This project is part of the PRIMA programme supported by the European Union

PRIMA-SECTION 2-2022

"Modelling and Technological Tools to Prevent Surface and Ground-Water Bodies from Agricultural Non-Point Source Pollution Under Mediterranean Conditions"

NPP-SOL

NPP-SOL Dissemination and know-how transfer report with updates (M14)

Deliverable number: D5.2

Project Acronym: NPP-SOL

Project Full Title: Modelling and Technological Tools to Prevent Surface and Ground-Water Bodies from Agricultural Non-Point Source Pollution Under Mediterranean Conditions

Call: PRIMA Section 2 2022

Topic: PRIMA Section 2 2022- Multi-topic 2.1.1 RIA

Type of Action: Multi-topic Topic 2.1.1 RIA (Prevent and reduce land and water salinization and pollution due to agri-food activities).

Project URL: https://npp-sol.iamm.ciheam.org/

Project Coordinator: Antonio Coppola (UNIBAS) - antonio.coppola@unibas.it

Deliverable No. D5.2: NPP-SOL Dissemination and know-how transfer report with updates

Work Package: WP5 - Dissemination and Communication

Lead beneficiary: CIHEAM-IAM

Contributing beneficiaries: ALL

Due date of deliverable: M14, M26 and M36

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Approved by project coordinator A. Coppola

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1. Introduction

Executive summary

The present document is the first **Dissemination and know-how transfer report** of the NPP-SOL project, which is funded by the PRIMA programme supported by the European Union. It outlines the activities implemented in the framework of the **WP5 Dissemination and Communication** and the achieved results over the first 14 months of the project's execution.

This first year has been characterized by the official launch of the project and its inception phase with a particular focus on **planning** and **coordination** activities, as well as the development of the **modelling tools** and the **technologies** (*bioreactors*, *constructed wetlands* and *anaerobic digestors*) to be used in the four case study areas. With regards to the communication and dissemination, the first months have been dedicated to the building of the related strategy and a plan of the first activities and tools to be implemented. Besides, an **overview on the dissemination and communication strategy** was presented to all Partners during the Kick-off meeting held in Cagliari (Italy) from 6 to 8 November 2023.

In order to gather all the necessary information and assess the needs of Partners in terms of communication and dissemination, a **communication assessment survey** has been circulated. Furthermore, the **Outward Strategy (D5.1)** has been defined identifying the main objectives, target audiences, key messages, tools and products to be delivered.

The NPP-SOL **visual identity**, **logo** and **project's leaflet** (in English, Italian, Hebrew, French and Spanish) have been designed and distributed to all Partners through the internal repository. To enhance the visibility of the NPP-SOL project and facilitate collaborative working and sharing of documents/material, a **project website** (https://npp-sol.iamm.ciheam.org/) has been designed and constructed using information, data and suggestions provided by the partners. The project is also active on social media through its **LinkedIn public group** (https://bit.ly/NPP_SOL).

Several meetings with Partners have taken place within this period (M1-14) to discuss about the implementation of the models and technologies and the issues related to communication and dissemination.

Partners have also independently disseminated the activities of NPP-SOL project, through their communication channels and at the occasion of conferences, meeting with stakeholders and scientific events.

Further details can be found in the following pages.

2. Activities carried out in the framework of WP5

In the following paragraphs of this report, the activities carried out in the framework of **WP5 Dissemination and Communication** are listed and described, along with the major outputs, deliverables produced and impacts reached.

2.1 The NPP-SOL Outward Strategy (*WP5, TASK 1, D 5.1)*

In the framework of the activities of WP5 aimed at maximizing the impact of NPP-SOL project's activities and results, the **Outward Strategy Plan (D 5.1)** has been elaborated and shared with all Partners.

The strategy was structured following the *WHY*, *WHO*, *WHAT*, *HOW*, *BY WHOM*, *WHEN* and *WHERE* approach and provided a detailed description of the methodology and tools to be used in order to raise the interest of the target audience and stakeholders toward the technologies, solutions, and knowledge that will be produced by the project.

In particular, the document included:

- the **tools** and **channels** to be used to the achieve strategic communication objectives and to ensure the spreading of projects results;
- the identification of the **target audiences** to be addressed;
- **Strategic aspects,** peculiar to the project, to be considered for the communications/dissemination activities;
- **Guidelines** addressed to project partners to contribute to communication activities and to ensure a proper dissemination of project results, as well as the **actions to support SE and farmers** in the adoption of the tools, technologies and agro-hydrogeological practices developed by the project.

Moreover, the Outward Strategy established all the indicators (KPI) and the measures to monitor and evaluate the success of the dissemination and communication activities.

In order to acquire useful information, a preliminary ***communication and dissemination assessment survey*** has been submitted to all Partners to acquire **strategic information** and **data**, relevant for the development of the communication and dissemination activities.

The **Outward Strategy Plan**, uploaded on the project's repository, is available at the following LINK

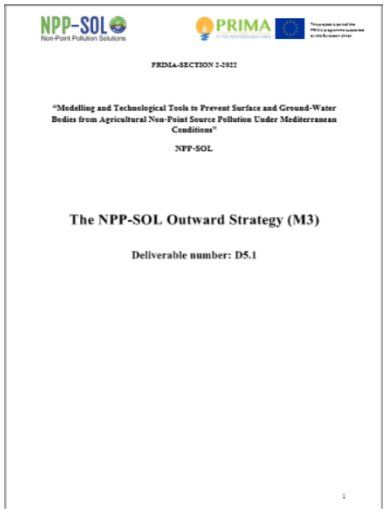


Fig. 1. NPP-SOL Outward Strategy Plan cover page

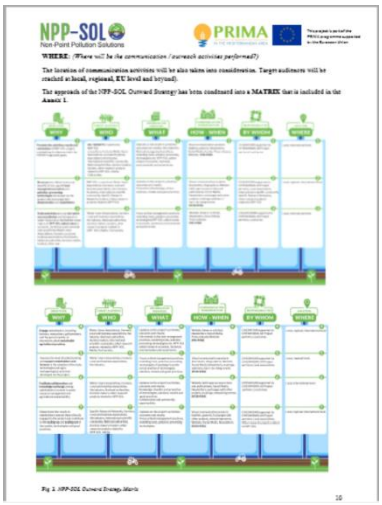


Fig. 2. An example of an infographic included in the strategy

2.2 Kick-off meeting brochure

A **brochure** has been elaborated at the very first stage of the NPP-SOL project, in order to present its activities, objectives, case studies and to **launch the Kick-Off meeting** held from 6 to 8 November 2023 at the "Cittadella Universitaria di Monserrato" of the University of Cagliari.

The brochure is available on the project's website at this LINK

Fig. 3. NPP-SOL Outward Strategy Plan cover page

2.3 - Project Visual Identity Kit – Logo, Project leaflet and Poster

A set of graphic **logos** and a **visual identity** presentation has been elaborated to represent and convey the image of the NPP-SOL project (Figures 3 and 4). The logo features a pictogram that visually represent the thematic areas related to the project.

NPP-SOL Non-Point Pollution Solutions

Fig. 4. *Project logo*

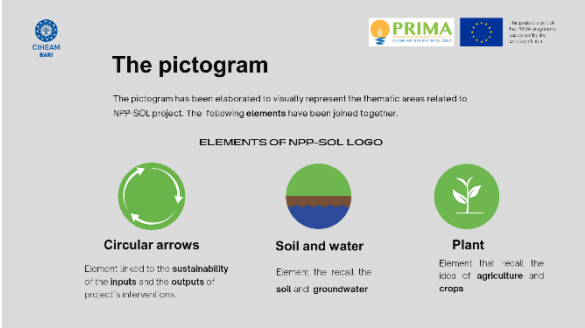


Fig. 5. *Project Visual Identity*

The files of the logo and all its variations, have been shared with Partners through the project's repository in the specific folder "**Promotional material**" (accessible through this LINK).

Suggestions and guidelines on the usage of the logo, have also been provided in the presentation of the **NPP-SOL visual identity.**

NPP-SOL communication materials (that have been also uploaded on the project website in a dedicated page "**Communication Kit**" (https://npp-sol.iamm.ciheam.org/communication-kit/).

These materials also include the **NPP-SOL leaflet** that will be used to promote the project during conferences, trainings or digital events. The product has been originally elaborated in english, but multilingual versions of the leaflet are now available:

- NPP-SOL Leaflet (English version)
- NPP-SOL Leaflet (Spanish version)
- NPP-SOL Leaflet (Hebrew version)
- NPP-SOL Leaflet (Italian version)
- NPP-SOL Leaflet (French version)

The leaflet is structured in a double-sided A4 format (easy to be shared online or printed) and provides essential information about the NPP-SOL project's objectives, partnership, approach, technologies and case studies.

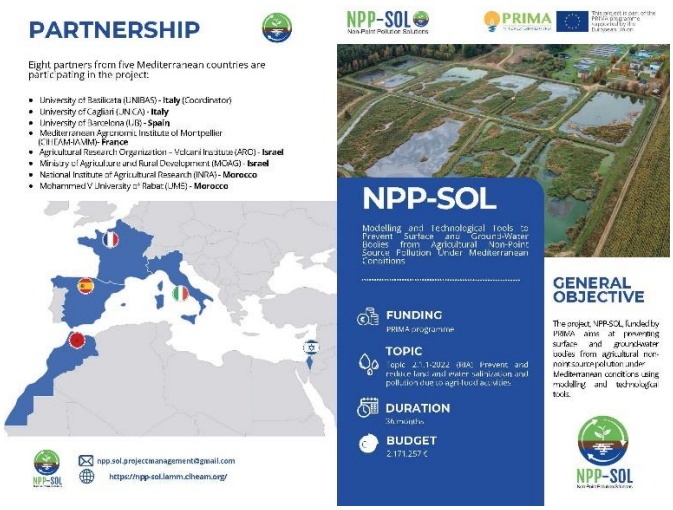


Fig. 6. *NPP-SOL Leaflet in English side 1*

Fig. 7. *NPP-SOL Leaflet in English side 2*

As for the **NPP-SOL Poster**, it has been developed and printed by CIHEAM Montpellier and includes general information and objectives of the project, as well as a description of the activities to be carried out.
The poster has reached approximately 120 people and has been uploaded on the project website at this **LINK**.

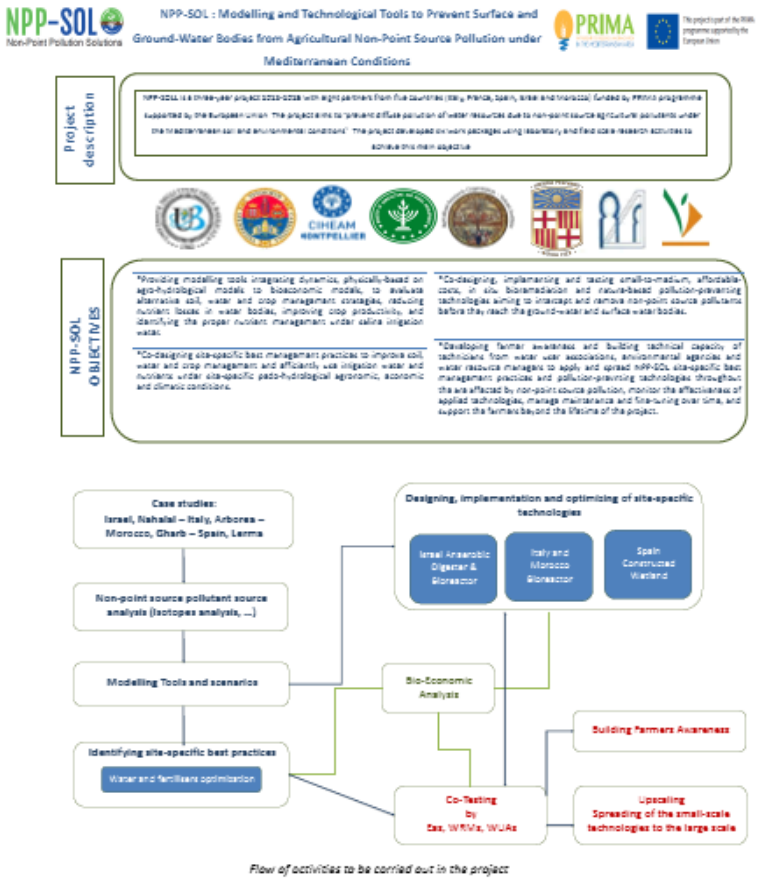


Fig. 8. *NPP-SOL Poster*

2.4 - NPP-SOL Project Public Website (Milestone 5)

NPP-SOL public website, which is one of the primary sources of information about the project, has been built and shared with all Partners at month 9 (July 2024).

The link of the website is: https://npp-sol.iamm.ciheam.org/

Fig. 9. *NPP-SOL website - homepage*

The structure of the website includes the **HOMEPAGE** (Fig.7), and a **top navigation bar** linking to several other sections:

- '**About the project'**: provides an overview of the project including its objectives, methodology, technologies and the project team.

- '**Case studies'**: focuses on the four case study areas in which the project is implemented (Italy, Spain, Israel and Morocco). Each case study has a dedicated page with a description of the general context, issues to be addressed, solutions and technologies implemented in the case study area, expected impacts, an aerial image of the area, information about the Partner, beneficiaries and Stakeholders involved.

- '**Resources**': provides visitors with easy access to content and materials related to the project activities and it is divided into the following submenus:

- **Deliverables**
- **Publications**
- **Project Materials**
- **Newsletters**
- **Press room**
- **Communication kit**

Fig. 10. NPP-SOL website – Resource page

- 'News & Events'**:** that includes relevant articles and news about past or future initiatives related to NPP-SOL Project.

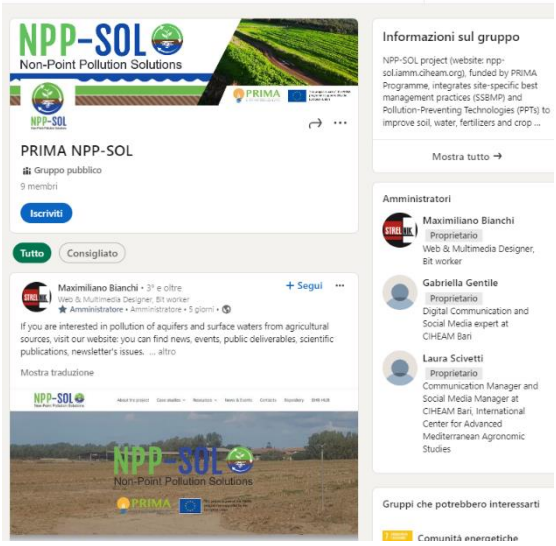
- '**Contacts'**: contact form to ask for information or keep in touch with the project management.

- **"Repository":** that is linked to the internal cloud of the project and is only accessible by consortium members upon registration. The section serves as a repository for the exchange of documentation, deliverables, reports, minutes etc.

For an easy access and consultation, the **homepage** also includes a section named "**at a glance**" with quick links to the main sub-areas of the website, as well as other relevant pages.

Fig. 11. NPP-SOL website – "AT A GLANCE" section

2.5 - Project Social Media Strategy



During the first year, the communication activities aimed at establishing an official presence of the project on social media platforms and setting the related channels.

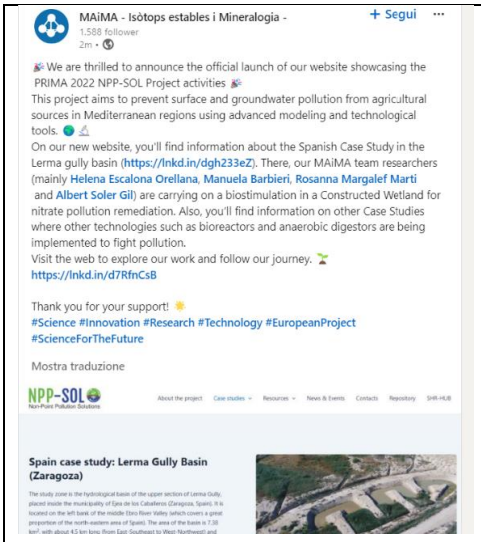
These activities have included the setting up of a **LinkedIn public group** https://bit.ly/NPP_SOL.

Partners have been provided (D 5.1 NPP-SOL Outward Strategy) with guidelines and suggestions to develop project-related communication activities on their social media channels, ensuring alignment with the project's overall goals and communication objectives, and ensuring proper visibility of the project's activities, stakeholders, and PRIMA.

Fig. 12. NPP-SOL LinkedIn public group

Taking advantage of the forthcoming initiatives that have been scheduled for the end of 2024 (mainly trainings and knowledge transfer activities), specific visibility actions shall be implemented.

In addition, some Partners have shared several posts using their own institutional channels (Linkedin) providing news on activities related to the project. Here are some examples:

<table>
<tr>
<td> 
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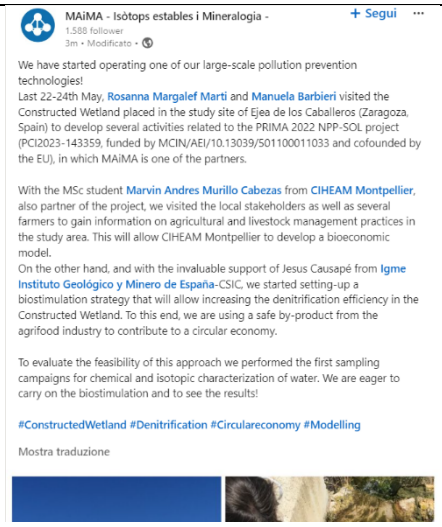
<td> 
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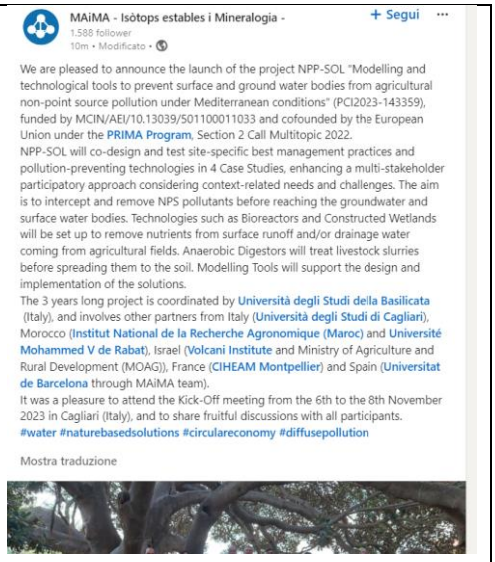
<td> 
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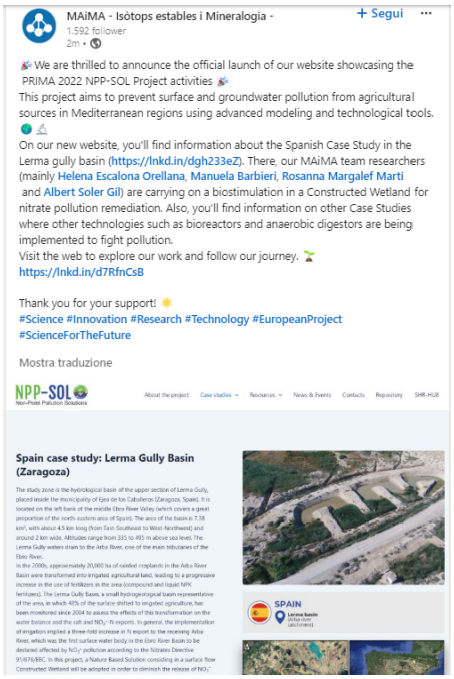
<td> 
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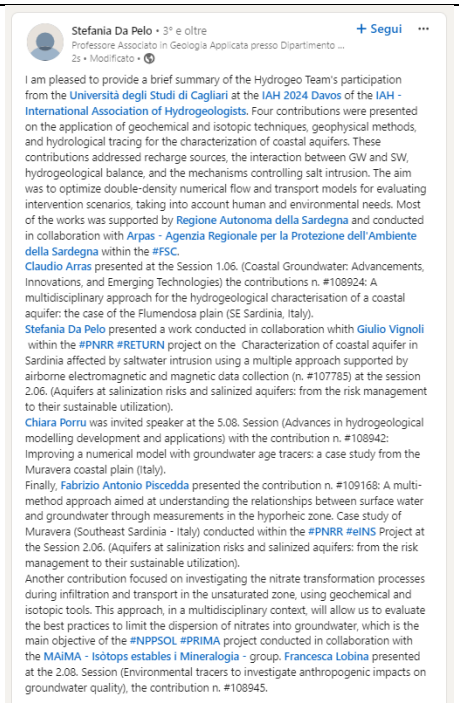
<td> 
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Fig. 13. Examples of social media communication by Partners

2.6 - Factsheets and electronic newsletters

Starting from M6, the **issue n°1** of the **NPP-SOL electronic newsletter** has been constructed and uploaded on the project website. The contents have been provided, from time to time, by the coordinator or by the project partners and included:

- News regarding the kick-off meeting, technical visits, conferences or other events internal or external to NPP-SOL;
- Press releases;
- News about other PRIMA initiatives.

The **newsletter,** is structured in an easy-to-read format and have been embedded in the project website to further increase its views and traffic.

Fig. 14. NPP-SOL electronic newsletter

2.7 - Press releases and news published by external pages

In order to facilitate the spreading of information about the project, **two press kit templates** (in English and Italian) have been elaborated and are available on the project website, to support Partners in the relations with local press and the dissemination of the project activities and achievements to a wider public.

Within the first year of implementation of NPP-SOL (M1/M14), **news** about the project activities (mainly the launch of the project and the kick-off meeting) were relaunched by Partners and appeared online:

- http://www.ub.edu/maima/news-detail/164
- https://magazine.unica.it/eventi/progetto-prima-2/
- https://anr.fr/Project-ANR-23-P012-0001

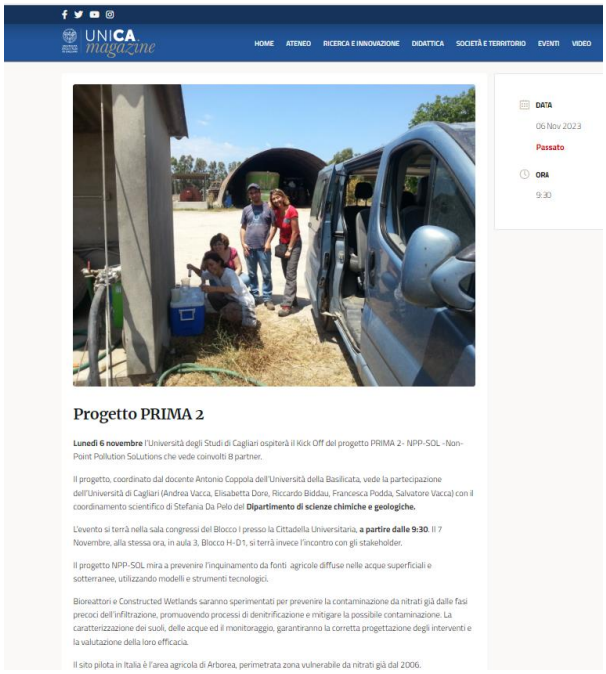
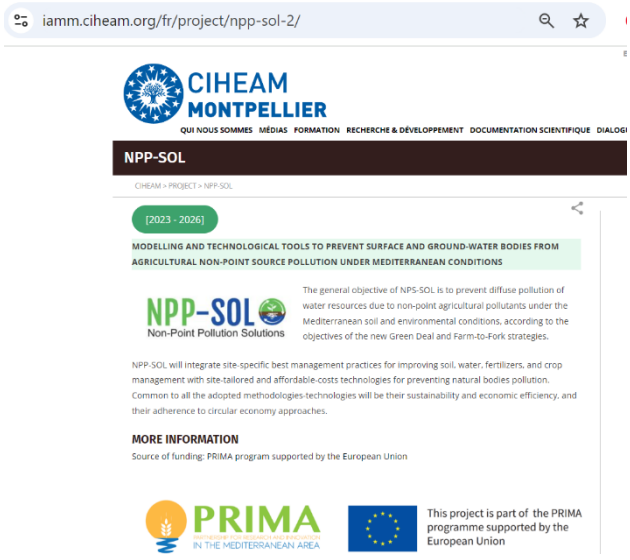


Fig. 15. Example of news appeared online 1

Fig. 16. Example of news appeared online 2



Furthermore, the Mediterranean Agronomic Institute of Montpellier (CIHEAM-IAMM) has included in its institutional website, a page specifically dedicated to NPP-SOL, providing general information about the project:

https://www.iamm.ciheam.org/fr/project/npp-sol-2/

2.8 - Project videos

In order to promote the project and communicate its activities and results, a **short video** has been elaborated at the occasion of the field visit of the NPP-SOL Italian team in Morocco.

The video shows the geographical and environmental context of the **Mnasra** case study area in **Gharb** Region. The footage also includes an interview to the Moroccan partners of NPP-SOL, providing general information about the project and updates on the research conducted in the case study.

Specific **guidelines** and a **script** have been shared beforehand with the Italian team, in order to elevate the quality of the material to be provided. The video script outlined all the suggested contents, detailing the visuals, pictures, and questions for the interview.

Link to the video: https://www.youtube.com/watch?v=wzWTj4UH8I8

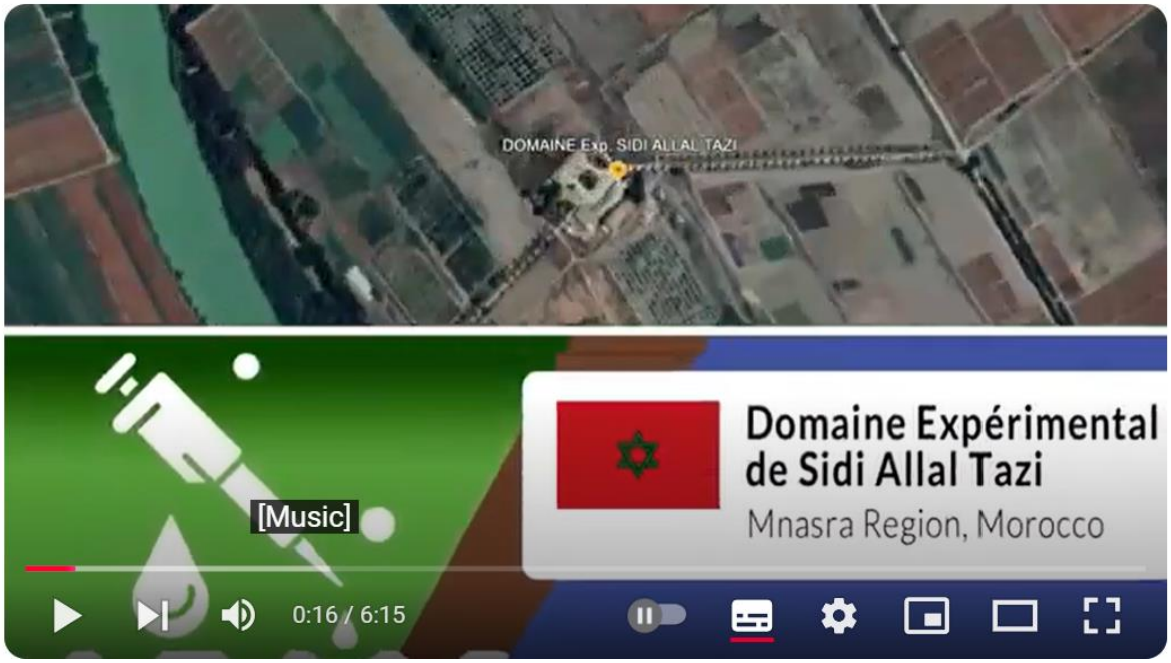


Fig. 17. Screen of the video of the field visit in Morocco (June 2024)

2.9 - Communication Key Performance Indicators

The following **KPIs** will be used for the monitoring of each tool/channel/activity related to communication and to evaluate the success of the dissemination and communication activities.

Tool	Item/Description	KPIs
Project Visual Identity Kit	project visual identity kit	1
	Project leaflet	1 Brochure elaborated for the Kick-off meeting. 1 Project leaflet in English and 4 in the other languages of consortium countries (Italian, Hebrew, French and Spanish)
	Poster	1 poster in English
	Banner	1 Banner to be used for communication on social media
Project Public Website	NPP-SOL Website	Number of unique visitors to the Website (Being the website published in September 2024, this data isn't available for the moment)
Social Media	Project Social Media group on Linkedin (https://bit.ly/NPP_SOL) and social media channels of the Partners	Nr. of followers among all social networks: 11 members of the Linkedin group Nr. of posts on Linkedin group: 5 Nr. of posts on Partner's SNs: 6
Factsheets and electronic newsletters	Factsheets with infographics and electronic newsletters	1 Newsletter (every 6 months, from M6) 4 News published by external pages 4 Factsheets, for the case studies (For the moment, only published on the project website)
Press release	Press kit available for download	2 press releases (in English and Italian)
Project videos	NPP-SOL project videos	1 video of the field visit in Morocco

3. Knowledge and Technology Transfer Activities (Dissemination)

3.1 - Open Access to scientific publications in international peer-reviewed journals

With the aim of facilitating the dissemination of knowledge and subjects related to the scientific activities, **NPP-SOL website** hosts a specific section dedicated to scientific publications, studies and other relevant resources in complementarity with the SHR platform established by CIHEAM IAMM.

Within the first year, a total of **25 articles, studies** and **scientific publications** in international peer-reviewed journals, have been uploaded on the project website: https://npp-sol.iamm.ciheam.org/publications/ .

These publications guarantee the dissemination toward the international community of scientific knowledge and subjects related to NPP-SOL project.

Most of the publications were included on **WOS – web of science** or **SCOPUS** portals.

Fig. 18. NPP-SOL scientific publications

3.2 - Participation in scientific conferences, workshops, or networking events (Cooperation and joint initiatives with other PRIMA or H2020 projects)

In order to maximise the impacts of the project, NPP-SOL has been presented by the Partners at the occasion of **scientific conferences**, **workshops**, **networking activities** (also organized by other PRIMA or H2020 projects).
The presentation of the project has been made by using the NPP-SOL **communication tools** (mainly *leaflets*, *powerpoint presentation and poster)* as a support.

The **initiatives** and **events** identified by project partners for the dissemination activity are the following:

- **Turkish Delegate visit** from the Turkish Ministry of Agriculture 18 March 2024, Venue: CIHEAM Montpellier, France.
- **DIONYSUS project** kick-off meeting 1-2 July 2024, Venue: CIHEAM Montpellier, France
- **Researcher meeting**, 6 August 2024, Venue: Ondokuz Mayıs University, Samsun, Türkiye
- **Joint Congress SGI-SIMP** - Geology for a sustainable management of our Planet, 3-5 September 2024. Venue: Bari, Italy
- **IAH 2024 World Groundwater Congress**, 8-13 September 2024. Venue: Davos, Switzerland.
- **EXCEL4MED Living Lab meeting** / Co-Creation Workshop, 21 November 2024. Venue: Corinthia St George's Bay Hotel, Malta.

Fig. 19. Dissemination of NPP-SOL Project during EXCEL4MED Living Lab meeting in Malta

3.3 - Capacity building and Training activities

Technical Capacity Building (TCB) and Farmers Awareness (FA) represents one of the main pillars of NPP-SOL project. By building a self-sustaining capacity inside Water Users Association, Environmental Agencies and Water Resources Managers, TCB and FA are indeed essential to guarantee the operability of the modelling and technological tools in the long run, ensure the adoption of technologies and practices beyond the project duration as well as to and promote the communication (transfer) of scientific knowledge and dissemination of outcomes from all the project activities to increase stakeholder adoption of these interventions. to advancing and enhancing the capabilities of Stakeholder to adapt and manage the pollution preventing technologies and the site-specific best management practices developed in the project.

TCB and FA activities also facilitate (i) the application of site-specific best practices generated by the project, (ii) the monitoring of the effectiveness of the applied technologies and their refinement over time and (iii) the dissemination of the tested technologies and optimized throughout the area affected by NPS pollution.

In order to implement effective TBC and AF activities, NPP-SOL's partners have prepared, discussed and shared a general plan in which, for each case study, topic, objective, main target, provisional calendar and location of the different activities are defined.

General Plan of TBC and FA activities

Topic	When	Main Target				Where			
		Italy	Spain	Israel	Morocco	Italy	Spain	Israel	Morocco
Agrohydrological and Bioeconomic modelling (Identifying SSBMP)	Oct-2024	Irrigation Consortium (CBO) Water Authority (ADIS) Environmental Protection Agency (ARPAS) Farmers Association (3A)				Partly at Stakeholders' HUB local venue and partly remotely			
	Oct-2025								
	Jun-2026								
Technology Design	Feb-2025			Water Authority, Local Farmers, Extension Services, Environment	Water Authority, Local Farmers, Extension Services, Environment	Partly at Stakeholders' HUB local venue and partly on site		Newe Ya'ar Campuse	

Technology Construction	Dec-2024			Protection Ministry	Protection Minstry				Regional center of Kenitra
Technology monitoring	Feb-2025								
Open Demonstration Day at Case Study site	TBD (> Nov 2024)	All stakeholders involved in the HUB + general public	All stakeholders involved in the HUB + general public		All stakeholders involved in the HUB + farmers	Arborea - Experimental Site	Lerma gully Basin - Constructed wetland (experimental site)		Sidi Alla tazi experimental station
Agrohydrological and Bioeconomic modelling: scope, potentialities, succesfull examples, open discussion, etc.	TBD (> Nov 2024)	All stakeholders involved in the HUB	All stakeholders involved in the HUB			ADIS - Hydrographic District Agency of Sardinia (i.e., the basin authority)	to be established		

Furthermore, partners have agreed on a common content plan for training (see Annex 3). Despite the differences that exist between the different case studies, this common plan can constitute the starting point for scaling out and for effective cross-fertilization phase.

TCB and FA includes the following:

TCB activities on Modelling: Technicians from WUA, EA and WRM will be trained to run the modelling tool independently, with the aim of real-time adjustments and optimizations of the NPS pollution-preventing technologies developed in the project with changing scenarios in terms of climate, crop, and irrigation management. Trainings on Modelling will be held simultaneously for SEs of all the Case Studies, through webinars and face-to-face during the project conferences.

TCB activities on Maintenance and technical regulation: The NPP-SOL Pollution-Preventing technologies need to be maintained and regulated beyond the project lifetime. Training with demonstration will assure the sustainability of the action.

Involvement and assistance to farmers (FA activities)*:* Best practices will be analysed, transferred and shared, adopting farmer-friendly and context-related approaches. Information and training will be provided on meaning, background, benefits, and operational skills of the technologies and site-specific, modelling-based, water and nutrients good management practices to farmers to induce a deeper awareness of the environmental issue related to their farming behaviour. 3 half-day demonstration events will be organized for each CS. During the trainings by doing (see the item above), the local SEs will establish modes and procedure to involve farmers (M15).

Trainings to SE technicians: Technicians from WUA, EA and WRM will be trained on MT use, maintenance and technical regulation of PPT developed in the project. Technicians will be the main link among NPP-SOL findings and farmers, by transferring information about background, benefits, and operational skills of the PPT and SSBMP for water and nutrients. Trainings will be held by webinars (at least 2), face-to-face meetings, on-site training-by-doing. A detailed plan of trainings will be provided at M6. At all the training event, people involved will be regularly provided with all the documentation and materials needed for trainings. Tech guidelines and handbooks will be co-edited with the NPP-SOL SE community to address soil, water, fertilizers and crop management.

The following **training** and **capacity building activities** have been held during the M1/M14 of the project:

- **4 Trainings** addressed to farmers and officials at the Oristano reclamation and irrigation consortium to explain and introduce the bioreactors as the pollution-prevention technology. **Title**: "*Reducing groundwater nitrate pollution in Arborea plain originating from agro-zootechnical activities using in-situ biological treatment technologies*". **When:** 13 to 16 May 2024. **Where**: Oristano, Italy. **LINK** to the training material.

3.4 - Dissemination Key Performance Indicators

The following **KPIs** will be used for the monitoring and evaluation of the outreach activities.

Tool	Item/Description	KPIs
Open Access to scientific publications in international peer-reviewed journals	Number of publications uploaded on the website	25
Training activities	4 Trainings for farmers to explain and introduce the bioreactors as the pollution-prevention technology.	10 participants to each training
Presentations at EC events, exchanges with other projects, communication through EC media and channels	Collaboration/demo with similar projects, meetings with NCPs and other networks	2 Project powerpoint presentations (Uploaded on NPP-SOL website) 6 Presentations at scientific events or institutional exchanges 2 Abstracts

4. ANNEXES

ANNEX 1 - NPP-SOL LEAFLET

PARTNERSHIP

Eight partners from five Mediterranean countries are participating in the project:

- University of Basilicata (UNIBAS) - **Italy** (Coordinator)
- University of Cagliari (UNICA) - **Italy**
- University of Barcelona (UB) - **Spain**
- Mediterranean Agronomic Institute of Montpellier (CIHEAM-IAMM)- **France**
- Agricultural Research Organization – Volcani Institute (ARO) - **Israel**
- Ministry of Agriculture and Rural Development (MOAG) - **Israel**
- National Institute of Agricultural Research (INRA) - **Morocco**
- Mohammed V University of Rabat (UM5) - **Morocco**

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https://npp-sol.iamm.ciheam.org/

NPP-SOL Non-Point Pollution Solutions

PRIMA This project is part of the PRIMA programme supported by the European Union

NPP-SOL

Modelling and Technological Tools to Prevent Surface and Ground-Water Bodies from Agricultural Non-Point Source Pollution Under Mediterranean Conditions

FUNDING
PRIMA programme

TOPIC
Topic 2.1.1-2022 (RIA) Prevent and reduce land and water salinization and pollution due to agri-food activities

DURATION
36 months

BUDGET
2.171.257 €

GENERAL OBJECTIVE

The project, 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.

NPP-SOL Non-Point Pollution Solutions

APPROACH

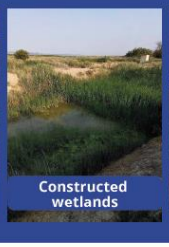
NPP-SOL integrates site-specific **best management practices** to improve soil, water, fertilizers, and crop management with site-tailored and affordable-cost **technologies** to prevent water bodies pollution.
Common to all the adopted methodologies-technologies is their sustainability, economic effciency, and adherence to circular economy approach.

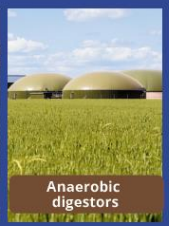
TECHNOLOGIES

In order to intercept and remove NPS pollutants before reaching the groundwater and surface water bodies, the following technologies will be implemented:

- **bioreactors** and **constructed wetlands** to remove nutrients and pesticides from surface runoff and/or drainage water coming from agricultural fields;
- **anaerobic digestors** to treat livestock slurries before spreading them to the soil.


Bioreactors


Constructed wetlands


Anaerobic digestors

CASE STUDIES

NPP-SOL is implemented in four **Case Studies** (Israel, Italy, Morocco and Spain).

ISRAEL
Newe Ya'ar experimental farm (Jezre'el Valley)
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 they impact on the quality of Nahalal River.

ITALY
Arborea Plain (Sardinia Region)
Since 2006, a specific action programme for the reduction of NO3 in water bodies 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.

MOROCCO
Mnasra (Gharb Region)
The misuse of irrigation water and agrochemical inputs have brought to a widespread pollution of ground and surface water by NO3 and salinity.

SPAIN
Lerma basin (Arba river catchment)
In agricultural land irrigated since the 2000s, a progressive increase in the use of fertilisers (NPK) has led to a three-fold increase of N input to the Arba river, recognized as affected by NO3 pollution.

ANNEX 2 - NPP-SOL BANNER

ANNEX 3 - NPP-SOL TRAINING MATERIAL

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PRIMA PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

Milestone 7 Overview: Training Material (M12)

PRIMA PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

This project is part of the PRIMA programme supported by the European Union

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Training target

Local agencies responsible for:

- Irrigation and drainage management,
- Environmental protection,
- Farmers' association and/or water user associations and
- Water resources authority (e.g., hydrographic district or basin authority) personnel.

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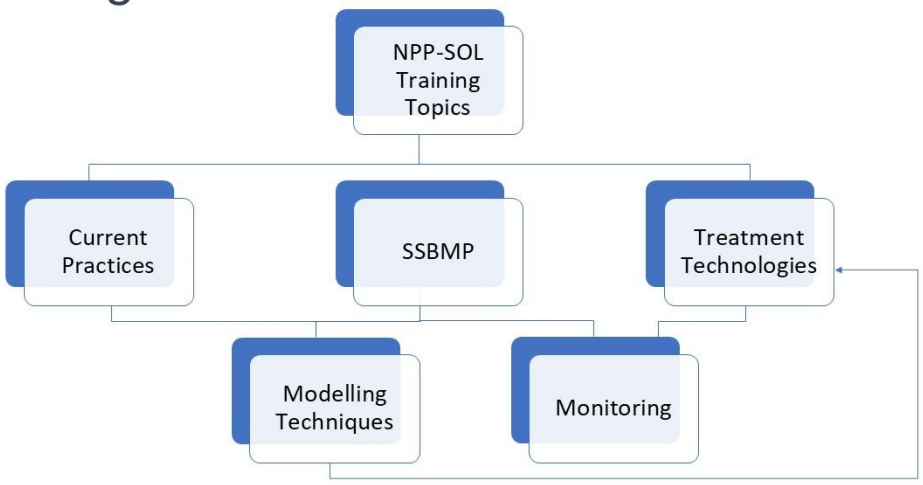
Training focus



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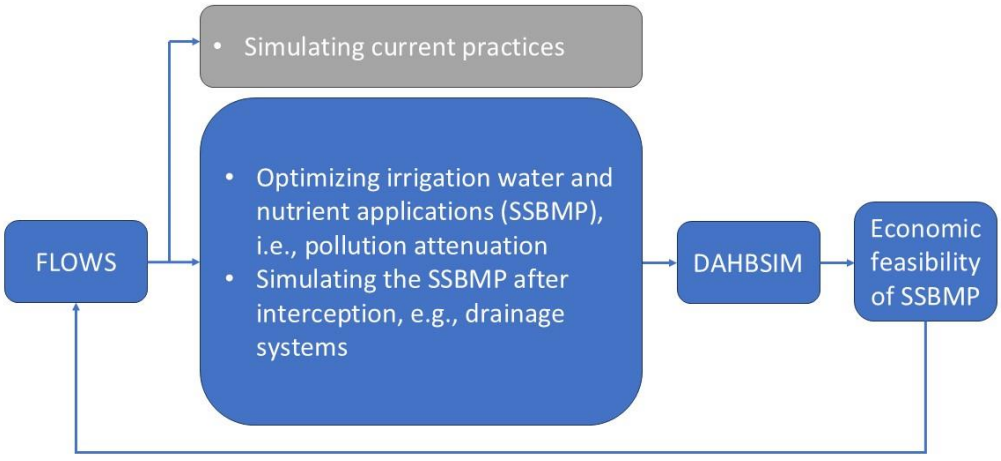
Modelling objectives



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Training on modelling

- Each model must be provided with its respective handbook to explain:
  - The model's equations, basis and applications
  - A user's guide/manual to easily use the model's interface
  - A user's guide for different input and output files, as well as, how to utilize and interpret the output files

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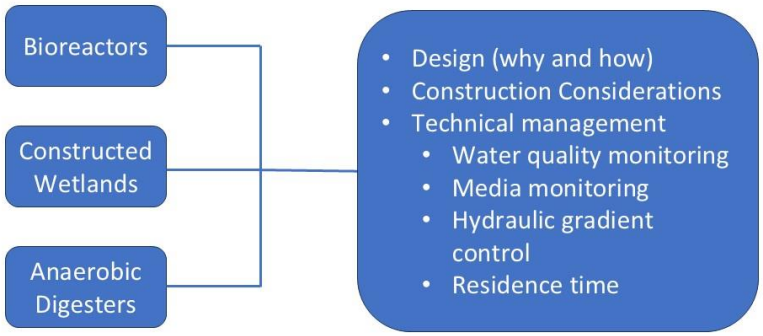
Nitrogen-removing technologies



Note: Each country/study area should have its own training programme based on the adopted technology. Monitoring should be the main focus because it influences the two other topics: the design and the construction considerations of the

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Training on monitoring

1. For current practices:

Site characterization: sources of pollutants, water and pollutant fluxes, isotopic characterization in the groundwater

1. For technologies: principles of chemical processes, monitoring sensors, analytical lab techniques, facility characteristics (dimensions, parts, components)

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Training on technology monitoring