mr. Goyagoya J. M.	Sep. 2007	Technical Support Section (Sep. 2009)
	Ms. Neema Siarra	Jun. 2008	RUWASA-CAD Project Member
WRD	Mr. F. Masanja	Nov. 2007	Demise (Dec. 2007)
	Mr. O. Rumambo	Dec. 2007	Demise (Sep. 2008)
	Mr. Diana Kimbute	Mar. 2009	RUWASA-CAD Project Member
DHAR	Mr. Jhon Danirl	Jun. 2008	PCT (Jan. 2010)
	Ms. Flora W. Mlege	Feb. 2010	RUWASA-CAD Project Member

### 2.4.8 SEMINARS AND JCC MEETINGS

Through entire project terms, six times JCC (Joint Coordination Committee) meetings and two times seminar were held. The outline of these meetings and seminars are summarised as below. The agreed Minutes of Meeting of JCC meetings and the Agendas and List of Participants of the seminar are shown in **Annex-3** of this report.

#### (1) 1<sup>st</sup> JCC Meeting

Date:	25 <sup>th</sup> September 2007
Chairman:	Mr. C. N. Sayi (Deputy Permanent Secretary of MoWI)
Participants:	<p>【Tanzania Side】 MoWI, Coast Region, Mtwara Region, Wami &amp; Ruvu BWO, Ruvuma &amp; Southern Coast BWO; Total 14 participants</p> <p>【Japanese Side】 JICA Tanzania Office, Expert Team; Total 6 participants</p>
Major Issue:	Inception Report of RUWASA-CAD Project
Contents of Discussions:	<ul style="list-style-type: none"> <li>• Presentation of Inception Report by Japanese expert team</li> <li>• How the project would link with Thematic Working Group (TWG) of the water sector dialogue and coordination mechanism</li> <li>• Details of the contents and target group of the trainings planned by the Project</li> <li>• The function of PDM, and the necessity of PDM revision according to the need</li> </ul>

Agreed Matter:	<ul style="list-style-type: none"> <li>• The contents of Inception Report</li> <li>• Importance of this project ownership and responsibility of the Tanzanian side</li> </ul>
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**(2) 2<sup>nd</sup> JCC Meeting**

Date:	11 <sup>th</sup> March 2008
Chairman:	Mr. C. N. Sayi (Deputy Permanent Secretary of MoWI)
Participants:	<p>【Tanzania Side】 MoWI, Coast Region, Mtwara Region, Lindi Region, Dar es Salaam Region, PMO-RALG, Wami &amp; Ruvu BWO, Ruvuma &amp; Southern Coast BWO; Total 16 participants</p> <p>【Japanese Side】 JICA Tanzania Office, Expert Team; Total 4 participants</p>
Major Issue:	Progress Report (1) of RUWASA-CAD Project
Contents of Discussions:	<ul style="list-style-type: none"> <li>• The definitions of the terminologies related to the capacity development planning utilizing by PDM</li> <li>• The contents of the activities related to Output 1 for the capacity development for CWSD of MoWI</li> <li>• The details of training contents and trainee</li> <li>• Regarding the way to monitor and maintain the project sustainability</li> </ul>
Agreed Matter:	The contents of Progress Report (1)

**(3) 3<sup>rd</sup> JCC Meeting**

Date:	27 <sup>th</sup> October 2008
Chairman:	Mr. F. Fimbo (MoWI, Director of Division of Human Resources and Administration)
Participants:	<p>【Tanzania Side】 MoWI, Lindi Region, Dar es Salaam Region, PMO-RALG, Wami &amp; Ruvu BWO; Total 10 participants</p> <p>【Japanese Side】 JICA Tanzania Office, Expert Team; Total 5 participants</p>
Major Issue:	Progress of the project activities of first half of project step of Work in Tanzania II
Contents of Discussions:	<ul style="list-style-type: none"> <li>• Necessity of revision and update of PDM</li> <li>• Issue about transfer of trained personnel</li> <li>• The details of training contents and trainee.</li> <li>• Regarding the method of project monitoring and evaluation</li> </ul>
Agreed Matter:	Progress of the project

**(4) 4<sup>th</sup> JCC Meeting**

Date:	6 <sup>th</sup> March 2009
Chairman:	Mr. C. N. Sayi (Deputy Permanent Secretary of MoWI)
Participants:	【Tanzania Side】 MoWI, Coast Region, Lindi Region, Dar es Salaam Region, PMO-RALG, Wami & Ruvu BWO; Total 11 participants

	【Japanese Side】 JICA Tanzania Office, Mid Term Evaluation Mission, Expert Team; Total 8 participants
Major Issue:	Progress of the project activities of first half of project step of Work in Tanzania II
Contents of Discussions:	<ul style="list-style-type: none"> <li>• Presentation of Interim Report by project team</li> <li>• Proposal of revision and update of PDM<sub>1</sub> to PDM<sub>2</sub></li> <li>• Result of joint evaluation by Mid-Term Evaluation Team</li> </ul>
Agreed Matter:	<ul style="list-style-type: none"> <li>• The contents of Interim Report</li> <li>• Revision and update of PDM<sub>1</sub> to PDM<sub>2</sub></li> <li>• The contents of mid-term evaluation</li> <li>• Necessity of the improvement of counterpart participation to the Project</li> </ul>

**(5) 5<sup>th</sup> JCC Meeting**

Date:	4 <sup>th</sup> March 2010
Chairman:	Mr. J. Kakunda (MoWI Head of PCT)
Participants:	<p>【Tanzania Side】 MoWI, Mtwara Region, Lindi Region, Dar es Salaam Region, PMO-RALG, Wami &amp; Ruvu BWO; Total 13 participants</p> <p>【Japanese Side】 JICA Tanzania Office, Terminal Evaluation Team, Expert Team; Total 10 participants</p>
Major Issue:	Progress of the 3 <sup>rd</sup> Phase of the Project
Contents of Discussions:	<ul style="list-style-type: none"> <li>• Presentation of the Progress Report (3) by project team.</li> <li>• Result of joint evaluation by Terminal Evaluation Team</li> </ul>
Agreed Matter:	<ul style="list-style-type: none"> <li>• The contents of Progress Report (3)</li> <li>• The training modular guide provided by the Project would be utilized future capacity development component of the Programme.</li> <li>• The contents of terminal evaluation report</li> <li>• MoWI to take initiative of full utilization of the outputs of the Project</li> </ul>

**(6) 6<sup>th</sup> JCC Meeting**

Date:	22 <sup>nd</sup> July 2010
Chairman:	Mr. John Mukumwa (Director CWSD MoWI)
Participants:	<p>【Tanzania Side】 MoWI, Mtwara Region, Lindi Region, Dar es Salaam Region, Coast Region, PMO-RALG, Wami &amp; Ruvu BWO Ruvuma &amp; Southern Coast BWO, DDCA; Total 14 participants</p> <p>【Japanese Side】 JICA Tanzania Office, Expert Team; Total 6 participants</p>
Major Issue:	Contents of Final Report
Contents of Discussions:	Presentation of the contents of Final Report by project team.

Agreed Matter:	<ul style="list-style-type: none"> <li>• The contents of Final Report</li> <li>• MoWI to take initiative of sustainability of the outputs of the Project</li> </ul>
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**(7) 1<sup>st</sup> RUWASA-CAD Seminar**

Date:	12 <sup>th</sup> February 2009
Chairman:	Mr. J. Mukumwa (MoWI, Director of CWSD) Ms. Kwiluhya (PMO-RALG, Director of Sector Coordination)
Participants:	LGAs, RS, BWOs, PMO-RALG, MoEVT (Ministry of Education and Vocational Training), MoHSW (Ministry of Health and Social Welfare) , MoWI, GTZ, AfDB, JICA; Total 81 participants
Adgenda:	<ol style="list-style-type: none"> <li>1. Welcome Note (Mr. J. Mukumwa, MoWI Director CWSD)</li> <li>2. Statement from JICA (Mr. T. Yamamoto, JICA Tanzania Office)</li> <li>3. Opening Address (Mr. W. Mkama, Permanent Secretary MoWI)</li> <li>4. Introduction and Outline of RUWASA-CADproject (Dr. Y. Hata, Chief Advisor of the Project)  Session 1: RUWASA-CAD Training Plan (Ms. N. Siarra, Project Team) Session 2: Proposed RWSSP Project Cycle and Procedure (Mr. J. Goyagoya, Project Team) Session 3: Progress of RUWASA-CAD Training (Mr. J. Goyagoya, Project Team)</li> <li>5. Plan of Following Project Activities (Ms. J. Praxeda, Wami &amp; Ruvu BWO)</li> <li>6. Open Discussion (All)</li> <li>7. Closing Address (Ms. Kwiluhya, PMO-RALG, Director of Sector Coordination)</li> </ol>
Major Contents of Discussions:	<ul style="list-style-type: none"> <li>• Roles and responsibilities of each institutions which form the basis of the training plan, base on the results actor analysis of the Project</li> <li>• Coordination between the institutions at the occasion of project implementation</li> <li>• Expectation of the target trainee</li> <li>• Monitoring method of the Project output</li> </ul>
Results of the Seminar	Most of the participants are the target trainee that is member of DWST, RWST and BWO. In this first seminar, the project team presented the background to formulate the training plan. Therefore, the seminar contribute to create the awareness of stakeholder regarding RUWASA-CAD training plan.

**(8) 2<sup>nd</sup> RUWASA-CAD Seminar**

Date:	15 <sup>th</sup> July 2010
Chairman:	Mr. A Mafuru (MoWI, Assistant Director of CWSD) Ms. A. Mtani (PMO-RALG, Principal Officer, Local Government)

Participants:	LGAs, RS, BWOs, PMO-RALG, MoEVT (Ministry of Education and Vocational Training), MoHSW (Ministry of Health and Social Welfare) , MoWI, SNV, UNICEF, TAMISEMI, JICA; Total 105 participants
Agenda:	<ol style="list-style-type: none"> <li>1. Welcome Note (Mr. A Mafuru MoWI, Assistant Director of CWSD)</li> <li>2. Statement from JICA (Mr. Y. Katsuta, Chief Representative JICA Tanzania Office)</li> <li>3. Opening Address (Mr. J. Mukumwa, MoWI, Director CWSD)</li> <li>4. Introduction and Outline of RUWASA-CADproject (Dr. Y. Hata, Chief Advisor of the Project)</li> </ol> <p>Session 1: RUWASA-CAD Training System (Ms. N. Siarra, Project Team)</p> <p>Session 2: Results of Pilot Trainings from 2008 to 2010 (Ms. D. Kimbute, Project Team)</p> <p>Session 3: Proposal on RUWASA-CAD Training Modular Guide (Ms. Kirenga D.A.T, Project Team)</p> <ol style="list-style-type: none"> <li>6. Open Discussion (All)</li> <li>7. Closing Address (A. Mtani, PMO-RALG, Principal Officer, Local Government)</li> </ol>
Major Contents of Discussions:	<ul style="list-style-type: none"> <li>• Opinion and/or request on the contents of training and target trainee</li> <li>• Interest on the achievement of the RUWASA-CAD activities</li> <li>• Interest on Training Modular Guide</li> <li>• Opinion, interest and request on expansion of RUWASA-CAD activities in other area</li> </ul>
Results of the Seminar	The seminar have succeeded to create deep understand of the stakeholder regarding project activities through 3 years project period. The participant expressed their interest and request on expansion of RUWASA-CAD training to the nationwide. The participants also expressed their interest o use of proposed Training Modular Guide.

## CHAPTER 3 OUTPUT 1: ENHANCEMENT OF CWSD'S CAPACITY

### 3.1 ACTIVITIES CARRIED OUT FOR OUTPUT 1

The expected output of [Output 1] is "Capacity of CWSD (Community Water Supply Division) / MoWI for managing capacity development programme on RWSS is enhanced".

#### 3.1.1 WORK IN TANZANIA I (SEPTEMBER 2007 TO MARCH 2008)

The activities taken in this term are mainly the preparatory works in order to implement the training phase. The capacities and training needs of the target regions and districts are assessed based on the results of Baseline survey. The current capacity building practice and the existing training resources were examined through the activities of the preparatory phase. Based on the assessment and examination, capacity development plan and programme were formulated. Likewise, the existing training materials and guidelines were compiled and improved. The activities taken by this term for the Output 1 is summarized in *Figure 3.1*.

Activities Carried Out	Year	2007				2008		
		Sep	Oct	Nov	Dec	Jan	Feb	Mar
1-1 Assess capacities and training needs of regional and district personnel in the target areas	Month		██████████	██████████	██████████			
1-2 Examine current practices in capacity building of regional and district personnel.				██████████	██████████			
1-3 Collect information on training resources			██████████	██████████	██████████			
1-4 Draft a capacity development programme for the target areas in line with the institutional framework of the RWSS sub-programme of the WSDP				██████████	██████████	██████████		
1-5 Based on the capacity development programme of 1-4 above, draft an annual work plan for the programme.						██████████	██████████	
1-6 Compile and improve the existing manuals and guidelines on RWSS services for Regional and District personnel.			██████████	██████████	██████████	██████████	██████████	
1-7 Monitor progress of RWSS projects implemented by the target Districts.		(to be carried out in Next Phase)						
1-8 Review the annual work plan based on the results of 1-6 and 1-7 above.		(to be carried out in Next Phase)						
1-9 Disseminate the training modules and materials revised through the Project to other stakeholders through the Thematic Working Group for Institutional Development and Capacity Building and other channels.						██████████	██████████	
1-10 Make contribution on revision and improvement of the PIM and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities						██████████	██████████	

**Figure 3.1 Activities Carried Out for Output 1 during the Work in Tanzania I**

#### 3.1.2 WORK IN TANZANIA II (MAY 2008 TO MARCH 2009)

During the term of Work in Tanzania II, the training phases of II and III were carried out for the DWSTs, RWSTs and BWOs. After each training phase, monitoring of pilot districts and regions were carried out. Additionally, through the terms of project activity, report on project activities carried out and the output achieved was made by participating the sector dialogue meetings of the WSDP such as DPG-W (Development Partner Group, Water), TWG (Thematic Working Group) WSWG (Water Sector Working Group) and JWSR (Joint Water Sector Review). For the TWG, the RUWASA-CAD project member is acting as the member of Institutional Development and Capacity Building (ID&CB) TWG. Through the activities of ID&CB TWG, the project has contributed various task related to the activities of IS&CB under the WSDP.

The project cycle and procedures of the RWSS revised by the RUWASA-CAD project were proposed to PCT (Project Coordination Team) and CWSD of the MoWI.

The activities taken by this term for the Output 1 is summarized in *Figure 3.2*.

As explained foregoing section, activities item from 1-1 to 1-4 were completed by the project step of Work in Tanzania I. In this term, therefore, the activities of compilation and improvement of existing manuals and guideline, monitoring of the progress of RWSS project, dissemination of

Chapter 3 Output 1: Enhancement of CWSD's Capacity

training module and materials and revision and improvement of the PIM and related guides in RWSS projects were carried out through the project term. The revision of the annual work plan was made on February 2009.

Activities Carried Out	Year	2008										2009		
		Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1-1 Assess capacities and training needs of regional and district personnel in the target areas		(as the baseline survey, completed in last term)												
1-2 Examine current practices in capacity building of regional and district personnel.		(completed in project step 1)												
1-3 Collect information on training resources		(completed in project step 1)												
1-4 Draft a capacity development programme for the target areas in line with the institutional framework of the RWSS sub-programme of the WSDP		(completed in project step 1)												
1-5 Based on the capacity development programme of 1-4 above, draft an annual work plan for the programme.		■												
1-6 Compile and improve the existing manuals and guidelines on RWSS services for Regional and District personnel.		■												
1-7 Monitor progress of RWSS projects implemented by the target Districts.		■												
1-8 Review the annual work plan based on the results of 1-6 and 1-7 above.											■			
1-9 Disseminate the training modules and materials revised through the Project to other stakeholders through the Thematic Working Group for Institutional Development and Capacity Building and other channels.		■												
1-10 Make contribution on revision and improvement of the PIM and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities		■												

Figure 3.2 Activities Carried Out for Output 1 during the Work in Tanzania II

3.1.3 WORK IN TANZANIA III (MAY 2009 TO MARCH 2010)

The main activities taken in the term of Work in Tanzania III are implementation of training phase-4 and 5, monitoring visit for pilot districts and review of capacity development plan. Through the activities in this term, the project team member participated WSDP sector dialogue meetings of DPG-W meeting, ID&CB TWG meeting, WSWG meeting and JWSR meeting. Through the participation of the meetings, the project team member have reported the activities and outputs of the Project, and playing a role of the each meeting. The activities carried out in this term for output 1 is shown in *Figure 3.3*.

Activities Carried Out	Year	2009										2010		
		Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1-1 Assess capacities and training needs of regional and district personnel in the target areas		(as the baseline survey, completed in last term)												
1-2 Examine current practices in capacity building of regional and district personnel.		(completed in project step 1)												
1-3 Collect information on training resources		(completed in project step 1)												
1-4 Draft a capacity development programme for the target areas in line with the institutional framework of the RWSS sub-programme of the WSDP		(completed in project step 1)												
1-5 Based on the capacity development programme of 1-4 above, draft an annual work plan for the programme.		■												
1-6 Compile and improve the existing manuals and guidelines on RWSS services for Regional and District personnel.		■												
1-7 Manage the implementation of the training courses including supervision of the training consultants.				■	■	■				■	■			
1-8 Monitor progress of RWSS projects implemented by the target Districts.		■												

Activities Carried Out	Year	2009										2010		
		Month												
Activities	Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
1-9 Review the annual work plan based on the results of 1-6 and 1-7 above.			■											
1-10 Disseminate the training modules and materials revised through the Project to other stakeholders through the Thematic Working Group for Institutional Development and Capacity Building and other channels.		■												
1-11 Make contribution on revision and improvement of the PIM and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities		■												

**Figure 3.3 Activities Carried Out for Output 1 during Work in Tanzania III**

### 3.1.4 WORK IN TANZANIA IV (MAY 2010 TO JULY 2010)

The Work in Tanzania IV is the final step of the Project. Following the training phase, end line survey and seminar was conducted during the term of May to July 2010. The activities carried out in this term for output 1 is shown in *Figure 3.4*.

Activities Carried Out	Year	2010			
		Month			
Activities	Month	May	Jun	Jul	Aug
1-1 Assess capacities and training needs of regional and district personnel in the target areas		■			
1-2 Examine current practices in capacity building of regional and district personnel.		(completed in project step 1)			
1-3 Collect information on training resources		(completed in project step 1)			
1-4 Draft a capacity development programme for the target areas in line with the institutional framework of the RWSS sub-programme of the WSDP		(completed in project step 1)			
1-5 Based on the capacity development programme of 1-4 above, draft an annual work plan for the programme.		■			
1-6 Compile and improve the existing manuals and guidelines on RWSS services for Regional and District personnel.		(completed in project step 3)			
1-7 Manage the implementation of the training courses including supervision of the training consultants.		(completed in project step 3)			
1-8 Monitor progress of RWSS projects implemented by the target Districts.		■			
1-9 Review the annual work plan based on the results of 1-6 and 1-7 above.		(completed in project step 3)			
1-10 Disseminate the training modules and materials revised through the Project to other stakeholders through the Thematic Working Group for Institutional Development and Capacity Building and other channels.		■			
1-11 Make contribution on revision and improvement of the PIM and related guides in RWSS projects based on findings from monitoring and evaluation of application of these documents in the project activities		■			

**Figure 3.4 Activities Carried Out for Output 1 during Work in Tanzania IV**

## 3.2 ENHANCEMENT OF CAPACITY OF CWSD / MoWI

### 3.2.1 REQUIRED CAPACITY OF THE CWSD FOR MANAGING CAPACITY DEVELOPMENT PROGRAMME ON RWSSP

Upon launching the WSDP, in 2007, the Training and Capacity Building Unit (TCB Unit) was established within the Community Water Supply Division (CWSD) of MoWI, in order to manage the capacity development programme for the actors on implementation of Rural Water Supply and Sanitation Programme (RWSSP). TCB Unit was started their activities by two officials. In September 2009, under the organizational reform of CWSD of MoWI, the unit was changed as CBT Sub section (CBT: Capacity Building & Training sub section) with four official.

The capacity to be enhanced for the CBT sub section of CWSD by the Project is the capacity of managing capacity development programme for the DWST, RWST and BWO on implementation of

RWSSP. In the preparatory phase of the Project, based on the analysis on roles and responsibilities of the actors and the review of the existing training system and plan of CWSD, following required capacities of the CBT sub section of the CWSD were identified.

**(1) Planning Stage**

- Setting clear goals of each training session by specifying behavioural objectives
- Making consensus with the training consultants on the facilitation process and methods based on the training guide

**(2) Implementation Stage**

- Utilisation of resource persons from various organisations such as MoWI, PMO-RALG, MoHSW, and private sector
- Supervision of the training consultants through checking training guide, timetable, staffing plan, training materials
- Evaluating skills of the trainees/facilitators
- Reviewing the training reports submitted
- Modification and adjustment of the training guide based on the direct observation of the implementation process of the trainings

**(3) Monitoring & Evaluation Stage**

- Integrating M&E plan in the training
- Utilisation of the training results and evaluation by trainees, training consultants and organizer for verification of effectiveness of the proposed training model as well as for improvement of the following training phase

**3.2.2 IMPLEMENTATION OF THE CAPACITY DEVELOPMENT TO THE CBT / CWSD**

**(1) On the Job Training Through Project Activities**

The capacity development to the CBT sub section/CWSD was carried out as the on the job training by formulating the training plan, managing implementation of the training and M&E of the training for DWST, RWST and BWO.

In the preparatory phase of the Project, through following OJT activities to the CWSD, RUWASA-CAD capacity development programme and training plan were formulated. The following section describes the details of the OJT activities as the Planning Stage of the capacity development programme on RWSSP.

- 1) Baseline Survey
- 2) Inventory of Training Resources
- 3) Formulation of Training Plan
- 4) Revision of Existing Manual

In the training and monitoring phase of the Project, through the following OJT activities to the CWSD, a series of training for DWST, BWO and RWST.

- 5) Implementation of Training Phase 1
- 6) Implementation of Training Phase 2
- 7) 1<sup>st</sup> Monitoring of Pilot Districts
- 8) Implementation of Training Phase 3

- 9) 2<sup>nd</sup> Monitoring of Pilot Districts
- 10) Implementation of Training Phase 4
- 11) 3<sup>rd</sup> Monitoring of Pilot Districts
- 12) Implementation of Training Phase 5
- 13) End line survey

The contents of the OJT activities of above item 5 to 13 are shown in Chapter 4 for DWST, Chapter 5 for BWO and Chapter 6 for RWST.

## **(2) Support on Formulation of CD Plan of the CWSD**

As one of the agreed undertakings of JWSR for 2009/10, it is strongly required that all divisions and agencies of MoWI should have their own CD plans. The Project has been supporting its counterpart organization of CWSD to formulate their CD plan by providing comments and suggestions, and even workshops for understanding of CD Framework and Guideline and identification of problems and solutions.

The early December 2009, the Project received the final draft of CD plan for CWSD. Contents and logical structure of this CD plan were thoroughly studied by the Project. Comments and suggestions were finally presented to CWSD with focus on improving the practicability of CD plan. Major comments and suggestions were summarized herewith.

- 1) It is suggested that the narrative summary of aspects of best practice in self assessment format should be reflected more with a mission and objectives of CWSD and objectives of WSDP.
- 2) Capacity areas 6 to 9 would be able to have more concrete narrative summaries which could contain quantitative indicators because these areas show the level of outputs and/or outcomes of services/interventions provided by CWSD.
- 3) Logical linkages between the result of self assessment and CD intervention plans are not clear and/or missing.
- 4) Responsible person should be more specified for all CD interventions though currently CWSD, DAHR and DPP are listed. At least section level is required.
- 5) CD interventions should be prioritized with a certain time frame based on the priority of capacity areas obtained in self assessment.
- 6) Each CD intervention should have specific indicators in order to conduct systematic monitoring and evaluation.

## **(3) Implementation of Counterpart Training in Japan**

During the period of 7<sup>th</sup> to 24<sup>th</sup> November 2009, the counterpart training in Japan for five counterpart member of Mr. Goyagoya J Mbenna (CWSD), Ms. Neema Siarra (CWSD), Ms. Kirenga D.A.T (CWSD), Ms. Dianna Kimbute (WRD), Mr. John Daniel (DHRA) was carried out. The purpose the training is to enhance the capacities of the counterpart personnel of the MoWI providing the capacity development intervention for the LGAs, Regions and Basin Water Offices by learning capacity development system for the rural water supply sector in Japan. The contents of the training in Japan consisting following areas;

- 1) Outline of the water works in Japan
- 2) Role and responsibilities of JWWA(Japan Water Works Association)
- 3) Training projects of the JWWA
- 4) Qualification system for the water works in Japan
- 5) Inspection mechanism for the products in Japan

- 6) Groundwater development and management system in Japan
- 7) Groundwater monitoring system in Japan
- 8) Outline of water supply projects in LGAs
- 9) Capacity development system in water works department in LGAs
- 10) Operation and maintenance of the community water supply system

The schedule of the training carried out is shown in **Table 3.1**.

**Table 3.1 Training Schedule of the Counterpart Training in Japan**

Date		Contents of the Training / Activities	Receiving Institution	Stay
7-Nov	sat	Move: Dar es Salaam - Dubai		on the plane
8-Nov	sun	Move: Dubai - Kansai (Osaka) - Haneda (Tokyo)		Tokyo
9-Nov	mon	Briefing and Programme Orientation /Courtesy Call to JICA Headquarter	JICA	Tokyo
10-Nov	tue	Water works operation in Japan, and role and responsibility of JWWA	JWWA	Tokyo
11-Nov	wed	Training project and qualification system of JWWA	JWWA	Tokyo
12-Nov	thu	Inspection and verification system of JWWA	JWWA	Tokyo
13-Nov	fri	Move:Tokyo - Numata City (Gunma Prefecture) Visit Rural Water Supply System in Numata City	Numata Municipal Government	Numata City
14-Nov	sat	Move:Numata - Tokyo		Tokyo
15-Nov	sun	Move:Tokyo - Kumamoto City (Kumamoto Prefecture)		Kumamoto City
16-Nov	mon	Review the groundwater development and monitoring system in the rural water supply system in Kumamoto	Kumamoto Municipal Government	Kumamoto City
17-Nov	tue	Visit Rural Water Supply System in Kikuchi City	Kikuchi Municipal Government	Kumamoto City
18-Nov	wed	AM: Visit Kumamoto Water Science Museum PM: Move: Kumamoto - Tokyo	Kumamoto Municipal Government	Kokyo
19-Nov	thu	Visit Training and Development Center of Tokyo Metropolitan Government, Bureau of Waterworks	Tokyo Metropolitan Government	Tokyo
20-Nov	fri	Review of human resources development project in Yokohama Municipal Government, Bureau of Waterworks	Yokohama Municipal Government	Tokyo
21-Nov	sat	Compile the training results	JICA	Tokyo
22-Nov	sun	Holiday (Compile the training results)	JICA	Tokyo
23-Nov	mon	National Holiday (Compile the training results)	JICA	Tokyo
24-Nov	tue	Visit JICA for the Training Evaluation	JICA	Tokyo
25-Nov	wed	Move:Haneda (Tokyo) – Kansai (Osaka) – Dubai		on the plane
26-Nov	thu	Move:Dubai-Dar es Salaam		Dar es Salaam

JWWA: Japan Water Works Association

### 3.3 BASELINE SURVEY

#### 3.3.1 INTRODUCTION

As a part of the works in the preparatory phase of the project, the baseline survey was conducted by a local consultant from October to November 2007, in order to obtain baseline data on the present conditions of provision of rural water supply and the capacity status of local authorities, especially DWSTs, in terms of organisation, knowledge and skills, institutional linkages and working tools.

The survey was also meant to collect data and information to be used for assessment of the capacity gap and training needs of DWSTs which will form a basis for capacity building interventions.

### 3.3.2 SURVEY METHODOLOGY

The baseline survey was divided into two phases. Firstly, the district inventory survey was conducted in 22 LGAs to collect the baseline data of the project and information required for the selection of pilot districts for monitoring during implementation of the project and for assessment of the capacity gap and training needs of the staff involved in the rural water supply at the district level. Secondly, the detailed field survey was implemented in four pilot districts, namely Mkuranga, Temeke, Masasi and Lindi Rural, selected from the target districts based on results of the district inventory survey. The detailed field survey was aimed to comprehend attitude and practices of the district authorities for facilitation of RWSS projects and conditions of operation and maintenance of existing water supply facilities by respective communities. **Table 3.2** shows outline of the scope of the baseline survey.

**Table 3.2 Outline of the Baseline Survey**

	District Inventory Survey	Detailed Field Survey in 4 Pilot Districts for Monitoring	
<b>Survey Area</b>	22 districts targeted by the project	Mkuranga in Coast Region, Temeke in Dar es Salaam Region, Masasi in Mtwara Region, and Lindi Rural in Lindi Region	
<b>Survey Method</b>	<ul style="list-style-type: none"> <li>Literature review on the district profiles including demography, water and sanitation coverage, and organizational set-up of the district/ municipal councils</li> <li>Structured interview with DWE and other members of DWST</li> </ul>	Semi-structured interview with DWST members in each district	Structured interview with the village head and members of WATSAN committees at 4 villages selected in each district
<b>Survey Item</b>	<ul style="list-style-type: none"> <li>Organizational structure, staffing, budget and expenditure of LGAs</li> <li>Equipment and vehicles available at LGAs</li> <li>Formation and activities of DWST</li> <li>Rural water supply and sanitation coverage</li> <li>Process of planning, implementation, and operation and maintenance of RWSS projects</li> <li>Activities related to sanitation and hygiene promotion</li> <li>Support service by the central government, regional secretariat, and private sector</li> <li>Experiences of attending training programme and further raining needs of DWST members in terms of facilitation of RWSS projects</li> </ul>	Planning and implementation process of RWSS projects by DWST including the aspects of; <ul style="list-style-type: none"> <li>Formulation of DWSP</li> <li>Formulation, monitoring and evaluation of annual investment plan for DWSP</li> <li>District policy for community contribution of RWSS projects</li> <li>Adoption of MoWI's design criteria of water supply facilities</li> <li>Water quality inspection practices</li> </ul>	<ul style="list-style-type: none"> <li>General information of the village</li> <li>Water and sanitation conditions</li> <li>Operation and maintenance of existing water supply facilities</li> <li>Sanitation and hygiene promotion activities</li> <li>Support services by the district authority and private sector</li> </ul>

### 3.3.3 SELECTION OF THE PILOT DISTRICTS FOR MONITORING

Due to vastness of the target area of the project which contains 22 LGAs in four regions, the pilot districts for monitoring were selected in order to closely monitor the behavioral change of DWST at the individual and organizational levels after their attending the trainings. Monitoring in the pilot districts is regarded as a part of the entire framework of the monitoring and evaluation system of the training plan which is aimed to verify if the training has resulted into improvement of organizational capacity of DWST in implementation of WSDP.

The status of all the target districts identified in the district inventory survey was assessed in accordance with the selection criteria mentioned below and four pilot districts were finally selected by the project team.

**【Criteria for Selection of the Pilot Districts for Monitoring】**

1. The District Water and Sanitation Plan (DWSP) is formulated.
2. The annual implementation plan of DWSP is formulated
3. The district has experience in application of WSDP fund.
4. DWST holds meeting regularly.
5. There is no duplication of project interventions in the district for capacity development of DWST.
6. The district has high potential of water resources.
7. Communication network and accessibility of the district are in good condition.

### 3.3.4 RESULTS OF THE SURVEY

Based on results of the baseline survey, an inventory was compiled as shown in *Annex 4* which shows basic information on the implementation set-up of the target districts for implementation of RWSS projects and situation of on-going activities. This section summarizes salient points on the current status of institutional set-up of and service delivery by DWST as the baseline.

#### (1) Formation and Activities of DWST

As of October 2007 when the baseline survey was conducted, 17 out of 22 districts had DWST. Kinondoni, Temeke and Nanyumbu formed DWST in 2008. Apart from the one for Rufiji that was formed in 2002, other DWSTs are relatively new and half of them were established in 2006 or after. The DWST is made up of department heads or senior officers in relevant Council departments as listed below. With the exception of Kibaha and Rufiji Districts, no other district had desk officers other than departmental heads who were representing their departments in the DWST. In February 2008, just before the commencement of 1<sup>st</sup> Training Phase, DWST was formed on all of 22 LGAs.

- District Executive Director (DED)
- District Planning Officer (DPLO)
- District Water Engineer (DWE)
- District Health Officer (DHO)
- District Comm. Development Officer (DCDO)
- District Education Officer (DEO)
- District Treasurer (DT)

In all studied districts/municipalities DWSTs saw themselves as having a key role to play in WSDP implementation and coordination. However, they expressed a general lack of capacity in terms of knowledge and skills to effectively perform their new roles and responsibilities as well as lack of working tools. DWST members generally lack sufficient numbers of qualified staff, and are too involved in their normal day-to-day activities to be able to devote sufficient time to RWSS. Most of the members are heads of departments who are often involved in other routine

activities thus, sparing insufficient time for water and sanitation activities. It was generally observed that in most districts DWSTs meet seldom and on ad hoc basis.

Implementation of WSS responsibilities now tend to rest primarily with the DWE. More effort is required to actively engage the other members of the DWST so that the sanitation, hygiene promotion, and community development components of the project receive their due share of attention.

The DWEs are often occupied with district related administrative issues to the point that it becomes difficult for them to adequately supervise and coordinate project activities.

## **(2) Process of Planning and Implementation of RWSS Projects by DWST**

In practice all districts in Tanzania are expected to prepare the DWSP according to the RWSSP/WSDP. It appears that all districts have development plans, prepared in accordance with criteria and guidelines that vary considerably. The District Development Plans (DDPs) typically include RWSS plans, which tend to focus more on construction and installation of facilities than on the "soft" side of RWSS, such as problem analysis and training. Moreover, these plans do not consider at all O&M activities. Each year districts plans for new construction without taking into account follow up support plans to communities.

Few of the districts in the surveyed area have not prepared their DWSPs mostly due to limited capacity. Similarly most of the districts have not established District Water and Sanitation Fund (DWSF). The absence of sufficiently comprehensive District Water and Sanitation Plans (DWSPs) and associated financing plans complicate the approval and disbursement process. This justifies the idea of strengthening the capacity of all districts to develop their district water and sanitation plans and associated financing plans, in line with the steps of the community WSS project cycle. The DWSPs should be incorporated into the overall district development plan.

The number of RWSS subprojects approved and implemented is not significant due to insufficient funding over the last three years. The only funding which was made available to all districts at the time of the baseline survey is for the quick-wins projects.

## **(3) Operation and Maintenance**

### **1) Village Water and Sanitation Committees (WATSAN)**

The common form of O&M management in nearly all schemes in the districts is a Village Water Committee (VWC). This is the traditional O&M management structure which has no legal recognition but operates under the social services sub-committee of the Village Council. There are few schemes which had instituted a legal entity system to take up the O&M management function. There are about 16 registered Water Users Entities (WUEs) in the target districts: Ilala (1), Temeke (11), Kibaha (1), Kilwa (1) and Mtwara (2).

While water committees are normally trained during project implementation, no follow-up or additional training are provided by the districts. When the community members who had been trained have either left the village, been deceased or are no longer active in the committee, the community selects new committee members by election.

### **2) Availability of Guidelines and Manuals**

Several guidelines and manuals are available at DWE's office but not all members of the DWST have access to them, and as such it appears that they do not regularly make use of them as a source of reference for their work. O&M issues are partially addressed during the subproject implementation, but the survey teams were unable to trace any actual O&M guidelines or manuals in villages where sub-projects have been completed. Moreover, O&M follow up support activities are not included in the district plans.

#### **(4) Activities related to Sanitation and Hygiene Promotion**

In the target districts, most of the existing sanitation facilities are unimproved pit latrines which collapse during rainy season due to those temporary natures. In the field survey at the village level, it was also found that some households did not have any toilet facility so they opt for open defecation. This leads to further contamination of water sources. Latrines were found to be unclean and had no hand washing facilities.

10 districts among 20 have programmes that support hygiene and sanitation promotion for communities and 16 districts conduct schools health and sanitation programme. The programmes focus on community training and creating awareness, construction of demonstration latrines, and construction/improvement of school latrines. With the exception of areas where there have been specific hygiene and sanitation projects in the past, hygiene practices to most people was not encouraging. For example, the hand washing habits at critical times such as before eating and after using the toilet differed from place to place but only an insignificant number of people said they used soap.

#### **(5) Support Services by Central Government and Region**

MoWI has been providing technical and some financial support, training in procurement, and in the use of computers. There is no support at all from BWOs.

Support provided to the districts by the region especially during monitoring visits is in most cases irregular though appreciated by district personnel. Region Secretariat is a mandated institution for supporting LGAs through district coordination, provision of technical support, information collection and sharing, and capacity building. While Regional Secretariats are in place, they lack sufficient resources to adequately carry out their responsibilities, which include providing on-demand consultancy services to the districts in the area of training, hydrogeology, complex piped system design, assistance to project supervision, and technical backup services for O&M. However, it appears that districts do not regularly request for such support from RWAs.

Communication between MoWI, RWA, DWE, and BWO is not usually smooth due to the fact that LGAs are directly answerable to PMO-RALG and not through MoWI, BWOs or RWAs.

#### **(6) Technical and Facilitation Service Providers in the Private Sector**

All districts except for Rufiji have no experience in the use of Technical Service Providers (TSP) and Facilitation Service Providers (FSP). Experience from Rufiji indicates that there is a need of collaboration between the service providers to avoid contradictory messages being communicated to villagers, particularly as regards the role of villagers in sub-project management.

Also, the availability of service providers at district level was almost nil. All districts do not have database for service providers, contractors and spareparts dealers.

#### **(7) Equipment and Means of Transport**

Almost all districts surveyed complained of poor working environment, exacerbated by inadequate tools and transport to support the water supply and sanitation development in the districts. In some cases, the vehicles were available but there were inadequate funds to purchase fuel.

In most cases LGA capacity to coordinate, follow up and sustain the projects is challenged by:

- Lack of vehicles and logistical support,
- Lack of coordinated use of the logistical resources that are available to the district as a whole
- Reluctance of staff to go to field unless they are paid per diems or other financial support available,

- Lack of access to computer resources,
- Inability to use computer resources that are available, and
- Ineffective and uncoordinated ways of working by different departments

As the means of communication, all the target districts can be covered by the mobile phone network. However, facsimile and internet are not available in some districts, which may make it difficult to communicate with them over the training in the Project.

### 3.3.5 CAPACITY GAPS AND TRAINING NEEDS IDENTIFIED

In the course of the survey, major capacity gaps common to all LGAs and training needs were identified among DWST as individuals and as a team, which are shown in *Table 3.3* and *Table 3.4*.

**Table 3.3 Major Capacity Gaps at the District Level**

Capacity to interpret and implement the sector policy	<ul style="list-style-type: none"> <li>• Limited knowledge about the ongoing reforms in the water sector including NAWAPO principles, and WSDP strategies and approaches.</li> <li>• Difficulties to most of the DWST members to have a critical analysis and interpretation of these approaches in a practical way.</li> </ul>
Capacity for organizational management	<ul style="list-style-type: none"> <li>• Most of the DWSTs with the exception of the DWEs had difficulties in identifying their new roles and responsibilities in WSDP and those of other key players.</li> <li>• Nearly all sectors required to form DWSTs were working in isolation of each other regardless of overlaps in related activities. Hence, teamwork and coordination among sectors which form DWST was either minimal or non-existence.</li> </ul>
Capacity for planning and management of RWSS projects	<ul style="list-style-type: none"> <li>• DWSTs were unfamiliar with the RWSS project cycle.</li> <li>• LGAs had not been adequately involved in the appraisal of community applications for water and sanitation subprojects.</li> <li>• DWSPs were not prepared in a coherent manner and in most cases the DWE did much of the planning with little or no consultation with the other related sectors.</li> <li>• Most of DWSPs had not been oriented to the Programme Implementation Manual (PIM) for WSDP.</li> <li>• Skills in database management including collection and analysis were limited and this was particularly observed in the way they were struggling to retrieve the data on water and sanitation during the survey.</li> <li>• Monitoring and evaluation to verify achievement of DWSP is not systematically built in the activities of DWST.</li> <li>• Knowledge and skills on the following are insufficient for formulation and management of DWSPs. <ul style="list-style-type: none"> <li>- Consideration of water resources potential in water supply planning</li> <li>- Integrated approach of water, sanitation and hygiene</li> <li>- Methodologies of sanitation and hygiene promotion</li> <li>- Approaches and methodologies to tackle cross-cutting issues such as mainstreaming gender and HIV/AIDS in water and sanitation projects.</li> </ul> </li> </ul>
Capacity for provision of support to communities in RWSS projects	<ul style="list-style-type: none"> <li>• Majority of the DWST members were unable to effectively facilitate prioritization, planning based on the informed choice and implementation of subprojects by the communities and hygiene promotion.</li> <li>• Knowledge and skills on the project management based on the Demand Responsive Approach (DRA) are insufficient.</li> <li>• Skills in contract management including preparation of tender documents, advertisement, evaluation of bids, and supervision of TSP/FSP for most of the DWST members were insufficient. Knowledge on the Public Procurement Act (2003) was limited.</li> <li>• Follow-up activities after completion of the project are not included in DWSP.</li> </ul>

**Table 3.4 Training Needs Identified at the District Level**

DWST	<ul style="list-style-type: none"> <li>• Orientation to NAWAPO principles and RWSSP/WSDP strategies and approaches including DWST roles and responsibilities and relations with other key players</li> <li>• Facilitation of planning of community subprojects base on DRA</li> <li>• Appraisal and vetting of community subproject proposals</li> <li>• Preparation of DWSP and annual implementation plan</li> <li>• Management of procurement and contract</li> <li>• Team work building</li> <li>• Report writing skills</li> <li>• Familiarization with core RWSSP guidelines and manuals</li> </ul>
DWE	<ul style="list-style-type: none"> <li>• Orientation to different water supply technologies options recommended under WSDP including designs and costing</li> <li>• Water resources management</li> <li>• MIS application in RWSS projects</li> <li>• Supervision of TSP</li> <li>• Technical support for operation and maintenance follow-up</li> </ul>
DHO	<ul style="list-style-type: none"> <li>• Orientation to different sanitation &amp; hygiene promotion methods such as PHAST and CTLS</li> <li>• Orientation to basics on environmental impact assessment</li> <li>• Water quality analysis</li> <li>• Mainstreaming of HIV/AIDS in RWSS projects</li> <li>• Different options on improved sanitation technologies</li> </ul>
DCDO	<ul style="list-style-type: none"> <li>• Promotion techniques and methods of WSDP/RWSSP to communities</li> <li>• Social and environmental impact assessment/ analysis</li> <li>• Community O&amp;M management model for RWSS projects, procedures for formation and registration of COWSO, and knowledge and skills required for COWSO members on management of the organization</li> <li>• Supervision of FSP</li> <li>• Gender mainstreaming in RWSS projects</li> </ul>
DEO	<ul style="list-style-type: none"> <li>• Orientation to school sanitation and hygiene project as per RWSSP</li> <li>• Sanitation and hygiene promotion approaches (PHAST, CLTS etc) effective at the schools</li> </ul>
DPLO	<ul style="list-style-type: none"> <li>• Planning guidelines of DWSP</li> <li>• Result-Based Management</li> <li>• Monitoring and evaluation</li> <li>• MIS application in RWSS projects</li> </ul>

### 3.4 INVENTORY OF TRAINING RESOURCES

The existing training resources were examined throughout the project period. Primarily five organizations including academic institutions, NGOs and public agencies were identified as potential training providers based on the report of JICA preparatory study.

In the preparatory phase of the project, other four organizations were introduced by MoWI as common training providers in Tanzania.

RUWASA-CAD interviewed those identified organizations with an inventory format (*Annex 5; Training Resource Inventory*). Collected information, data and documents are compiled as training resources and kept properly in database in RUWASA-CAD.

Other listed organizations happened to be involved in the project through introduction from MoWI and WSDP dialogues such as DPG-W, WSWG and ID&CB TWG. The list of identified training resources is shown in the *Table 3.5*.

**Table 3.5 List of Training Resources**

No.	Name of Institutes	Type
1	Water Aid Tanzania	NGO
2	Drilling and Dam Construction Agency (DDCA)	Public
3	RWEGARULILA Water Resource Institute	Academic
4	ARDHI University (UCLAS)	Academic
5	Dar es Salaam Institute of Technology	Academic
6	WEDECO Ltd	Private
7	NETWAS	Private
8	ACHIRID	Private
9	WATSANET	NGO
10	Multi Water	Private
11	TAWASANET	NGO
12	TWESA	NGO
13	PEVODE	NGO
14	EPCO	NGO
15	WEPMO	NGO
16	Partner for Water and Sanitation	NGO
17	CCI	NGO

3 or 4 listed organizations are selected, based on their expertise and speciality associated with specific training objectives and the training programme, as nominees of competitive tender for a particular training package.

The performance of an organization awarded with the contract for training implementation is totally evaluated through the trainings and its results are incorporated into training resource database. Eventually, the quality of database is improved as the components of the project are properly carried out.

### **3.5 FORMULATION OF TRAINING PLAN**

#### **3.5.1 INTRODUCTION**

In the preparatory phase, the training plan of was formulated. The training plan is the basis of the training curriculum to be used by the each training courses of the project. *Figure 3.5* shows the orientation of the formulation of the training plan and curriculum, in the flow of RUWASA-CAD project.

As the results of the Baseline Survey, 1) baseline data of rural water supply and sanitation conditions, 2) capacities of the organizations such as DWST and District Water Engineer Office, and 3) training needs of the LGA officials are analysed. The matrix on task analysis was reviewed through the study on the existing RWSSP cycle and activities. By integrating outputs from various project activities, a Capacity Development Strategy of the RUWASA-CAD was formulated.

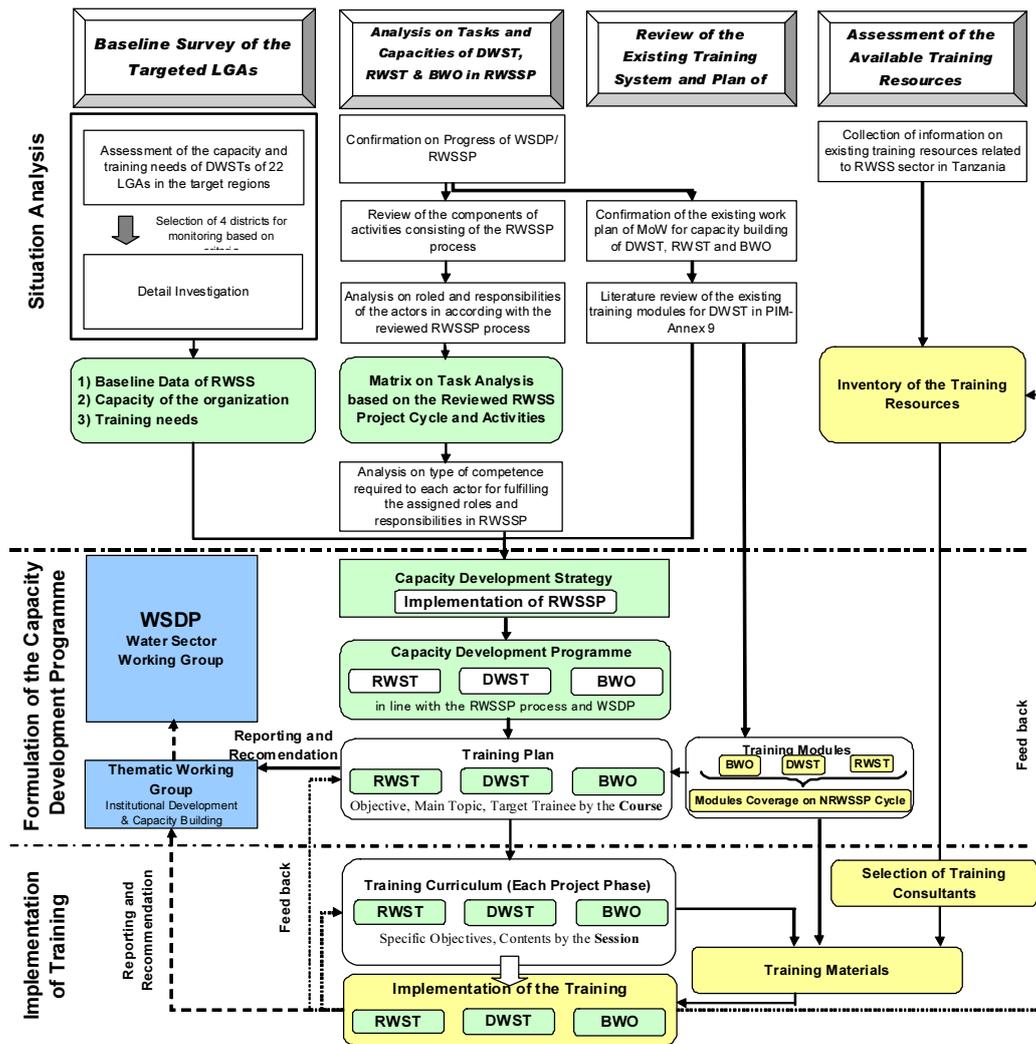


Figure 3.5 Flow of Formulation of Training Plan

Accordingly, the capacity development programme was provided based on the strategy. Following the programme, the training plan was prepared by integration of the training materials. The training plan consists of the training courses for DWST, RWST and BWO independently. It, however, includes not only the individuals training sessions but also the discussions for the proposed institutional linkage and the responsibilities of the organizations. The training curriculum was prepared on each time before starting of the training phase by integration of the training modules and experiences of the previous training phase. The training curriculum is consisting of specific objectives and contents of sessions by each course.

The results and experiences of the training shall always be reflected to improve the quality of the following training plans and curriculum, and nourish the inventory of training resources database. The lesson and the recommendation shall be reported to the Thematic Working Group (TWG) and Water Sector Working Group (WSWG) in order to authorise the capacity development strategy and programme formulated by the Project.

### 3.5.2 CAPACITY DEVELOPMENT STRATEGY

The Project regards the capacity as “the ability of the target LGAs to provide RWSS services for rural communities”. The capacity development is thus “the process that such abilities are enhanced at three different levels of individuals, organizations and institutions, in an integrated way.” In the Project therefore, the capacity development strategy sets the strengthening of the ability of individuals such as officials of LGAs, regions and basin water office, as well as organizational ability of the teams as DWST and RWST, in order to accomplish their required task in managing RWSS services. For the institutional capacity development, the strengthening of the institutional linkage among LGAs, BWOs and Regions is another important challenge in the strategy. The capacity development strategy was formulated, in consideration of the results of above situation analysis. *Figure 3.6* shows the conceptual flow of the capacity development strategy.

After the project, when the capacities of the target LGAs are enhanced, it is expected to improve the RWSS services in the target LGAs. This is the overall goal of the project. Moreover, after achieving the overall goal, the super goal of “RWSS services in the mainland are improved under the WSDP by deploying nationwide the training system to be established in the Technical Cooperation” is provided. In order to achieve the super goal, it is essential to authorize the training system model established by the RUWASA-CAD Project by the WSDP.

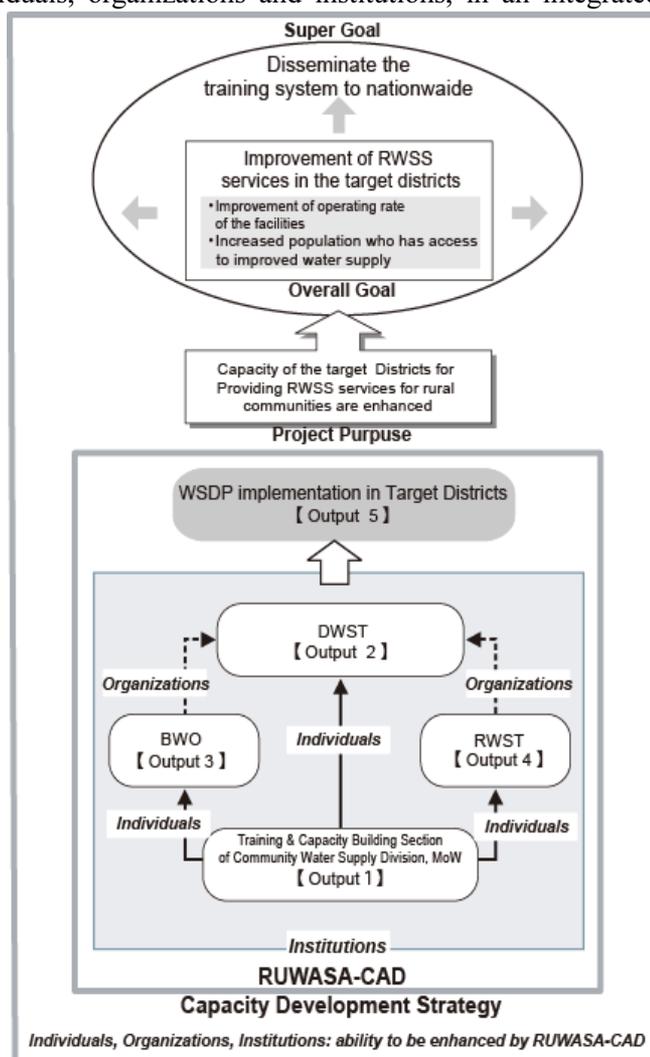


Figure 3.6 Concept of Capacity Development Strategy

### 3.5.3 CAPACITY DEVELOPMENT PROGRAMME

The basic concept of the RWSS project is to sustain the operation and maintenance of the water supply schemes by means of emphasizing the ownership of facilities to the communities. For this purpose, the Demand Responsive Approach (DRA) was adopted in order to make beneficiaries to participate in the project planning and implementation processes. The District Water and Sanitation Plan (DWSP), therefore, can be treated as referable to the aggregate of the Sub-Project based on the demand of the villages. The DWSP will be formulated by the demand of each village without extensive studies and/or considerations such as the Master Plan.

The RUWASA-CAD project, therefore, proposes to supplement following 4 items of basic concepts, in order to sustain and upgrade the economic effect of the DWSP by maintaining the balance between the demand and water resources potential.

### Chapter 3 Output 1: Enhancement of CWSD's Capacity

1. The project process shall focus on the adaptation of not only a demand responsive approach, but also the assessment of the project planning from the standpoint of harmonization of the demand and water resources potential.
2. In order to sustain and upgrade the economic effect of the project, it is necessary to develop the function of RWST to make regional assessment of the DWSP.
3. The capacity of DWST in formulation of the integrated approaches and activities of water, sanitation and hygiene with encouraging the community participation shall be strengthened.
4. The function of DWST to extend the support service to the communities shall be enhanced, in order to sustain the RWSS project by appropriate O&M and Follow-up activities.

Based on the above mentioned basic concepts, following Capacity Development Programme are formulated. The **Figure 3.7** shows the Capacity Development Programme and the flow of the training phases.

#### **(1) 1<sup>st</sup> Training Phase: Identification of Present Status**

- Situation analysis of RWSS sub-project in districts and regions
- Improvement of planning and management of RWSS projects
- Encouragement DWE to take initiative in the change process of management RWSS project
- Preparation of the preliminary hydrogeological maps to all target district
- Setting output of the training programme and performance indicator

#### **(2) 2<sup>nd</sup> Training Phase: Project Planning**

- Demand responsive approach in RWSS project
- Strategic planning of RWSS with considering sustainability of water resources
- Coordination with WRMP (Water Resources Management Plan)
- Preparation of RWSP (Regional Water Supply and Sanitation Plan)

#### **(3) 3<sup>rd</sup> Training Phase: Project Management**

- Project management which requires consciousness to link the activities of DWST
- Strengthen the capacity of DWST for the integrated activities of water and sanitation
- Assessment of project design from standpoint of water resources management

#### **(4) 4<sup>th</sup> Training Phase: Strengthening of Support Service**

- Support services for the community-based O&M and hygiene promotion
- Technical supervision of service providers, contractors and suppliers
- Update of hydrogeological maps and assist the DWST for the water resources development
- Monitoring in accordance with RWSPs (Regional Water Supply Plans)
- Evaluation of quarterly and annual report

#### **(5) 5<sup>th</sup> Training Phase: O&M and Follow-up**

- Planning for the O&M and follow-up, and final evaluation of the achievement of each districts
- Sustainability of water resources development and management
- Sustainability of rural water supply project

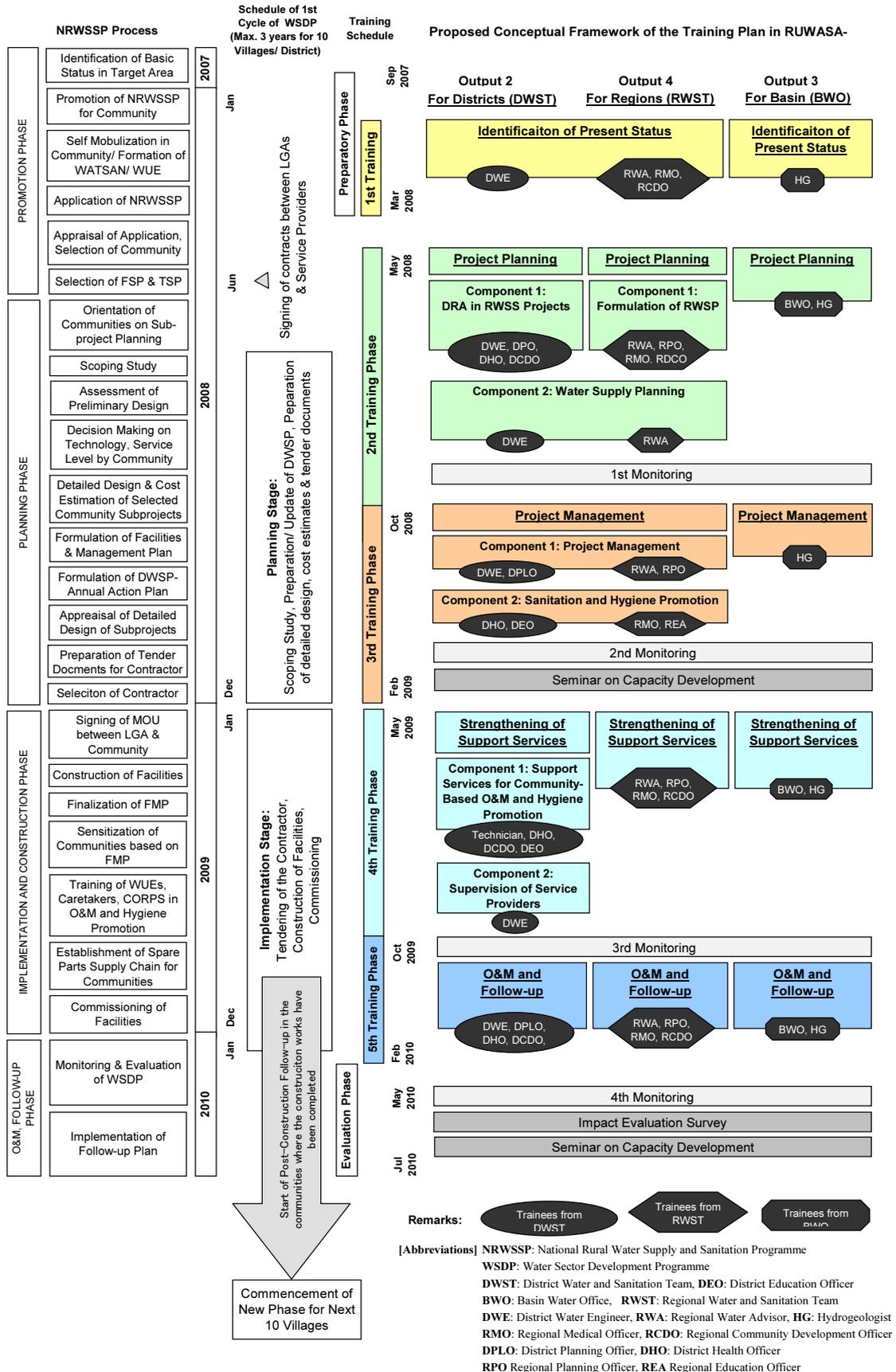


Figure 3.7 Capacity Development Programme

### 3.5.4 TRAINING PLAN

Based on the capacity development strategy and the programme, the training plan was provided in the preparatory phase of the Project. In accordance with the strategy, the training plan consists of the courses targeting not only the training on individual participants but also the discussions for the proposed institutional linkage and the responsibilities of the organizations. The training plan was provided for every target group.

The basic approaches to be employed in the training plan are;

- To facilitate participants to align individual capacity building target with the vision and goals of the organization and national development programme,
- To enhance capacities of DWST for applying the national RWSS-related policies and strategies in the context of each Local Government Authority, managing the entire RWSS project cycle in the defined WSDP institutional framework, and encouraging the change processes with learning by doing.
- To provide opportunities to learn from experiences in other districts and regions and share good practices in behavior change by organizing the joint workshops for the districts in the same region.

The Training Plans for the DWST, RWST and BWO are shown in *Table 3.6, 3.7* and *3.8* respectively.

Table 3.6 Training Plan for DWST

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
<p><b>1</b></p> <p><b>Identification of Present Situation</b></p>	<ul style="list-style-type: none"> <li>To focus on situation analysis of RWSS sub-sector in the target regions and districts.</li> <li>To set the desired goal for improvement of planning and management of RWSS projects by DWSTs in the context of the WSDP framework.</li> <li>To encourage DWE to take initiative in the change processes of management of RWSS projects in their respective DWSTs with active linkage and coordination with regional and basin levels, i.e. RWST and BWO.</li> </ul>	<ul style="list-style-type: none"> <li>Present water supply and sanitation conditions of the districts</li> <li>Desired water supply and sanitation situation in the context of the national, regional and district development goals</li> <li>Review of processes of planning, implementation, monitoring and evaluation of DWSP and annual action plans</li> <li>Introduction to the strategic planning of water supply plan with utilizing the regional water supply master plans</li> <li>Roles and responsibilities of DWST, RWST and BWO in the RWSS project cycle and procedures</li> <li>Perceived capacity gaps as individual and organization to manage RWSS projects</li> <li>Expected output of the training programme and performance indicators for monitoring</li> </ul>	<ul style="list-style-type: none"> <li>DWE from each DWST</li> <li>3 members (RWA, RCDO, RMO) from each RWST</li> </ul>	5 days x 2 times (Feb. 2008)	DSM, MT
<p><b>2</b></p> <p><b>Project Planning</b></p> <p><b>Component I:</b> Demand Responsive</p>	<p>To enhance improvement of approaches for promotion and planning of RWSS projects by DWST from the viewpoints of Demand Responsive Approach (DRA) and water supply planning.</p> <p>To improve application of DRA in the project planning and management by DWST with considering institutional, organizational, and</p>	<ul style="list-style-type: none"> <li>National policies and strategies related to RWSS sub-sector</li> <li>Roles and responsibilities of DWST and relations</li> </ul>	4 members (DWE, DPLO, DHO, DCDO) from each	5 days x 4 times	DSM, CS, LI, MT

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
Approach in Rural Water Supply and Sanitation Projects	socio-economic conditions of each district.	<ul style="list-style-type: none"> <li>with other key players</li> <li>Team work building</li> <li>Application of the DRA in RWSS projects</li> <li>Participatory planning and preparation of Facility and Management Plan by communities (FMP)</li> <li>Appraisal of requested community subprojects (FMP)</li> <li>Formulation of DWSP</li> <li>Integrated approach of water supply and sanitation improvement and hygiene promotion</li> <li>Social and environmental impact assessment</li> </ul>	DWST	(Jun.-Jul. 2008)	
<p><b>Component 2:</b> Water Supply Planning</p>	To equip knowledge and skills for the strategic planning of rural water supply with considering sustainability of water resources in the area and management by the Community-Owned Water Supply Organization (COWSO).	<ul style="list-style-type: none"> <li>Assessment of water resource potential in target communities</li> <li>Assessment of current and future water demand</li> <li>Design criteria</li> <li>Technology options in rural water supply</li> <li>Operation and maintenance plan</li> <li>Feasibility assessment of water supply plan</li> <li>Roles and responsibilities of BWO and RWA in water supply planning</li> </ul>	<ul style="list-style-type: none"> <li>DWE from each DWST</li> <li>RWA from each RWST</li> </ul>	5 days x 2 times (Jul. 2008)	DSM, MT
<b>3. Project Management</b>	To improve capacities of DWST in the overall project management and integrated approach for water, sanitation and hygiene.				
<p><b>Component 1:</b> Project Management</p>	<ul style="list-style-type: none"> <li>To enhance knowledge and skills of DWST members in the project management which requires consciousness to link the activities of DWST with the organizational goal and output.</li> </ul>	<ul style="list-style-type: none"> <li>Review of DWSP formulated or updated by DWSTs under the 1<sup>st</sup> phase of WSDP</li> <li>Result-Based Management of programme/project</li> <li>Performance indicators and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>2 members (DWE &amp; DPO) from each DWST</li> <li>2 members (RWA)</li> </ul>	5 days x 4 times (November)	DSM, CS, LI, MT

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
	<ul style="list-style-type: none"> <li>To improve capacities of DWST for management of the outsourcing process in RWSS projects for preparation of the detail design of the community subprojects and tendering procedures for selection of the contractor under the 1<sup>st</sup> phase of WSDP.</li> </ul>	<ul style="list-style-type: none"> <li>Management of the change processes</li> <li>Procurement and contract management</li> </ul>	& RPO) from each RWST	2008)	
Component 2: Sanitation and Hygiene Promotion	To strengthen capacity of DWST in formulation of the integrated approaches and activities of water, sanitation and hygiene with encouraging community participation.	<ul style="list-style-type: none"> <li>National strategies on sanitation and hygiene promotion</li> <li>Community-Led Total Sanitation (CLTS)</li> <li>PHAST</li> <li>School sanitation and hygiene education</li> <li>Technology options for improvement of sanitation</li> <li>Social marketing for the improved sanitation</li> <li>Mainstreaming of HIV/AIDS in RWSSP</li> </ul>	<ul style="list-style-type: none"> <li>2 members (DHO and DEO) from each DWST</li> <li>2 members (RMO and REO) from each RWST</li> </ul>	5 days x 2 times (November 2008)	DSM, MT
4. Strengthening of Support Services	To enhance function of DWST to extend support services to communities including utilization of government extension staff and private sector.				
Component 1: Support Services for the Community-Based O&M and Hygiene Promotion	To strengthen the network of human resources and organizations in the districts to extend support services for the community-based O&M and hygiene promotion activities. It focuses on measures for utilization of the extension workers and CBOs/NGOs in the districts as the facilitators to support WATSAN/WUE in management of the community subprojects.	<ul style="list-style-type: none"> <li>Roles &amp; responsibilities of extension workers of the district council in RWSSP</li> <li>Facilitation skills</li> <li>Community management, Community O&amp;M management models and registration procedures</li> <li>Gender mainstreaming</li> <li>Participatory monitoring and evaluation of WSS situation and O&amp;M</li> <li>Guidelines and manuals for the facilitators</li> </ul>	4 members (Senior water technician, DHO, DCDCO, DEO) from each DWST	5 days x 4 times (July 2009)	DSM, CS, LI, MT
Component 2: Supervision of Service	To strengthen knowledge, skills and attitude of DWEs in technical supervision of the service	<ul style="list-style-type: none"> <li>Technical supervision of the works by service providers and contractors</li> <li>Quality control of workmanship</li> </ul>	DWE from each DWST	5 days x 2 times	DSM, MT

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
Providers	<p>providers, contractors and suppliers to ensure meeting the required standard of the water supply and sanitation services.</p>	<ul style="list-style-type: none"> <li>• O&amp;M follow-up technical support</li> <li>• Building cooperative relationship with private sector</li> <li>• Management of database on the available service providers</li> </ul>		(June 2009)	
5. O&M and Follow-Up	<p>Coming to the final stage of the construction works under the 1<sup>st</sup> stage of WSDP, the course will provide an opportunity to DWSTs for planning for the O&amp;M and follow-up stage. This course will also serve as the final evaluation of the achievement of each district in their capacity development goals which was set in the 1<sup>st</sup> training course.</p>	<ul style="list-style-type: none"> <li>• Monitoring and Evaluation</li> <li>• Management Information System</li> <li>• Roles and responsibilities of DWST in the O&amp;M and follow-up stage</li> <li>• Promotion of participation of service providers in O&amp;M</li> <li>• Integration of the follow-up plan into the subsequent DWSP</li> <li>• Evaluation of change processes and achievement throughout the implementation period of RUWASA-CAD</li> </ul>	5 members (DWE, DPO, DHO, DEO & DCDO) from each DWST	5 days x 4 times (January 2010)	DSM, CS, LI, MT

DWE: District Water Engineer, DPO: District Planning Officer, DCDO: District Community Development Officer, DHO: District Health Officer, DEO: District Education Officer  
 DSM: Dar es Salaam Region, CS: Coast Region, LI: Lindi Region, MT: Mtwara Region

Table 3.7 Training Plan for RWST

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
<p><b>1</b></p> <p><b>Identification of Present Situation</b></p>	<ul style="list-style-type: none"> <li>-Present situation of RWSS sub-sector in the target districts and regions</li> <li>-Setting output of the training programme and performance indicators for monitoring</li> </ul> <p>(Joint training with DWE in I. Identification of Present Situation)</p>	<ul style="list-style-type: none"> <li>- Present water supply and sanitation conditions of the districts</li> <li>- Desired water supply and sanitation situation in the context of the national, regional and district development goals</li> <li>- Review of process of planning, implementation, monitoring and evaluation of DWSP and annual plans</li> <li>- Introduction to the strategic planning of water supply plan with utilizing the regional master plans</li> <li>- Roles and responsibilities of DWST, RWST and BWO in the RWSS project cycle and procedures</li> <li>- Perceived capacity gaps as individual and organization of districts to manage RWSS projects</li> <li>- Expected out put of the training programme and performance indicators for monitoring</li> </ul>	<p>RWA, CDO, RMO</p>	<p>5 days</p> <p>Feb 2008</p>	<p>DSM, MT</p>
<p><b>2</b></p> <p><b>Project Planning</b></p>	<p>Skills for the preparation of Regional Water and Sanitation Programme (RWSP)</p> <p>Skills for the strategic planning of rural water supply with considering sustainability of water resources and socioeconomic situation in the area</p>	<ul style="list-style-type: none"> <li>- Clarification of tasks of RWST in NRWSSP</li> <li>- Report to be submitted to PMO-RALG</li> <li>- Review of RWSP formulated</li> <li>- Evaluation of DWSPs and DIPs</li> <li>- Support to districts for preparation of DWSPs</li> <li>- Water development projects in the region</li> <li>- Assessment of water resources potential in target communities</li> <li>- Assessment of current and future water demand</li> <li>- Design criteria</li> <li>- Technology option in rural water supply</li> <li>- Operation and maintenance plan</li> <li>- Feasibility assessment of water supply plan</li> </ul>	<p>RWA, PO, CDO, RMO</p>	<p>5 days</p> <p>Jun 2008</p>	<p>DSM, MT</p>

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
	(Joint training with DWE in Project Planning Phase, Component 2: Water Supply Planning)	<ul style="list-style-type: none"> <li>- Roles and responsibilities of BWO and RWA in water supply planning</li> <li>- Establishment of coordination system with BWO for water supply system that covers several communities or districts</li> </ul>			
<b>3</b> <b>Project Management</b>	<p>Project Management</p> <p>(Joint training with DWE &amp; DPO in 3. Project Management Phase, Component 1: Project Management)</p> <p>Sanitation and Hygiene Promotion</p> <p>(Joint training with DHO &amp; DEO in Project Management Phase, Component 2: Sanitation and Hygiene Promotion)</p>	<ul style="list-style-type: none"> <li>- Review of DWSP formulated or updated by DWSTs under the 1<sup>st</sup> phase of WSDP</li> <li>- Result-Based Management of programme/project</li> <li>- Performance indicators and monitoring</li> <li>- Management of the change process</li> <li>- Procurement and contract management</li> <li>- National strategies on sanitation and hygiene promotion</li> <li>- Community-Led Total Sanitation (CLTS)</li> <li>- PHAST</li> <li>- School sanitation and hygiene education</li> <li>- Technology options for improvement of sanitation</li> <li>- Social marketing for the improved sanitation</li> <li>- Mainstreaming of HIV/AIDS in RWSSP</li> </ul>	RWA, PO	5 days Nov 2008	DSM, CS, LI, MT
<b>4</b> <b>Strengthening of Support System</b>	Monitoring in accordance with RWSPs	<ul style="list-style-type: none"> <li>- Evaluation of quarterly and annual report</li> <li>- Support hygiene and sanitation activities carried out by DWSTs</li> <li>- Support and monitoring community participation in sub projects</li> </ul>	RWA, PO, RMO, CDO	5 days Jun 2009	DSM, MT
<b>5</b> <b>O&amp;M, Follow-up</b>	Sustainability of rural water supply	<ul style="list-style-type: none"> <li>- Roles and responsibilities of RWST in the O&amp;M</li> <li>- Monitoring and Evaluation</li> <li>- Integration of follow-up plan into the subsequent RWSP</li> <li>- Evaluation of change processes and achievement throughout the implementation period of RUWASA-CAD</li> </ul>	RWA, PO, RMO, CDO	5 days Jan 2010	DSM, MT

Note) Target Group - RWA: Regional Water Advisor, CDO: Community Development Officer, RMO: Regional Medical Officer, PO: Planning Officer  
 Venue – DSM: Dar es Salaam Region, CS: Coast Region, LI: Lindi Region, MT: Mtwara Region

Table 3.8 Training Plan for BWO

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
<b>1</b> <b>Identification of Present Situation</b>	<ul style="list-style-type: none"> <li>To master basic skills for database management and GIS operation</li> <li>To prepare database management system for hydrogeological information</li> <li>To prepare preliminary hydrogeological maps in order to support target districts in managing RWSS projects</li> </ul>				
<b>Component 1</b> : Basic Skill of Database Management	<ul style="list-style-type: none"> <li>To master basic skills for database management in order to manage hydrogeological information</li> </ul>	<ul style="list-style-type: none"> <li>Fundamentals of database management</li> <li>Designing of database</li> <li>Querying database</li> </ul>	1 HG from each BWO	5 days Nov to Dec 2007	DSM
<b>Component 2</b> : Basic Skill of Geographical Information System (GIS)	<ul style="list-style-type: none"> <li>To master basic skills for GIS operation in order to prepare preliminary hydrogeological maps.</li> </ul>	<ul style="list-style-type: none"> <li>Fundamentals of GIS</li> <li>GIS data preparation</li> <li>Linking data from the database system (MS-Access)</li> <li>Spatial data analysis</li> <li>Layout preparation</li> </ul>	1 HG from each BWO	10 days Dec 2007	DSM
<b>Component 3</b> : Preparation of Preliminary Hydrogeological Map	<ul style="list-style-type: none"> <li>To improve skills for database management of hydrogeological information</li> <li>To improve skills for preparation of preliminary hydrogeological maps based on the existing information</li> <li>To prepare preliminary hydrogeological maps to be distributed to targeted districts</li> </ul>	<ul style="list-style-type: none"> <li>Creation of database system by MS Access for the management of hydrogeological information</li> <li>Data processing for preliminary hydrogeological map</li> <li>Topographic and geological maps</li> <li>Water quality and well yield distribution maps</li> <li>Preliminary hydrogeological map with description about hydrogeological characteristics</li> </ul>	1 HG from each BWO	15 days Jan to Feb 2008	DSM
<b>2</b> <b>Project Planning</b>	<ul style="list-style-type: none"> <li>To improve intercommunication mechanism between BWOs and DWSTs and RWSTs</li> <li>To enhance capacity of BWOs in supporting DWSTs for rural water supply planning</li> </ul>				

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
<p><b>Component 1</b> Roles and responsibilities of BWOs in RWSS projects</p>	<ul style="list-style-type: none"> <li>To clarify the roles and responsibilities of BWOs in NRWSSP</li> <li>To improve intercommunication mechanism between BWO and DWST and RWST</li> </ul>	<ul style="list-style-type: none"> <li>Roles and responsibilities of BWOs in WRM sub component</li> <li>NRWSSP project cycle</li> <li>Clarification of roles of BWO in NRWSSP</li> <li>Intercommunication mechanism between BWO and DWST and RWST</li> </ul>	Officer, HG	2 days Jun 2008	DSM
<p><b>Component 2</b> Assessment of water resources potential for rural water supply</p>	<ul style="list-style-type: none"> <li>To enhance knowledge about necessary information for rural water supply planning</li> <li>To improve capacities for providing DWSTs with water resources information</li> </ul>	<ul style="list-style-type: none"> <li>Rural water supply planning</li> <li>Required water resources information for rural water supply (quality, future demand, etc)</li> <li>Assessment of water resources for RWSS projects in the target area</li> </ul>	HG	3 days Jun 2008	DSM
<p><b>3</b> <b>Project Management</b></p>	<ul style="list-style-type: none"> <li>To improve capacity of BWOs for supporting DWSTs in project management in terms of water resources management</li> </ul>				
<p><b>Component 1</b> Coordination with RWA for water supply planning</p>	<ul style="list-style-type: none"> <li>To improve capacity of BWOs for communication with RWAs and DWSTs for planning of water supply system covering several districts</li> </ul>	<ul style="list-style-type: none"> <li>DWSP and RWSP</li> <li>Assessment of water resources potential</li> </ul>	Officer, HG	1 day Oct 2008	DSM
<p><b>Component 2</b> Optimization of water resources for rural water supply</p>	<ul style="list-style-type: none"> <li>To improve capacity of BWOs in optimizing water resources for rural water supply</li> <li>To strengthen issuance of water right to users</li> </ul>	<ul style="list-style-type: none"> <li>Water right, regulation</li> <li>Allocation of water resources in accordance with water demand and condition of communities (water quality and quantity)</li> </ul>	HG	2 days Oct 2008	DSM
<p><b>Component 3</b> Assessment of design of water supply system</p>	<ul style="list-style-type: none"> <li>To improve capacity of BWOs for assessment of preliminary and detailed designs from the hydrological point of view</li> </ul>	<ul style="list-style-type: none"> <li>Preliminary and detailed designs</li> <li>Water demand</li> </ul>	HG	2 days Oct 2008	DSM
<p><b>4</b> <b>Strengthening of Support Services</b></p>	<ul style="list-style-type: none"> <li>To strengthen capacity of BWOs in supporting DWSTs for supervision of technical service providers and contractors</li> </ul>				
<p><b>Component 1</b> Support of supervision in construction phase</p>	<ul style="list-style-type: none"> <li>To enhance knowledge about borehole construction for assuring the sustainability of water source in terms of quantity and quality</li> </ul>	<ul style="list-style-type: none"> <li>Construction of water supply system (water source)</li> <li>Registration of boreholes</li> <li>Borehole drilling, sampling, geophysical logging, pumping test, decision of pump installation depth and evaluation of water quality</li> </ul>	HG	2 day Jun 2009	DSM

Training Phase and Course Title	Course Objectives	Main Topics	Target Group	Duration	Venue
Component 2 Update of preliminary hydrogeological maps based on the information submitted by districts	<ul style="list-style-type: none"> <li>To improve capacity of BWOs for updating the preliminary hydrogeological maps based on the lessons learnt</li> </ul>	<ul style="list-style-type: none"> <li>Borehole completion report</li> <li>Update of database</li> <li>Update of preliminary hydrogeological maps by processing newly obtained water sources information from the districts</li> <li>Dissemination of updated hydrogeological maps to districts</li> </ul>	HG	1 day Jun 2009	DSM
Component 3 Water resources management	<ul style="list-style-type: none"> <li>To enhance capacity of BWOs in water resources management taking into consideration rural water supply</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of borehole registration taking into consideration lessons learnt</li> <li>Improvement of issuance of water right</li> </ul>	Officer	2 days Jun 2009	DSM
<b>5</b>	<ul style="list-style-type: none"> <li>To formulate the plan of supporting system for O&amp;M in order to keep sustainability of water source</li> <li>To evaluate achievement of each BWO in capacity development of support for DWSTs in NRWSSP</li> </ul>	<ul style="list-style-type: none"> <li>Roles and responsibilities of BWO in the O&amp;M and follow-up stage</li> <li>Monitoring and Evaluation</li> <li>Support mechanism for maintenance of water source</li> <li>Evaluation of change processes and achievement throughout the implementation of period of RUWASA-CAD project</li> </ul>	Officer, HG	5 day Jan 2010	DSM

Note : Target Group – Officer: Basin Water Officer, HG: Hydrogeologist

Venue – DSM: Dar es Salaam

### 3.6 END LINE SURVEY

#### 3.6.1 PURPOSE OF SURVEY

The end line survey was conducted in the period between the end of May and middle of June 2010 in order to collect data and information necessary to verify achievement of the output and project purpose at the completion of the Project. This survey is a part of the monitoring and evaluation activities to check effectiveness of the training provided in the Project. The data collection was conducted in the period between the end of May and the middle of June 2010 by a consultant based in Tanzania under the supervision of the Project Team. Specific objectives of the survey were as follows;

- to collect data and information on present conditions of rural water supply and sanitation in the target districts.
- to collect data and information on behavior change of DWSTs, RWSTs and BWOs after attending the RUWASA-CAD training.
- to collect data and information on conditions of rural water supply and sanitation in the area as well as practices of DWSTs, RWSTs and BWOs in implementation of rural water supply and sanitation projects under WSDP in non-target districts, regions and basins in order to verify impact of the Project and its attributes.

#### 3.6.2 SURVEY METHODOLOGY

##### (1) Survey Area

The survey was conducted at four BWOs, six Regional Secretariats (RSs) and 27 Local Government Authorities (LGAs) as listed in **Table 3.9**. The non-target group was sampled from the regions outside the project area with considering past experiences of the organizations to receive the technical cooperation similar to this Project for the organizational capacity development. Accessibility to the areas was also considered in sampling of the non-target group in order to complete the field survey within short period.

**Table 3.9 List of the Target Organizations for the End Line Survey**

Category	BWO	RS	LGA	
Target Group of the Project	1. Wami Ruvu (Morogoro)	1. Coast	1.	Bagamoyo
			2.	Kibaha District
			3.	Kibaha Town
			4.	Kisarawe
			5.	Mkuranga
			6.	Rufiji
			7.	Mafia
	2. Dar es Salaam		8.	Kinondoni
			9.	Ilala
			10.	Temeke
	2. Ruvuma & Southern Coast (Mtwara)	3. Lindi	11.	Kilwa
			12.	Lindi District
			13.	Lindi Town
			14.	Liwale
			15.	Nachingwea
			16.	Ruangwa
	4. Mtwara		17.	Masasi
			18.	Mtwara Municipal
			19.	Mtwara District

Category	BWO	RS	LGA	
			20.	Nanyumbu
			21.	Newala
			22.	Tandahimba
Non-Target Group	3.Lake Tanganyika (Kigoma)	5. Kigoma	23.	Kigoma District
	4. Pangani (Moshi)	6. Kilimanjaro	24.	Moshi
			25.	Kilolo (Iringa Region)
			26.	Mbozi (Mbeya Region)
			27.	Morogoro District (Morogoro Region)

## (2) Survey Method

The semi-structured interview was employed to gather information on practices of each organization in implementation of RWSS projects. Interview sheets prepared by the Project Team were utilized to guide the interviews. Interviewees at LGAs and RSs are members of DWSTs and RWSTs while the interviews with DED and RAS were conducted separately from other members in order to have their views as the top management of the respective organizations. For BWOs, Basin Water Officers, hydrogeologists and CDOs were called for the interviews. The survey teams also collected supplementary data and documents related to the monitoring indicators from the organizations.

**Table 3.10** shows the outline of the semi-structured interviews. Findings from the survey are described in the respective sections on “Monitoring and Evaluation” in Chapter 4, 5, and 6 for each category of LGA, RS and BWO. Chapter 8 summarizes the achievement of the output and project purpose based on observations made in the preceding chapters.

**Table 3.10 List of the Target Organizations for the End Line Survey**

Category	Survey Items through the Semi-Structured Interviews		
	DWST	RWST	BWO
1. Status of RWSS Projects in the District	<ul style="list-style-type: none"> <li>Progress of the 1<sup>st</sup> cycle of RWSSP</li> <li>Outline of the community subprojects formulated in the 1<sup>st</sup> cycle of RWSSP</li> <li>Outline of other on-going RWSS projects in the district</li> <li>Activities of DWST in the on-going RWSS projects</li> </ul>	<ul style="list-style-type: none"> <li>Progress of the 1<sup>st</sup> cycle of RWSSP in the region</li> <li>Activities of RWST with regard to the on-going RWSS projects</li> </ul>	<ul style="list-style-type: none"> <li>Status of water resources management sub-component in the region</li> <li>Activities of LGAs in water resources development under the 1<sup>st</sup> cycle of RWSSP</li> </ul>
2. Behavior Change of the Trainees of RUWASA-CAD*	<ul style="list-style-type: none"> <li>Application of knowledge, skills and attitude obtained in the training to actual works</li> <li>Practicability of the training contents</li> </ul>	<ul style="list-style-type: none"> <li>Application of knowledge, skills and attitude obtained in the training to actual works</li> <li>Practicability of the training contents</li> </ul>	<ul style="list-style-type: none"> <li>Application of knowledge, skills and attitude obtained in the training to actual works</li> <li>Practicability of the training contents</li> </ul>
3. Practices of Organization/ Team	<ul style="list-style-type: none"> <li>Implementation process of RWSS projects by DWST in terms of; <ul style="list-style-type: none"> <li>Application of DRA in community selection</li> <li>Examination of output submitted by consultants/contractors</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Implementation of activities by RWST in terms of; <ul style="list-style-type: none"> <li>Formulation of RWSSP</li> <li>Examination of progress reports from LGAs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Implementation of activities by BWOs in terms of; <ul style="list-style-type: none"> <li>Update of hydrogeological data in the basin</li> <li>Dissemination of hydrogeological</li> </ul> </li> </ul>

Category	Survey Items through the Semi-Structured Interviews		
	DWST	RWST	BWO
	<ul style="list-style-type: none"> <li>- Update of information on water and sanitation conditions</li> <li>- Integrated approach of water, sanitation and hygiene promotion in DWSP</li> <li>• Linkage with RS and BWO                             <ul style="list-style-type: none"> <li>- Submission of quarterly reports to RS</li> <li>- Utilization of technical support of RS and BWO in RWSS projects</li> <li>- Utilization of hydrogeological data and information provided by BWO</li> <li>- Obtaining approval from RS on designs of subprojects</li> </ul> </li> <li>• Team Management                             <ul style="list-style-type: none"> <li>- Organizing periodical meetings</li> <li>- Coordination in water and sanitation related activities in the district</li> <li>- Utilization of available human resources for facilitation of RWSS projects</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Provision of advice to LGAs in formulation and designing of community subprojects</li> <li>- Provision of approval to LGAs on designs of subprojects</li> <li>• Team Management                             <ul style="list-style-type: none"> <li>- Organizing periodical meeting</li> <li>- Coordination in water and sanitation related activities at the regional level</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>information and data to LGAs</li> <li>- Provision of advice to LGAs in formulation an designing of community subprojects</li> </ul>
4. Contributing/ Preventing Factors for Behavior Change*	<ul style="list-style-type: none"> <li>• Information sharing on training</li> <li>• Acceptance of change in the office</li> <li>• Implementation of capacity development plan</li> </ul>	<ul style="list-style-type: none"> <li>• Information sharing on training</li> <li>• Acceptance of change in the office</li> <li>• Implementation of capacity development plan</li> </ul>	<ul style="list-style-type: none"> <li>• Information sharing on training</li> <li>• Acceptance of change in the office</li> <li>• Implementation of capacity development plan</li> </ul>

\* Categories No. 2 and 4 in the table above are not included in the interviews with the organizations in the non-target group. Main items discussed with the non-target group are status of the on-going RWSS projects, practices of the organization in the project implementation, experiences of attending training related to RWSS, and their capacity development plan.

### 3.7 PROPOSALS FOR REVISION OF EXISTING MANUALS

#### 3.7.1 INTRODUCTION

Examination of existing manuals is one of the key components for the preparation of training plan as discussed in Section 3.5.3. During their examination, the Project team could observe the following shortfall/ deficiency in existing manuals.

<RWSS Project Cycle>

- RWST and BWO are not involved in the existing RWSS project cycle although they are recognized as a key stakeholder and their roles and responsibilities are clearly specified.
- Activities in the existing RWSS project cycle are not really consistent with roles and responsibilities of stakeholders of RWSSP.
- The hierarchy of activities is not well examined according to their importance, necessity interrelation, which causes considerable confusion and inconsistency of RWSS project cycle.

<Training Modular Guide>

- Training modular guide includes only a component for DWST, but not RWST and BWO.
- Comparing the capacity areas targeted in the existing training modular guide with activities necessary for implementation of RWSS project, the coverage of the existing training modular guide is not comprehensive.
- Some of reference materials indicated in modules are not available in general.
- It is difficult to establish the logical linkage between selection of appropriate modules and target capacity areas identified in CD plans owned by each stakeholder.

Upon the results of examination on the existing manuals, and the RUWASA-CAD strategy and basic polices, existing RWSS project cycle and training modular guide were totally reviewed and the proposal on “Matrix of RWSS Project Cycle and Task Allocation” and “Training Modular Guide for DWST, RWST and BWO” were prepared and presented respectively for TWG-ID&CB, PCT (Programme Coordination Team) members and the management of CWSD. Both proposals are shown in *Annex 6* and *Annex 7* of this report. In addition, formulated Training Modules and Training Materials are compiled as the additional volume of this report. Outlines of each proposal are explained in the following section.

### 3.7.2 MATRIX OF RWSSP PROJECT CYCLE AND TASK ALLOCATION

The results of critical point analysis, stakeholder analysis and identification of actors responsible for critical points are summarized in a single matrix as *Annex 6*. The detailed task allocation that is the procedure of RWSSP, for DWST members are illustrated for better understanding of each responsibility among DWST. Besides, highlighted activities and components are those which have been modified from or added to the original RWSSP cycle although cycle itself has been totally re-organized.

The Project expects that this matrix would show the benchmarks for identified stakeholders as the programmes of RWSS project take a step forward in their jurisdictions. It, however, is suggested that this matrix should be utilized as a standard, which gives a space for stakeholders to determine their tasks under their arrangement.

### 3.7.3 TRAINING MODULAR GUIDE AND MODULE COVERAGE

Training curricula prepared for 5 phases of RUWASA-CAD training are composed of the combination of various modules. In each module, links to actual work, objectives and topics of a particular training are clearly displayed. Therefore, it is quite easy for training organizers to tailor training contents to their training demand based on capacity gaps identified. Furthermore, the reference materials are confirmed available and refined with clear indication of suitable chapters according to training objectives. Most significantly steps/ procedures shown in each module are finally determined after they are tested and assessed their practicability carefully through the implementation of 5 phases of RUWASA-CAD training. Training modular guide and module coverage are attached in *Annex 7*.

Module coverage shows the clear interface between activities of RWSS project cycle and modules. This indicates that training modules are strongly associated with actual activities necessary for RWSSP and very useful tools for capacity development interventions in stakeholders of RWSSP.

The intensity of modules by categorizing “well covered”, “moderately covered” and “not covered” is illustrated with different colours in the module coverage. It is obvious that most of components identified in the new RWSS project cycle are covered by either single training module or plural training modules, depending on the task allocation of stakeholders.

### 3.8 ANNUAL WORK PLAN

#### 3.8.1 FORMULATION OF ANNUAL WORK PLAN

One of the indicators to evaluate the achievement of Output-1 is formulation of annual work plan every year. Since the Tanzanian fiscal year starts from July and ends June, the annual work plan of CBT sub section could not be formulated, during the project step of Work in Tanzania I (September 2007 to March 2008). Therefore it is agreed that the counterpart use the PO (Plan of Operation) provided by the project as the annual work plan of 2007/2008.

During the following project steps of Work in Tanzania II, III and IV, after the MoWI's budgetary planning on every May, annual work plan of CBT sub section was prepared and agreed upon counterpart meetings held generally in June.

Agreed annual work plans during the project period of CBT sub section are shown in *Annex 8*.

#### 3.8.2 ACTION PLAN OF THE COUNTERPART PERSONNEL

The trainings carrying out by the project are classified by two different operation methods of consignment contract and direct management.

Major roles of the project team member, in case of manage the training through the employed consultants, are preparation of TOR and tender documents, implementation of tendering, evaluation of tender proposal, supervision of the training implementation, monitoring and evaluation of the training results. On the other hand, in case of the direct management by the project, all the necessary works related to the preparation, implementation, monitoring and evaluation of the training are directly taken by the project team member.

In RUWASA-CAD project, in order to promote responsible participation of the counterpart personnel, the responsibilities and assigning tasks of the each counterpart personnel were defined as shown in *Table 3.11*. The action plans of 2008/2009, 2009/10, and 2010/11 are provided for each counterpart personnel, based on the defined responsibilities and assigning tasks.

**Table 3.11 Action Plan of Counterpart Personnel**

Name of Counterpart	Responsibility	Assigning Tasks
Mr. Goyagoya J. Mbenna (decommissioned from September 2009)* <sup>1</sup> (CWSD)	Planning of the Training	<ul style="list-style-type: none"> <li>• Selection of training consultants</li> <li>• Preparation of training materials</li> <li>• Update contents of RUWASA-CAD homepage</li> <li>• Preparation of presentation for seminar</li> </ul>
Ms. Neema Siarra (CWSD)	Implementation of the Training	<ul style="list-style-type: none"> <li>• Management of training</li> <li>• Update of training resources database</li> <li>• Preparation of presentation for seminar</li> </ul>
Ms. Kirenga D.A.T (CWSD)	Monitoring and Evaluation of the Training Results	<ul style="list-style-type: none"> <li>• Training evaluation</li> <li>• Monitoring in pilot LGAs</li> <li>• Preparation of presentation for seminar</li> </ul>
Mr. John Daniel (decommissioned from January 2010)* <sup>1</sup> Ms. Flora W. Mleje (appointed from February		

Name of Counterpart	Responsibility	Assigning Tasks
2010) (DAHR)		
Ms. Diana Kimbute (DWR)	Planning, implementation and evaluation of training for BWOs	<ul style="list-style-type: none"> <li>• Preparation of Training for BWOs</li> <li>• Implementation of Training for BWOs</li> <li>• Evaluation of Training</li> <li>• Monitoring of BWOs</li> <li>• Preparation of presentation for seminar</li> </ul>

\*1: Due to the transfer to other division/section, they were decommissioned from the task of the project counterpart.

### 3.8.3 EVALUATION OF PERFORMANCE OF THE ACTION PLAN BY COUNTERPARTS

The action plan discussed in the previous section encompasses individual action plan for each counterpart personnel, accordingly to their responsibilities and tasks.

It, however, is observed that the project counterparts could not follow much their action plans because of various limitation and obstacles. These limitation and obstacles are summarized in the *Table 3.12*.

**Table 3.12 Common Limitation and Obstacles for Counterparts**

Limitation and Obstacles
• The commitment of counterparts was not full-time basis.
• The schedules of their regular duties changed often and all of sudden.
• Directions from their bosses overwrote the planned activities.

Under such limitation and obstacles they had, the project counterparts tried to participate in the project activities and fulfil their tasks and responsibilities. In fact, they actively joined the preparation and evaluation of tender documents, the implementation of training courses, and the monitoring and evaluation of the project impact.

From this point of view, it could be concluded that the enable environment such as administrative arrangement, understanding/awareness from management body, etc may contribute the level of C/P's participation rather than willingness, awareness, commitment at the individual level. However, it is remarked that those limitation and obstacles could be mitigated and/or even solved if each counterpart was to coordinate and share the information in a better manner. As the conclusion, it is our belief that all counterparts will be able to do so after the termination of the Project.

## CHAPTER 4 OUTPUT 2: ESTABLISHMENT OF TRAINING SYSTEM MODEL FOR DWST

### 4.1 ACTIVITIES CARRIED OUT FOR OUTPUT 2

The expected output of [Output 2] is “A training system model for District Water and Sanitation Teams (DWST) in managing RWSS projects is established.”.

#### 4.1.1 WORK IN TANZANIA I (SEPTEMBER 2007 TO MARCH 2008)

The activities for the Output-2 taken in this term are mainly formulation of the training plan and execution of 1<sup>st</sup> Training for DWST.

The 1<sup>st</sup> training for DWST was held on 11<sup>th</sup> to 15<sup>th</sup> February 2007 at Dar es Salaam for Coast and Dar es Salaam region, 25<sup>th</sup> to 29<sup>th</sup> February 2007 at Mtwara for Mtwara and Lindi regions. The activities taken by this term for the Output 2 is summarized in *Figure 4.1*.

Activities Carried Out	Year	2007				2008		
		Sep	Oct	Nov	Dec	Jan	Feb	Mar
2-1 Improve existing training programmes for DWSTs in the target districts in managing RWSS projects and supporting communities in O&M and sanitation promotion.	Month			■	■			
2-2 Develop training curriculum and materials for DWSTs based on 2-1 above.						■	■	
2-3 Provide training for DWSTs in the target Districts based on 2-1 and 2-2 above.							■	■
2-4 Provide mentoring for DWSTs for improvement of their performance in management of RWSS projects through field visit to the districts for monitoring.		(to be carried out in Next Phase)						
2-5 Monitor and evaluate attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme for improvement of the training programme.							■	■

**Figure 4.1 Activities Carried Out for Output 2 during the Work in Tanzania I**

#### 4.1.2 WORK IN TANZANIA II (MAY 2008 TO MARCH 2009)

During the term of project step 2, in order to execute of the training phases of II, improvement of existing training programmes and development of training curriculum and materials were carried out. Additionally, through the monitoring survey (1) and (2) to the pilot districts, provision of mentoring for DWSTs to improve their performance in management of RWSS projects and the evaluation of the attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme were carried out. The activities taken by this term for the Output 2 is summarized in *Figure 4.2*.

Activities Carried Out	Year	2008								2009		
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2-1 Improve existing training programmes for DWSTs in the target districts in managing RWSS projects and supporting communities in O&M and sanitation promotion.	Month				■						■	
2-2 Develop training curriculum and materials for DWSTs based on 2-1 above : 2-2-3 Update the PIM)		■	■	■	■	■	■	■	■	■	■	■
2-3 Provide training for DWSTs in the target Districts based on 2-1 and 2-2 above.			■	■				■				
2-4 Provide mentoring for DWSTs for improvement of their performance in management of RWSS projects through field visit to the districts for monitoring.						■					■	
2-5 Monitor and evaluate attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme for improvement of the training programme.				■		■		■			■	

**Figure 4.2 Activities Carried Out for Output 2 During the Work in Tanzania II**

### 4.1.3 WORK IN TANZANIA III (MAY 2009 TO MARCH 2010)

The major activities for the Output-2 taken in this project step 2 are training phases of III and IV, improvement of existing training programmes and development of training curriculum and materials. Additionally, through the monitoring survey (3) to the pilot districts, provision of mentoring for DWSTs to improve their performance in management of RWSS projects and the evaluation of the attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme were carried out. The activities taken by this term for the Output 2 is summarized in *Figure 4.3*.

Activities Carried Out	Year	2009									2010		
		Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2-1 Improve existing training programmes for DWSTs in the target districts in managing RWSS projects and supporting communities in O&M and sanitation promotion.									■				
2-2 Develop training curriculum and materials for DWSTs based on 2-1 above. ( ■ ■ ■ : 2-2-3 Update the PIM)		■	■	■	■	■	■	■	■	■	■	■	■
2-3 Provide training for DWSTs in the target Districts based on 2-1 and 2-2 above.				■	■	■	■			■	■		
2-4 Provide mentoring for DWSTs for improvement of their performance in management of RWSS projects through field visit to the districts for monitoring.								■					
2-5 Monitor and evaluate attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme for improvement of the training programme.						■	■	■				■	

**Figure 4.3 Activities Carried Out for Output 2 During the Work in Tanzania III**

### 4.1.4 WORK IN TANZANIA IV (MAY 2010 TO JULY 2010)

During the term of project step 4, compilation of training materials provided based on the completed training curriculum was carried out. By the end line survey, provision of mentoring for DWSTs and the evaluation of the attainment of skills and knowledge, and behaviour change of trainees as well as impact of all the training programme were carried out. The activities taken by this term for the Output 2 is summarized in *Figure 4.4*.

Activities Carried Out	Year	2010			
		Month	May	Jun	Jul
2-1 Improve existing training programmes for DWSTs in the target districts in managing RWSS projects and supporting communities in O&M and sanitation promotion.				■	
2-2 Develop training curriculum and materials for DWSTs based on 2-1 above. ( ■ ■ ■ : 2-2-3 Update the PIM)		■	■	■	
2-3 Provide training for DWSTs in the target Districts based on 2-1 and 2-2 above.		(completed by last term)			
2-4 Provide mentoring for DWSTs for improvement of their performance in management of RWSS projects through field visit to the districts for monitoring.			■		
2-5 Monitor and evaluate attainment of skills and knowledge, and behaviour change of trainees as well as impact of the training programme for improvement of the training programme.			■		

**Figure 4.4 Activities Carried Out for Output 2 During the Work in Tanzania IV**

## 4.2 PERSPECTIVE OF DWST TRAINING

The training perspective for DWST is shown in *Table 4.1*. The project emphasize not only the capacity building of DWST but also the coordination between DWST and RWST, thus the joint training with RWST was planned depending on the course objectives.

Five phases of the training courses were conducted in the period between February 2007 and January 2010 and all the programmes were completed as planned.

**Table 4.1 Training Perspective for DWST**

Fiscal Year	Phase	Training Perspective			Venue	
		Contents	Course Objective, Topics	Target Trainee		
				Trainee		Region
2007	1	Identification of Present Status <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>To focuses situation analysis of RWSS sub-project</li> <li>Improvement of planning and management of RWSS projects</li> <li>To encourage DWE to take initiative in the change process of management RWSS project</li> </ul>	DWE (RWA) (RMO) (RCDO)	Coast, DSM Lindi, MT	DSM MT
2008	2	Project Planning Component-1	<ul style="list-style-type: none"> <li>Demand responsive approach in RWSS project</li> </ul>	DWE DPLO DHO DCDO	Coast, DSM Lindi, MT	DSM MT
		Component-2 <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>Strategic planning of RWSS with considering sustainability of water resources</li> </ul>	DWE (RWA)	Coast, DSM Lindi, MT	DSM MT
	3	Project Management Component-1 <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>Project management witch requires consciousness to link the activities of DWST</li> </ul>	DWE DPLO (RWA) (RPO)	Coast, DSM Lindi, MT	DSM MT
Component-2 <i>(association with RWST)</i>		<ul style="list-style-type: none"> <li>Strengthen capacity of DWST in formulation of the integrated approach and activities of water and sanitation</li> </ul>	DHO DEO (RMO) (REA)	Coast, DSM Lindi, MT	DSM MT	
2009	4	Strengthening of Support Service Component-1	<ul style="list-style-type: none"> <li>Support services for the community-based O&amp;M and hygiene promotion</li> <li>Technical supervision of service providers, contractors and suppliers</li> </ul>	DWE DHO DCDO DEO	Coast, DSM Lindi, MT	DSM MT
		Component-2		DWE S.Tech DT	Coast, DSM Lindi, MT	DSM MT
	5	O&M and Follow-up	<ul style="list-style-type: none"> <li>Planning for the O&amp;M and follow-up, and final evaluation of the achievement of each districts</li> </ul>	DWE DPLO DHO DCDO DEO	Coast DSM Lindi MT	DSM DSM MT MT

[Abbreviation] **DSM:** Dar es Salaam, **MT:** Mtwara, **DWST:** District Water & Sanitation Team, **RWST:** Riginal Water & Sanitation Team, **DWE:** District Water Engineer, **DPLO:** District Planning Officer, **DHO:** District Health Officer, **DCDO:** District Community Development Officer, **DEO:** District Education Officer, **S. Tech:** Senior Technician, **DT:** District Treasurer

### 4.3 TRAINING MODULE AND MATERIALS

#### 4.3.1 EXISTING TRAINING MODULES AND MATERIALS

Annex 9 of the Programme Implementation Manual (PIM) designates the training modules for DWST. It consists of 16 modules and 7 sub-modules under module 14. The titles of the modules and categories based on contexts of RWSSP are briefly summarized in the **Table 4.2.**

**Table 4.2 Titles and Categories of Training Modules**

Module	Title	Category
1	Opening activities for training events	Introduction of RWSSP
2	New approach to NRWSSP development	Policy and Strategy of RWSSP
3	New players and new roles	
4	Kick start activities for DWST	
5	Building a strong DWST	Setting Up for RWSSP
6	Linking district and community project cycles	
7	Promoting demand	
8	Data collection and verification	Promotion of RWSSP
9	Selecting communities for NRWSSP	
10	Deciding scale of programme	
11	Appraisal of community proposals	
12	Promoting health through water supply	Sanitation and Health in RWSSP
13	HIV/AIDS mitigation	
14	Result-based management	
	A Introduction to result-based management	Monitoring and Evaluation
	B RBM application to planning and monitoring	
	C Managing assumption and risks	
	D Critical factors to success	
	E Monitoring and evaluation	
	F Supervision of service providers	
	G Developing report writing skills	
15	Participatory facilitation skills	Facilitation Skill
16	Preparation of a DWSP	Planning (DRA)

#### 4.3.2 REVISION OF EXISTING MODULES

Through the process, in which baseline survey, task and capacity analysis, review of existing training system and plan and assessment of available training resources are carried out, of formulation of training plan, the existing training modules were examined and reviewed in comparison with revised RWSS project cycle and coverage of modules on activities necessary for RWSS project. Accordingly the project made proposal as the “Proposed Matrix of RWSSP Project Cycle and Task Allocation” shown in *Annex 6*. Revised training modules are also attached in *Separate Volume 1: Training Modular Guide for DWST, RWST and BWO* of this report.

Composition of the existing training modules for DWST included in PIM were reviewed in twice in the project implementation period *Table 4.3* shows the first revision of composition of the training modules or DWST done in the Work in Tanzania I. Revisions made in the first draft were mainly to develop new modules or supplement the existing ones in order to cover topics related to water supply planning, sanitation and hygiene promotion, procurement, contract management, project supervision and cross-cutting issues which had not been addressed enough in the original modules.

**Table 4.3 Composition of the Revised Training Modules for DWST (1<sup>st</sup> revision in Mar. 2008)**

Module	Title	Status	Category
1	Opening activities for training events	Not reviewed	Introduction of RWSSP
2	New approach to RWSS development		Policy and Strategy
3	New players and new roles		Setting Up for RWSSP
4	Kick start activities for DWST		
5	Building a strong DWST		
6	Linking district and community project cycles		

Module	Title		Status	Category	
7	Promoting demand			Promotion of RWSSP	
8	Data collection and verification				
9	Selecting communities for NRWSSP				
10	Deciding scale of programme				
11	Appraisal of community proposals				
12	A	Strategies and approaches for sanitation and hygiene promotion	Reviewed	Sanitation and Health in RWSSP	
	B	PHAST			
	C	School sanitation and hygiene			
13	HIV/AIDS mitigation		Not reviewed		
14	A	Introduction to result based management (RBM)	Reviewed	Monitoring and Evaluation	
	B	RBM framework: Part I Activity vs. Output and its indicators			
	C	RBM framework: Part II Managing assumption and risks			
	D	RBM framework Part III Success factors on activities			
	E	RBM framework Part IV Monitoring and evaluation plan			
	F	RBM framework Part V Progress evaluation and follow-up plan	Newly developed		
	G	RBM framework Part VI Report format and writing	Reviewed		
	H	Supervision of service providers: Part I Technical service provider			
	I	Supervision of service providers: Part II Facilitation service provider			
15	Participatory facilitation skills		Not reviewed	Facilitation Skill	
16	Identification of basic status in target areas			Planning (DRA)	
17	A	Procurement of goods, works and services	Newly developed	Procurement	
	B	Contract management			
18	Water supply planning				Planning (WRM)
19	Provision of training for communities				CD at Community Level
20	Consideration of gender issues in water supply and sanitation projects				Gender Issue

Further elaboration was done in the Work in Tanzania III based on the observations on application of these modules in four training phases. Composition of the training modules were reorganized by categorizing different modules according to the main themes which would help the users identify structure and relation of these modules. New modules were also developed for some themes such as operation and maintenance, sanitation and hygiene promotion and capacity development with considering its necessity raised through four training phases. The **Table 4.4** below shows the structure of the second revised version of the training modules for DWST.

**Table 4.4 Composition of the Revised Training Modules for DWST (2<sup>nd</sup> revision in Oct. 2009)**

Module	Title		Sub-Title
1	A	Introduction to DWST	Opening activities for training events
	B		New approach to RWSS development
	C		New players and new roles
	D		Kick start activities for DWST
	E		Building a strong DWST
2	Linking district and community project cycles		
3	A	Project formulation based on the Demand Responsive Approach	Promoting demand
	B		Selecting communities for RWSSP
	C		Deciding scale of programme
	D		Appraisal of community proposals
4	A	Water supply planning	<b><i>Situation analysis on RWSS conditions of the district</i></b>

Module		Title	Sub-Title
	B		<b>Assessment of water resources potential</b>
	C		Water supply planning
	D		<b>Data management and monitoring</b>
5	A	<b>Operation &amp; maintenance of rural water supply</b>	<b>O&amp;M requirements for sustainability</b>
	B		<b>Organizational and financial management in O&amp;M</b>
	C		<b>Technical support for O&amp;M</b>
6	A	Sanitation & Hygiene Promotion	Basic policies and implementation strategies of sanitation and hygiene promotion
	B		PHAST
	C		<b>Social marketing</b>
	D		<b>CLTS</b>
	E		<b>Technology options for improvement of sanitation</b>
	F		School sanitation and hygiene
7	A	Project planning & management	Result Based Management
	B		<b>Project Cycle Management with using logical framework</b>
	C		<b>Project monitoring</b>
	D		<b>Project evaluation &amp; follow-up plan</b>
	E		Managing success factors, assumptions and risks
	F		Report format and writing
8	A	Procurement and contract management	Procurement of goods, works and services
	B		Contract management
9	A	Supervision of Service Providers and Contractors/ Suppliers	Supervision of Technical Service Provider
	B		Supervision of Facilitation Service Provider
	C		Supervision of the Contractor/ Supplier
10	A	<b>Capacity development</b>	<b>Capacity assessment</b>
	B		<b>Capacity development planning</b>
	C		<b>Monitoring and evaluation of capacity development interventions</b>
	D		<b>Support for capacity development of communities</b>
11		Participatory facilitation skills	
12		Consideration of gender issues in water supply and sanitation projects	
13		HIV/AIDS mitigation	

Titles in bold and Italic in above table shows modules newly developed.

#### 4.3.3 SELECTION OF APPROPRIATE MODULES ON RUWASA-CAD TRAINING PLAN

An area of a particular capacity necessary for DWST is generally complex with different technical and managerial competences. Likewise, each phase of the training plan requires multi-disciplinary inputs for effective capacity development. Therefore, more than one training module is usually incorporated in each phase of the training plan. The combination of the training plan and modules is summarized in the *Table 4.5*.

Table 4.5 Training Plan and Modules

Phase	Training Plan (excluding trainees)		Developed and/or Improved Materials	
	Course Title	Course Objective, Topics	Module	Training Materials
1	<b><u>Identification of Present Status</u></b> <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>Verification of present situation of RWSS in the district and region</li> <li>Establishment of common pictures of existing organizational and individual capacities of DWST &amp; RWST</li> <li>Factors to be considered in planning of water supply projects</li> </ul>	<b>1A, 1B, 1C, 4A, 4B, 4C, 10A, 10B, 10C</b>	<b><u>I: Identification of Present Status</u></b> <ul style="list-style-type: none"> <li>Situation analysis on RWSS conditions of the districts</li> <li>Review of processes of the project planning and implementation in the district</li> <li>Introduction to the strategic planning of water supply</li> <li>Regional water supply master plan</li> <li>Water resources evaluation</li> <li>Capacity assessment</li> <li>Management of the capacity development process at the district &amp; regional level</li> <li>Setting goals and performance monitoring indicators for the training programme</li> </ul>
2	<b><u>Project Planning</u></b> Component-1	<ul style="list-style-type: none"> <li>Improved application of DRA in the project planning and management</li> <li>Maximization of synergy among DWST members for facilitation of RWSS projects</li> </ul>	<b>1, 2, 3</b>	<b><u>II: DRA in RWSS Projects</u></b> <ul style="list-style-type: none"> <li>National policies and strategies related to RWSS sub-sector</li> <li>Framework for planning DWSP based on DRA</li> <li>Roles and responsibilities of DWST and relations with other key players</li> <li>Promotion of demand</li> <li>Application for RWSSP by communities and verification of demand by DWST</li> <li>Deciding scale of the Programme</li> <li>Appraisal of community proposals</li> </ul>
	Component-2 <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>Strategic planning of RWSS with considering sustainability of water resources</li> </ul>	<b>1A, 3D, 4A, 4B, 4C</b>	<b><u>III: Water Supply Planning</u></b> <ul style="list-style-type: none"> <li>Flow of formulation of preliminary study and detailed design of RWSS projects</li> <li>Assessment of water resources potential</li> <li>Consideration of socio-economic conditions</li> <li>Water supply planning</li> <li>Facility plan and design</li> <li>Operation and maintenance plan</li> <li>Impact assessment</li> <li>Appraisal of the community subprojects</li> </ul>
3	<b><u>Project Management</u></b> Component-1 <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>Project management which requires consciousness to link the activities of DWST</li> </ul>	<b>1A, 7A, 7B, 7C, 7D, 7E, 8A</b>	<b><u>IV: Project Management</u></b> <ul style="list-style-type: none"> <li>Project Cycle Management based on the logical framework</li> <li>RBM in the project cycle</li> <li>Communication in the project management</li> <li>Contract management</li> </ul>
	Component-2 <i>(association with RWST)</i>	<ul style="list-style-type: none"> <li>Strengthened capacity of DWST in formulation of the integrated approach and activities of water and sanitation</li> </ul>	<b>1A, 6, 13</b>	<b><u>V: Sanitation &amp; Hygiene Promotion</u></b> <ul style="list-style-type: none"> <li>National strategies on sanitation &amp; hygiene promotion</li> <li>PHAST</li> <li>CLTS</li> <li>School sanitation &amp; hygiene education</li> <li>Technology options for improvement of sanitation</li> <li>Social marketing for the improved sanitation</li> <li>Mainstreaming of HIV/AIDS in RWSSP</li> </ul>
4	<b><u>Strengthening of Support Service</u></b> Component-1	<ul style="list-style-type: none"> <li>Strengthened network of human resources and organizations in the districts for support services</li> <li>Utilization of extension workers and CBOs/NGOs to support WATSAN/COWSO</li> </ul>	<b>1A, 1B, 1C, 5A, 5B, 10D, 11, 12</b>	<b><u>VI: Support Services for the Community-Based O&amp;M and Hygiene Promotion</u></b> <ul style="list-style-type: none"> <li>Roles and responsibilities of extension workers and CBOs/NGOs in RWSSP</li> <li>Facilitation skills on water supply and hygiene promotion</li> <li>Community O&amp;M models and registration procedures</li> <li>Gender mainstreaming</li> <li>Participatory M&amp;E of WSS situation and O&amp;M</li> <li>Guidelines and manuals for the facilitators</li> </ul>
	Component-2	<ul style="list-style-type: none"> <li>Technical supervision of service providers, contractors and suppliers to ensure meeting required standard of the water supply services</li> </ul>	<b>1A, 5A, 5C, 8B, 9</b>	<b><u>VII: Supervision of Service Providers</u></b> <ul style="list-style-type: none"> <li>Technical supervision of works by service providers and contractors</li> <li>Quality control of workmanship</li> <li>O&amp;M follow-up technical support</li> <li>Contract management</li> </ul>

Phase	Training Plan (excluding trainees)		Developed and/or Improved Materials	
	Course Title	Course Objective, Topics	Module	Training Materials
				<ul style="list-style-type: none"> <li>➤ Building cooperative relationship with private sector</li> <li>➤ Management of database of available service providers</li> </ul>
5	<b>O&amp;M and Follow-up</b>	<ul style="list-style-type: none"> <li>• Planning for the O&amp;M and follow-up</li> <li>• Monitoring and evaluation at the O&amp;M and follow-up stage</li> <li>• Final evaluation of the achievement of each districts</li> </ul>	<b>1A, 5</b>	<b>VIII: O&amp;M and Follow-up</b> <ul style="list-style-type: none"> <li>• O&amp;M requirements for sustainability</li> <li>• Post-construction follow-up support by DWST</li> <li>• Monitoring of O&amp;M conditions</li> <li>• Evaluation of community subprojects and preparation of follow-up plan</li> <li>• Review of behavior change realized through the training</li> </ul>

#### 4.3.4 RUWASA-CAD TRAINING CURRICULUM FOR DWST

Training curriculum for each phase were prepared by associating the training plan with training sessions, specific objectives and contents of each session. Composition of sessions of each training course is described in the **Table 4.6**. The training curricula prepared by the project are attached in **Annex 9**.

**Table 4.6 Summary of the Training Curriculum for DWST**

Training Phase	Session Composition of the Training Course
<b>1<sup>st</sup> Phase: Identification of Present Situation</b>	<ol style="list-style-type: none"> <li>1. Situation analysis on RWSS conditions of the districts</li> <li>2. Review of processes of the project planning and implementation in the districts</li> <li>3. Review of the task allocation and coordination in the team</li> <li>4. Introduction to the strategic planning of water supply</li> <li>5. Regional water supply master plan</li> <li>6. Water resources evaluation</li> <li>7. Capacity assessment</li> <li>8. Management of the capacity development process at the district &amp; regional levels</li> <li>9. Setting the goal and performance monitoring indicators for the training programme</li> </ol>
<b>2<sup>nd</sup> Phase: Project Planning</b>	<b>Component 1: Demand Responsive Approach in RWSS Projects</b> <ol style="list-style-type: none"> <li>1. National policies and strategies related to RWSS sub-sector</li> <li>2. Framework for Planning DSWP based on DRA</li> <li>3. Roles and responsibilities of DWST and relations with other key players</li> <li>4. Promoting demand</li> <li>5. Application for NRWSSP by communities and verification of demand DWST</li> <li>6. Selecting Communities for NRWSSP</li> <li>7. Deciding scale of Programme</li> <li>8. Appraisal of community proposals</li> </ol>
	<b>Component 2: Water Supply Planning</b> <ol style="list-style-type: none"> <li>1. Flow of formulation of preliminary study and detailed design of rural water supply projects</li> <li>2. Assessment of water resources potential</li> <li>3. Consideration of socio-economic conditions</li> <li>4. Water supply planning</li> <li>5. Facility plan and design</li> <li>6. Operation and maintenance plan</li> <li>7. Impact assessment</li> <li>8. Appraisal of the community subprojects</li> </ol>
<b>3<sup>rd</sup> Phase: Project Management</b>	<b>Component 1: Project Management</b> <ol style="list-style-type: none"> <li>I. Project Cycle Management based on the Logical Framework                             <ol style="list-style-type: none"> <li>1. Introduction to the project cycle management with using the logical framework</li> <li>2. Stakeholders analysis</li> <li>3. Problem analysis &amp; objective analysis</li> <li>4. Formulation of the logical framework</li> </ol> </li> <li>II. Result Based Management                             <ol style="list-style-type: none"> <li>5. Activities linked to the expected output</li> </ol> </li> </ol>

Training Phase	Session Composition of the Training Course	
	(RBM) in the Project Cycle	6. Managing assumptions and risk and success factors 7. Monitoring and evaluation
	III. Communication in the Project Management	8. Information sharing for management of the change processes
	IV. Contract Management	9. Procurement and contract management
	<b>Component 2: Sanitation and Hygiene Promotion</b>	
1. National strategies on sanitation and hygiene promotion 1. Participatory Hygiene and Sanitation Transformation (PHAST) 2. Community-Led Total Sanitation (CLTS) 3. School sanitation and hygiene education 4. Technology options for improvement of sanitation 5. Social marketing for the improved sanitation 6. Mainstreaming of HIV/AIDS in RWSSP		
<b>4<sup>th</sup> Phase: Strengthening of Support Services</b>	<b>Component 1: Support Services for the Community-Based Operation and Maintenance and Hygiene Promotion</b>	
	1. Roles and responsibilities of extension workers of the district council and CBOs/NGOs in RWSSP 2. Facilitation skills on water supply and hygiene and sanitation promotion 3. Community management Community O&M management models and registration procedures 4. Gender mainstreaming 5. Participatory monitoring and evaluation of WSS situation and O&M 6. Guidelines and manuals for the facilitators	
	<b>Component 2: Supervision of Service Providers</b>	
1. Technical supervision of the works by the service providers and contractors 2. Quality control of workmanship 3. O&M follow-up technical support 4. Contract management 5. Building cooperative relationship with private sector 6. Management of database of the available service providers		
<b>5<sup>th</sup> Phase: O&amp;M and Follow-up</b>	1. Operation and maintenance requirements for sustainability 2. Post- construction follow-up support by DWST 3. Monitoring of O&M conditions 3-1. Monitoring of RWSSP/WSDP 3-2. Indicators for monitoring at O&M stage 4. Evaluation of community sub-projects and preparation of follow-up plan 5. Review of behavior change realized through RUWASA-CAD training	

Training sessions are basically derived from main topics of the training phases described in the training plan while specific objectives are stipulated from training modules incorporated. These processes are rather methodical. It, however, needs a sort of skills and experiences for training planners to set up the contents of sessions which are relevant and logically feasible under the course objectives.

#### 4.3.5 PROVISION OF TRAINING GUIDES AND MATERIALS

Training guides and materials were prepared by trainers, who were selected through tenders for provision of trainings, based on each training curriculum mentioned above. The project team ensured the quality of training guides and materials by examining methods/approaches used in sessions and contents of training materials.

#### 4.4 IMPLEMENTATION OF DWST TRAINING

In RUWASA-CAD project, the training implementation, which includes preparation of training time table and training guide, provision of facilitators and trainers, preparation of training materials and arrangement of training venue, stationeries and equipments, is basically contracted to local consultants in order to ensure the sustainable training implementation. The proceedings of each training phase are explained in the following sections.

##### 4.4.1 1<sup>ST</sup> TRAINING PHASE

The outline of 1<sup>st</sup> training phase is given in the *Table 4.7*.

**Table 4.7 Outline of 1<sup>st</sup> Training Phase**

No	Outlines	
1	Consultant	RUWASA-CAD
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 11/Feb – 15/Feb, 2008 (Dar es Salaam) for DSM and Coast regions</li> <li>• 25/Feb – 29/Feb, 2008 (Mtwara) for Mtwara and Lindi regions</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>• Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> <li>• Vocational Education and Training Authority (Mtwara)</li> </ul>
4	Facilitator	Mr. Deo Binamungu (Achrid Ltd) Mr. Modhakiru Katakweba (Multiwater Ltd)
5	Trainers (responsible session)	Mr. Goyagoya J.M. (MoWI) Session 1
		Mr. Goyagoya J.M. (MoWI) Session 2
		Mr. Goyagoya J.M. (MoWI) Session 3
		Ms. Rita Kilua (MoWI) Session 4
		Mr. Yusuke Ando (JICA Expert)
		Mr. Goyagoya J.M. (MoWI) Session 5
		Mr. Omari Rumanbo (MoWI) Session 6
		Mr. Kisaka G.J. (MoWI) Session 8
		Mr. Goyagoya J.M. (MoWI) Session 9
6	No. of Trainees	Dar es Salaam DWE: 10 participated / 10 invited (RWST: 6 participated / 6 invited)
		Mtwara DWE 12 participated / 12 invited (RWST: 6 participated / 6 invited)

This training was organized directly by MoWI in collaboration with the RUWASA-CAD and was facilitated jointly for DWST and RWST by Mr. Deo Binamungu (Achrid Ltd). This training had the following major goals:

- (i) To verify the baseline data on RWSS coverage in the target districts and regions as presented in the Baseline Survey Report;
- (ii) To establish a common picture of the existing organizational and human resources capacities of District Water and Sanitation Teams (DWSTs) in RWSS planning and management;
- (iii) To identify crucial factors for consideration in planning water supply projects; and
- (iv) To define performance monitoring indicators for measuring improved management capacity of DWSTs and RWSTs.

The training was conducted in two places at two separate centres. The training firstly held from 11-15 February 2008 at the Dar es Salaam centre brought together 16 trainees from seven districts and three municipalities of Coast and Dar es Salaam regions respectively. The second training at Mtwara centre was held from 25-29 February 2008 and attended by 18 trainees from Lindi and Mtwara regions. The trainees included 22 district/municipal water engineers and 3 members (RWA, RMO, and RCDO) each from the Regional Water and Sanitation Teams (RWST) of Dar es Salaam, Coast, Lindi and Mtwara regions.

Both training events were carried out in a participatory manner through which trainees had an opportunity to share experiences from different districts and regions. A mix of methods and techniques were used to generate dialogue among trainees. These included presentations of papers on power point system, handouts, small group discussions, focus group discussions, pair buzzing<sup>1</sup>, and rotational brainstorming.

In order to optimize discussion and collaboration, discussion groups were kept small – not more than six people. Groups were frequently assigned different but related tasks. Plenary sessions, which were organized after group discussions helped the trainees to share common understand on issues and acquire further learning of new things. Some energizers were sporadically injected into the learning process to ensure that trainees were always active and refreshed.

The following part highlights the overall key results and ideas that emerged from the training. Paper presentations and the subsequent group and plenary discussions generated lots of ideas from the trainees and below are some of the major insights.

### **(1) WSS Coverage and DWST Management Capacity of RWSS Projects**

- Trainees admitted that most of the data on water supply and sanitation available in the districts were fragmented and at times unreliable or outdated e.g. on population, WSS coverage etc. Hence, there was a need under this project to ensure that an efficient system for collecting, analyzing and managing RWSS data is established.
- The data on organizational capacity at the district level as presented in the baseline survey report showed a real picture as most of the DWSTs were not functioning as a team e.g. meetings were hardly convened and DWSPs were often prepared by the DWEs with minimal or no consultation with other relevant sectors.

### **(2) Strategic Planning of Water Supply**

- Trainees underscored the need to give high profile matters concerning water resources assessment as this would be a key determinant for demand for water in a community. Thus, they concurred with the proposal in the revised RWSSP Cycle that identification of water resource potential should precede promotion/sensitization of communities on RWSSP.
- Furthermore trainees recognized the fact that districts had no required skills to carry out water resources identification/assessment and hence it was imperative to link up with BWOs in undertaking this activity. They also recommended strongly that the BWOs should examine detailed water resources assessment results carried out by the TSPs.
- RWSTs and particularly RWAs should certify the detailed designs worked out by the TSPs.

### **(3) Strengthening Role of DWSTs**

- Districts should produce their DWSPs as the guiding vision for the investment of their funds and funds from WSDP. O&M issues should be part of the DWSPs to ensure that communities continue to access technical support from the DWSTs even after the completion of the WSS facilities.
- There is an urgent need to build up a strong teamwork among DWST members. Such teamwork requires DWST members to meet regularly, share information so that even if some of the officials are transferred elsewhere, there could be continuity in the management of RWSS projects in the district.
- Trainees recognized that in their day to day operations they hardly link up their individual skill and the organization capacity. They underscored the need for this project to

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<sup>1</sup> Pair buzzing: discussion between 2 trainees.

specifically focus on this aspect so that all district staff should share a common vision while undertaking their responsibilities.

#### (4) Enhancing Strategic Linkages

- Linkages between DWSTs, RWSTs and BWOs should be strengthened through regular communication. RWSTs should recognize that they have a mandate to provide technical support to DWSTs e.g. in preparation of DWSPs, interpreting sector policies, monitoring implementation of RWSS projects and capacity building.
- Roles and responsibilities should be adequately articulated both within the DWSTs and other key players specifically RWSTs and BWOs. Such articulation should also imply areas of relations among these players and mandates of each within the revised RWSSP Cycle. In other words, trainees were calling upon an expanded sense of teamwork among all players in RWSSP cycle.

### 4.4.2 2<sup>ND</sup> TRAINING PHASE

#### (1) Component 1

The outline of component 1 of the 2<sup>nd</sup> training phase is given in the *Table 4.8*.

**Table 4.8 Outline of Component 1 of the 2<sup>nd</sup> Training Phase**

No	Outlines	
1	Consultant	WEDECO Ltd
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 9/June – 13/June, 2008 (Dar es Salaam) for Coast region</li> <li>• 16/June – 20/June, 2008 (Dar es Salaam) for DSM region</li> <li>• 23/June – 27/June, 2008 (Mtwara) for Lindi region</li> <li>• 30/June – 4/July, 2008 (Mtwara) for Mtwara region</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>• Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> <li>• Clinical Officers Training Center (Mtwara)</li> </ul>
4	Facilitator	Ms. Mwanasha Ally (WEDECO Ltd) Ms. Marry Liwa (WEDECO Ltd) Mr. Charles Panyika (WEDECO Ltd)
5	Trainers (responsible session)	Ms. Kirenga D.A.T. (MoWI) Session 1
		Mr. Ally S. Mlupilo (PMO-RALG) Session 2
		Ms. Consolata Sana (WEDECO Ltd) Session 3
		Ms. Kirenga D.A.T. (MoWI) Session 4
		Ms. Julieth Kahembe (WEDECO Ltd) Session 5
		Ms. Marry Liwa (WEDECO Ltd) Session 6
		Ms. Consolata Sana (WEDECO Ltd) Session 7
		Ms. Consolata Sana (WEDECO Ltd) Session 8
		Ms. Mwanasha Ally (WEDECO Ltd) Session 8
6	No. of Trainees	Coast region DWST 28 participated / 28 invited
		Dar es Salaam region DWST 12 participated / 12 invited
		Lindi region DWST 24 participated / 24 invited
		Mtwara region DWST 24 participated / 24 invited

This training was contracted to Water and Environmental Development Company (WEDECO) Ltd with the following major goals:

- (i) To improve application of the Demand Responsive Approach (DRA) in the project planning and management by DWST with considering institutional, organizational, and socio-economic conditions of each district.
- (ii) To enhance understanding of the trainees on significance and effectiveness to maximize synergy among DWST members for facilitation of RWSS projects.

The training was carried out for the DWST core members. These included four trainees from each District, i.e. the District Water Engineer (DWE), The District Planning Officer (DPLO), the District Health Officer (DHO) and the District community Development Officer, (DCDO).

The training took place at Ubungu Plaza in the Blue Pearl Hotel in Dar es Salaam and at the Clinical Officers Training Centre (COTC) in Mtwara region. The training took place from 9<sup>th</sup> June 2008 to 4<sup>th</sup> July 2008. The training lasted for five days each.

Both participatory information delivery methods were applied as much as possible to draw out trainees own experiences and ideas about specific topics. Maximum interactions were made through different facilitation techniques. The techniques included brainstorming, buzzing discussions, card storming, case studies, demonstrations, live examples and plenary. As a back up, different materials were used. These included handouts flipcharts; news prints Meta cards, notebooks, pens, files, power point slides, and other relevant stationery and training aids.

The followings are the observations and findings, which were realized during the four trainings in the Dar es Salaam and the Mtwara venues from sessions.

### 1) Framework for Planning DWST Based on DRA

The trainees acknowledged the Government directive on demand responsive planning using the O&OD approach. O&OD methodology was adopted as the official planning tool to planning of the any development programme since it was realized that it was constitutional, although the application of O&OD was limited because some districts had not been rolled out with the methodology.

District Council used various approaches in the planning process, for example SWOT analysis, PRA and PHAST. These tended to confuse the communities by having too many plans at a time with inadequate fund to implement the plans.

Trainees identified the following points as hindering factors to utilize O&OD in an effective manner.

- Plans without funding

Experience showed that the plans had not been reviewed and that most planned activities were not yet implemented.

- Political interference

Another setback to RWSSP implementation was political interference, which led to low revenue collection and negative attitudes of the communities towards O&OD on the other hand the DWST were not used effectively.

It was observed that due to political interferences communities identified many projects and that the plans were biased to certain sectors.

- Hygiene and sanitation

It was reported that water borne diseases, were rampant due to inadequate sanitation facilities i.e. latrines and inadequate safe and clean water. Sanitation issues are not included in LGA plans.

LGAs have separate plans for water under water department while the sanitation part is under the health department.

- Limited community involvement

The plans in the LGAs use the O&OD methodology. It is regretfully observed that the communities are not fully involved in the planning process.

## 2) Promoting Demand

There is no systematic strategy for promotion on RWSSP to the communities. O&OD, which is the official planning tool to ensure DRA, is not yet practiced by DWSTs.

The DRA is still a new concept to members of DWSTs and therefore its use in the communities is not widely accustomed by key players of development programmes. It may need longer time that the level of understanding on DRA among stakeholders becomes profound enough to change from top-down approach to bottom-up.

## 3) Application for RWSSP and Verification of Demand

The access to RWSSP by the communities needs certain application procedures, which are explained in PIM, to be followed by applicant themselves. This step aims to encourage applicants to feel more involved in the commencement of the project, which would consequently grow the ownership of the project among stakeholders. There, however, are various hindering factors among communities identified during the discussion. They are as followed.

- Low awareness on the project

Communities feel that they do not have to apply for RWSSP because water is natural resource, which is shared by many people. Therefore, they think that someone else will take an action to develop this natural resource even for them. This sense of dependency reduces significantly the level of responsibility to the communities. It results in occurrence of low awareness on the project among communities and consequently creates a negative spiral of awareness-application.

- Political interference

In some cases the local politicians have biased some communities towards filling in the application forms because they would have liked certain communities to apply for the water facilities and not others for political reasons. Local politicians look for popularity from voters they tend to give false promises.

## 4) Selection of Communities for RWSSP

The information available for selection of communities in the districts and communities is outdated. It is because there is no comprehensive information management system among LGAs and Lower Local Government Authorities (LLGAs). Trainees realized that it was one of DWSTs tasks to coordinate and make follow-up on use and updating of information. Besides, MoWI was recommended to coordinate sector responsible ministries and consolidate the information management system set differently in each sector.

## 5) Appraisal of Community Proposals

Trainees understood that there were 2 different practices for planning water sector development intervention at community level, namely village comprehensive development plans based on O&OD approach and facility and management plan (FMP part A) to apply RWSSP. The former is stipulated by PMO-RALG, while the latter by MoWI.

By assessing experiences addressed by trainees, 8 cases are generally observed in appraisal of community proposals within 22 LGAs. They are summarized in the **Table 4.9**.

**Table 4.9 Categorized Cases of Community Appraisal**

Case	Practices at LGAs	Consequences
1	<ul style="list-style-type: none"> <li>O&amp;OD gives priority to each sector development plan at communities.</li> <li>Communities with water sector as first priority are given FMP for application of RWSSP.</li> </ul>	<ul style="list-style-type: none"> <li>Communities with water sector as first priority are selected for 1<sup>st</sup> cycle of RWSSP at LGAs.</li> </ul>
2	<ul style="list-style-type: none"> <li>O&amp;OD gives priority to each sector development plan at communities.</li> <li>Communities with water sector as first priority are given FMP for application of RWSSP.</li> <li>Local politicians interfered with the selection process by adding their preferred communities.</li> </ul>	<ul style="list-style-type: none"> <li>Communities with water sector as first priority and those with other sectors are selected for 1<sup>st</sup> cycle of RWSSP at LGAs.</li> </ul>
3	<ul style="list-style-type: none"> <li>O&amp;OD gives priority to each sector development plan at communities.</li> <li>All communities are given with FMP for application of RWSSP.</li> <li>Priority identified through O&amp;OD is used as one of selection criteria.</li> </ul>	<ul style="list-style-type: none"> <li>Communities with water sector as first priority are selected for 1<sup>st</sup> cycle of RWSSP at LGAs.</li> </ul>
4	<ul style="list-style-type: none"> <li>O&amp;OD gives priority to each sector development plan at communities.</li> <li>All communities are given with FMP for application of RWSSP.</li> <li>Priority identified through O&amp;OD is used as one of selection criteria.</li> <li>Local politicians interfered with the selection process by adding their preferred communities.</li> </ul>	<ul style="list-style-type: none"> <li>Communities with water sector as first priority and those with other sectors are selected for 1<sup>st</sup> cycle of RWSSP at LGAs.</li> </ul>
5	<ul style="list-style-type: none"> <li>All communities are given with FMP for application of RWSSP.</li> <li>DWST set selection criteria, which priority of communities is one of.</li> </ul>	<ul style="list-style-type: none"> <li>Communities with water sector as first priority are selected for 1<sup>st</sup> cycle of RWSSP at LGAs.</li> </ul>
6	<ul style="list-style-type: none"> <li>All communities are given with FMP for application of RWSSP.</li> <li>DWST set selection criteria, which priority of communities is one of.</li> <li>Local politicians interfered with the selection process by adding their preferred communities.</li> </ul>	<ul style="list-style-type: none"> <li>Communities with water sector as first priority and those with other sectors are selected for 1<sup>st</sup> cycle of RWSSP at LGAs.</li> </ul>
7	<ul style="list-style-type: none"> <li>All communities are given with FMP for application of RWSSP.</li> <li>DWST set selection criteria, which priority of communities is not included.</li> </ul>	<ul style="list-style-type: none"> <li>Communities are selected for 1<sup>st</sup> cycle of RWSSP at LGAs without considering their priority.</li> </ul>
8	<ul style="list-style-type: none"> <li>All communities are given with FMP for application of RWSSP.</li> <li>DWST set selection criteria, which priority of communities is not included.</li> <li>Local politicians interfered with the selection process by adding their preferred communities.</li> </ul>	<ul style="list-style-type: none"> <li>Communities are selected for 1<sup>st</sup> cycle of RWSSP at LGAs without considering their priority.</li> </ul>

According to the official procedures of RWSSP, securing DRA is indispensable for appraisal of community development plan. Based on this idea, assessing above mentioned cases, there could be only 3 cases which may secure DRA, case 1, 3 and 5 respectively.

Responding this result of discussion, trainees recommended the following points to MoWI.

- Policy dissemination to both LGAs and LLGAs about DRA
- Harmonization of outputs from O&OD and FMP

## (2) Component 2

The outline of component 2 of the 2<sup>nd</sup> training phase is given in the *Table 4.10*.

**Table 4.10 Outline of Component 2 of the 2<sup>nd</sup> Training Phase**

No	Outlines	
1	Consultant	WEDECO Ltd
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 30/June – 4/July, 2008 (Dar es Salaam) for DSM and Coast regions</li> <li>• 7/July – 11/July, 2008 (Mtwara) for Mtwara and Lindi regions</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>• Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> </ul>

<sup>2</sup> There are 3 LGAs, in the project regions, where O&OD is not rolled out, Lindi D.C., Nachingwea, and Ruangwa. Instead, PRA is utilized for planning community development programmes.

No	Outlines	
		<ul style="list-style-type: none"> <li>Clinical Officers Training Center (Mtwara)</li> </ul>
4	Facilitator	Ms. Mwanasha Ally (WEDECO Ltd) Ms. Marry Liwa (WEDECO Ltd) Ms. Consolata Sana (WEDECO Ltd)
5	Trainers (responsible session)	Mr. Goyagoya J.M. (MoWI) <span style="float: right;">Session 1</span>
		Ms. Mwanasha Ally (WEDECO Ltd) <span style="float: right;">Session 2</span>
		Mr. Saidi Faraji (MoWI) <span style="float: right;">Session 3</span>
		Mr. Goyagoya J.M. (MoWI) <span style="float: right;">Session 4</span>
		Mr. Goyagoya J.M. (MoWI) <span style="float: right;">Session 5</span>
		Mr. Goyagoya J.M. (MoWI) <span style="float: right;">Session 6</span>
		Ms. Mwanasha Ally (WEDECO Ltd) <span style="float: right;">Session 7</span>
		Ms. Mwanasha Ally (WEDECO Ltd) <span style="float: right;">Session 7</span>
		Mr. Goyagoya J.M. (MoWI) <span style="float: right;">Session 8</span>
6	No. of Trainees	DSM and Coast regions <span style="float: right;">DWE 11 participated / 11 invited (RWA 1 participated / 2 invited)</span>
		Mtwara and Lindi regions <span style="float: right;">DWE 12 participated / 12 invited (RWA 2 participated / 2 invited)</span>

This training was contracted to Water and Environmental Development Company (WEDECO) Ltd and facilitated jointly for DWST and RWST with the following major goals:

- (i) To equip knowledge and skills for the strategic planning of rural water supply with considering sustainability of water resources in the target area and management by the Community-Owned Water Supply Organization (COWSO)

The training was carried out jointly for DWE and RWA only since the training objective covered technical aspects as water resources management of water supply planning.

The training was held at Ubungo Plaza Blue Pearl Hotel for trainees from Dar es Salaam and Coast regions and Clinical Officers Training Centre (COTC) in Mtwara for those from Mtwara and Lindi regions.

Various participatory methods and tools including brainstorming, card storming, buzzing in pairs, round robin report back, case studies, role plays and songs were used throughout the training. The training purposely used group and plenary discussions to enable trainees reach a common consensus on crucial issues.

Working in buzzing pairs or small groups enabled trainees to develop self-confidence and teamwork in sorting out issues as well as sharing experiences from different situations. Through these participatory methods, trainees were able to collectively conceive the results of the training.

The training materials document with a reference focusing on water supply planning has been developed and presented in a separate package which comprises of training aims, objectives, curriculum, session plans, training notes and lecture presentations.

The followings are the observations and findings, which were realized during the four trainings in the Dar es Salaam and the Mtwara venue from sessions.

### 1) Flow of formulation of preliminary and detail design of rural water supply projects

In the general process of water supply designing, various studies should be undertaken to increase the accuracy of water supply design. It, however, was realized that no particular study such as preliminary and feasibility studies were undertaken in the existing rural water supply and sanitation projects. The reasons identified by trainees are shown below.

- Directives from the Ministry of Water and Irrigation e.g. Project completion timeframe forced engineers to execute projects without detailed analysis.
- Inadequate budget provisions and low capacities available in the district water departments in terms of expertise, tools and equipment.
- Unavailability of reliable data that limits the possibilities to go through all of these steps.

As a conclusion of this session, trainees appreciated the importance of the involvement of different players in RWSSP, based on the fact that they commonly faced in their LGAs, in order to undertake a series of studies effectively.

## 2) Assessment of water resources potential

Basing on Tanzania experience, the assessment of water quality is not given first priority as compared to water quantity. It was realized that there were few water analysis laboratories compared to the high-expected number of projects to be executed under RWSSP. To ensure reliable assessment of water quality it was advised that MoWI through BWOs to equip the basin water laboratories with necessary tools, reagents and qualified staff to meet the RWSSP water quality assessment demand.

Tanzania is far behind in resource management. It was suggested that all stakeholders to take corrective measures on the water resources management before the scarce water resource is depleted. However much of the support comes from BWOs.

It was recognized that some of water resource data, e.g. demographic and geological data are available at District/Municipal councils and other can be obtained from BWOs of which in both cases need to be updated. There is an immediate need of collecting new and updating the available data. BWOs are obliged to provide information and data for proper management of water resource. It was found that BWO has no systematic MIS much of the existing monitoring stations are out of order. There are no personnel to be entrusted for work at BWO.

## 3) Consideration of socio-economic conditions

It was revealed that there is minimal consideration of the social economic factors when designing rural water supply and sanitation sub projects. Further to that trainees realize the importance of referring to the factors during designing.

## 4) Water Supply Planning

Water supply plan needs reliable technical data and information for its accuracy. It, however, is quite limited for planners to access these data and information with the following reasons.

The water departments at district and regional levels have inadequate hydrological and hydrogeological data for water supply planning. Trainees were concerned on the capability of the BWO to supply the data and information for planning. Ruvuma/Southern Coast water basin was mentioned as an example of BWOs that cannot provide all the required information for water supply planning as it is still under the infant stage of its existence.

There is no clear line of information sharing between the LGAs and BWOs. It was suggested to establish reliable Information Management Systems. This limits DWSTs to design the water supply plans in technically feasible manner.

## 5) Facility Plan and Design

Practice of water supply and sanitation facilities planning and designing is not a common phenomenon to LGAs' staff. This has been due to limitations on the timing and knowledge on the process.

Especially in a process of facility planning and designing with involvement of communities, there is a need of synchronizing the O&OD process in the implementation of RWSS project under WSDP. During preparations of community planning if water happens to be the priority, which in most cases occurs, advance stage of water supply planning can be done at community level.

## 6) Impact Assessment

The trainees' experiences on water supply and sanitation projects planning showed that there is a minimum consideration on the social and environmental impact assessment during planning stage. This is because all trainees are not aware of the procedures and guidelines on how social and environmental impact assessments should be incorporated in the overall process of project planning.

## 7) Appraisal of the Community Subprojects

Trainees realized that most of the existing projects have not been derived from any of the study e.g. feasibility/preliminary and this situation has reduced significantly the technical feasibility of the project.

Besides, BWOs and RWSTs which are supposed to provide technical services during the appraisal do not have enough capacity in terms of personnel, equipment and even finances to support DWSTs.

Trainees were confused on alignment of O&OD planning process and FMP to be carried out during RWSS project cycle. Neither PMO-RALG nor MoWI could clarify. It was proposed that during the review of WSDP manuals including the FMP, O&OD process should be well discussed and integrated within the process.

### 4.4.3 3<sup>RD</sup> TRAINING PHASE

#### (1) Component 1

The outline of component 1 of the 3<sup>rd</sup> training phase is given in the *Table 4.11*.

**Table 4.11 Outline of Component 1 of the 3<sup>rd</sup> Training Phase**

No	Outlines	
1	Consultant	Achrid Ltd
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 3/November – 7/November, 2008 (Dar es Salaam) for DSM and Coast regions</li> <li>• 17/November – 21/November, 2008 (Mtwara) for Mtwara and Lindi regions</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>• Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> <li>• Clinical Officers Training Center (Mtwara)</li> </ul>
4	Facilitator	Mr. Deo Binamungu (Achrid Ltd) Ms. Anna Stella Kajjage (Achrid Ltd)
5	Trainers (responsible session)	Ms. Anna Stella Kajjage (Achrid Ltd) Session 1
		Ms. Anna Stella Kajjage (Achrid Ltd) Session 2
		Ms. Anna Stella Kajjage (Achrid Ltd) Session 3
		Ms. Anna Stella Kajjage (Achrid Ltd) Session 4
		Ms. Anna Stella Kajjage (Achrid Ltd) Session 5
		Ms. Anna Stella Kajjage (Achrid Ltd) Session 6
		Mr. Kisaka G.J. (MoWI) Session 7
		Mr. Deo Binamungu (Achrid Ltd) Session 8
		Mr. Deo Binamungu (Achrid Ltd) Session 9
6	No. of Trainees	DSM and Coast regions   DWST 20 participated / 20 invited (RWST 3 participated / 4 invited)

No	Outlines	
	Mtwara and Lindi regions	DWST 24 participated / 24 invited (RWST 3 participated / 4 invited )

This training was contracted to Achrid Ltd and facilitated jointly for DWST and RWST with the following major goals:

- (i) To enhance knowledge and skills of DWST/RWST members in the project management which requires consciousness to link the activities of DWST and RWST with the organizational goal and outputs.
- (ii) To improve capacities of DWST for management of the outsourcing process in RWSS projects for preparation of the preliminary and detail designs of the community subprojects and tendering procedures for selection of contractors under the first phase of WSDP
- (iii) To strengthen capacities of RWST to provide DWST with advisory services on the contract management.

A total of 50 trainees attended this training. Trainees were drawn from 22 districts and four regions in the project area. These were DWE and DPLO from all targeted 22 districts and RWA and RPO in the targeted regions of Coast, Dar es Salaam, Lindi and Mtwara.

The facilitation process aimed at ensuring full participation of all trainees. Hence, a right combination of training methods and techniques of delivery were applied which included paper presentations by resource persons followed by open ended discussions and points of clarifications on key concepts and procedures. The training was also purposely planned to include a series of group work discussions with the same composition of trainees so that each trainee could feel more at ease to share his or her knowledge and skills.

The views and the analysis results of each group were further discussed in plenary sessions for collective synthesis. All group work was displayed on the walls and in most cases used as reference materials to the subsequent sessions. In fact there was a strong ownership

In many a times, prior to introducing the topics via a power point presentation, trainers attempted to explore trainees' knowledge and experience on certain concepts. This method not only created a sense of confidence and ownership among the trainees but most importantly helped the trainers to assess the level of understanding of the trainees on certain concepts and thus, at times led to a re-planning of the delivery methods and also to identify areas which required more emphasis.

The following part highlights some of the major issues which emerged from the training course either as results, ideas, trainers' observations and/or recommendations.

### 1) Usefulness of the PCM Approach to Planning

Despite the fact that majority of the trainees were not familiar with the PCM approach to planning, there was a general consensus that the approach was relevant for their work.

Apart from being enlightened on the overall conceptual framework of project designing by using PCM, trainees had an opportunity of learning new concepts such as Result Based Management (RBM), Logical Framework Analysis (LFA), and how they can be applied in their day to day work.

Trainees at both centres underscored the importance of PCM method and expressed their desire to learn more about it so that they could utilise it in preparing their district development plans. They however, noted with concern that the PCM process requires more time than that which is normally available to the district officers in the districts especially when they are assigned numerous ad hoc tasks. They also showed some doubts whether the participatory planning process would be implemented effectively since it involves many stakeholders.

Moreover, they admitted that this first orientation on PCM method could not enable them to acquire sufficient skills to practice in their respective districts let alone facilitating other DWST members who had not attended the course.

## 2) Alignment of Theoretical and Practical Aspects of Training

In principle the course had a good mix of theoretical and practical orientation which in many ways helped trainees to practically visualise their opinions in comparison to what they had learned theoretically. This kind of learning not only ensured smooth discussions during group discussions but more importantly reinforced the trainees' knowledge on different concepts.

Similarly, the field assignment or homework which was given by the organizers at the end of the course was in essence meant to link up the acquired knowledge during the training and practical aspects of the trainees' day to day work.

## 3) Level of knowledge on PCM

This training was planned on the assumption that most of the potential trainees had been familiar somehow with the participatory planning processes using the LFA and PCM method. However, as it turned out during the training most of the trainees acknowledged their limited practical knowledge on the subject matter. There were a few individuals especially the planning officers who had been introduced to the government MTEF/strategic planning in which a LFA was part, but had not been following the PCM process to reach the formulation of the PDM. They asserted that in most cases they were either being provided with generic LFA templates by the ministries or consultants were hired to work out the strategic plans including LFA for the districts.

Furthermore, whereas most of the trainees were familiar with a project cycle they failed to relate it to the PCM process. The definitions and features of PCM as presented by the trainees revealed a significant level of ignorance on the concept. Most of them thought that PCM referred to how the project was managed.

## 4) Internalisation of the PCM Process

As commonly observed by the trainers and trainees, the duration of five days for this training course was inadequate particularly given the trainees' unfamiliarity with the whole PCM concept and process. Therefore, time limitation partly affected adversely trainees' internalisation of the process. For example, at times trainers had to rush through certain important steps in order to catch up with the allocated time. In so doing too much information/explanations was given in a very short time, something which might have contributed to partial understanding of some topics such as formulation of OVI and assumptions.

### (2) Component 2

The outline of component 2 of the 3<sup>rd</sup> training phase is given in the *Table 4.12*.

**Table 4.12 Outline of component 2 of 3<sup>rd</sup> training phase**

No	Outlines	
1	Consultant	Achrid Ltd
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 10 – 14 November 2008 (Dar es Salaam) for DSM and Coast regions</li> <li>• 24 – 28 November, 2008 (Mtwara) for Mtwara and Lindi regions</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>• Diamond Hall, Ubungo Plaza (Dar es Salaam)</li> <li>• Clinical Officers Training Center (Mtwara)</li> </ul>
4	Facilitator	Mr. Deo Binamungu (Achrid Ltd) Mr. Andrew Kahesa (Achrid Ltd)
5	Trainers (responsible session)	Mr. Andrew Kahesa (Achrid Ltd) Session 1
		Mr. Andrew Kahesa (Achrid Ltd) Session 2

No	Outlines					
		Mr. Deo Binamungu (Achrid Ltd) Session 3 Mr. Anytika Mwakitalima (MoHSW)				
		Mr. David Rwehikiza (Achrid Ltd) Session 4				
		Mr. Deo Binamungu (Achrid Ltd) Session 5 Mr. Andrew Kahesa (Achrid Ltd)				
		Mr. Andrew Kahesa (Achrid Ltd) Session 6				
		Mr. Deo Binamungu (Achrid Ltd) Session 7				
6	No. of Trainees	<table border="1"> <tr> <td>DSM and Coast regions</td> <td>DWST 20 participated / 20 invited (RWST 4 participated / 4 invited)</td> </tr> <tr> <td>Mtwara and Lindi regions</td> <td>DWST 23 participated / 24 invited (RWST 3 participated / 4 invited)</td> </tr> </table>	DSM and Coast regions	DWST 20 participated / 20 invited (RWST 4 participated / 4 invited)	Mtwara and Lindi regions	DWST 23 participated / 24 invited (RWST 3 participated / 4 invited)
DSM and Coast regions	DWST 20 participated / 20 invited (RWST 4 participated / 4 invited)					
Mtwara and Lindi regions	DWST 23 participated / 24 invited (RWST 3 participated / 4 invited)					

This training was contracted to Achrid Ltd and organized jointly for DWST and RWST with the following major goals:

- (i) To strengthen capacity of DWST in formulation of the integrated approaches and activities of water, sanitation and hygiene with encouraging community participation.

A total of 51 trainees attended this course at both venues at Ubungo Plaza in Dar es Salaam and at the Clinical Officers' Training College (COTC) in Mtwara Municipality. Trainees for this training were drawn from the health and education departments in each target district/municipality and from the Regional Secretariats (RS) of target regions.

Various adult training techniques and tools were used to provide an opportunity for trainees to explore how much they knew already on the topics and as a consequence share and compare the strategies, approaches and experience on sanitation and hygiene education promotion. This kind of approach necessitated the use of both participatory and paper presentation methods in the hope that synergy and dialogue as well as expert inputs would generate a common ground process.

Initially, it was also planned to include a field practice on CLTS at both centres. Field practice had to be conducted at one selected school. For various reasons field practice was not possible for the Dar es Salaam trainees. First, the training in Dar es Salaam coincided with the National STD IV Examinations. Secondly, the organisers were informed that the Ministry of Education and Vocational Training (MoEVT) prohibits such extra curricula events to take place at schools during working days. On the other hand, CLTS field practice was conducted for Mtwara trainees in Nambaleketela village in Mtwara rural district.

The following part highlights some of the major issues which emerged from the training course either as results, ideas, trainers' observations and/or recommendations.

### 1) Better Understanding of WSDP

There was an increased understanding of the basic institutional issues related to water sector development especially among those trainees who had not been involved in water and sanitation development in their respective districts. In the course of the training the following issues were regularly explained to ensure that trainees get a better understanding of the institutional and operational framework of the water sector.

- The national Water Sector Development Programme (WSDP)
- DWST composition including DEO and DHO as members
- Clarification of roles and responsibilities of the education and health departments and need to link up together especially in planning, implementing and monitoring of School Sanitation Hygiene Education (SSHE)
- RWSS Project Cycle and how S&H activities are fitted in the cycle

## 2) Shared Insights and Learning on Approaches to S&H Promotion

The presentations and subsequent discussions on national approaches and the new Total Sanitation and Social Marketing (TSSM) approach stimulated the thoughts and analysis of the trainees on a number of practical issues. The group presentations aroused intense discussions in plenary sessions and formed the basis for drawing practical lessons and learning opportunities. For instance, trainees clearly expressed the need to have an integrated participatory approach for S&H promotion and this process should not be owned by the DWSTs but by the communities who are expected to benefit from adoption of improved sanitation and hygiene practices.

## 3) New Knowledge and Skills

The training resulted into a better understanding of new approaches to S&H promotion and the need to link water supply with S&H as well as HIV/AIDS. More importantly, trainees were exposed to practical strategies of how to mainstream HIV/AIDS in RWSSP.

Likewise, the trainees appreciated the current thinking of applying CLTS and Social Marketing to motivating communities to build improved sanitation facilities in order to avoid faecal-oral transmission and adopting better hygiene behaviours. Also the field practice at Mtwara centre was regarded by trainees as a practical and useful approach to ensure effective community facilitation.

## 4) Expanded Sense of Teamwork

The group and plenary discussions not only reinforced team work among trainees but most importantly produced a strong sense of achievement among them. There was a general feeling of self satisfaction because of the contribution each one had made during the training.

Similarly, the identification of key players in S&H promotion and the need to link them was indeed a beginning of establishing a common vision of how to plan, implement and monitor S&H interventions in the districts.

## 5) Inclusion of SSHE Interventions in RWSSP

The training aroused interest and need for DWSTs to include SSHE interventions in DWSPs. It was found out that schools had been generally marginalised in the past as far as RWSSP support was concerned. The education and health departments were focal points in this respect.

### 4.4.4 4<sup>TH</sup> TRAINING PHASE

#### (1) Component 1

The outline of component 1 of the 4<sup>th</sup> training phase is given in the *Table 4.13*.

**Table 4.13 Outline of Component 1 of 4<sup>th</sup> Training Phase**

No	Outlines					
1	Consultant	Achrid Ltd				
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 27 – 31 July, 2009 (Dar es Salaam) for DSM Region</li> <li>• 3 – 7 August, 2009 (Dar es Salaam) for Coast Region</li> <li>• 24-28 August, 2009 (Mtwara) for Mtwara Region</li> <li>• 31 August – 4 September, 2009 (Mtwara) for Lindi Region</li> </ul>				
3	Training venue	<ul style="list-style-type: none"> <li>• Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> <li>• Clinical Officers Training Center (Mtwara)</li> </ul>				
4	Facilitator	Mr. Deo Binamungu (Achrid Ltd) Mr. George Rwehumbiza (Achrid Ltd)				
5	Trainers (responsible session)	<table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">Ms. Kirenga D.A.T. (MoWI)</td> <td style="text-align: right;">Session 1</td> </tr> <tr> <td>Mr. Deo Binamumbu (Achrid Ltd)</td> <td style="text-align: right;">Session 2</td> </tr> </table>	Ms. Kirenga D.A.T. (MoWI)	Session 1	Mr. Deo Binamumbu (Achrid Ltd)	Session 2
Ms. Kirenga D.A.T. (MoWI)	Session 1					
Mr. Deo Binamumbu (Achrid Ltd)	Session 2					

No	Outlines	
	Ms. Kirenga D.A.T (MoWI)	Session 3
	Ms. Neema Siarra (MoWI)	Session 4
	Mr. Kisaka G. J. (MoWI)	Session 5
	Ms. Neema Siarra (MoWI)	Session 6
6	No. of Trainees	
	DSM	DWST 12 participated / 12 invited
	Coast	DWST 28 participated/ 28 invited
	Mtwara	DWST 24 participated/ 24 invited
	Lindi	DWST 24 participated / 24 invited

This training was contracted to Achrid Ltd. and facilitated with the following major goal;

- (i) To strengthen the network of human resources and organizations in the districts to extend support services for the community-based O&M and hygiene promotion activities.

The training focused on measures for utilization of the extension workers and CBOs/NGOs in the districts as the facilitators to support WATSAN/WUE in management of the community subprojects.

DWE, DHO, DCDO, and DEO were invited to the training from each district. A total of 88 trainees attended this training.

The following part highlights some of the major issues which emerged from the training course either as results, ideas, trainers' observations and/or recommendations.

### 1) Utilization of Extension Workers

In conformity with the decentralization policy, RWSSP has identified new players at the community level specifically the community-based council personnel such as CDOs, health officers, teachers and agricultural extension workers as the catalysts between the community members and district council to facilitate and support communities for improved management of the projects through the community-based organizations such as WATSAN committees and for sanitation and hygiene promotion.

Discussion in the training revealed that an idea to utilize the extension workers was relatively new to the trainees. DWSTs had not utilized extension staff of the member departments in RWSS projects despite the policy direction mentioned above. The trainees commonly expressed its reason that the extension workers had their own full time specific tasks and involvement in RWSS activities were regarded as extra works for them. From this statement, it was observed that the integrated approach of water, sanitation and hygiene promotion in RWSS projects had not been fully internalized in the daily operation of works by each member departments of DWST. Other challenge found in the training is that the trainees did not have enough information on the staff allocation of the extension workers in each member department of DWST, which made them difficult to consider strategy for utilization of those human resources.

The trainees agreed at the end of the session that they would carry out an inventory of the existing extension workers in each district and assess their capacities so that the information would be referred to for strategizing their utilization in RWSS activities. The trainees further agreed that they would review tasks of the extension workers in order to harmonize the RWSSP activities under their job descriptions and train them in RWSSP approaches through on-the-job training basis.

### 2) Facilitation Skills for Water Supply and Sanitation and Hygiene Promotion

Various techniques are used in facilitation of activities at the community level throughout the project cycle in order to ensure that the communities are effectively engaged and take initiatives in the process and results. The trainees reviewed in the session how they had been interacting with the community members in RWSS activities. Despite the fact that they had at one time

applied participatory approaches such as PRA and PHAST in RWSS activities, most of the participants with the exception of CDOs lacked basic facilitation skills such as asking open/probing questions, rephrasing, redirecting, using encouragers to motivate people to talk, listening, and summarizing the discussion to enable people to recap the agenda and reach a consensus or agreements.

Based on the recap on essentials of the facilitation skills in supporting the community development, the trainees further practiced the facilitation skills with role-play. Performance of the role play by each group showed that a good number of participants, especially the technically oriented/trained, were still playing an expert role in which case use of teaching/lecturing methods were still dominant. The participants found the training very helpful but they rightly claimed that they would need more time to practice.

### 3) Gender Mainstreaming in RWSSP

Through the group works, the trainees identified practical gender needs and strategic gender needs for the specific themes of i) water supply, ii) household sanitation and hygiene, and iii) school sanitation and hygiene education. Based on the knowledge acquired during the session, the trainees prepared the district-based action plans for the gender mainstreaming in RWSS projects in their districts. Strategic points when mainstreaming gender in RWSSP were emphasized by the facilitator and resource person in plenary discussion on the action plans prepared by each district.

#### (2) Component 2

The outline of component 2 of the 4<sup>th</sup> training phase is given in the *Table 4.14*.

**Table 4.14 Outline of Component 2 of the 4<sup>th</sup> Training Phase**

No	Outlines	
1	Consultant	Achrid Ltd
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>10-14 August, 2009 (Dar es Salaam) for DSM and Coast regions</li> <li>7-11 September, 2009 (Mtwara) for Lindi and Mtwara regions</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> <li>Clinical Officers Training Center (Mtwara)</li> </ul>
4	Facilitator	Mr. Deo Binamungu (Achrid Ltd) Mr. George Rwehumbiza (Achrid Ltd)
5	Trainers (responsible session)	Mr. Kisaka G. J. (MoWI) <span style="float: right;">Session 1</span>
		Mr. Gabriel Lwakabare (Achrid Ltd) <span style="float: right;">Session 2</span>
		Mr. Kisaka G. J. (MoWI) Mr. Goyagoya J. M. (MoWI) <span style="float: right;">Session 3</span>
		Mr. Kisaka G. J. (MoWI) Mr. Goyagoya J. M. (MoWI) <span style="float: right;">Session 4</span>
		Mr. Gabriel Lwakabare (Achrid Ltd) <span style="float: right;">Session 5</span>
		Mr. Gabriel Lwakabare (Achrid Ltd) Mr. Kisaka G. J. (MoWI) <span style="float: right;">Session 6</span>
6	No. of Trainees	DSM and Coast <span style="float: right;">DWST 27 participated / 30 invited</span>
		Lindi and Mtwara <span style="float: right;">DWST 30 participated/ 36 invited</span>

This training was contracted to Achrid Ltd. and facilitated with the following major goal;

(i) To strengthen knowledge, skills and attitude of DWEs in technical supervision of the service providers, contractors and suppliers to ensure meeting the required standard of the water supply and sanitation services.

This training course divided into two parts. The first part which was conducted in the first three days of the course focused on the technical supervision of the construction works. DWEs and Senior Technicians were invited for this part. Meanwhile, main topics related to the contract

management were discussed in the second part held in the last two days with participation of DWEs and DTs. A total of 57 trainees attended this training.

The following part highlights some of the major issues which emerged from the training course either as results, ideas, trainers' observations and/or recommendations.

### **1) Technical Supervision of the Works**

Field practices for the technical supervision were included in this training course. The participants from DWSTs in Coast and Dar es Salaam regions visited two communities, namely Kitunda-Kivule in Ilala and Kibugumo in Temeke, where piped water schemes were under construction or had been constructed in a Japan's grant aid project. The participants from Mtwara and Lindi regions conducted the field practice in Tangazo in Mtwara District, where the distribution network was being extended with a support of TASAF for a piped water scheme constructed in a Japan's grant aid project. The field work involved critical assessment of the main status of the schemes including technical aspects, community participation and management.

The participants observed the following through the field practices;

- Preparation and use of a checklist had make the supervision more effective since it sets what to be checked on site according to the ToR, tender documents and other contract documents.
- Since community subprojects involve both technical and social issues such as health, management, community mobilization, it is very difficult to separate technical supervision from the other community development aspects. Even though the visit is primarily meant for the technical supervision of the works, DWSTs should pay attention to those issues as well. Moreover, the field supervisions should be conducted jointly by DWST members.
- Involvement of the beneficiary communities is indispensable in the supervision of the works. They have often been left out in the process of the supervision in spite that they were the owners of the projects.

### **2) Contract Management**

The training provided opportunities to DWEs and DTs to review their practices on the management of contracts with consultants and contractors in the past and on-going RWSS projects. The trainees raised the following points as their observations;

- There was inadequate follow up on progress of the works by the contractors in the field, which made the districts difficult to detect any anomalies early enough for making rectifications. Timely supervision of the works is indispensable to verify quality of workmanship and contract management.
- Management of the contract for the services by TSP and the works of the contractors is seen to be much easier than that of FSP because in most cases the latter's results are not tangible. Hence, DWSTs need to make close supervision of FSP's work so that they can verify process and results of the works.
- Payments to the service providers were sometimes not effected in tandem with work executed or within the contractual timeframe which resulted in delays of delivery of works.
- DWSTs need to thoroughly review reports submitted by the consultants and contractors in order to ensure that the requirements in the contracts are satisfied in the actual works and properly recorded.

### **3) Database on the Service Providers in the District**

All districts confirmed that they did not have a reliable database of service providers even those located within their districts. The trainees underscored the importance of maintaining a databases of the service providers particularly as a tool in outsourcing small works or services as

well as in identifying competent and non-competent service providers. It is necessary for LGAs to start taking stock of the service providers within their localities and also make consultation with the procurement unit in MoWI and other professional bodies such as the Contractors Association of Tanzania (CATA), Tanzania Association of NGOs (TANGO), Institution of Engineers of Tanzania (IET), and Engineers Registration Board (ERB) so that they can be availed with update information about private firms and NGOs.

#### 4.4.5 5<sup>TH</sup> TRAINING PHASE

The outline of the 5<sup>th</sup> training phase is given in the *Table 4.15*.

**Table 4.15 Outline of the 5<sup>th</sup> Training Phase**

No	Outlines	
1	Consultant	WEDECO Ltd.
2	Schedule (implemented)	<ul style="list-style-type: none"> <li>• 30 November – 4 December, 2009 (Dar es Salaam) for DSM Region</li> <li>• 7-11 December, 2009 (Dar es Salaam) for Coast Region</li> <li>• 11-15 January, 2010 (Mtwara) for Mtwara Region</li> <li>• 18-22 January, 2009 (Mtwara) for Lindi Region</li> </ul>
3	Training venue	<ul style="list-style-type: none"> <li>• Pearl Hall, Ubungo Plaza (Dar es Salaam)</li> <li>• Clinical Officers Training Center (Mtwara)</li> </ul>
4	Facilitator	Ms. Mary Liwa (WEDECO Ltd.) Mr. Johannes Ishengoma (WEDECO Ltd.)
5	Trainers (responsible session)	Ms. Mwanasha Ally (WEDECO Ltd.) Session 1
		Mr. Johannes Ishengoma (WEDECO Ltd.)
		Ms. Mwanasha Ally (WEDECO Ltd.) Session 2
		Mr. Johannes Ishengoma (WEDECO Ltd.)
		Mr. Johannes Ishengoma (WEDECO Ltd.) Session 3
		Ms. Mwanasha Ally (WEDECO Ltd.) Session 4
		Mr. Johannes Ishengoma (WEDECO Ltd.)
		Mr. Tomohiro Kato (JICA Expert) Session 5
		Ms. Mikiko Azuma (JICA Expert)
6	No. of Trainees	DSM DWST 14 participated / 15 invited
		Coast DWST 34 participated/ 35 invited
		Mtwara DWST 28 participated/ 30 invited
		Lindi DWST 30 participated / 30 invited

This training was contracted to Achrid Ltd and facilitated with the following major goals:

- (i) To strengthen capacity of DWST in planning for the O&M and follow-up stage of RWSS projects.
- (ii) To strengthen capacity of DWST in monitoring and evaluation at the O&M and follow-up stage of RWSS projects.
- (iii) To evaluate achievement of capacity development through RUWASA-CAD and draw lessons learnt and recommendations.

DWE, DPLO, DHO, DCDO, and DEO were invited to the training from each district. A total of 106 trainees attended this training.

The following part highlights some of the major issues which emerged from the training course either as results, ideas, trainers' observations and/or recommendations.

#### (1) Operation and Maintenance Requirements

Before the training, most of the participants were considering that many activities in O&M are only linked to the technical (engineering) aspects. The training provided an opportunity to review practices of the districts in the support service provisions to communities at the O&M and follow-up stage and to conceptualize the requirements in O&M of the water supply facilities by

looking at various factors, such as technical, organizational, social, and financial aspects, which contribute sustainability of the water supply services.

## (2) Post-Construction Follow-up Support by DWST

The trainees pointed out that the districts had hardly been conducting the scheduled follow-up after they hand over water supply facilities to the communities unless the communities request. In addition, there are few WUEs legally for management of existing water supply facilities in the districts as both communities and districts are not familiar with the procedures to be followed for the registration.

At the end of the training, the trainees expressed that they would ensure the following in supporting communities and WATSAN/WUE in O&M;

- To select appropriate management moles and leaders who can manage water facilities
- To set water tariff with considering costs to be incurred for management of the water facilities
- To organize meetings as scheduled and assist them to write report so as to ensure that there is enough information which can help the communities analyze the financial viability of the water supply services.

## (3) Monitoring of Operation and Maintenance Conditions

The training revealed that the districts had not given high priority in monitoring of O&M conditions of the existing water supply facilities as the monitoring of progress of the on-going projects was more focused in the day-to-day activities by DWSTs. Through the group works, the trainees practiced how to come up with the monitoring and follow-up plans including the indicator setting to verify O&M conditions with considering factors which contribute to sustainability. As the trainees were not experienced in utilizing logical framework in planning the monitoring and follow-up activities of the completed projects, most of them had difficulties to prepare such plans in logical manner. They expressed that they would still need to practice it in their actual works so that they would get familiar with the logical thinking in planning, monitoring and evaluation of the community subprojects.

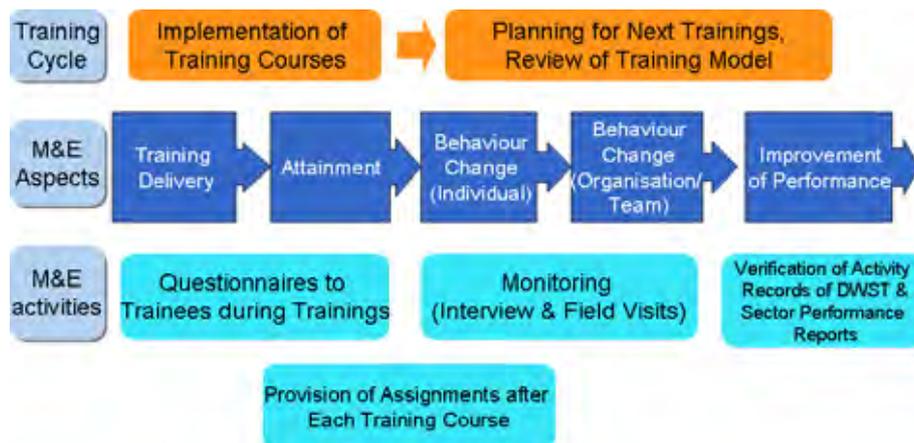
## 4.5 MONITORING AND EVALUATION

### 4.5.1 INTRODUCTION

The monitoring and evaluation plan was designed by the project team to evaluate “effectiveness” of the training programmes to be provided for DWST/RWST/BWO in the project. Findings from the monitoring and evaluation were utilized for improvement of the training model which the project proposed. A series of the monitoring and evaluation activities was also regarded as an opportunity to strengthen capacity of Community Water Supply Division for planning and managing the training programmes they would organize in future.

### 4.5.2 METHODOLOGY OF THE EVALUATION & MONITORING SURVEY

Along with the training cycle, “effectiveness” was evaluated at the different stages and from different aspects. *Figure 4.5* shows the monitoring and evaluation framework of the training.



**Figure 4.5 Monitoring and Evaluation Framework of the Training**

During the implementation of each training course, it was firstly focused on the training delivery, such as level of satisfaction of the trainees, time management, quality of lecture and facilitation, and others. For this purpose, a set of questionnaires was used to obtain views from the trainees of which results were presented in the previous sessions. The project team also made direct observations at the training.

Attainment of knowledge, skills and attitudes by the trainees was also monitored in the course of the training with employing self-evaluation by the trainees. Additionally, assignments were given to the trainees after the training in order to make follow-up of attainment of the training contents by the participants.

The third stage was the evaluation of behavior change of the trainees and organization to which the trainees belonged. The monitoring surveys were meant to collect necessary information to analyze this stage.

Finally, as a result of the trainings, level of improvement of performance of the organizations and RWSS sector was to be verified with referring to the various activity records of DWST and sector performance reports. This level corresponds to monitoring and evaluation of achievement of the Project Purpose and Overall Goal of this project.

**Table 4.16** describes the evaluation questions, monitoring items, methods and tools which were used in monitoring and evaluation at each stage.

**Table 4.16 Monitoring & Evaluation Plan of the Training Effectiveness**

<b>Evaluation Questions</b>	<b>Monitoring Items</b>	<b>Monitoring Methods</b>	<b>Tools</b>
<b>1. Delivery of the Training</b>			
1) Did the training programme satisfy training needs of the trainees?	<ul style="list-style-type: none"> <li>▪ Responsiveness of the training contents to issues they have with regard to the training theme</li> </ul>	a) Collection of questionnaires from the trainees during and at the end of each training course	a) Training Evaluation Sheet
2) Were the training sessions organized and facilitated to help learning of the trainees?	<ul style="list-style-type: none"> <li>▪ Usefulness of the training contents</li> <li>▪ Facilitation and training skills of the facilitators/ lecturers</li> </ul>	b) Direct observation by the training organizer	b) Evaluation Sheet for Lecturing/ Facilitation Process
3) Was the time management of the training properly done?	<ul style="list-style-type: none"> <li>▪ Training materials</li> <li>▪ Training facilities</li> <li>▪ Timetable</li> </ul>		
4) Was the training environment preferable to facilitate learning by the trainees?			
<b>2. Learning of the Trainees</b>			
Have the trainees obtained knowledge, skills and attitudes set as the specific objectives for each session?	<ul style="list-style-type: none"> <li>▪ Level of understanding of the trainees on each session</li> <li>▪ Level of accomplishment of the trainees to practice behavioral terms set as the specific objectives of each session</li> </ul>	a) Self-evaluation by the trainees at the end of each training course b) Provision of assignments to the trainees after each training course c) Evaluation by the trainers	a) Training Evaluation Sheet,  Evaluation Format for Specific Objectives,  b) Assignment Plan of RUWASA-CAD Training
<b>3. Behavior Change at the Individual Level</b>			
Are the trainees utilizing knowledge, skills, and attitudes attained in the trainings in their actual work?	<ul style="list-style-type: none"> <li>▪ Situation on adoption of knowledge, skills, and attitudes in planning and implementation of DWSP</li> <li>▪ Factors to contribute/ prevent behavior change of the trainees</li> </ul>	a) Interview to the trainees and their superiors, co-workers and subordinates at the monitoring visits  b) End line survey	a) Interview guide for the monitoring visits  b) Interview guide for the end line survey
<b>4. Behavior Change at the Organizational Level</b>			

Chapter 4 Output 2: Establishment of Training System Model for DWST

Evaluation Questions	Monitoring Items	Monitoring Methods	Tools
<p>Have procedures for planning and implementation of DWSP by the target districts improved as a result of the trainings?</p>	<ul style="list-style-type: none"> <li>▪ Adoption of selection procedures of candidate communities for the scoping survey based on DRA in the promotion phase</li> <li>▪ Examination of progress reports and other output reports to be submitted by consultants/ contractors</li> <li>▪ Updating information on water supply and sanitation conditions as well as O&amp;M of existing water supply facilities in the districts</li> <li>▪ Integration of strategies and activity plans on sanitation and hygiene promotion for households and schools into DWSP and its annual plan</li> <li>▪ Inter-communication between the district and RWST/ BWO at formulating and designing community subprojects</li> <li>▪ Factors contributing/preventing behavior change at the organizational level such as;               <ul style="list-style-type: none"> <li>➢ Transfer of staff trained</li> <li>➢ Delay in implementation of RWSSP</li> </ul> </li> </ul>	<p>a) Interview to DWST members at the monitoring visits</p> <p>b) End line survey</p> <p>c) Verification of the following documents which are to be prepared by DWST in the implementation of RWSSP;</p> <ul style="list-style-type: none"> <li>• Records on appraisal of the community application</li> <li>• Records on comments made to the reports submitted by consultants/ contractors</li> <li>• Monitoring records of the districts</li> <li>• DWSPs and annual investment plans</li> <li>• Records on assessment of designs of the requested subprojects</li> </ul>	<p>a) Interview guide for the monitoring visits</p> <p>b) Interview guide for the end line survey</p>
<p>Has the delivery of support services by BWO to districts improved as a result of the trainings?</p>	<ul style="list-style-type: none"> <li>▪ Distribution of the preliminary hydrogeological maps to the districts</li> <li>▪ Distribution of the updated hydrogeological data to the districts</li> <li>▪ Intercommunication with DWST and RWST</li> <li>▪ Factors contributing/preventing behavior change at the organizational level</li> </ul>	<p>a) Interview to BWO at the monitoring visits</p> <p>b) End line survey</p> <p>c) Verification of the following documents which are to be prepared by BWO;</p> <ul style="list-style-type: none"> <li>• Records of the meeting with DWST and RWST</li> <li>• Updated hydrogeological maps</li> </ul>	<p>a) Interview guide for the monitoring visit</p> <p>b) Interview guide for the end line survey</p>

Evaluation Questions	Monitoring Items	Monitoring Methods	Tools
Has the delivery of support services by RWST to districts improved as a result of the trainings?	<ul style="list-style-type: none"> <li>▪ Formulation of RWSP</li> <li>▪ Examination of the quarterly reports submitted by the districts</li> <li>▪ Monitoring visits to the districts for technical advice for and performance monitoring of the project implementation</li> <li>▪ Factors contributing/preventing behavior change at the organizational level</li> </ul>	a) Interview to RWST members at the monitoring visits b) End line survey c) Verification of the following documents which are to be prepared by RWST; <ul style="list-style-type: none"> <li>• RWSP</li> <li>• Records of RWST on comments made to the quarterly reports submitted by the districts</li> </ul>	a) Interview guide for the monitoring visits b) Interview guide for the end line survey
<b>5. Final Results of the Training</b>			
Has the service delivery in RWSS been improved in the districts as a result of implementation of the Project?	<ul style="list-style-type: none"> <li>▪ Coverage rate of improved water supply in the rural part of the districts</li> <li>▪ Percentage of functional water points</li> <li>▪ Number of legally registered Water User Entities (WUEs)</li> <li>▪ Coverage rate of improved sanitation</li> <li>▪ Factors contributing/preventing improvement of the service delivery in RWSS in the districts</li> </ul>	Verification of the related data which are to be included in the monitoring records of the districts and sector performance reports	

### 4.5.3 DELIVERY OF THE TRAINING

The delivery of the training represents the process and/or approach in which training contents are transferred to target individuals properly, and is evaluated based on the appreciation of trainees on each session during the trainings. This evaluation was intended to get trainees' instant response on how the session was organized e.g. logistics, venue etc, facilitated and the content and formatting of the handouts. The session evaluation results were intended to help improve performance in the facilitation and presentation of the subsequent sessions.

The results of assessment on each phase of the trainings are summarized in the following sections.

#### (1) 1<sup>st</sup> training phase

8 sessions (DSM) and 9 sessions (Mtwara) under 1<sup>st</sup> training phase were assessed higher than 4.0. This result illustrates high satisfaction among trainees.

Session	1	2	3	4	5	6	7	8	9
DSM	4.2	4.0	4.1	4.0	4.1	4.1	4.2	4.3	4.2
Mtwara	4.1	4.1	4.1	4.2	4.2	4.3	4.2	4.2	4.1

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

The main components of the training, which might influence the satisfaction of trainees, are commonly the level of performance/quality of facilitators, trainers and training materials. Assessing these main components and level of satisfaction mentioned above, it can be concluded that the training contents were delivered adequately to trainees. Besides, the level of

understanding and usefulness on training contents could encourage the overall achievement of training delivery.

However, the amount of training contents might contradict simply time available during the training period to a certain extent. The assessment on a training venue in Mtwara was negatively affected by the condition of locally available venue, which was situated in semi-open air, frequent disturbance by birds, low ventilation.

Indicator	Facilitator	Presenter	Training Materials	Time Arrangement	Training Venue	Understanding	Usefulness
DSM	4.2	4.1	4.2	3.9	4.2	4.0	4.3
Mtwara	4.3	4.2	4.2	4.1	3.5	4.2	4.4

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

## (2) 2<sup>nd</sup> training phase

### 1) Component 1

Generally most of sessions were evaluated highly by trainees although the tendency of severe evaluation was obvious among trainees from coast region.

Session	1	2	3	4	5	6	7	8
DSM	4.1	4.2	4.3	4.4	4.5	4.5	4.6	4.6
Coast	4.2	4.0	4.1	4.1	4.1	3.9	4.0	4.0
Lindi	4.2	4.3	4.3	4.4	4.4	4.4	4.4	4.5
Mtwara	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

With the same logical interpretation on figures given below as the previous phase, the achievement of this training delivery has become more significant than the previous training. The factors positively affecting on this improvement are assumed based on the following comments given by trainees.

- Consistency of training focal points
- “Continuous participation in RUWASA-CAD training increases the level of understanding on contents.”
- “Integrating training messages are relevant and consistent with practical works at stations.”
- Harmonization of different approaches given from sector ministries
- “RUWASA-CAD training intended to harmonize different planning approaches. This will reduce confusion among DWST.”
- “I have never known about O&OD planning approach even though those who have been trained with it were members of DWST.”

Indicator	Facilitator	Presenter	Training Materials	Time Arrangement	Training Venue	Understanding	Usefulness
DSM	4.4	4.4	4.5	4.2	4.2	4.4	4.6
Coast	4.0	4.0	4.2	3.9	4.0	4.1	4.3
Lindi	4.4	4.4	4.5	4.1	4.1	4.3	4.4
Mtwara	4.5	4.5	4.6	4.1	4.4	4.3	4.8

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

### 2) Component 2

The results of evaluation under each session illustrate how highly trainees feel relevance and usefulness on contents of trainings.

Chapter 4 Output 2: Establishment of Training System Model for DWST

Session	1	2	3	4	5	6	7	8
DSM	4.3	4.4	4.5	4.4	4.4	4.4	4.4	4.6
Mtwara	4.4	4.5	4.5	4.5	4.4	4.5	4.6	4.5

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

With regard to the main components of the training, their average is highest of all phases. Besides, DWE and RWA were only invited to the training so that total number of trainees was adequately limited, which enabled them to utilize spaces of venue facility with high efficiency. Consequently all positive factors compromised trainees to rate their satisfaction high.

Indicator	Facilitator	Presenter	Training Materials	Time Arrangement	Training Venue	Understanding	Usefulness
DSM	4.3	4.3	4.6	4.4	4.5	4.4	4.7
Mtwara	4.6	4.5	4.5	4.2	4.3	4.3	4.7

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

### (3) 3<sup>rd</sup> training phase

#### 1) Component 1

The backbone of this component was associated with the principles of the project cycle management (PCM), which requires consistent steps to identify and sort out actual phenomenon logically. Usually obtaining this skill quite depends on regular practices and experiences in actual situation.

This was the first opportunity for most trainees to expose themselves to PCM. Therefore, it was naturally difficult to understand fully on training contents, which was reflected on figures given in the table below.

Session	1	2	3	4	5	6	7	8	9
DSM	3.8	4.0	4.1	3.8	4.3	3.9	3.9	3.9	3.9
Mtwara	4.3	4.1	4.2	3.9	4.1	4.0	4.1	4.2	3.6

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

Since training contents were difficult, the overall evaluation on the training delivery was averagely lowest of all phases. However, many trainees commented that PCM was quite useful and they would like to have other training sessions on PCM for better understanding. In this context, the responsiveness from trainees was not as bad as the result shows.

Considering the limited time and complexity of contents, it could be a better approach if number of sessions in this training component was reduced in order to focus simply more on PCM.

Indicator	Facilitator	Presenter	Training Materials	Time Arrangement	Training Venue	Understanding	Usefulness
DSM	4.1	3.9	4.0	3.5	3.6	3.8	4.0
MTW	4.0	3.8	3.9	3.8	3.3	3.7	4.0

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

#### 2) Component 2

As well as the results of trainings in previous phases, this component persuaded trainees to be satisfied. This was the first opportunity for DEO and REO to be involved in RUWASA-CAD training, even training under WSDP.

Session	1	2	3	4	5	6	7
DSM	4.4	4.5	4.5	4.1	4.4	4.6	4.4
Mtwara	4.5	4.5	4.4	4.3	4.4	4.5	4.2

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

Having that size of venues in COTC was not comfortable at all for 25 trainees. However, it was unfortunate that the situation of venue availability in Mtwara did not give us any alternative. This was illustrated in the result of training venue throughout phases. The better environment in venues would subsequently improve the quality of the training.

The field practice was not conducted in Dar es Salaam centre of training while was in Mtwara. This might make different in the evaluation results of these centres, particularly in understanding and usefulness of the training. This could be understood that theories and principles discussed in a venue were physically practiced in a community, where similar situation could be easily found in trainees' LGAs, and linked logically.

Indicator	Facilitator	Presenter	Training Materials	Time Arrangement	Training Venue	Understanding	Usefulness
DSM	4.3	4.2	4.5	4.0	4.2	4.0	4.0
MTW	4.3	4.4	4.5	3.8	3.3	4.1	4.3

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

#### (4) 4<sup>th</sup> training phase

##### 1) Component 1

Results of the evaluation shows relatively high understanding on the session contents by the trainees from all the regions.

Session	1	2	3	4	5	6
DSM	4.3	4.2	4.0	4.2	4.0	4.1
Coast	4.1	4.2	4.3	4.3	4.3	4.3
Lindi	4.4	4.5	4.3	4.4	4.6	4.4
Mtwara	4.2	4.4	4.3	4.5	4.4	4.6

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

The participants rated above average with regard to the facilitation of the sessions, presentation of key concepts related to the main topics, and contents of the handouts as a result evaluated the level of understanding high. It is considered that these factors contributed to the evaluation of the 'Usefulness' factor at both centres scored between 4.1 and 4.7 which was remarkably high.

On the other hand, the 'venue' factor scored below 4 (though above average) at Dar es Salaam centre for both Dar es Salaam and Coast participants as well as at the Mtwara centre for Lindi participants. In all cases this was because the conference rooms which were provided were less convenient in terms of ventilation as well as space.

Some of the participants at both centres commented in the evaluation forms that the duration of this training which required a lot of group and plenary discussions and other practical orientations was inadequate. Others commented that some of the new and long topics were not allocated enough time. This could justify the rating of the 'Time' factor which was slightly below 4 by the participants from Coast Region (3.9), Dar es Salaam Region (3.8) and Lindi Region (3.9).

Indicator	Facilitator	Presenter	Handouts	Time	Venue	Understanding	Usefulness
DAR	4.3	4.2	4.4	3.8	3.9	4.1	4.1
COAST	4.1	4.1	4.3	3.9	3.7	4.2	4.3
MTW	4.3	4.3	4.5	4.0	3.7	4.3	4.7
LINDI	4.4	4.5	4.6	3.9	4.2	4.4	4.4

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

##### 2) Component 2

The overall results show that DWEs who attended all the sessions rated the course with relatively higher scores than WT and DT. This implies that they were in a better position of sequencing

the training delivery than WTs and DTs who were not required to attend some sessions. Moreover, DWEs have been participating in all training phases under the Project and as such they are familiar with the facilitation process of the training.

Session		1	2	3	4	5	6
DAR	DWE	4.3	4.4	4.4	4.4	4.6	4.5
	WT	4.4	4.3	-	-	-	-
	DT	-	-	3.3	3.3	3.8	3.8
MTW	DWE	4.2	4.6	4.3	4.2	4.4	4.4
	WT	3.8	4.1	-	-	-	-
	DT	-	-	4.7	4.2	4.4	4.4

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

All participants in all categories indicated that the delivery of the training was satisfactory as the scores for all factors were above average.

Though most of the participants rated the time factor above average, WTs and DTs indicated in quantitative and qualitative evaluation that the time allocated to some sessions or the training duration was too short since most of the topics were relatively new to them.

Trainees		Facilitator	Presenter	Handouts	Time	Venue	Understanding	Usefulness
DAR	DWE	4.2	4.3	4.4	3.9	4.1	4.4	4.7
	WT	4.1	4.2	4.1	3.8	4.5	4.3	4.8
	DT	3.7	3.9	3.6	3.4	3.6	3.5	3.8
MTW	DWE	4.1	4.2	4.4	4.0	4.2	4.3	4.4
	WT	4.0	4.2	4.4	3.8	3.8	3.9	3.9
	DT	4.4	4.2	4.5	3.7	3.9	4.4	4.5

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

### (5) 5<sup>th</sup> training phase

Generally trainees were contented above the average with how the course was organized and facilitated. As mentioned in the previous section, the trainees had difficulties to come up with the monitoring plan with using the logical framework concept in Session 3, which resulted in low score on understanding on the session contents compared to other sessions.

Session	1	2	3	4	5
DSM	3.8	3.7	3.7	3.7	3.8
Coast	3.9	4.0	3.9	4.3	4.3
Lindi	3.8	3.9	3.7	3.7	4.1
Mtwara	4.0	4.1	3.9	4.0	4.1

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

With regard to the evaluation results by each criteria, ‘facilitator’, ‘presenter’ and ‘usefulness of sessions in work’ factors gained high scores.

On the other hand the ‘time’ factor scored less than 4.0 for all regions for one common reason earmarked by trainees that most session contents were too many such that not matching with the time allocated for each session. As for the ‘venue’ factor the conference room which was provided in Mtwara centre was less convenient in terms of ventilation as well as space. However, the venue for Dar es Salaam centre had technical problems in the cooling systems at the training inception with DWSTs of Dar es salaam region, that is why has been rated with a score of less than 4.0.

Regarding the ‘usefulness’ factor most trainees had appreciated that contents of the sessions were very crucial in their day to day undertakings although they had proposed to include as many field practice as possible in such training course.

Indicator	Facilitator	Presenter	Handouts <sup>3</sup>	Time	Venue	Understanding	Usefulness
DAR	4.3	4.1	-	3.3	3.8	3.7	4.3
COAST	4.3	4.4	-	3.7	4.0	4.1	4.4
MTW	4.1	4.2	4.5	3.5	3.5	4.0	4.4
LINDI	4.0	4.0	4.2	3.3	3.1	3.8	4.1

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

#### 4.5.4 LEARNING OF THE TRAINING

Learning of the training represents the extent of improvement in knowledge, skills and attitudes set as the specific objectives for each session (Training Curriculum; *Annex 9*). The achievement on learning of the training is evaluated based on the results from self evaluation, response of assignment, and evaluation by trainers.

The results of evaluation on each phase of the trainings are summarized in the following sections.

##### (1) 1<sup>st</sup> training phase

In the 1<sup>st</sup> training phase, assessment of specific objectives was not programmed in the training. In stead of it, trainees made a self evaluation on the effectiveness of the training with focus on six factors shown in the *Table 4.17*.

**Table 4.17 Factors of Self-Evaluation on Training Effectiveness**

No.	Factors	Definition
1	Understanding of Policies, Strategies, Programmes, etc	Institutional Setting and Direction
2	Utilization of Existing Reference Materials	Guidance and Tools
3	Understanding of Planning Perspectives	Perception and Simulation of Actions
4	Understanding of Administrative Procedures	Promise of Smooth Implementation
5	Understanding of Monitoring Perspectives	Confirmation of Perception and Simulation
6	Understanding of Evaluation Perspectives	Assessment of Monitored Impact and Connection of Planning

Facilitators requested firstly trainees to evaluate their level of satisfaction to these six factors in accordance with their expected goal. After they finish the first practice, the second practice to evaluate the same before the training participation.

This approach enables outcomes considerably to be more accurate to assess the effectiveness of inputs.

In general the objectives of this training cover mainly perspectives of 1 to 3 while those of 4 to 6 are not directly targeted in this training.

In *Table 4.18*, rather significant changes between after and before the training are observed in factor 1 and 2. This is quite synchronized with the intention of this training. Vice versa, the result of factor 3 shows relatively lower difference than others. This could be assessed that the approach taken in this training for factor 3 was rather introductive than the one which trainees expected. Similarly factor 4 is definitely out of our target area of capacity development. Therefore, trainees might have assessed it relatively lower than others.

Areas of factor 5 and 6 are not directly covered by this training but somehow concept of monitoring and evaluation was introduced as a part of planning session. This may contribute their assessment.

<sup>3</sup> Usefulness of the handouts was not evaluated by the trainees from Dar es Salaam and Coast regions at the handouts were provided to them after completion of the training.

**Table 4.18 Result of Self-Evaluation on Training Effectiveness**

Factors	1	2	3	4	5	6
Average (After)	79.0	80.3	80.1	79.5	79.0	80.5
Average (Before)	48.5	52.3	56.0	55.7	51.9	53.8
Ave. Difference	30.5	28.1	24.2	23.9	27.1	26.7

?: Percentage

20 LGAs have given the response of assignment at least either for regular assignment, specific assignment or both. Out of 20, 8 LGAs were qualified for both regular and specific assignments while 12 LGAs fulfilled only one of them.

Assessing on the response on the specific assignment only, 16 LGAs have completed it with satisfactory level. This result meant that most of trainees (DWEs) for 1<sup>st</sup> phase training learned effectively enough to complete it, which represented the principles of the training.

From all these points of view, the matter of learning of the training could be adequate in this training phase.

## (2) 2<sup>nd</sup> training phase

### 1) Component 1

Trainees were questioned whether or not to be able to perform the action described in each specific objective at the end of session and assessed themselves generally “able to perform in good”, which was illustrated in the table below.

Session	1	2	3	4	5	6	7	8
DSM	4.1	4.3	4.3	4.3	4.5	4.5	4.6	4.5
Coast	4.3	4.1	4.2	4.2	4.1	4.1	4.0	4.1
Lindi	4.2	4.2	4.3	4.3	4.2	4.3	4.3	4.3
Mtwara	4.2	4.1	4.2	4.2	4.4	4.1	4.1	4.3

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

The assignment prepared for this training component, which aimed to provide an opportunity for trainees to assess the procedure of selection of candidate villages based on DRA, could cover intentionally the contents of session 2 to 6. According to trainees’ evaluation result, most of trainees were able to perform specific objectives in session 2 to 6 in good manner. However, as the response of this given assignment was assessed, it was realized that there were only a few responses which could be qualified as of the end of January 2009.

How we can understand the denotation of this gap. Assessing 12 reports submitted from trainees, there could be some observations and findings herewith.

Trainees did not understand fully the requirements on the report of this assignment.

In some of LGAs, documents associated with selection of candidate villages were not kept properly. Therefore, the procedures of the selection were not clear enough as required for the report.

### 2) Component 2

As well as the result of component 1, trainees assessed the accomplishment of specific objectives high.

Session	1	2	3	4	5	6	7	8
DSM	4.1	4.3	4.2	4.3	4.2	4.1	4.5	4.4
Mtwara	4.6	4.4	4.4	4.5	4.5	4.4	4.5	4.5

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

However, there is a significant gap between the above mentioned result and the assessment result on submitted assignments similarly to the condition of component 1. This assignment aimed to assure not only technical skills and knowledge among DWSTs, but also the communication mechanism between LGAs and BWO responsible to abridge hydrogeological and hydrological information for stakeholders.

Necessary technical information from BWO was established during the 1<sup>st</sup> phase of the training and distributed to DWEs through the 2<sup>nd</sup> phase trainings. Nevertheless, it was not referred for the assessment of water resource potentials in areas.

**(3) 3<sup>rd</sup> training phase**

**1) Component 1**

The result of assessment on accomplishment of specific objectives shows relatively lower than other results. This was affected by the complexity of the subject discussed in the training.

Session	1	2	3	4	5	6	7	8	9
DSM	4.3	4.1	4.2	3.9	4.1	4.0	4.1	4.2	3.6
Mtwara	3.8	4.0	4.1	3.8	4.3	4.0	4.0	4.0	3.9

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

On the contrary with this result, the comments given from trainees were largely positive and enthusiastic on the subject. Besides, the trainers expressed their appreciation on the active participation of trainees in sessions.

The response on the assignment for this component was not collected yet. Its assessment will be an issue to be discussed in the following report.

**2) Component 2**

Trainees have assessed their accomplishment of specific objectives on this training component as high as other trainings. Innovative subjects such as CLTS and social marketing could have increased trainees' interest, participation and eventually rate of accomplishment.

Session	1	2	3	4	5	6	7
DSM	4.4	4.5	4.5	4.1	4.4	4.6	4.4
Mtwara	4.5	4.5	4.4	4.3	4.4	4.5	4.2

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

Trainers have evaluated the attitude of trainees as high as the component 1, especially enthusiastic preparation and participation on CLTS field practice. Including a field practice in the training programme would be a good catalyst to enhance the understanding of training contents.

**(4) 4<sup>th</sup> training phase**

**1) Component 1**

As for the assessment of the achievements of the participants per specific session objectives, the results indicate scores above 4 for all sessions at both centres except for Sessions 5 and 6 which were rated 3.9 by Mtwara Region participants. Nevertheless, all the scores clearly depicted that the participants at both centres had acquired sufficient knowledge on the topics or sessions which were presented during the training course. Of particular interest were Sessions 1 to 4 which seemed to have been adequately understood since at all centres the score was above 4.

Despite these high scores, qualitative comments by some participants on the evaluation forms indicated that they required more time to practice what they had learned during this training

course. This was mainly because most of the topics and concepts were relatively new to the participants and hence needed more time for internalisation and practice.

Centre	Sessions					
	1	2	3	4	5	6
DAR	4.3	4.5	4.1	4.2	4.1	4.3
COAST	4.1	4.3	4.2	4.2	4.0	4.0
MTW	4.1	4.2	4.0	4.2	3.9	3.9
LINDI	4.3	4.2	4.2	4.3	4.2	4.1

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

## 2) Component 2

Though the scores for each session for all categories of participants at both centres were above average, rating by DTs in Dar es Salaam centre and the one by WTs in Mtwara centre are lower than others who participated in the same sessions. This phenomenon could, to some extent be attributed to the level of their involvement in the day to day DWST activities in each LGA, which to some participants reflected an added advantage in terms of acquisition of background knowledge on some topics covered in this training course.

As for the DWEs, the overall results at both centres showed high level of achievement as most of their scores were above 4 with the lowest being 3.9 for Session 6 at the Dar es Salaam Centre.

Centre	Session	DWE	WT	DT
Dar es Salaam	1	4.0	4.2	-
	2	4.0	4.2	-
	3	4.1	-	3.2
	4	4.1	-	3.4
	5	4.4	-	3.4
	6	3.9	-	3.5
Mtwara	1	4.4	3.8	-
	2	4.2	3.9	-
	3	4.2	-	3.7
	4	4.2	-	4.3
	5	4.1	-	4.5
	6	4.2	-	4.2

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

## (5) 5<sup>th</sup> training phase

On the average most of the sessions were understood since at both centres the score was above 4 out of 5 for sessions 1 and 3 on O&M requirements for sustainability and monitoring of O&M conditions respectively. Despite the high scores, the trainers expressed the importance of giving more time for practice since most of the session contents were new to the trainees

Session	1	2	3	4	5
Dar es salaam	4.0	4.2	4.1	3.7	3.8
Coast	4.1	4.1	4.0	4.2	4.3
Mtwara	4.0	4.2	4.0	3.8	4.0
Lindi	4.1	3.8	4.0	4.1	3.8

[5: Very good 4: Good 3: Fair 2: Poor 1: Very poor]

### 4.5.5 OVERVIEW OF THE 1<sup>ST</sup> CYCLE OF RWSSP IN THE TARGET LGAs

It was expected in the Project that the trainees would apply their training attainment in the daily operation of the rural water supply and sanitation projects, especially through the 1<sup>st</sup> cycle of RWSSP under WSDP. From this view point, each training phase was planned to deal with topics related to respective implementation stages of RWSSP prior to commencement of each stage of the

Program. Overall status of the 1<sup>st</sup> cycle of RWSSP in the target LGAs throughout the implementation period of the Project is summarised in this sub-section in order to describe the external environment of the Project which is related to realisation of behavior change of the trainees and DWSTs.

The procurement process of TSP/FSP was started by MoWI and LGAs in 2007. Most of the target LGAs signed a contract with TSP/FSP in the latter half of 2009 and the consultants commenced the scoping study. As of the middle of June 2010, 19 LGAs have completed the scoping study and seven out of 19 are in the process of selection of the contractor for exploratory drilling at the target communities. The remaining three LGAs, namely Ilala, Temeke and Kisarawe, had just signed a contract with TSP/FSP at the time of the visit by the end line survey team in early June 2010.

It means that the planning stage of the 1<sup>st</sup> cycle of RWSSP had been started around the implementation of the 4<sup>th</sup> training phase of the Project, which shows a gap of almost one year and nine months between the initial schedule of RWSSP and the actual progress.

#### 4.5.6 BEHAVIOR CHANGE AT THE INDIVIDUAL LEVEL

The trainees have been applying knowledge, skills and working attitudes which they gained through the training courses to their actual works. Behavior change at the individual level was identified from the interview conducted through three monitoring visits to pilot LGAs as summarized **Table 4.19**. Behavior change at the individual level was observed in the areas of DRA, project management especially technical supervision and monitoring, hygiene promotion, teambuilding and collaboration with other actors in RWSS projects.

**Table 4.19 Individual Behavior Changes**

	Area	Facts (Behavior Change)	LGAs
1 <sup>st</sup> Monitoring [Sep. 2008]	Project Management	Basic data and information collection formats have been prepared based on the monitoring format prepared by the project and data and information collection has started by utilizing monitoring system from villages to LGA councils through ward development committee	Acting DWE of Masasi D.C.
	DRA	Recognizing importance of O&OD with respect to relevance and effectiveness for participatory comprehensive planning approach, the promotion activity to utilize this planning approach in village development plan is thoroughly incorporated into 2008/09 annual DWST activity plan.	DPLO of Lindi D.C.
	Teamwork	The common understanding among DWST is enhanced by attending the same trainings and having series of discussion together. This enables members of DWST to discuss the approaches and principles of programme implementation more effectively among DWST, although it used to be done individually by each head of departments.	DCDO of Masasi D.C. and Mtwara D.C.
2 <sup>nd</sup> Monitoring [Jan. 2009]	DRA	Participation in O&OD roll-out over all villages of Lindi D.C. was encouraged because basic knowledge and understanding on O&OD has already been delivered from RUWASA-CAD.	DWE of Lindi D.C.
	Teamwork	All training materials used in 3 <sup>rd</sup> phase were given from one represented for DEO and now DEO regularly communicates with DWE.	DEO of Lindi D.C.
		Each member of DWST has understood appropriately their roles and responsibilities so that the performance of team work is quite improved in comparison with previous achievement.	DWST of Masasi D.C.
		The training contents are practicable for activities to be implemented by DWST. Among others, the issue of team work building was regarded very important in DWST.	DWST of Mukuranga D.C.
Hygiene Promotion	A training of health extension officers at the Ward level on CLTS and social marketing is planned as a part of an	DHO of Temeke M.C.	

Chapter 4 Output 2: Establishment of Training System Model for DWST

	Area	Facts (Behavior Change)	LGAs
		action plan of Dept. of Health for 2009/2010.	
	Project Management	The training materials on the project management, especially PCM, were referred to when the Planning Office prepared a project proposal for waste management.	DPLO of Temeke M.C.
3 <sup>rd</sup> Monitoring [Oct. 2009]	Project management	Knowledge and skills on monitoring and evaluation are being utilized in the on-going projects. A checklist for monitoring introduced in the training is also used in the works.	DWE and DPO of Temeke MC
		PCM method was adopted when DWST promoted new projects.	DWE and DPO of Temeke MC
		Technical supervision as well as monitoring and evaluation were conducted in the Quick-Wins Project with utilizing knowledge and skills obtained in the training.	DWE of Mkuranga DC
		Based on the training on the technical supervision of the RWSS projects in the 4 <sup>th</sup> training phase, DWST is considering to prepare a supervision plan for the 1 <sup>st</sup> cycle of WSDP.	DWST of Masasi DC
	Hygiene promotion	Confidence to apply skills for PHAST method has improved.	DHO of Mkuranga DC
		Active involvement in school sanitation programme and formation of WATSAN committees at the community level.	DHO and DEO of Mkuranga DC
		Application of CLTS is now included in the sanitation and hygiene promotion activities under Department of Health to be conducted in the 3 <sup>rd</sup> quarter of 2009/2010.	DHO of Lindi DC
	Teamwork	Each member of DWST respects team work better than before.	DWST of Mkuranga DC
		Team work spirit among the members has been strengthened. Even if DWE is absent from the office, other members can discuss and execute activity plans.	DWST of Masasi DC
		DWST members jointly conducted the field supervision of activities facilitated by TSP/FSP under the 1 <sup>st</sup> cycle of WSDP.	DWST of Lindi DC
	Collaboration with various actors	With considering importance of utilization of the extension workers in RWSS projects as discussed in the 4 <sup>th</sup> training phase, DWST started to develop an inventory of the council extension workers working in various sector in the district. DWST is going to organize an orientation for the extension workers on working as a team.	DWE, DHO, DCDO, and DEO of Masasi DC

Number of cases was initially limited in terms of practice of the trainees on application of their the training attainments in the daily operation of their works as the implementation of RWSSP considerably delays against its original schedule as mentioned in the previous sub-section.

Compared to the situation at the first and second monitoring visits conducted in September-October 2008 and January 2009, those who attended the RUWASA-CAD training have had more opportunities to practice the obtained skills, knowledge and attitudes in their actual works. The behavior change of the individual members of DWST has gradually occurred along with the progress of RWSSP/WSDP which provides various opportunities for practice to the trainees.

It is noteworthy that the collective behavior change in the team is also observed among the trainees in each DWST, which have been realized through making joint actions to improve their activities as DWST.

Most of the interviewees explained that skills and knowledge obtained in the training were practical and could be adopted in their works in most cases. Main reasons why the trainees could not utilize their attainment from the training were either no opportunity in actual works due to slow progress of RWSSP or the working environment and customs in the offices which do not allow them to apply new procedures and attitude even if the trainees understand those importance and value.

#### 4.5.7 BEHAVIOR CHANGE AT THE ORGANIZATIONAL LEVEL

##### (1) Monitoring of the Process of Behavior Change

Behavior change as DWST has been monitored from the viewpoints of change in procedures employed in activities related to RWSS projects, especially with regard to the practice of DWST described in the indicators of the project purpose as mentioned below;

- Adoption of selection procedures of candidate communities of RWSS projects based on the DRA (demand-responsive approach) in the promotion phase
- Examination and making comments to progress reports and other output reports submitted by the TSP/FSP within the agreed period, if the districts currently implement RWSS projects with hiring TSP/FSP
- Update of information on water supply and sanitation conditions as well as operation and maintenance of existing water supply facilities in the district every year
- Integration of strategies and activity plans on water supply, sanitation and hygiene promotion for households and schools into DWSP and annual plan

LGAs are expected to ensure these behaviors as a part of their responsibilities in RWSSP. The indicators were set to address areas of capacity gaps and training needs of DWSTs in the target LGAs which had been identified in the baseline survey.

Process of the behavior change was observed through three monitoring visits to the pilot LGAs as shown in **Table 4.20**.

**Table 4.20 Organizational Behavior Changes**

Visit		Facts (Behaviour Change)	LGAs	
1 <sup>st</sup> Monitoring [Sep. 2008]		The importance of team work (information, task and responsibility sharing) is logically understood among DWST and consequently came to have the common vision for RWSSP among DWST.	All LGAs	
		Regular monitoring programme is established as the joint activity of DWE, DHO and DCDO and financed and arranged under the responsibility of DWE office.	Mukuranga D.C. and Masasi D.C.	
2 <sup>nd</sup> Monitoring [Jan. 2009]		DWST has practically integrated sanitation and hygiene activities into DWSP and annual action plan (although strategic approach to formulate DWSP was not considered in association with various analysis.)	Masasi D.C., Lindi D.C. and Temeke D.C.	
3 <sup>rd</sup> Monitoring [Oct. 2009]	i. DRA	DWST has been facilitating DRA in the promotion phase before commencement of the 1 <sup>st</sup> cycle of WSDP.	All LGAs	
	ii. Management of output	All the members of DWST were involved in examination and preparation of comments on reports submitted by TSP/FSP.	All LGAs	
	iii. Monitoring		Activities to update the information on water and sanitation conditions have not started yet.	Temeke MC
			DWE office conducted activities to update the information on water and sanitation conditions. DWST reviewed the report by DWE and gave comments on it.	Mkuranga DC
			Information is updated quarterly. WEOs at the wards and Water Technicians stationed at community level are involved in collection of data from all the communities.	Masasi DC
			Information is updated monthly through data collection from all the villages by involving WATSAN committees, Village Governments, and WEOs. DWE Office also	Lindi DC

Visit	Facts (Behaviour Change)	LGAs
	collect information through the field supervision.	
iv. Integrated approach	DWST is discussing how to incorporate sanitation and hygiene promotion for household and schools into DWSP. After selecting TSP/FSP, DWST will work with them for formulation of DWSP.	Temeke MC
	The present DWSP was formulated in June 2009 and DWST is elaborating it with support of TSP/FSP to include sanitation and hygiene promotion activities at communities and primary schools.	Mkuranga DC
	DWST will consider necessary activities related to sanitation and hygiene promotion when DWSPs are updated with support of TSP/FSP after the scoping study.	Masasi DC, Lindi DC

It was identical that the behavior changes at the individual level have induced the behavior changes, which are shown in the table above, at the organizational level to a certain extent. It, however, was also observed that the linkage among different institutions, especially between BWO and DWST/RWST, was still under practical during the 1<sup>st</sup> and 2<sup>nd</sup> monitoring visits. Besides, any significant outcome to improve the status of RWSSP in respective LGAs could not be identified in these initial stage of the Project.

The situation has been improved since the latter half of 2009 when most of LGAs started actual implementation of the 1<sup>st</sup> cycle of RWSSP. During the 3<sup>rd</sup> monitoring visit, it was found that practices of the pilot LGAs had been improved in terms of examination of output submitted by consultants/ contractors as well as application of DRA in selection of the target communities. Apart from these behavior change, DWSTs visited expressed that linkage among the team members ha been strengthened after the training. Also, in case of Masasi, DWST reviewed its membership and was planning to include Natural Resource Officer and DEO in charge of the secondary schools in the team. This effort indicates that the team members have gradually realized effectiveness of teamwork and function of DWST to coordinate various actors related to RWSS projects at the district level.

## (2) Achievement

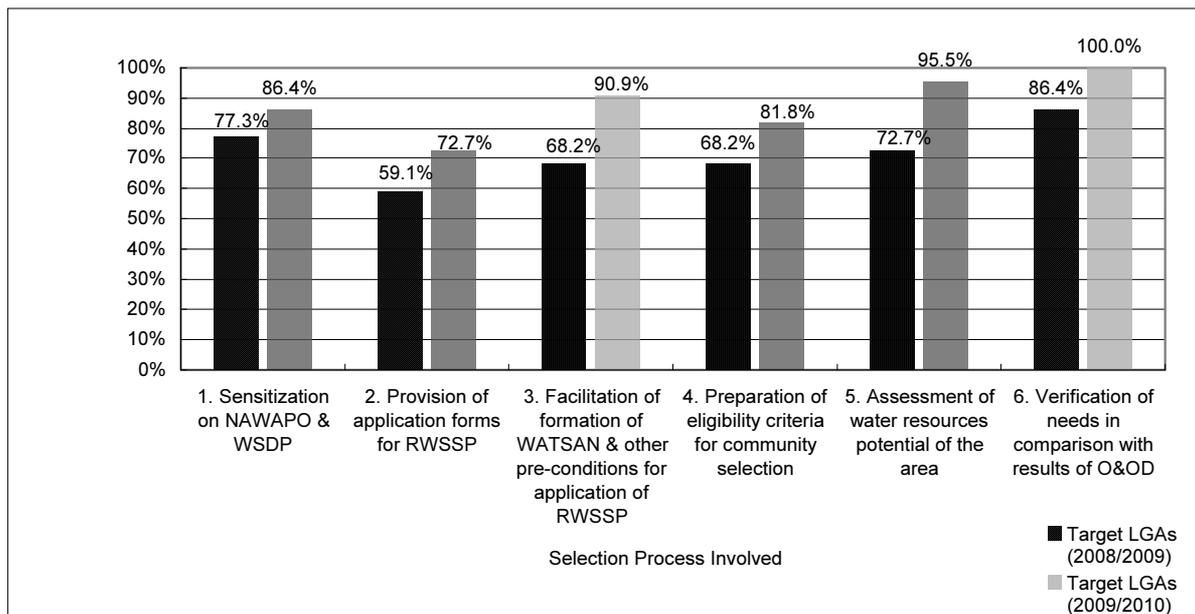
As a result of the surveys conducted in the project implementation period, an improvement was observed in terms of the behavior change of DWST from the aspects mentioned above. The surveys were conducted in July 2009 and June 2010 for all the target LGAs. The first one was administered by sending a questionnaire to each LGA which was filled by respective DWSTs, especially DWEs. The second one was implemented as the end line survey as mentioned in Chapter 3.6.

### 1) Adoption of selection procedures of candidate communities of RWSS projects based on DRA

The Programme Implementation Manual (PIM) for the WSDP suggests employment of DRA in RWSS projects. In the process of selection of the candidate communities of RWSS projects, six activities as indicated in **Figure 4.6** below can be considered to realize DRA.

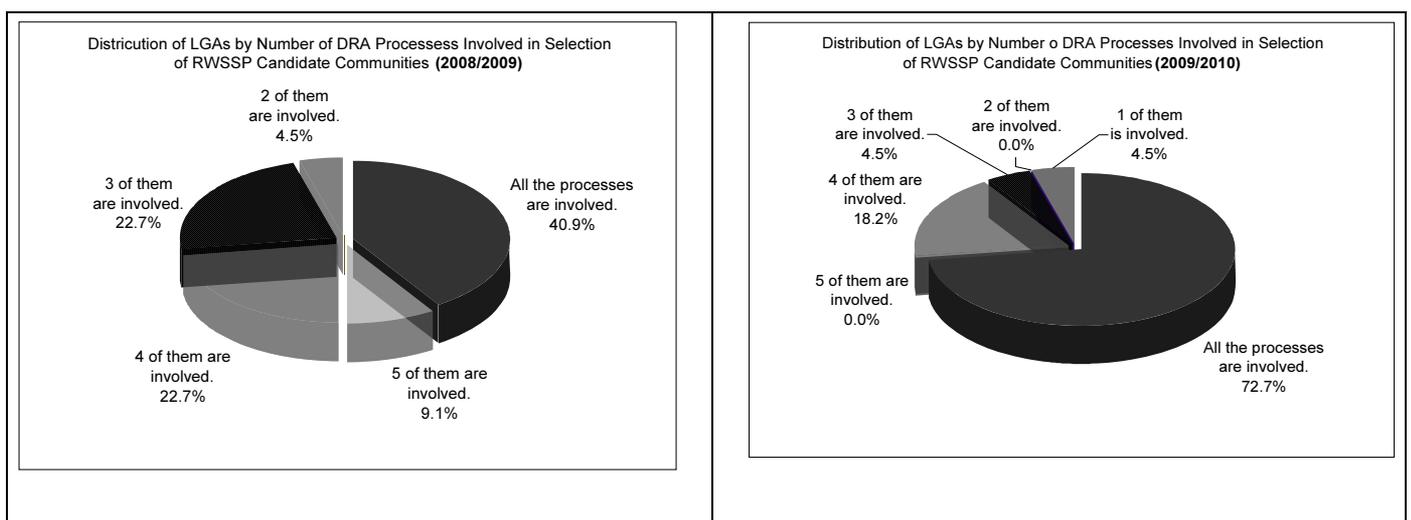
Among these activities, the RUWASA-CAD training has put special emphasis on the training topics related to “assessment of water resources potential of the target area” in order to ensure formulation of RWSS projects with due consideration of balance between water demand and water resources potential. Participants of the 1<sup>st</sup> and 2<sup>nd</sup> training phases reviewed processes which had been involved in formulation of RWSS projects in their respective LGAs. A certain number of the participants had understanding that demand of communities was the sole factor to be considered based on DRA in formulation and implementation of RWSS projects. The participants observed that overemphasise of the demand might have resulted in designing of subprojects without appropriate assessment of the water resources potential, which would hinder

sustainability of water supply services. With considering understanding and practices of DWSTs before the training, it can be concluded that importance of the water balance has been well understood by the trainees and practices of LGAs in application of DRA has been improved in terms of the selection process of the target communities.



**Figure 4.6 Process Involved by DWST to Select RWSSP Candidate Communities based on DRA**

It was confirmed through the surveys that 9 out of 22 target LGAs involved all these processes when they select the candidate communities in 2008/2009 while the number of LGAs increased to 16 in 2009/2010. (Fig. 4.7) Especially, all the LGAs utilized output of the O&OD to crosscheck the needs expressed by the communities which submitted the applications for the RWSS projects.



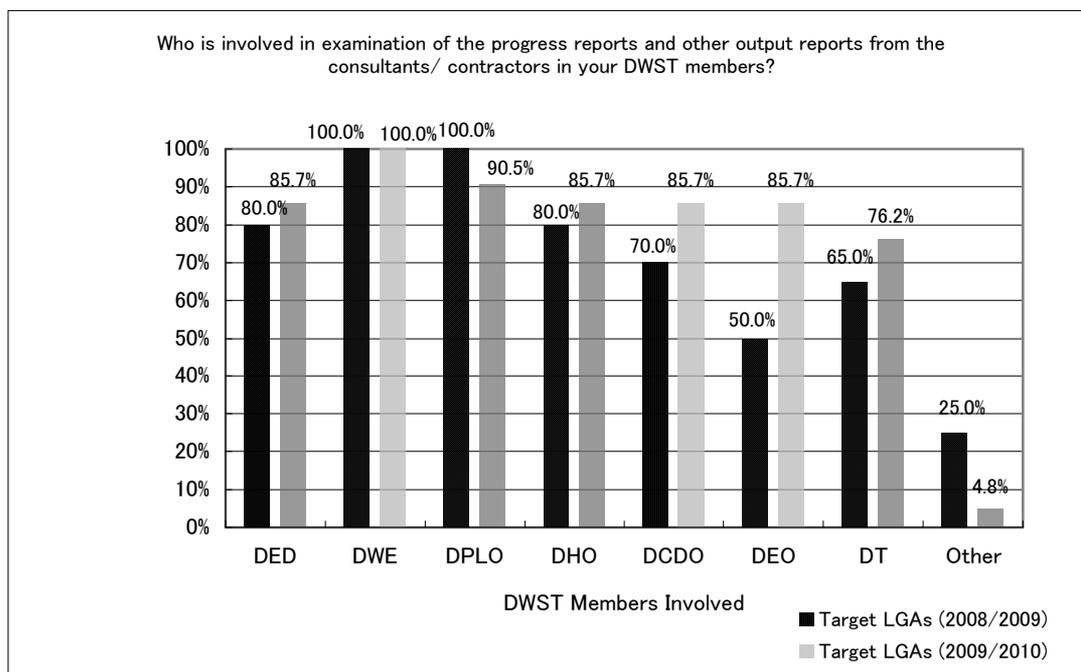
**Figure 4.7 Distribution of LGAs by Number of DRA Processes Involved in Selection of RWSSP Candidate Communities**

**2) Examination and commenting of outputs submitted by the service providers**

LGAs are responsible to examine outputs submitted by the service providers and give them feedback as a part of the works related to the contract management. 21 out of 22 LGAs

answered that they actually examined and made comments to progress reports and other output submitted by the consultants or contractors in 2009/2010 while there were 20 LGAs in 2008/2009 which practiced this activity in the on-going RWSS projects. What is remarkable is that, as shown in **Fig. 4.8**, situation has been improved in terms of involvement of the DWST members as the team. Especially, participation of DCDO, DEO and DT has been increased dramatically. Furthermore, number of LGAs which involve all the members of DWST has increased from 10 in 2008/2009 to 16 in 2009/2010.

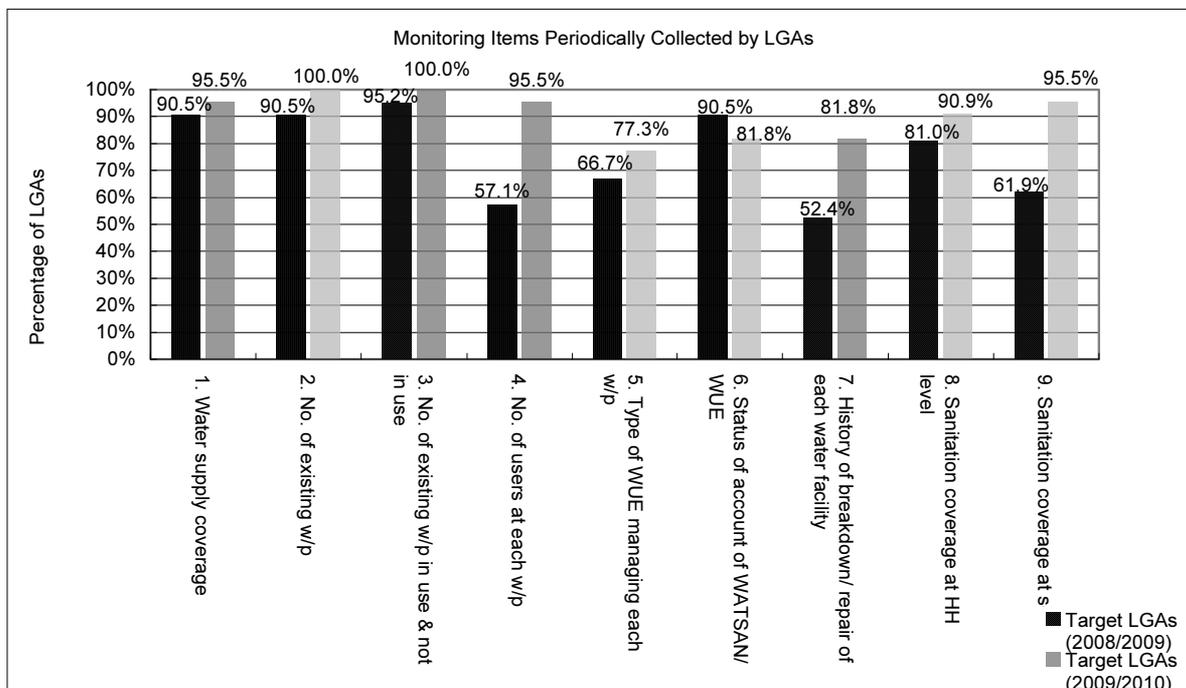
Before the training, this activity had been done by DWE only in most LGAs. With addressing this situation, approaches to build teamwork were employed purposefully in each training course, which has contributed to improvement of processes on examination of the output of RWSS projects by DWSTs.



**Figure 4.8 Distribution of LGAs by Participation of DWST Members in Examination of Outputs from Consultants/ Contractors**

### 3) Update of information on WSS conditions

All LGAs responded that they conducted periodic monitoring and updated information on water supply and sanitation conditions in the district in 2009/2010 while 21 LGAs practiced the same in 2008/2009. **Fig.4.9** shows the distribution of LGAs by monitoring items which they update periodically.



**Figure 4.9 Distribution of LGAs by Monitoring Items Periodically Updated**

The information is being updated through reports from WEOs, VEOs, and other field extension officers as well as field visits by the district staff in most cases.

As the practice of the target LGAs, priority has been put on the monitoring of progress of on-going projects while situation of operation and maintenance of water facilities as well as sanitation conditions has been monitored irregularly. Only five LGAs collected data on all items mentioned in **Fig. 4.9** in 2008/2009. The number of LGAs increased to 13 in 2009/2010, which means that practices of LGAs on the monitoring have been improved to make it more comprehensively. The training has contributed to this positive change through facilitation of discussion on importance of continuous monitoring of existing water supply and sanitation conditions for formulation of the follow-up plan and new projects by LGAs.

However, challenges are still observed as a result of verification of the monitoring data which are being collected by LGAs. Quality of the data collected and uniformity of definition of the monitoring indicators should be improved by facilitating employment of a standardized monitoring system in LGAs. For instance, definitions of indicators are not clearly explained in DWSPs which are being formulated by LGAs with support of TSP/FSP. Also, these indicators are not necessarily in uniform manner, which would make it difficult to conduct the comparative analysis.

These challenges would be partly attributed to the fact that the training could not cover topics on the established monitoring system in RWSS sub-sector well since the performance monitoring frameworks of WSDP was under review by MoWI during the implementation period of the training. In addition to efforts by LGAs for improvement of quality of the monitoring activities, it is expected that MoWI will facilitate LGAs to apply the standardized monitoring system linking with the sector monitoring framework.

#### **4) Integration of strategies and activity plans on water supply, sanitation and hygiene promotion for households and schools into DWSP**

As the status at the baseline survey, most of the target LGAs conducted hygiene promotion activities on ad hoc basis. No strategic approaches were considered in these activities to maximize synergy effect between improvement of water supply and sanitation conditions and hygiene practices. The following was confirmed through the monitoring on application of the integrated approach on water supply, sanitation and hygiene promotion in DWSP;

19 LGAs answered that they incorporated strategies and activities related to sanitation and hygiene promotion at communities and schools into DWSPs in 2008/2009. At the end line survey, there were 17 LGAs which had already formulated or drafted DWSPs with support of TSP/FSP while 5 LGAs were yet to reach to the stage for formulation of DWSP. Interventions for sanitation and hygiene promotion are included in the DWSPs in these 17 LGAs.

Integrated approach of water supply, sanitation and hygiene promotion was emphasized throughout the training phases. It would have contributed to maintain high number of LGAs to adopt the integrated approach in DWSP. The emphasis of sanitation component in RWSSP by MoWI would also be one of the attribution of this achievement.

As the 1<sup>st</sup> cycle of RWSSP will enter into the implementation stage, DWSTs are expected to coordinate sequence of activities and to cooperate among the members so that the planned activities for construction of water facilities and sanitation and hygiene promotion will be implemented timely and effectively.

#### **4.5.8 KNOWLEDGE SHARING ON THE TRAINING**

The trainees took several measures to share knowledge and skills obtained in the training with other members of DWST and staff of the departments which they belong to. Those are reporting at the regular Council Management Meeting, submitting papers at the councilors' meetings to sell ideas obtained in the training, and holding ad hoc meetings to share the information with other staff.

Several efforts by the trainees and DWSTs were confirmed through the monitoring visits. For instance, DWE of Mkuranga organized a feedback seminar on the RUWASA-CAD training inviting other DWST member and department staff in order to disseminate what she learnt in the training courses. In Temeke, the DWST organized a team meeting after the 4<sup>th</sup> training course and trainees explained the contents of the training materials to other members. Districts of Mafia and Nanyumbu requested for WSDP fund for 2010/2011 to replicate some of the training courses of RUWASA-CAD as a part of their capacity development plans.

Furthermore, it was confirmed in the end line survey that quite a good number of the districts, such as Bagamoyo, Kibaha Town, Lindi Town, Liwale, Nachingwea, Ruangwa, Kinondoni, and Temeke, provided the on-the-job training to subordinates of the DWST members in application of skills and knowledge the trainees had learnt. For instance, DWST of Lindi Town gave guidance to the subordinate staff on operation and maintenance of water supply facilities as well as the project monitoring. In Liwale, DWSP has a plan to provide orientation to councilors on facilitation skills, community participation, and operation and maintenance. DWST members who attended the RUWASA-CAD training from Ruangwa conducted training for other members of the team and their subordinates in CLTS and the project management.

However, challenges still remain in dissemination of the training attainment within the organization at the district level according to the survey results. Some DWSTs expressed that all DWST members should attend same training courses as the contents of the RUWASA-CAD training are of basics which need to be commonly understood by the members. Also, the trainees pointed out limitation of knowledge transfer by means of introduction of the training contents to others. With considering these comments by the trainees, it would be useful for LGAs to organize similar training courses as a part of their capacity development interventions in the districts. Some DWSTs questioned about availability of the training resources which can be used by LGAs to

organize the training. Provision of such information from MoWI will help LGAs plan for replication of the RUWASA-CAD training plan in their respective areas.

Other challenge is that subordinates of DWST members such as water technicians in DWE's office have limitation to access to the training materials written in English as they are not conversant in reading English. A volunteer from Water Security Action Team (W-SAT) attached to DWE's office in Lindi District Council pointed out this through his observation of daily operation of projects by DWE office. The water technicians also have difficulty to assist DWE in implementation of the projects in some cases since they cannot fully understand PIM and other project documents in English. Development of Swahili version of the key documents and materials would help information and knowledge sharing within the organization and with the lower LGAs.

#### **4.5.9 CAPACITY DEVELOPMENT PLAN OF LGAs**

MoWI has been facilitating various implementing agencies of WSDP to formulate their own capacity development plans to strengthen organizational capacities to be required for implementation of WSDP. It is of high priority among the undertakings of WSDP for 2009/2010. Progress of formulation and implementation of the capacity development plan by respective LGAs was also confirmed in the monitoring visits and end line survey with considering above-mentioned sector environment and future possibility of utilization of the RUWASA-CAD training plan by LGAs and regions in their capacity development plans.

The interviews with DWSTs revealed that all target LGAs had completed the formulation of the capacity development plans. The plans were prepared based on the capacity assessment by DWST members as the team in most cases.

Training of the council staff is one of the major interventions included in the capacity development plans according to the interviewees of the end line survey. There will be rooms for LGAs to elaborate the implementation plans of such training by specifying rationale, objectives, target groups, methodologies and other details in order to have the training effectively.

#### **4.5.10 COMPARISON BETWEEN THE TARGET LGAs AND OTHERS**

The end line survey revealed gaps between the target LGAs and samples of the non-target LGAs in the implementation of the RWSS projects, especially on i) the teamwork of DWST in the contract management of the service providers, ii) experiences in utilization of the hydrogeological maps, and iii) linkage with RS and BWO. Findings from the survey of the both groups are compared as follows;

- Involvement of members of DWST except for DWE is low in examination of reports and other outputs submitted by the consultants/contractors in the non-target LGAs while DWSTs in the target LGAs involve core members such as DWE, DPLO, DHO, DCCDO and DEO when they review the outputs from the service providers.
- LGAs in the non-target area do not have experiences in making reference to hydrogeological maps in the implementation of the RWSS projects sine neither LGAs nor BWOs have such data and information.
- All the target LGAs are aware of the roles of RS and BWO to provide technical support to LGAs in the RWSS projects. This was supported by their practices that 21 LGAs sought advice from RS in the process of formulation/designing of the RWSS subprojects in 2009/2010 and 19 consulted with BWO. Furthermore, 10 LGAs obtained approval from RS on designs of water supply facilities. Even the remaining LGAs also stated in the end line survey that they were going to communicate with RS and BWO accordingly when they reach to the certain stages requiring those input from RS and BWO. Contrary, it is observed that LGAs in the non-target area do not have proper understanding on and experiences in cooperation with RS and BWO as indicated in their comments described below;

- There is no direct and regular communication between DWST and BWO. DWST is not aware of the issues that are supposed to be consulted with BWO.
- LGAs do not need to get approval from RS on designs of water supply facilities before commencement of the construction works as the role of RS is to provide advice to LGAs. Each LGA through DWE has the mandate to approve designs of water supply facilities.

#### 4.5.11 CONCLUSION

Practices of implementation of RWSS projects and capacity gaps of DWSTs were identified in the baseline survey conducted at the beginning of the Project as explained in Chapter 3. Compared to the situation at that stage, behavior change of DWST as the team has achieved in most of the target LGAs in terms of the following aspects;

- Adoption of selection procedures of candidate communities of RWSS projects based on the demand-responsive approach in the promotion phase
- Examination and making comments to progress reports and other output reports submitted by the TSP/FSP within the agreed period, if the districts currently implement RWSS projects with hiring TSP/FSP
- Update of information on water supply and sanitation conditions as well as operation and maintenance of existing water supply facilities in the district every year
- Integration of strategies and activity plans on water supply, sanitation and hygiene promotion for households and schools into DWSP and annual plan

Except for these points, DWSTs in all the target LGAs acknowledged that coordination and sense of teamwork had been strengthened in the team compared to the situation before the training.

These changes were mainly observed simultaneously with the commencement and progress of the 1<sup>st</sup> cycle of RWSSP. Most of the target LGAs signed contract with TSP/FSP for RWSSP in the middle of 2009 by when three training phases had already been completed in the Project. The trainees and DWSTs as the team had opportunities to apply what they learnt in the training to the actual implementation of the project, which would have facilitated the behavior change at both the individual and organizational level as shown in the previous sections.

It can be concluded that the training system for DWST has brought positive impacts on improvement of the implementation process of RWSS projects by LGAs. As the 1<sup>st</sup> cycle of RWSSP will be entering into the designing and construction stage of the water supply facilities, MoWI requires to continue to monitor practices of LGAs so that level of the training attainment and further behavior change will be verified. Such information will be of use for MoWI to elaborate the training system to fit demands and actual situation in the RWSS sub-sector.

## CHAPTER 5 OUTPUT 3: ENHANCEMENT OF CAPACITIES OF BWO

### 5.1 ACTIVITIES CARRIED OUT FOR OUTPUT 3

The expected output of [Output 3] is “Capacities of the target Basin Water Offices (BWOs) for supporting Districts in managing RWSS projects are enhanced.”.

#### 5.1.1 WORK IN TANZANIA I (SEPTEMBER 2007 TO MARCH 2008)

At the preparatory phase of this term, the training for data processing of the water resources data was carried out for the hydrogeologists of 2 basin water offices of Wami Ruvu and Ruvuma Southern Coast. Following the training for water resources data processing, the trainings for GIS and database utilization were given to the hydrogeologists. Consequently, 2 preliminary hydrogeological maps of Coast, Dar es Salaam Regions and Lindi, Mtwara Regions were provided.

A training plans for BWOs of the target Basins in order to improve the support services for the local authorities in RWSS projects was formulated. The activities taken by this term for the Output 3 is summarized in *Figure 5.1*.

Activities Carried Out	Year	2007				2008		
		Sep	Oct	Nov	Dec	Jan	Feb	Mar
3-1 Review and compile existing water resource data to be used effectively by the target BWOs.	Month	■						
3-2 Guide the target BWOs on analyzing and processing the water resources data.	Month			■				
3-3 Develop training plans for BWOs of the target Basin for improvement of support services for the local authorities in RWSS projects	Month			■				
3-4 Provide training for BWOs based on the training plans of 3-3 above.	Month	(to be carried out in Next Phase)						
3-5 Monitor the implementation of support services by BWOs to the target districts	Month	(to be carried out in Next Phase)						

**Figure 5.1 Activities Carried Out for Output 3 During the Work in Tanzania I**

#### 5.1.2 WORK IN TANZANIA II (MAY 2008 TO MARCH 2009)

The Item No. 3-1 and 3-2, that is the activities related to the development of preliminary hydrogeological maps were completed during the term of project step 1. In this term, development of training plans, provision of training for BWOs for training phase 1 and 2, and monitoring of the implementation of support services by the BWOs were carried out as schedule. The activities taken by this term for the Output 3 is summarized in *Figure 5.2*.

Activities Carried Out	Year	2008								2009			
		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
3-1 Review and compile existing water resource data to be used effectively by the target BWOs.	Month	(completed in project step 1)											
3-2 Guide the target BWOs on analyzing and processing the water resources data.	Month	(completed in project step 1)											
3-3 Develop training plans for BWOs of the target Basin for improvement of support services for the local authorities in RWSS projects	Month		■					■					
3-4 Provide training for BWOs based on the training plans of 3-3 above.	Month		■						■				
3-5 Monitor the implementation of support services by BWOs to the target districts	Month							■				■	

**Figure 5.2 Activities Carried Out for Output 3 During the Work in Tanzania II**

### 5.1.3 WORK IN TANZANIA III (MAY 2009 TO MARCH 2010)

Preparation of training curriculum, timetable and training guide which are concerned with the activity 3-3 was carried out. Trainings of phase 4 and 5 in the activity of 3-4 have been completed by the end of January 2010. The 3<sup>rd</sup> monitoring visit of the activity 3-5 has been conducted in the middle of January 2010. The activities for Output 3 by this term is summarized in **Figure 5.3**

Activities Carried Out	Year	2009									2010		
		Month											
Activities	Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
3-1 Review and compile existing water resource data to be used effectively by the target BWOs.		(completed in project step 1)											
3-2 Guide the target BWOs on analyzing and processing the water resources data.		(completed in project step 1)											
3-3 Develop training plans for BWOs of the target Basin for improvement of support services for the local authorities in RWSS projects							■			■			
3-4 Provide training for BWOs based on the training plans of 3-3 above.							■			■			
3-5 Monitor the implementation of support services by BWOs to the target districts										■			

**Figure 5.3 Activities Carried Out for Output 3 During the Work in Tanzania III**

### 5.1.4 WORK IN TANZANIA IV (MAY 2010 TO JULY 2010)

The activities Item No. 3-3 and 3-4, that is the activities related to the development of training plans and provision of training for BWOs were completed in last project term. In this project step 4, monitoring of the implementation of support services by the BWOs were carried out as end line survey. The activities taken by this term for the Output 3 is summarized in **Figure 5.4**.

Activities Carried Out	Year	2010			
		Month			
Activities	Month	May	Jun	Jul	Aug
3-1 Review and compile existing water resource data to be used effectively by the target BWOs.		(completed in project step 1)			
3-2 Guide the target BWOs on analyzing and processing the water resources data.		(completed in project step 1)			
3-3 Develop training plans for BWOs of the target Basin for improvement of support services for the local authorities in RWSS projects		(completed in project step 3)			
3-4 Provide training for BWOs based on the training plans of 3-3 above.		(completed in project step 3)			
3-5 Monitor the implementation of support services by BWOs to the target districts			■		

**Figure 5.4 Activities Carried Out for Output 3 During the Work in Tanzania IV**

## 5.2 PERSPECTIVE OF BWO TRAINING

Formulated training plan for the BWO is summarized in **Table 5.1**. Based on the preliminary hydrogeological maps prepared in the preparatory phase, BWO will be able to support the groundwater development on RWSS project to the Districts. The plan was formulated with a focus on supporting mechanism to the District.

Through the entire project steps, all the training contents of training phase of 1 to 5 were completed.