Food and Agriculture Organization of the United Nations

CIHEAM IAM BARI

AgWA
Partnership for agricultural water for Africa

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

Thematic Workshop

Theme 2

Water Use Efficiency

Bari, 28 August 2017

Theme 2:

Water Use Efficiency

PRESENTATION OUTLINE

BACKGROUND AND DEFINITION

OBJECTIVES

MEASURES

THE PROJET

Theme 2:

Water Use Efficiency

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)

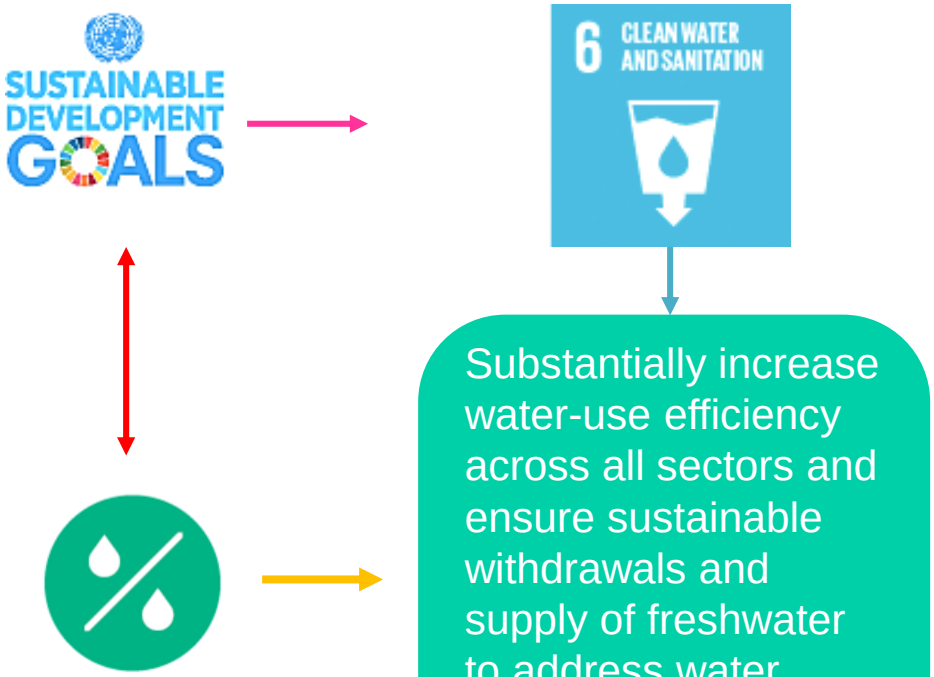
In Uganda, there had been no comprehensive studies to assess water use efficiency on the existing irrigation schemes before the Entry Phase of the project

Theme 2:

Water Use Efficiency

DEFINITION AND BACKGROUND

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

Theme 2:

Water Use Efficiency

MEASURES

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.

Food and Agriculture Organization of the United Nations

MASSCOTE

Theme 2:

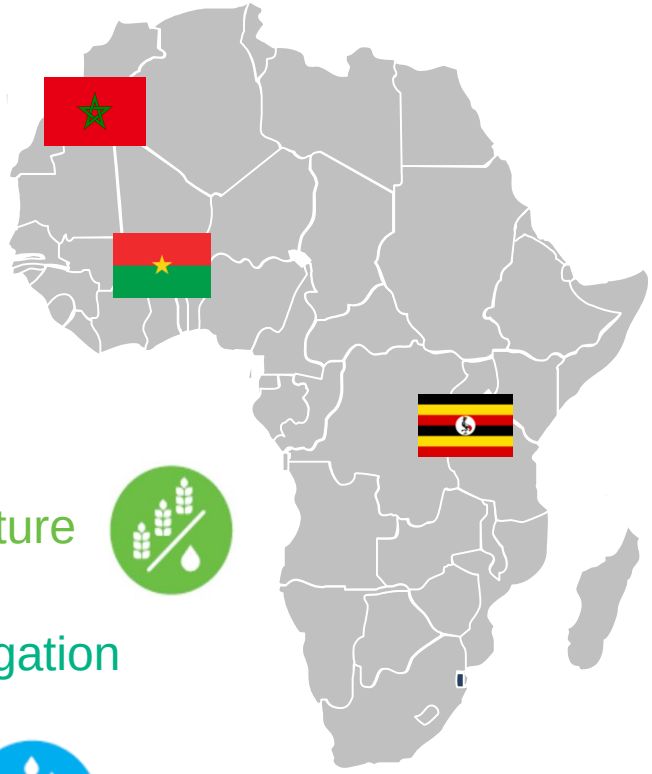
Water Use Efficiency

THE PROJECT

Food and Agriculture Organization of the United Nations

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

THE PROJECT

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

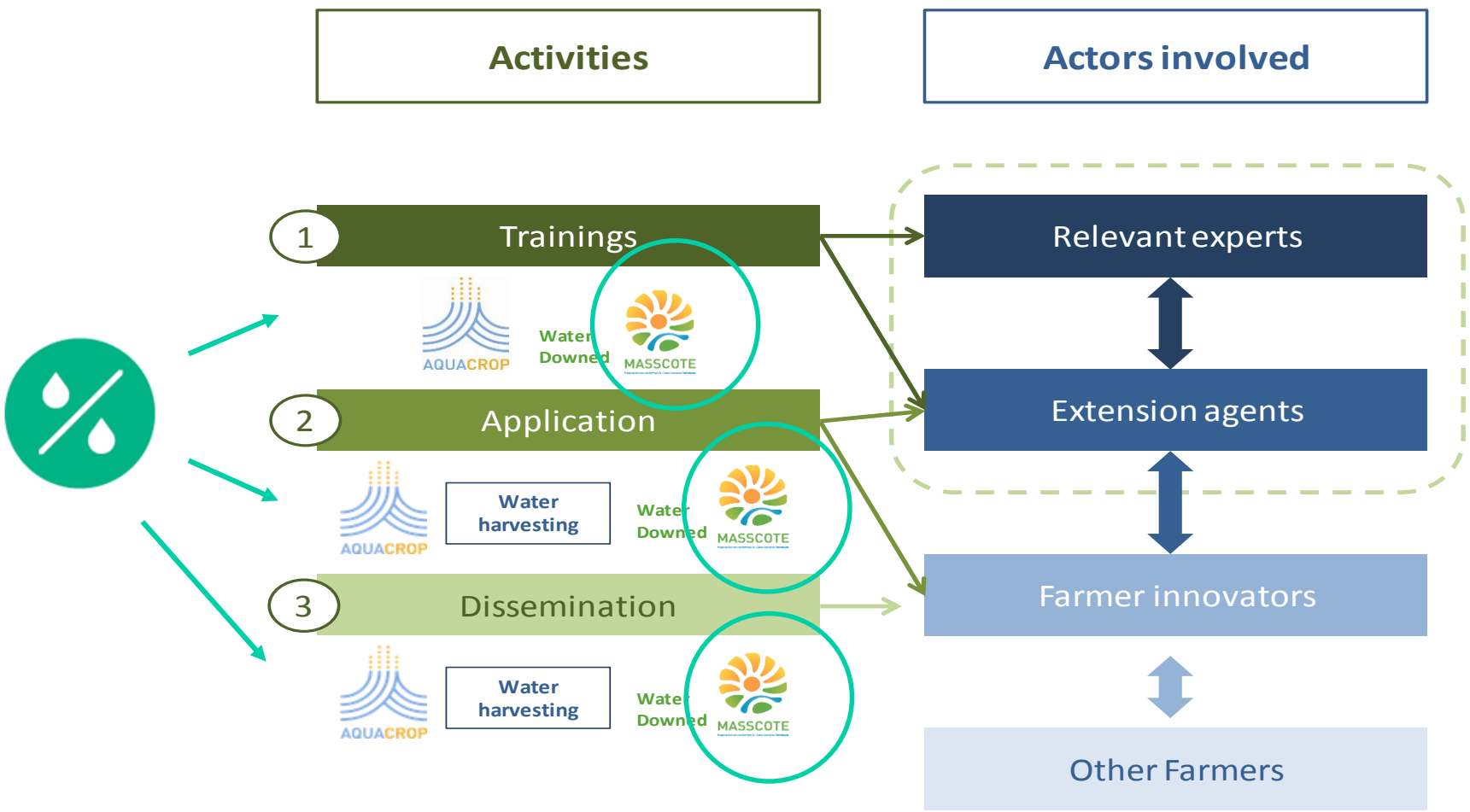
2. 

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

Theme 2:
Water Use Efficiency

THE PROJECT

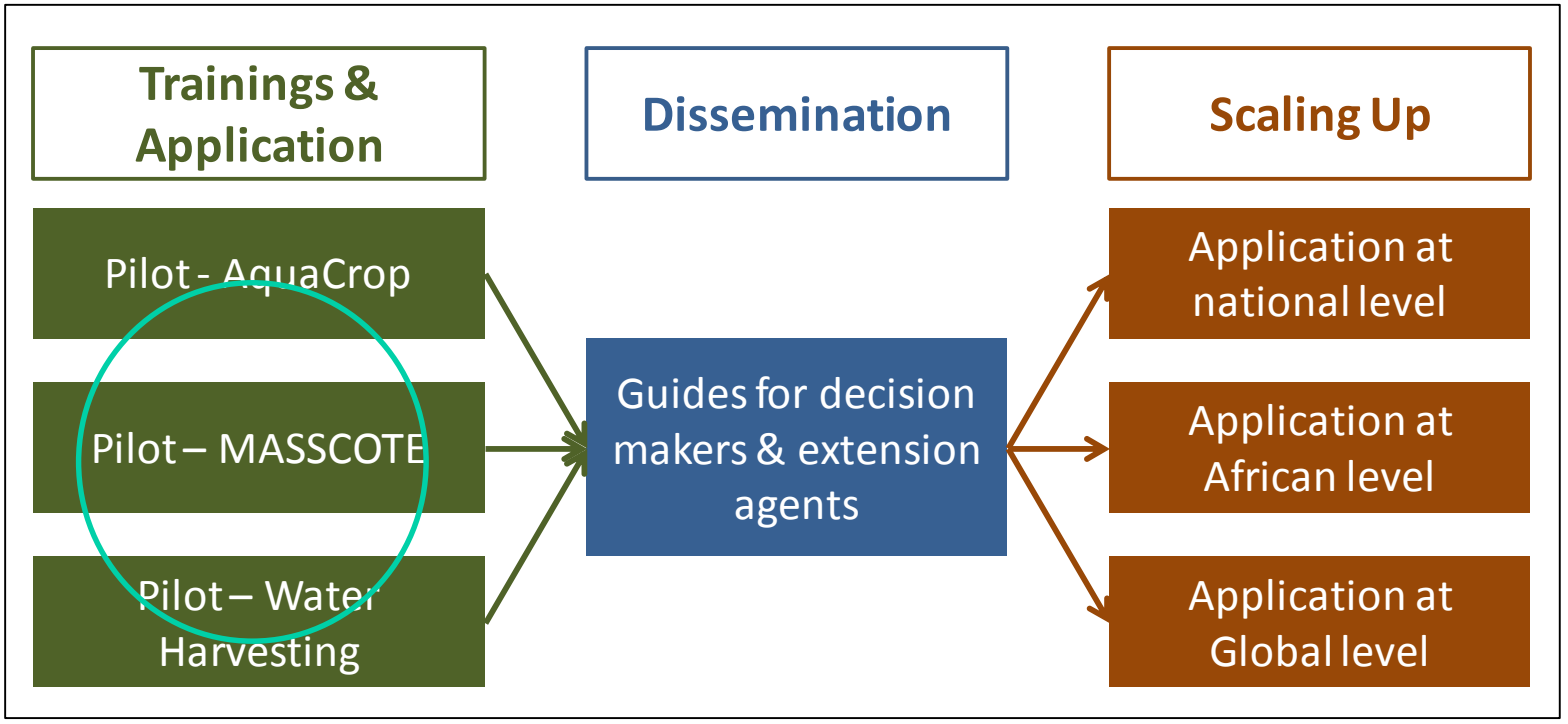
IMPLEMENTATION STRATEGY



Theme 2:
Water Use Efficiency

THE PROJECT

SCALING UP STRATEGY



Theme 2:

Water Use Efficiency

THE PROJECT

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

Theme 2:

Water Use Efficiency

NEXT TOPICS

INTRODUCTION TO METHODOLOGY AND TOOLS

METHODOLOGY AND TOOLS IN ACTION

RESULTS ACHIEVED

COUNTRY EXPERIENCES

STRENGTHS AND WEAKNESSES OF IMPLEMENTATION

DISCUSSION