

Non-Point Pollution SOLutions (NPP-SOL)

Kick-Off Meeting Agenda

Cagliari, 6th to 8th November 2023

Project definition




The project titled Non-Point Pollution SOLutions, NPP-SOL, funded by PRIMA aims at preventing surface and ground-water bodies from agricultural non-point source pollution under Mediterranean conditions using modelling and technological tools.

Project main objectives

The general objective of NPS-SOL is to prevent diffuse pollution of water resources due to NPS agricultural pollutants under the Mediterranean soil and environmental conditions, according to the objectives of the new Green Deal and Farm-to-Fork strategies. NPP-SOL will integrate site-specific best management practices for improving soil, water, fertilizers and crop management with site-tailored and affordable-costs technologies for preventing natural bodies pollution. Common to all the adopted methodologies-technologies will be their sustainability and economic efficiency, and their adherence to circular economy approaches.

Partnership

Eight partners from five Mediterranean countries are participating in NPP-SOL:

Partner Organisation	Country	Logo
University of Basilicata (UNIBAS) (Coordinator)	Italy	 UNIVERSITA' DEGLI STUDI DELLA BASILICATA
University of Cagliari (UNICA)	Italy	 Università degli Studi Cagliari
University of Barcelona (UB)	Spain	 UNIVERSITAT DE BARCELONA

Mediterranean Agronomic Institute of Montpellier
(CIHEAM-IAM)

France



Agricultural Research Organization – Volcani Institute (ARO)

Israel



Ministry of Agriculture and Rural Development (MOAG)

Israel



National Institute of Agricultural Research (INRA)

Morocco



المعهد الوطني للبحث الزراعي
ⵜⴰⴳⴷⵓⴷⴰ ⵜⴰⴷⵣⴰⵢⵔⵉⵜ ⵜⴰⴳⴷⵓⴷⴰ ⵜⴰⴷⵣⴰⵢⵔⵉⵜ
Institut National de la Recherche Agronomique

Mohammed V University of Rabat (UM5)

Morocco



جامعة محمد الخامس بالرباط
Université Mohammed V de Rabat

Case studies:

The project includes four case studies. The proposed Pollution-Prevented Technologies, PPT, include: Constructed Wetlands (CW), Anaerobic Digesters (AD) and Bio-reactors (BR), as shown in the figure.



ISRAEL Nahalal Stream near Newe Ya'ar experimental farm

Agricultural practices in the area involve over fertilization and poor management of liquid effluents from CAFO. **High NPS pollution sources threaten the sustainability of agriculture since it impacts on the quality of Nahalal River.**



ITALY Arborea study area in Sardinia Region

Designated as NVZ IN 2006, a specific action programme for the reduction of NO₃ has been developed. **Despite a significant reduction in nitrate concentrations during the first years of application, these concentrations are still high, above the threshold values established by national and European legislation.**



SPAIN Lerma basin study area in the Arba River catchment

Irrigated agricultural land since the 2000s. A progressive increase in the use of fertilisers (NPK) **lead to a three-fold increase of N input to the Arba river, recognized as affected by NO₃ pollution.**



MOROCCO Mnasra Region in the Gharb irrigated study area in NE Morocco

The misuse of irrigation water and agrochemical inputs have brought to a widespread pollution of ground- and surface-water by NO₃ and salinity.



Key Points

Pollution-Prevention Technologies

- CW = Constructed Wetlands
- BR = Bio-Reactor
- AD = Anaerobic Reactor

Pollutant Source

- Nitrate and Phosphorous (liquid effluent from CAFO)
- Nitrate and Phosphorous (manure from livestock)
- Nitrates from nitrogen fertilization (compound NPK fertilisers and liquid fertilisers as urea/ammonium nitrate)

Kick-off meeting venue and accommodation

The capital of the Island of Sardinia, Cagliari is a city with a unique, rich culture and warm Mediterranean weather.



Cagliari City

The best way to reach Cagliari is by plane to Cagliari Elmas airport. Then, to reach the city centre from the airport, you can take a 7-minute train ride from “Elmas Aeroporto” station at the airport (one ride), or a taxi. From the city centre, the bus is the most reliable method to arrive at the venue. Bus tickets can be easily obtained from tobacco shops or through the mobile app “BusFinder”. In any case, there will be a private bus service provided to you by the University of Cagliari.

The kick-off meeting will take place between 6 and 8 November 2023 at the “Cittadella Universitaria di Monserrato” of the University of Cagliari in Cagliari, Italy, address: Str. interna Policlinico Universitario, 09042 Monserrato CA.



The venue: Cittadella Universitaria di Monserrato

Here is a list of the recommended accommodations to stay in Cagliari and how to get from each of them to the venue in Monserrato:

Accommodation	Address	Email Address	Direction to the Venue (Bus No.)
Hotel Italia	6476+WQ Cagliari	www.hotelitaliacagliari.com	8
Hotel Due Colonne	6486+3J Cagliari	www.hotel2colonne.it	8
Affittacamere B&B Sardinia Domus	6486+8J Cagliari	www.sardiniadomus.it	8
L'Ambasciata Hotel de Charme	Via Sicilia, 12, 09124 Cagliari	www.hotelambasciatacagliari.com	8
Hostel Marina	6487+GM Cagliari	www.hostelmarinacagliari.it	8
La Terrazza Hotel	6497+CG Cagliari	www.laterrazzahotel.com	8
Hotel Residence Ulivi e Palme	64MJ+79 Cagliari	www.uliviepalme.it	29
Cerdena Rooms	645G+5G Cagliari	-	5 (until Cadello stop) then 8

Kick-off programme

Day 1: 6 November 2023

Chairperson(s)	Prof. Antonio Coppola & Prof. Stefania Da Pelo				
Time	Subject	Speaker(s)	Organisation	Venue	
8:30 - 9:30	Registration				
9:30 - 9:40	Opening Speech by the Rector's Representant	Rector's Representative		Congress Hall (Sala Rossa) - Cittadella Universitaria di Monserrato, Cagliari	
9:40 - 9:50	Opening Speech by the Head of the Department	Prof. Antonio Funedda	University of Cagliari (UNICA)		
9:50 - 10:20	Overview of the Project by the Project Coordinator	Prof. Antonio Coppola	University of Basilicata (UNIBAS)		
10:20 - 11:00	Coffee Break				
11:00 - 11:20	Work Package 1: Co-Creation, Scaling Up, Scaling Out	Dr. Hatem Belhouchette	Mediterranean Agronomic Institute of Montpellier (CIHEAM - IAM)		
11:20 - 11:45	Israel Case Study & Work Package 2: Technology Development	Dr. Roy Posmanik	Agricultural Research Organization – Volcanic Institute (ARO)		
11:45 - 12:10	Spain Case Study & Work Package 3: Experimental Tests and Data Collection in the Case Studies	Prof. Albert Soler Gil	University of Barcelona (UB)		
12:10 - 12:25	Morocco Case Study	Dr. Abdelmjid Zouahri	National Institute of Agricultural Research (INRA)		
12:25 - 12:45	Work Package 4: Modeling for technologies optimization, Modeling for Best Practices development, Bioeconomic Modeling	Shawkat B.M. Hassan Hanaa El Yadari	University of Basilicata (UNIBAS) Mediterranean Agronomic Institute of Montpellier (CIHEAM - IAM)		
12:45 - 13:00	Italy Case Study	Prof. Stefania Da Pelo	University of Cagliari (UNICA)		
13:00 - 14:30	Lunch Break				
16:30 - 19:30	City Tour			Cagliari City	
20:00	Social Dinner			To be determined	

Day 2: 7 November 2023

Chairperson(s)	Prof. Antonio Coppola & Prof. Stefania Da Pelo				
Time	Subject	Speaker(s)	Organisation	Venue	
8:30 - 9:00	Registration				
9:00 - 9:10	Opening Speech by the Project Coordination	Prof. Antonio Coppola	University of Basilicata (UNIBAS)	Cittadella Universitaria of Monserrato - DSCG Classroom 3	
10:00 - 10:30	Management of Water Resources in Sardinia: Availability and Quality Issues	Dr. Paolo Botti - Dr. Mario Lorrai	Hydrographic District Authority of Sardinia (ADIS)		
10:30 - 11:00	Water Quality Monitoring Network in Arborea	Dr. Maurizio Testa	Sardinia's Regional Agency for Environmental Protection (ARPAS)		
11:00 - 11:30	Coffee break				
11:30 - 12:00	The Bioreactor Planning in Arborea Area	Dr. Gianluca Zuddas	Oristano Land Reclamation and Irrigation Consortium		
12:00 - 12:30	Regeneration of Resources in the Agro-livestock Supply Chain with a View to the Circular Economy	Dr. Sebastiano Curreli	Arborea's Farmers Association (3A)		
12:30 - 13:00	Discussion on Stakeholders and Researchers Hub Creation	NPP-SOL Management Team	NPP-SOL Coordination		
13:00 - 14:00	Lunch break				
14:00 - 17:00	Field visit				
				Arborea - Oristano	

Day 3: 8 November 2023

Chairperson(s)	Prof. Antonio Coppola & Prof. Stefania Da Pelo		Organisation	Venue
Time	Subject	Speaker(s)	Organisation	Venue
8:30 - 9:00	Registration			Cittadella Universitaria of Monserrato - Cagliari - DSCG Meeting Room
9:00 - 9:30	Project timeline & deadlines Project Boards establishment Grant agreements	Prof. Antonio Coppola	University of Basilicata (UNIBAS)	
9:30 - 11:00	Project timeline & deadlines Project Boards establishment Grant agreements	Open Discussion		
11:00 - 11:20	Coffee Break			
11:20 - 11:40	Communication & Dissemination Plan	Dr. Chiara Ciannamea	Mediterranean Agronomic Institute of Bari (CIHEAM Bari)	
11:40 - 12:00	Tips on the Reporting and Communication with PRIMA	Dr. Marco Orlando	PRIMA Foundation	
12:00 - 12:30	Open Discussion			
12:30 - 14:00	Lunch Break			