

Innovative solutions for Sustainable Land management in Morocco

Workshop on

Water-saving sensor-monitored irrigation in agriculture in arid and semi-arid regions

22 & 23 October , 2024 ENA-Meknes

TOPICS

Subsurface Drip Irrigation

Solar powered and automated
Subsurface Drip Irrigation (SDI)
Lead: Irriprojekt (GER)

Sensors systems

Real time sensor technologies
for soil and water monitoring
Lead: Umwelt-Geräte-Technik
-UGT (GER)

Best Practices - SuLaMo

Results of water-saving practices
(Mulching, SDI) in SuLaMo
Lead: ENA-Meknes (MOR),
Humboldt-Universität (GER)

Demonstration

On field visit of SuLaMo pilot site
(ENA-Meknes): Sensor technologies
and solar-powered water-saving
irrigation for sustainable agriculture



**+ON-SITE PILOT
DEMONSTRATION**



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Overview

The Moroccan agricultural sector, as the foremost consumer of water, faces significant challenges in sustainable water management due to its substantial dependence on irrigation practices. This issue is further intensified by the effects of climate change, making the mobilization of water for irrigation a critical priority within national agricultural policies.

The Green Generation Strategy 2020-2030 seeks to incorporate innovative technologies and efficient irrigation methodologies to enhance water conservation efforts. Among these advancements, Subsurface Drip Irrigation (SDI) has demonstrated its effectiveness in improving water-use efficiency while maintaining the quality of agricultural produce, providing benefits such as optimized nutrient management, increased yields, and reduced losses through deep percolation. Additionally, mulching techniques serve to conserve soil moisture by minimizing evaporation and regulating soil temperature. The application of advanced sensor technology for precise soil water balance analysis through the collection of real-time data, allows for the formulation of customized irrigation schedules that meet the specific water requirements of plants. This strategy not only enhances agricultural productivity but also promotes sustainable water management and advancing the development of smart irrigation solutions.

The upcoming workshops will provide a platform for farmers, agricultural advisors, researchers, and decision-makers to engage in discussions regarding water-saving sensor-monitored irrigation in agriculture and to explore integrated approaches within the soil-plant-water-climate continuum.

This initiative aligns with Morocco's broader commitment to enhancing water security and sustainability through the National Program for Potable Water Supply and Irrigation (PNAEPI), which underscores the critical importance of efficient water use in addressing the challenges posed by climate change and resource scarcity.

Program

1st DAY : TUESDAY 22 OCTOBER 2024



Pedagogical block / ENA-Meknes

9:00 – 9:30	Registration
9:30 – 10:00	Introduction SuLaMo - Concept & Solutions Pr. Aziz Abouabdillah – ENAM (MOROCCO)
10:00 – 11:00	Part I. Subsurface Drip Irrigation (SDI) Maximilian Wenke – Irriprojekt (GERMANY)
11:00 – 11:30	Coffee break
11:30 – 12:30	Part II. Sensor systems Christian Heerdt – UGT (GERMANY)
12:30 – 13:30	Part III. Best practices & Results Helen Kretschmar – HUB (GERMANY)
13:30 – 14:00	Final discussion
14:00 – 15:00	Lunch

2nd DAY : WEDNESDAY 23 OCTOBER 2024



Field trial / ENA-Meknes

10:00 – 12:00	On-site pilot demonstration Group I “SDI” Group II “Sensor technologies” Group III “Smart irrigation”
12:00 – 12:30	Group discussion
12:30 – 13:15	Coffee break



Organizing Committee

Pr. Aziz ABOUABDILLAH

Ms. Kaouthar BACHAR

Ms. Helen KRETZSCHMAR

Dr. Edgardo CANAS KURTZ

Pr. Rachid BOUABID

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