



## BUILDING FORWARD BETTER INITIATIVE

### THEMATIC AREA

# IRRIGATION ASSET MANAGEMENT

## 1. Description of the module

Proper irrigation asset management is a critical element of ensuring the sustainability and efficiency of agricultural projects. In spite of the generally recognized importance of the maintenance component during the definition of project infrastructure, however, investment usually focus on modernizing existing systems rather than addressing proper installation, operation and monitoring activities.

The training will provide a comprehensive presentation of currently available asset management systems (within and related to the irrigation sector) and will address the main challenges to maintain diverse irrigation infrastructure. The module will introduce the characteristics of modern asset management approaches and will illustrate, also through the presentation of field case studies, the application of effective systems for increased performance of water delivery services and reduced maintenance and operational costs.

### *Highlights from the module*

- Challenges of asset management in irrigation schemes: social, financial, engineering, institutional;
- Participatory Irrigation Management (PIM) and farmers' participation;
- Financial sustainability and the water-energy nexus;
- Protection of hydraulic infrastructure in multiple service systems.





THEMATIC AREA

## IRRIGATION ASSET MANAGEMENT

### 2. Module structure

1. Introduction to Irrigation Asset Management for sustainable water, food security
2. Irrigation rehabilitation and planned asset management
3. Characteristics, challenges and opportunities in asset-poor irrigation schemes
4. Characteristics, challenges and opportunities in irrigation pumping systems
5. Characteristics, challenges and opportunities in peri-urban irrigation schemes
6. Asset management and Water Operator Partnerships (WOPs)
7. Integration of asset management in new projects

### 3. Learning objectives

Participants will become familiar and consolidate their knowledge on Irrigation Asset Management characteristics and processes, also through the evaluation of field applications, in order to:

- Enhance the performance and reliability of irrigation systems;
- Improve equity and efficiency of water delivery services;
- Reduce O&M costs of irrigation infrastructure;
- Strengthen sustainability of financial investments in agriculture.

They will gain awareness on the importance to incorporate asset-related considerations into projects, to extend infrastructure lifespan and reduce costs in the long-term. Participants will also increase capacities in irrigation O&M activities through the introduction to related governance and institutional mechanisms.



SUPPORTED BY:



Some rights reserved. This work is available under a CC BY-NC-SA 3.0 IGO licence