



## **MENAWARA International Conference on sustainable water management: the use of non-conventional water in Mediterranean countries**

*Research and cooperation towards a more sustainable water management*

*Sassari, Italy, 4 – 5 July 2023*

4 July: Dept of Agricultural Sciences, University of Sassari, viale Italia 39A

5 July: Arborea

The International conference aims at gathering national and international relevant stakeholders, including public and private authorities to show the effective implementation of projects in the field of non-conventional water reuse taking into account the technical scientific results achieved by projects funded by the ENI CBC “Mediterranean Sea Basin Programme 2014-2020”, a multilateral cross-border cooperation programme co-financed by the European Union under the European Neighbourhood Instrument (ENI).

The event is organized by the Desertification Research Centre of the University of Sassari (NRD-UNISS), coordinator of the “Non Conventional Water Re-use in Agriculture in MEDiterranean countries” (MENAWARA) project, and partner of “The MEDiterranean pathWAY for innovation CAPitalisation toward an urban-rural integrated development of non-conventional water resources” (MEDWAYCAP) project, funded by the ENI CBC MED programme.

Considering Mediterranean Countries’ water policies, and the link between water shortage, increasing water demand and poor infrastructure and management practices, the challenges of MENAWARA project, started in 2019, consisted of providing additional water resources by recycling drainage and wastewater (WW), rationalizing water use practices in agriculture and setting up operational governance models in line with national and international plans. Innovative techniques adopting the “fit-to-purpose” approach in water reuse to meet the needs of the intended end-users and stakeholders’ engagement (living labs) have been at the core of the project.

MENAWARA is part of a cluster of projects contributing to environmental protection, climate change adaptation and mitigation, objectives of the “ENI CBC MED programme. MENAWARA, MEDISS, PROSIM, AQUACYCLE and NAWAMED, shared the common challenges “Water Efficiency” and concerns, and could benefit from a consolidated network of organizations that have been collaborating in the same field for years, whose best practices are capitalized by MEDWAYCAP project.



In order to give space to the lessons learned from the projects nearing completion, promote collaborative pathway between research and cooperation and strengthen education system in the field of sustainable water management, the event will be structured in 2 phases: (1) a first session where the MENAWARA project achieved results and recommendations will be presented and will be included within the context of ENI CBC MED standard projects on NCW; (2) a second session where institutions working in research, education and cooperation will discuss to contribute to achieving the 6th Sustainable Development Goal set by the United Nations: "Ensure availability and sustainable management of water and sanitation for all".

A field visit to MENAWARA, MEDISS (ENI CBC MED) and RELIVE WASTE (INTERREG MED), pilot sites in Arborea will end the event.



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## DAY 1. July 4<sup>th</sup> / Department of Agricultural Sciences, Aula Magna Barbieri

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**9:00** Registration

**9:30** Welcome addresses

Gavino Mariotti, Rector, University of Sassari  
Elisabetta Neroni, General Director, University of Sassari  
Claudia Crosio, Delegate of the Rector for Internationalisation, University of Sassari  
Pier Paolo Roggero, Director, Department of Agricultural Sciences, University of Sassari, Italy  
Department of Agricultural and Agro-pastoral Reform, Sardinia Region  
Department of Environmental Defense, Sardinia Region  
Agnese Attene, Programme Officer, Managing Authority, Sardinia Region

### **Session I: ENI CBC MED standard projects and sustainable water management using non-conventional water.**

*The aim of the session is to discuss the insights generated by the MENAWARA and other ENI CBC MED projects, which are relevant for sustainable water management in Mediterranean Regions and provide final recommendations.*

Chair: Alberto Carletti (Project Coordinator of the MENAWARA project, NRD-University of Sassari, Italy)

**09:50** Irene Morell Rodriguez, Senior Expert - Environment and climate change | Joint Technical Secretariat (JTS) | ENI CBC MED Programme

**10:05** MENAWARA Video presentation

**10:15** Alberto Carletti (Desertification Research Centre, University of Sassari – NRD-UNISS, Italy); *Forested Infiltration Area in Arborea as a solution to help decrease excess nitrates in the aquifer*

**10:30** Isabel Martin (Agencia de Medio Ambiente y Agua de Andalucía – AMAYA, Spain), *Nature-Based Solutions in women-led olive grove: MENAWARA contribution*

**10:45** Taysir Arbasi (We World-GVC Onlus, Palestine), *Active engagement for a better governance: the experience of the living lab in Palestine*

**11:00** Coffee Break

**11:30** Thameur Jaouadi (Office National de l'Assainissement - ONAS, Tunisia): *The valorization of non-conventional water: the experience in Tunisia*

**11:45** Naem Mazahrih (National Agricultural Research Center - NARC, Jordan), *The Menawara impact on the Jordanian water regulations (MENAWARA) and Sustainable Irrigation Management and NCW use (PROSIM)*

**12:00** Roula Khadra (Mediterranean Agronomic Institute of Bari – CIHEAM BARI, Italy): *Mediterranean Living labs for a capitalization strategy on Non-conventional Water resource: the role of MENAWARA*



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**12:15** Konstantinos Plakas (Centre for Research and Technology – CERTH, Greece): *The AQUACYCLE APOC technology as an eco-innovative decentralized sanitation system for wastewater treatment and reuse in small and medium-sized communities (AQUACYCLE project) and “The MEDiterranean pathWAY for innovation CAPitalisation toward an urban-rural integrated development of non-conventional water resources (MEDWAYCAP project)*

**12:30** Fabio Masi (IRIDRA, Italy): *Integration of NBS in the urban structure for enhancing sustainability of water and nutrients recovery and reuse (NAMAMED project)*

**12:45** Monther Hind/Maria Antonietta Dessena (Palestinian Wastewater Engineers Group - PWEG, Ente Acque Sardegna - ENAS, Italy): *New technologies for wastewater reuse and environment protection (MEDISS project)*

**13:00** Discussion

**13:30** Lunch

## **Session II Research and cooperation towards a more sustainable water management**

*The aim is to focus on new collaborative pathway learning from previous experiences to contribute achieving the 6th Development Goal set by the United Nation: “Ensure availability and sustainable management of water and sanitation for all.*

**14:30** PANEL DISCUSSION:

Chair: Giuseppe Enne

Session Moderator: Roula Khadra

Agnese Attene, ENI CBC “Mediterranean Sea Basin Programme”

Samira Shaban Pina, Union for the Mediterranean, UfM

Giovanni Stanghellini, Partnership for Research and Innovation in the Mediterranean Area (PRIMA program)

Raquel Marijuan Cuevas, CARTIF Foundation (NATMED Project, PRIMA)

Pier Paolo Roggero, University of Sassari – Desertification Research Centre

Alessandra Carucci, University of Cagliari

Giovanna Seddaiu, DesertNet International (DNI) and Global Network of Dryland Research Institutes (GNDR)

Marta Debolini, Euro-Mediterranean Centre of climate change (CMCC)

**16:30** Conclusion

**20:30** Social dinner



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## DAY 2. July 5th / Field visit to Arborea 9.00 – 19.00

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Case study of MENAWARA and MEDISS projects in Sardinia, Arborea is one of the most productive agricultural sites in Italy with a milk productivity among the highest in Europe. The intensive agricultural activity has caused, over the years, groundwater nitrate contamination and for this reason, the area has been recognized as a Nitrate Vulnerable Zone since 2005.

09:00 Departure to Arborea

11:00 Visit to the Forested Infiltration Area system

13:00 Light lunch

14:00 Visit to MEDISS and RELIVE WASTE pilot site

15:00 Visit to Sardinian Heritage Sites

19:30 Arrival in Sassari



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