DNI Academy

REVIVING SEMI CIRCULAR STONE BUNDS AS LIVING TRADITIONAL KNOWLEDGE FOR SOIL AND WATER RESILIENCE IN SARDINIAN OLIVE GROVES

19 November 2026
15:00 to 16:00 CET

Mediterranean drylands face increasing challenges from soil erosion, land degradation, and water scarcity. In Sardinia, olive groves on steep, shallow, and stony soils are particularly vulnerable, highlighting the need for sustainable soil and water management solutions. Semi-circular stone bunds, or half-moons, are a traditional practice historically used to slow runoff, trap sediments, and potentially enhance soil moisture, reflecting centuries of local ecological knowledge.

This seminar provides an opportunity to explore these heritage practices, discuss their ecological and cultural relevance, and exchange ideas on how traditional knowledge can inform modern strategies for resilient agroecosystems.

Participants will learn about the concept of semi-circular stone bunds as nature-based solutions, their potential benefits for soil and water conservation, and the methodological approaches used to assess their performance, including field monitoring, participatory research, and remote sensing.



Meron Lakew Tefera

Postdoctoral researcher at the University of Sassari, specialising in land degradation, desertification, and sustainable land management in Mediterranean and African drylands, with expertise in remote sensing and machine learning.



Hassan Awada

Researcher at the University of Basilicata, specialising in agricultural hydraulics, soil hydrology, and sustainable water management in Mediterranean agroforestry systems.

MONALISA

DesertNet International

bit.ly/DNI_Academy

Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

Project funded by
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation
Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI