



Projet cofinancé
par l'Union Européenne



WEBINAR

29th - 30th September 2022

NATURE-BASED SOLUTION - NBS - FOR WASTEWATER AND SLUDGE TREATMENT AND REUSE IN MEDITERRANEAN AREA

The patronage:



ORDINE DEGLI ARCHITETTI,
PIANIFICATORI, PAESAGGISTI E CONSERVATORI
DELLA PROVINCIA DI SIRACUSA



Ministero della Giustizia

Other patronage required:



Ministero della Giustizia



Ministero della Giustizia

and the participation of:





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Introduction

The webinar is organized by the Department of Agriculture, Rural Development and Mediterranean Fisheries of the Sicilian Region – ASSAGRI, in collaboration with the Department of Agriculture, Food and Environment, Di3A, of the University of Catania - UNICT. For the event, the patronage of the following institutions and associations has been required: Ordine degli Ingegneri, Ordine degli Architetti Pianificatori, Paesaggisti Conservatori, Ordine dei Dottori Agronomi e Forestali, of the Province of Catania, Ragusa and Siracusa, and Ordine Regionale dei Geologi di Sicilia, Associazione Italiana di Architettura del Paesaggio - sez. Sicilia.

The webinar takes place as part of the activities of the project *TRESOR* – “*Traitement des eaux usées et des boues résiduaires par filtres plantés et usage agricole durable*”, funded by the European Union within the “Programme IEV de Coopération Transfrontalière Italie Tunisie 2014-2020”. The partnership of the project involves the following members: INRGREF - Institut National de Recherche en Génie Rural, Eaux et Forêts - Tunisie, as coordinator; UNICT - Department of Agriculture, Food and Environment; Comune di Scicli; ASSAGRI - Assessorato dell'Agricoltura, dello Sviluppo Rurale e della Pesca Mediterranea della Regione Siciliana; CERTE - Centre de Recherches et des Technologies des Eaux - Tunisie; INRAT - Institut National de la Recherche Agronomique de Tunisie; GDA- Groupement de Développement Agricole Sidi Amor, as associated partner.

The TRESOR project aims to promote and develop natural and low-cost treatment systems in order to adopt Nature-based solutions (NBS) as sustainable management of wastewater and sludge, also minimizing the risks associated with their agricultural use in the peripheral areas of Mediterranean coastal areas. The non-restrictive reuse in irrigation and as fertilizers, respectively of reclaimed water and sludge, would in fact enhance the water resources, nutrients and organic matter, thus strengthening the Water-Energy-Agriculture nexus, a priority in the adoption of good practices. The specific objectives include the diffusion of technology at different levels, supported by the evidence obtained during the research activities conducted and also the study of the socio-economic, agronomic, environmental and health impacts on small peri-urban and rural agglomerations. The latter would encourage the possible future involvement of other communities.

In particular, The Italian and Tunisian partners will install two pilot plants, one in the Ragusa area (Sicily) and one in the Nabeul area (Tunisia), for wastewater and sludge treatment and reuse through constructed wetland systems.

During the webinar, the objectives of the project will be presented and a state of the art on characteristics and applications of constructed wetlands will be outlined, enriched by the description of several experiences and case studies on wastewater and sludge treatment and reuse in different climatic and geographic contexts.

NOTES:

The event will be held in full virtual mode on the Zoom platform. The link to the webinar will be communicate in due time on the project website and social media:

(<https://www.tresorprojet.eu/>; <https://www.facebook.com/Tresorprojet>)

Language: French – Italian; a simultaneous translation Italian-French-English will be provided.

The registration to the event is mandatory: the format will be available at the website www.cseicatania.com.

Maximum number of participants: 100



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Programme

Session 1

Thursday 29th September 2022

10:00 Opening and introduction to TRESOR project

Olfa Mahjoub – Project leader

Giuseppe Cirelli – University of Catania

Antonio Virzì – Department of Agriculture, Rural Development and Mediterranean Fisheries of the Sicilian Region

Mauro Antonino Scaccianoce - President of the Order of Engineers of the Province of Catania
Enrico Catania - President of the Order of Agronomists and Foresters of the Province of Catania

Sonia Di Giacomo - President of the Order of Architects, Landscape Planners and Conservators of the Province of Syracuse

Sebastian Carlo Greco - President of the Order of Architects, Planners, Landscape Architects and Conservators of the Province of Catania

Vera Greco - Secretary of the Italian Association of Landscape Architecture - sec. Sicily

Moderator: Delia Ventura – University of Catania

10:30 Constructed wetlands: classification, applications, pros and cons, worldwide adoption

Carlos Arias – Aarhus University

11:30 Sludge treatment wetlands: operating principles, design criteria and management (e.g. temperate vs arid areas) – Real-scale applications and sludge reuse experience

Steen Nielsen – WSP Denmark

12:30 Real-scale and experimental cases: constructed wetlands for wastewater treatment and reuse in semi-arid (arid) regions

Alexandros Stefanakis - Technical University of Crete

13:30 - 15:00 Virtual Break

15:00 Reuse of reclaimed water in Tunisia: stakes and prospects

Olfa Mahjoub - Institut National de Recherche en Génie Rural, Eaux et Forêts – Tunisie



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16:00 Potential for water reuse in Mediterranean region
Miquel Salgot – University of Barcelona

17:00 End of 1st session

Session 2

Friday 30th September 2022

Moderator: Olfa Mahjoub - Institut National de Recherche en Génie Rural, Eaux et Forêts – Tunisie

10:30 Surface flow constructed wetlands (FWS) systems: operation, potential, design and management criteria, applications

Maurizio Borin – University of Padova

11:30 Sub-surface flow constructed wetlands systems: operation, potential, design and management criteria, applications

Giuseppe Cirelli – University of Catania

12:30 Constructed wetlands systems and emerging contaminants

Paola Verlicchi – University of Ferrara

13:30 - 15:00 Virtual Break

15:00 Experience on water use by constructed wetlands in Senegal

Antonina Torrens – University of Barcelona

16:00 NBS for reclaimed water use in agriculture in Mediterranean area: experiences in Sicily

Feliciana Licciardello, Delia Ventura – University of Catania

17:00 End of the webinar



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The Partnership

	Lead Partner	Institut National de Recherche en Génie Rural, Eaux et Forêts	INRGREF	Resp: Olfa MAHJOUB
	PP1	Università di Catania – (Dipartimento di Agricoltura Alimentazione e Ambiente – Di3A)	UNICT	Resp: Giuseppe CIRELLI
	PP2	Comune di Scicli	SCICLI	Resp: Andrea PISANI
	PP3	Assessorato dell'Agricoltura, dello Sviluppo Rurale e della Pesca Mediterranea della Regione Siciliana – Dipartimento dell'Agricoltura	ASSAGRI	Resp: Antonio VIRZÌ
	PP4	Centre de Recherches et des Technologies des Eaux	CERTE	Resp: Hamadi KALLALI
	PP5	Institut National de la Recherche Agronomique de Tunisie	INRAT	Resp: Mohamed ANNABI
	Associated Partner	Groupement de Développement Agricole Sidi Amor	GDA	Resp: Ahmed HERMASSI