Emerging practices from Agricultural Water Management in Africa and the Near East

Thematic Workshop

Theme 2

Water Use Efficiency

Bari, 28 August 2017
PRESENTATION OUTLINE

BACKGROUND AND DEFINITION

OBJECTIVES

MEASURES

THE PROJET
DEFINITION AND BACKGROUND

**Definition of Water Use Efficiency (WUE):** The ratio between effective water use and actual water withdrawal. It characterizes, in a specific process, how effective is the use of water.

**FACTS AND FIGURES**

CWP can often be improved by increasing efficiency with the reduction of water losses from drainage, seepage and non-productive evaporation.

In Burkina Faso, evaporation is about 2 m/year or 5 mm/day in storage, infiltration is 2 mm/day. Water available for irrigation is between 60-65% of the total storage capacity.

In Morocco, collective system efficiency is between 61-77% (gravity) and 85-95% (pressurized).

In Uganda, there had been no comprehensive studies to assess water use efficiency on the existing irrigation schemes before the Entry Phase of the project.
DEFINITION AND BACKGROUND

Theme 2:
Water Use Efficiency

Significant contribution to Sustainable Development Goals

Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity.
Theme 2: Water Use Efficiency

OBJECTIVES

IMPROVEMENT OF:

- Water resources management
- The service to irrigated agriculture
- The cost-effectiveness of infrastructure management

- Improving design for more efficient operation and management
- More accurate measurement and recording of water services
- Higher focus on capacity building to sustain WUE results
- Better harmonization and regulation with irrigation system
There is no single answer as to how to integrate all the elements into an effective and sustainable framework for improving of irrigation system!

**ASPECTS TO CONSIDER:**
- service to users
- cost and resources dedicated for O&M
- performance monitoring and evaluation (M&E)
- constraints on the timing and amount of water resources
- physical constraints and opportunities relating to topography, geography, climate, etc.
Strengthening Agricultural Water Efficiency and Productivity on the African and Global level

Morocco  Burkina Faso  Uganda

Improved crop water productivity in small scale agriculture

Increased water use efficiency in small scale irrigation

Enhanced water harvesting capacity for agriculture

National water audits prepared for Burkina Faso, Morocco and Uganda
Theme 2: Water Use Efficiency

AWM in Burkina Faso, Morocco and Uganda is improved and mainstreamed in national frameworks and processes

1. Knowledge/knowhow of AWM with increased crop water productivity/efficiency of water use and its mainstreaming in policy is capitalized, disseminated and used in Africa and globally
THE PROJECT

IMPLEMENTATION STRATEGY

Activities

1. Trainings
2. Application
3. Dissemination

Actors involved

- Relevant experts
- Extension agents
- Farmer innovators
- Other Farmers
Theme 2: Water Use Efficiency

The Project

Scaling Up Strategy

Trainings & Application
- Pilot - AquaCrop
- Pilot - MASSCOTE
- Pilot - Water Harvesting

Dissemination
- Guides for decision makers & extension agents

Scaling Up
- Application at national level
- Application at African level
- Application at Global level
Theme 2: Water Use Efficiency

Enhanced capacity for increased water use efficiency in small scale irrigation in Burkina Faso, Morocco and Uganda

Activity 1.
Training program on WD-MASSCOTE

Activity 2.
Apply and monitor the MASSCOTE for SSI

Activity 3.
Develop a modernization plan for small scale irrigation

Activity 4.
Information campaigns and widely dissemination