

Thematic area

Water Management



Section II

Topic 1.3 - Irrigation technologies and practice



Budget

1.426.208,00 €



Duration

36 months



Project

15/MEDWATERICE

Towards a sustainable water use in Mediterranean rice-based agro-ecosystems

Context

In the Mediterranean basin, rice is cultivated over an area of 1,300,000 hectares. The most important rice-producing countries are Italy and Spain in Europe (72% of the EU production; 345,000 ha), and Egypt and Turkey among the extra-EU countries (almost totality of the production; 789,000 ha). Traditionally, rice is grown under continuous flooding; thus, it requires much more irrigation than non-ponded crops. On the other hand, rice is strategic for food security in some countries (Egypt), and human consumption in the whole Mediterranean is steadily increasing.

Objectives

The project aims at exploring sustainability of innovative irrigation options, in order to reduce rice water consumption and environmental impacts, and to extend rice cultivation outside of traditional paddy areas to meet the escalating demand. The MEDWATERICE consortium includes universities, research centres and private companies operating in the Mediterranean area (IT, ES, PT, EG, TR, IL). Case studies will be conducted in pilot farms of the countries involved in the project. Alternative irrigation methods to be tested will be tailored to local conditions using a participatory action research approach through the establishment of Stake-Holder Panels (SHPs) in each country, which will include regional authorities, water managers, farmers' associations and consultants, and private companies of the rice production chain. For each irrigation solution, innovative technologies and the most appropriate rice varieties and agronomic practices will be adopted to minimize impacts on yield quantity and quality. Data collected at the farm level will be extrapolated to the irrigation district level to support water management decisions and policies. Indicators for quantitative assessment of environmental, economic and social sustainability of the irrigation options will be defined.

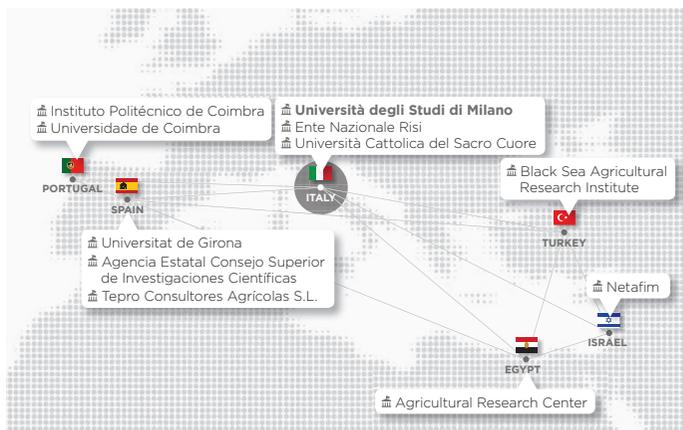
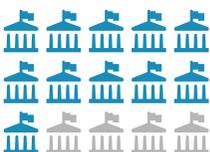
Coordinating country

Italy

Participating countries/ 6



Partners/ 11



Coordinating institution

Università degli Studi di Milano



UNIVERSITÀ DEGLI STUDI DI MILANO

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Expected impacts

Outcomes generated by MEDWATERICE are aimed at injecting tailored and updated knowledge to improve the sustainability of rice production in the countries of the Mediterranean area, with particular attention to the adoption of water-saving techniques. The MEDWATERICE consortium believes that the main barriers/obstacles to the achievement of the expected impacts are the economic sustainability of the proposed innovations and their social acceptance. For this reason, the project will: carry out an overall sustainability assessment of the irrigation solutions (including the economic dimension); be developed in close cooperation with the SHPs in all the project's phases, to improve the communication among all the actors involved and the transfer of project's results to the agricultural sector and decision makers; include the preparation and dissemination of technical best practice documents to support the effective implementation of irrigation solutions.

