

RWS O&M Management Manual and Strategic Framework



MINISTRY FOR FOREIGN
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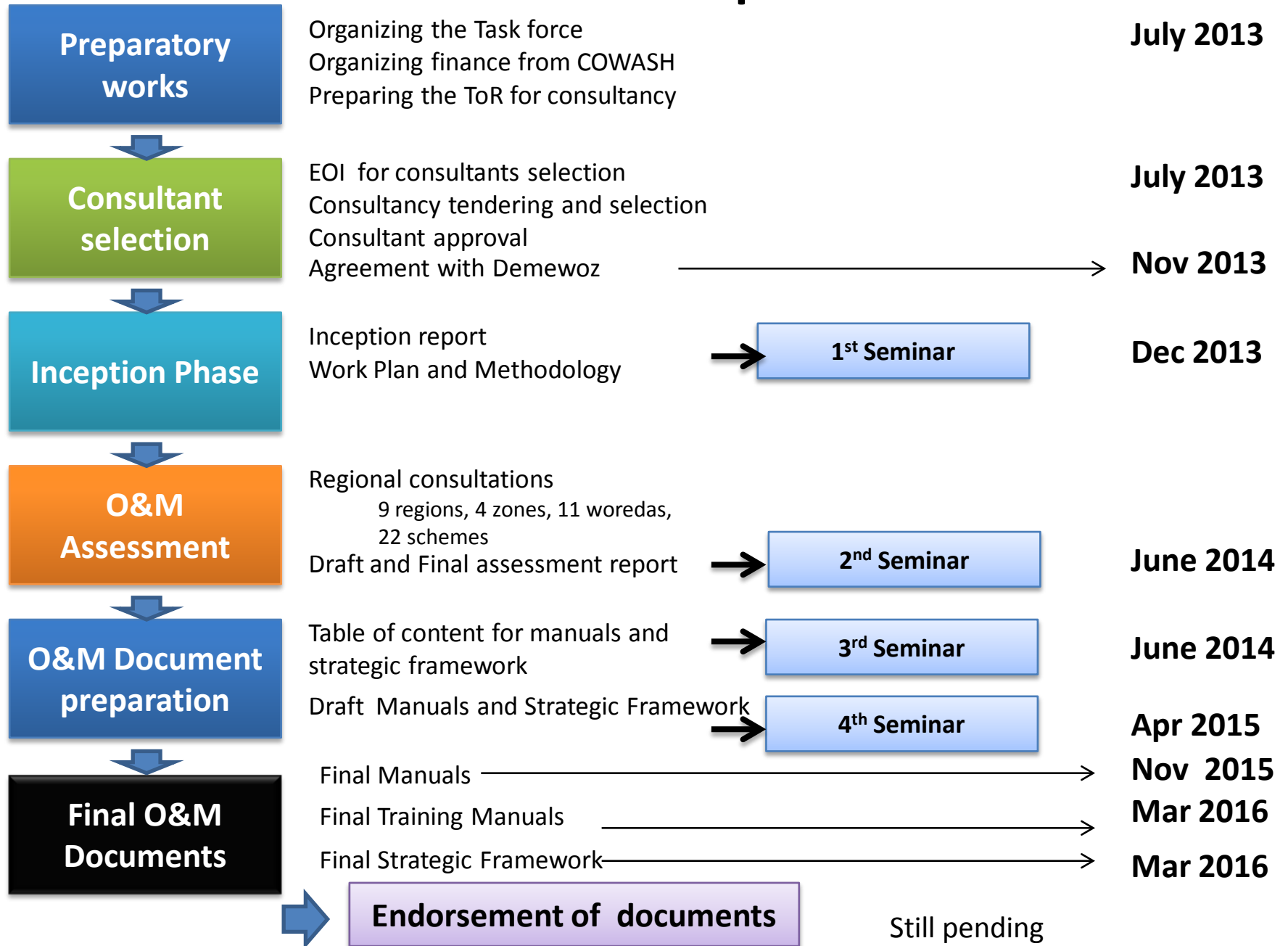
Effective and sustainable
WaSH services

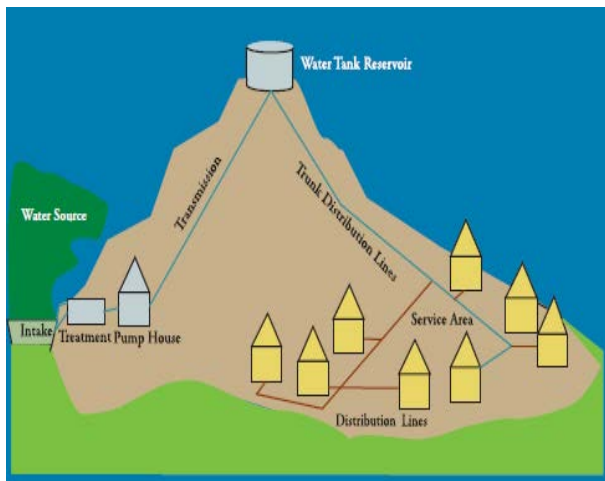


DEMWOZ CONSULTANCY



Consultation process





STRATEGIC FRAMEWORK FOR RURAL WATER SUPPLY OPERATION AND MAINTENANCE MANAGEMENT

WHY O&M FRAMEWORK?

NWI 2011:
92,588 rural
schemes exist

23,610 schemes
are non-
functional

(2011)
25.5%

No attention given for O&M

No institutional support

Focus has been in the
construction of new
schemes

The GTP I target was to
reduce the non-
functionality to 10 % and
GTP II is to reduce it to 7 %



2013 MoWIE launched the development of a strategic framework and relevant manuals for rural water supply O&M management

MAJOR PROBLEMS IDENTIFIED IN O&M

Scheme ownership and legal status is not ensured

Absence of proper O&M funding mechanism and financial management of water schemes

Inconsistence provision of spare parts, and quality of spare parts

Private sector and women participation in O&M minimal

Capacity building today is only a one time activity

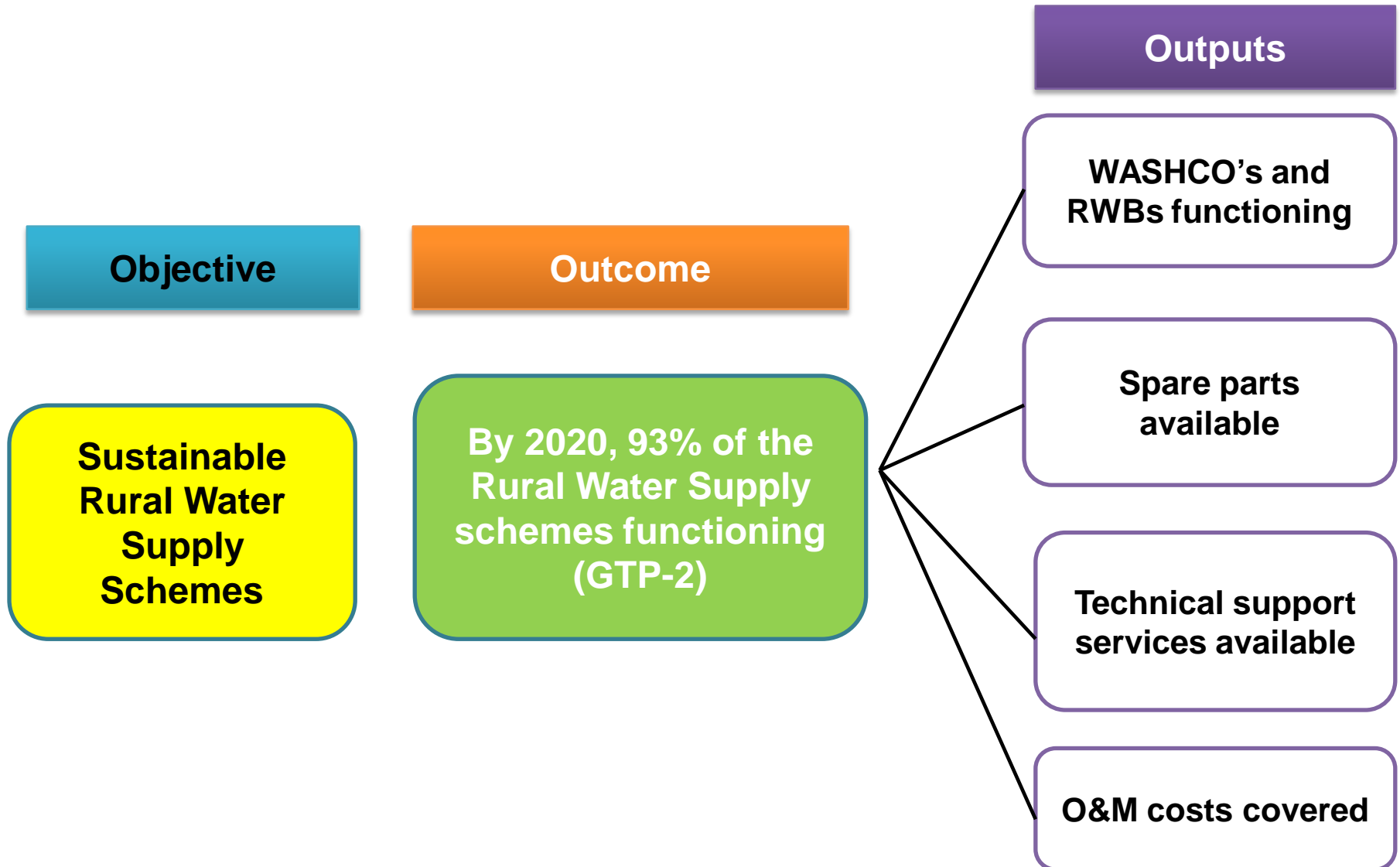
Deficiency of Human Resources and equipment, tools & logistics

Focus only at the specific water sources but not to the entire catchment

Absence of regular planning, budgeting monitoring and reporting on O&M

Rural Water Supply Operation and Maintenance Management

Objective, Outcome and Outputs



7 major principles that guide to achieve the objective of RWS O&M

**Water supply is
owned and
managed by the
community**

**Critical O&M
delegated to private
sector**

**Communities pay
O&M 100 %**

**Spare parts
supplied via private
sector or revolving
fund office**

**Participation by all
stakeholders and
user communities,
particularly women**

**Good governance
Transparency
Accountability**

**Enforcement of policies, acts, strategies, regulations, guidelines and
laws to protect and conserve the environment**

This Strategic Framework aims to provide:

Directions for service provision aimed at improving operation and maintenance

Strategies, solutions and interventions to address the challenges on priority basis

Key result areas, roles and responsibilities of each actor at all levels

Templates for regions and woredas to identify the activities to be carried out for each intervention with the corresponding time and budgets

13 Strategic Directions

1. Issue/amend the needed legal documents
2. Raise the profile of operation and maintenance management
3. Ensure the cost recovery in the community based financial management
4. Ensure sustainable spare part supply & management
5. Reinforce and establish institutional O&M support mechanisms
6. Develop and utilize appropriate norms, criteria and designs for rural water supply facilities
7. Ensure O&M service delivery,
8. Plan and implement preventive maintenance
9. Implement water safety planning from the remote catchment to the end users
10. Build professionals' capacity at all levels
11. Establish and strengthen of M&E, MIS and reporting system of O&M
12. Incorporate O&M management in to Technical Vocational & Educational Training (TVET) Curriculum
13. Identify and provide financial resources for the implementation of the above 12 strategic directions

Layout of the Strategic Framework

Chapter 1

Background with the concept, objective, mission, vision, goals, purpose, roles, principles and country's O&M situation

Chapter 2

Legal and regulatory framework with links between proclamation, strategy and guidelines in relation to O&M of RWS systems

Chapter 3

Challenges in O&M of RWS regards to ownership, technology choice, spare part, supporting mechanism, financial contribution , management, capacity building and water quality management

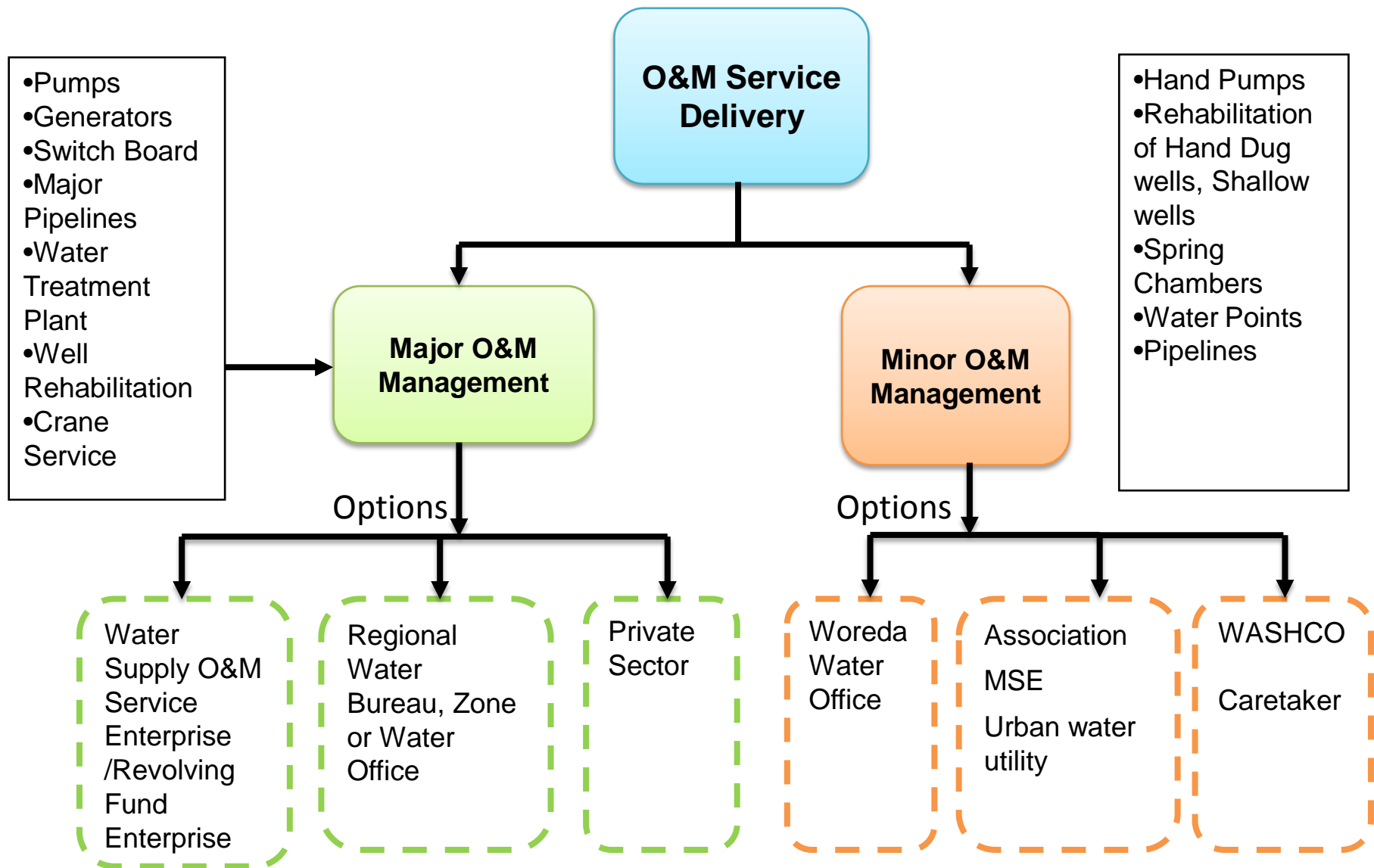
Chapter 4

Strategic Directions and their implementation strategies

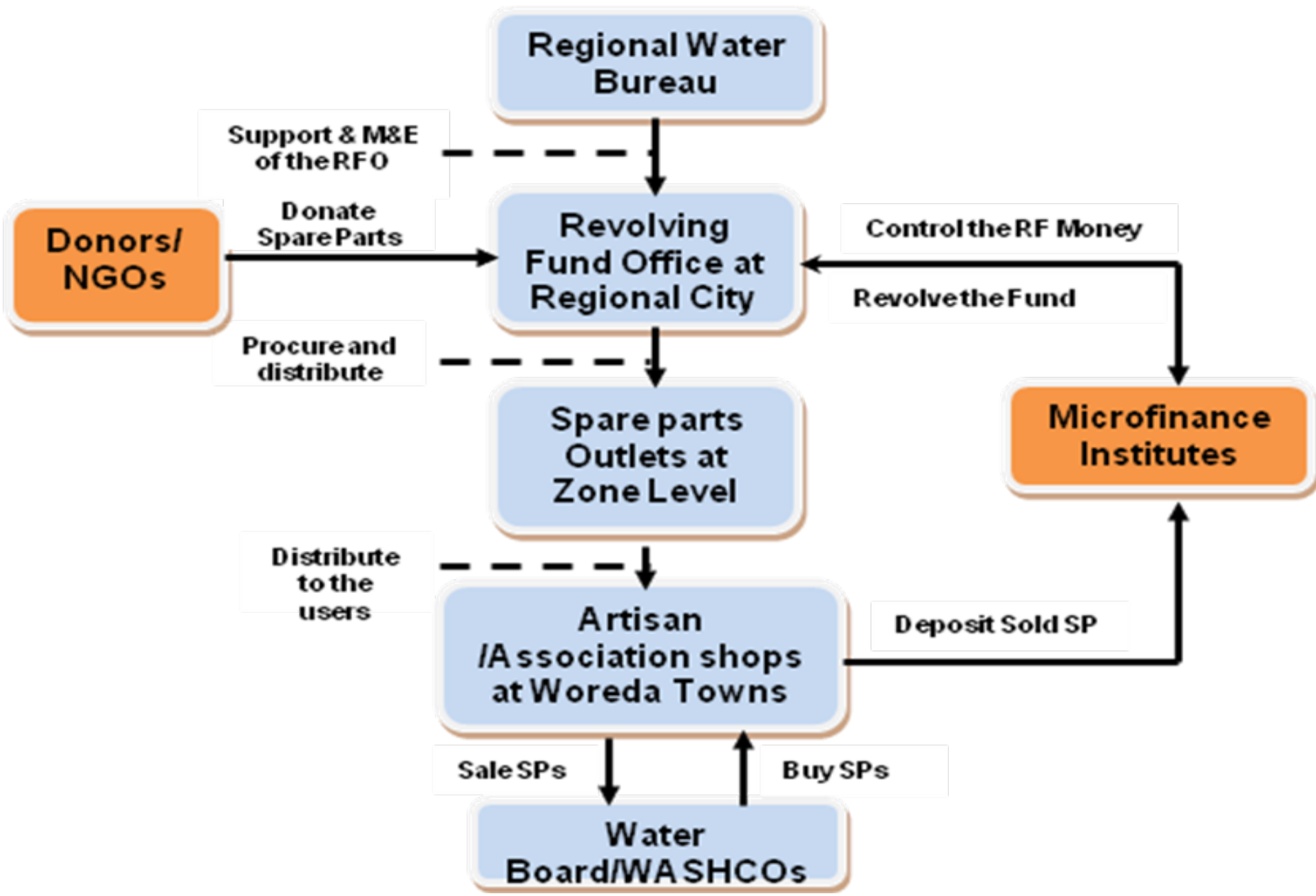
Chapter 5

Planning requirements for O&M described in various phases of the project cycle

Operation and Maintenance Service Options



Model Structure for Revolving Fund Enterprise



Model Structure for Woreda Water User Association

- WUA procures spares from suppliers
- MoWIE/Water Bureau supports the procurement

**NATIONAL OR REGIONAL LEVEL
SPARE PART SUPPLIERS**

- Supplier delivers the spares
- WUA stores the spare parts

**Initial help from
RWB/donors**

**WOREDA WATER USER
ASSOCIATION SPARE PART STORE**

- Each WASHCO pays initial payment and monthly fees

- WASHCO procures the needed spares
- WASHCO uses existing O&M service providers in maintenance

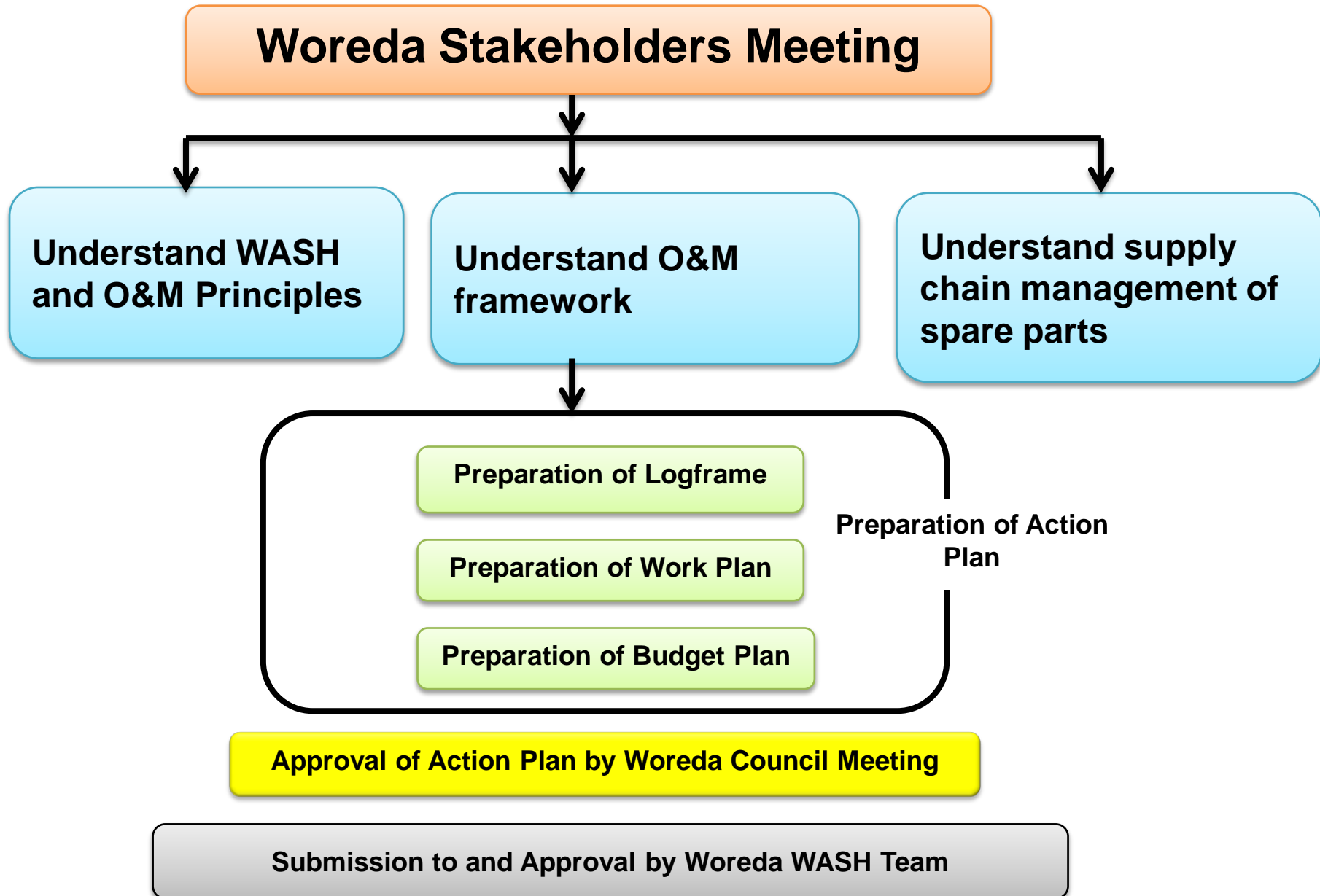
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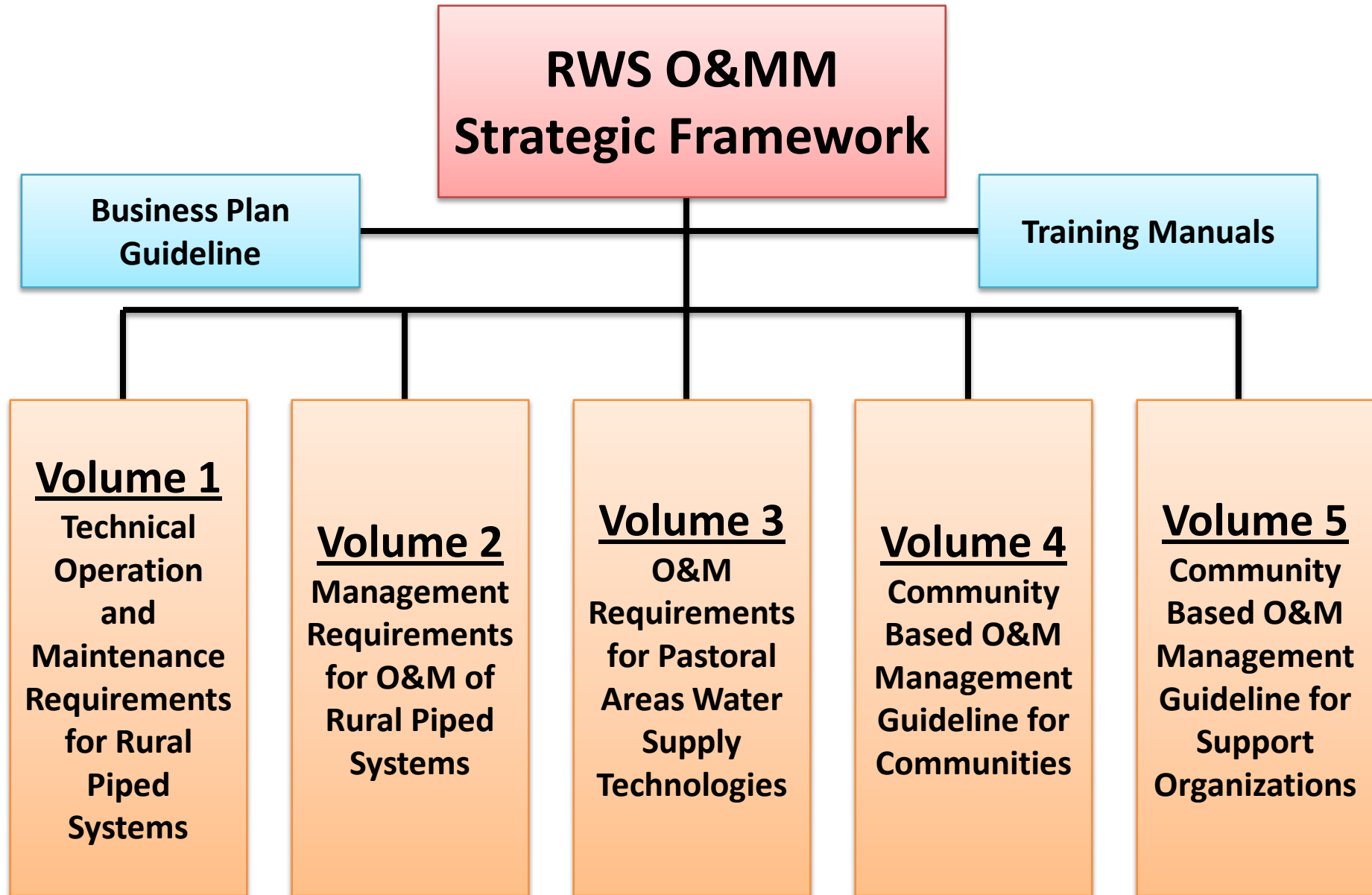
Flow Chart of Stages for Action Plan Preparation





National Rural Water Supply O&M Management Manuals

O&M documents' structure



VOLUME – I TECHNICAL OPERATION AND MAINTENANCE REQUIRMENTS FOR RURAL PIPED SYSTEM

- PART - A INTRODUCTION
- PART- B WATER SOURCES FOR WATER SUPPLY
- PART – C ELECTRO-MECHANICAL EQUIPMENT
- PART – D TRANSMISSION AND DISTRIBUTION SYSTEM
- PART – E SPARE PARTS SUPPLY AND MANAGMENT
- PART – F EQUIPMENT AND TOOLS MANAGEMENT
- PART – G LEAKAGE DETECTION AND CONTROL
- PART – H FIXED ASSET INVENTORY
- PART – I WQ MONITORING AND SURVELLIANCE

VOLUME – II MANAGEMENT REQUIREMENTS FOR OPERATION AND MAINTENANCE OF RURAL PIPED SYSTEM

- PART -A FINANCIAL MANAGEMENT
- PART- B COMMUNITY BASED MANAGMENT
- PART- C M&E, MIS AND REPORT REQUIREMENTS
- PART- D HUMAN CAPACITY BUILDING FOR WATER SERVICE

VOLUME – III OPERATION AND MAINTENANCE REQUIRMENTS FOR PASTORAL AREAS WATER SUPPLY TECHNOLOGIES

- PART - A INTRODUCTION TO PASTORAL WATER SUPPLY TECHNOLOGIES
- PART- B SAND/SUBSURFACE DAMS
- PART - C HAFIR DAM AND BERKAD
- PART - D ROOFTOP AND ROCK CATCHMENT RAIN WATER HARVESTING
- PART –E SOLAR POWERED PUMPING SYSTEM
- PART –F WINDPOWERED PUMPING SYSTEM

VOLUME – IV COMMUNITY BASED OPERATION AND MAINTENANCE MANAGMENT GUIDELINE FOR COMMUNITIES

- PART - A INTRODUCTION TO O&M MANAGMENT
- PART - B DESCRIPTION OF WATER SOURCES AND TECHNOLOGIES
- PART - C TECHNICAL OPERATION AND MAITENANCE REQUIRMENTS
- PART - D RURAL WATER SUPPLY SCHEMES MANAGMENT
- PART - E RURAL WATER UPPLY SPARE PARTS MANAGMENT
- PART - F COMMUNITY BASED M&E AND REPORTING SYSTEM
- PART - G WATER SUPPLY SAFETY PLAN
- PART - H PREPARATION OF ACTION PLAN

VOLUME – V COMMUNITY BASED OPERATION AND MAINTENANCE MANAGEMENT GUIDELINE FOR SUPPORT ORGANIZATIONS

- PART - A INTRODUCTION TO O&M MANAGMENT
- PART - B DESCRIPTION OF WATER SOURCES AND TECHNOLOGIES
- PART - C INSTITUTIONAL SUPPORT MECHANISMS FOR OPERATION
AND MAINTENANCE OF RWS
- PART - D SUPPORT ORGANIZATIONS BASED RURAL WATER SUPPLY
SCHEMES MANAGMENT
- PART - E SUPPORT ORGANIZATION BASED RURAL WATER UPPLY
SPARE PARTS MANAGMENT
- PART - F SUPPORT ORGANIZATIONS BASED M&E AND REPORTING
SYSTEM
- PART - G WATER SUPPLY SAFETY PLAN
- PART - H PREPARATION OF ACTION PLAN

BUSINESS PLAN GUIDELINE

- **1 INTRODUCTION**
- **2 THE BUSINESS PLAN PROCESS**
- **3 STRATEGIC GOALS**
- **4 STRATEGIES**
- **5 FINANCIAL FORECAST**
- **6 SYSTEMS FOR IMPLEMENTING AND MANAGING STRATEGIES**
- **Annexes**

Special issues from the manuals

- It is assumed that each woreda will prepare **O&M action plan with budget** as per the guideline
- The action plan includes:
 - Procurement and replenishment of spare parts
 - Procurement and distribution of tool kits
 - Contribution and management of O&M funds
 - Monitoring of WASHCO activities
 - Water supply inspections and reporting
 - Functionality monitoring
 - Minor repairs and preventive maintenance actions
 - Training of Woreda stakeholders, WASHCOs, Area Mechanics, Caretakers, Treasurers
 - Bi-annual review of activities and improvement of monitoring skills for WASHCO members

Other top issues to observe

- Federal government leadership
 - Assigning people for O&M responsibility
 - Giving directives for the regions
 - Building the capacity of the regions in O&M
- Regional and Woreda Government leadership
 - Assigning people at all levels for O&M and allocating budget for O&M responsibility
 - Implement Kebele Water Technician strategy
 - Human resource capacity development
 - Logistics development
 - Manual translation and printing
 - Legal framework development
 - Allocating resources for monitoring
 - Full use of private sector in O&M service delivery
 - Implement and institutionalize CR-WSP

Where to find all O&M information?

- <http://www.cmpethiopia.org/page/1345>
- **This includes**
 - O&M in Urban Water Supply
 - O&M in Rural Water Supply
 - RWS O&M Strategic Framework
 - RWS O&M Manual, RPS
 - RWS O&M Manual, Point Water Supply
 - Water and O&M MSE Manual

THANK YOU FOR LISTENING