NPP-SOL : Modelling and Technological Tools to Prevent Surface and Ground-Water Bodies from Agricultural Non-Point Source Pollution under Mediterranean Conditions

NPP-SOL Non-Point Pollution Solutions

PRIMA PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

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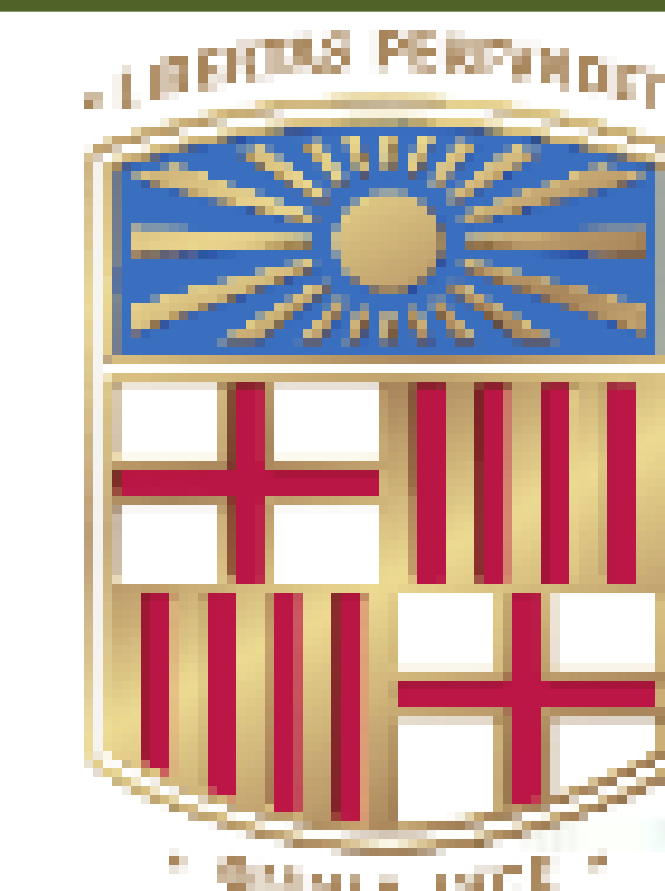
Project description

NPP-SOLL is a three-year project 2023-2026 with eight partners from five countries (Italy, France, Spain, Israel and Morocco) funded by PRIMA programme supported by the European Union. The project aims to 'prevent diffuse pollution of water resources due to non-point source agricultural pollutants under the Mediterranean soil and environmental conditions'. The project developed six work packages using laboratory and field scale research activities to achieve this main objective.
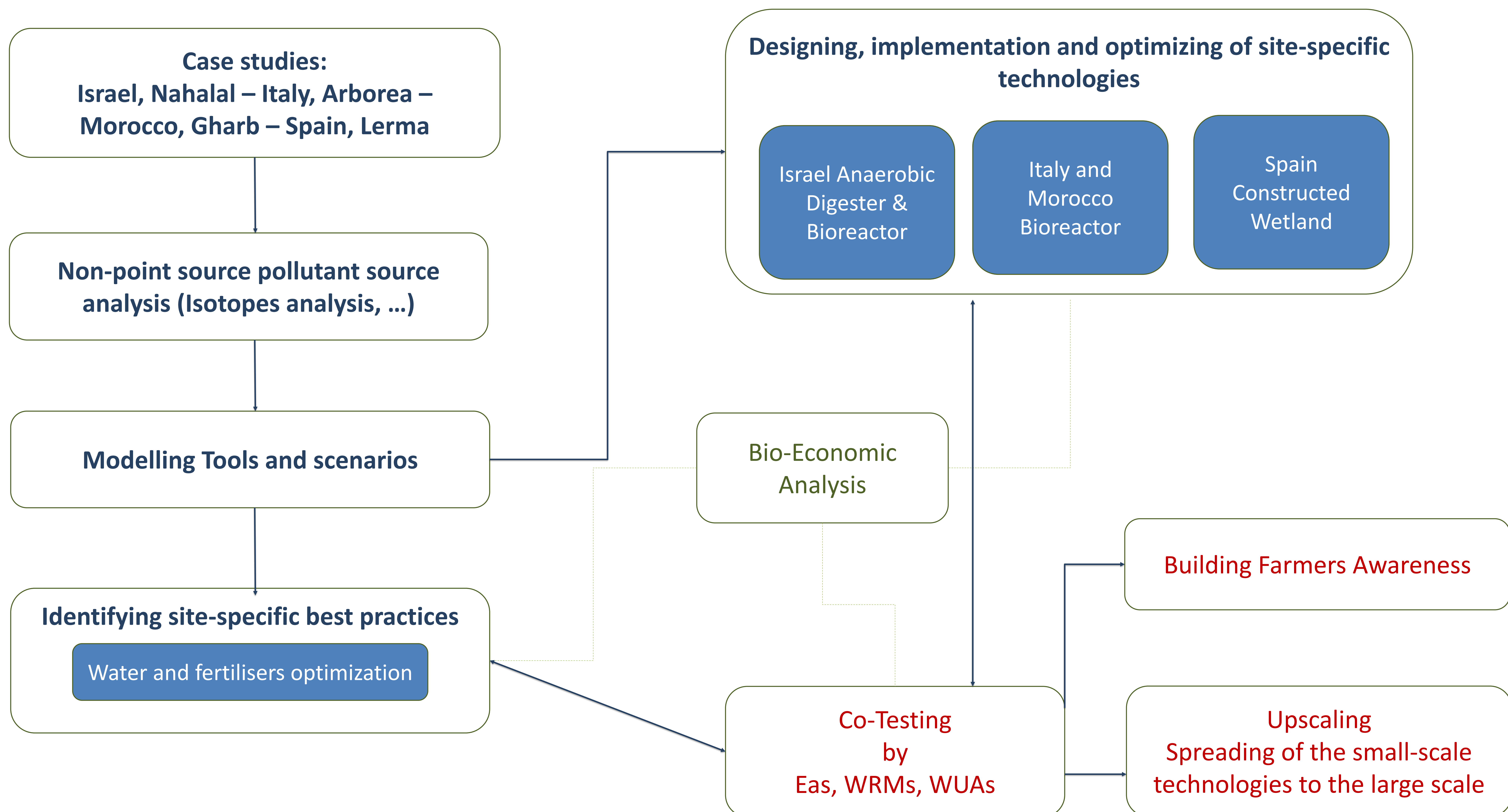
NPP-SOL OBJECTIVES

*Providing modelling tools integrating dynamics, physically-based on agro-hydrological models to bioeconomic models, to evaluate alternative soil, water and crop management strategies, reducing nutrient losses in water bodies, improving crop productivity, and identifying the proper nutrient management under saline irrigation water.

*Co-designing site-specific best management practices to improve soil, water and crop management and efficiently use irrigation water and nutrients under site-specific pedo-hydrological agronomic, economic and climatic conditions.

*Co-designing, implementing and testing small-to-medium, affordable-costs, in situ bioremediation and nature-based pollution-preventing technologies aiming to intercept and remove non-point source pollutants before they reach the ground-water and surface water bodies.

*Developing farmer awareness and building technical capacity of technicians from water user associations, environmental agencies and water resource managers to apply and spread NPP-SOL site-specific best management practices and pollution-prevnting technologies throughout the are affected by non-point source pollution, monitor the effectiveness of applied technologies, manage maintenance and fine-tuning over time, and support the farmers beyond the lifetime of the project.

Flow of activities to be carried out in the project