



LOCATION



Italy and Greece

PARTNERS



3.1

Decision Support System to Support Olive Growers

CHALLENGE

The efficient management of olive orchards requires complex decision-making processes. This is because of the increasing uncertainty and risk associated with olive fruit and olive oil production in a rapidly changing environment. Climate change is adding to erratic Mediterranean weather conditions, soil variability and pest outbreaks.

AIM

The aim of this pilot is to develop and demonstrate a Decision Support System (DSS) for olive tree growers, advisers and agri-food processors to address common issues associated with olive tree growing and olive oil production, including fertilisation, irrigation and integrated pest management (IPM). The DSS integrates in-field sensor data, remotely sensed data, a modelling platform, and a farm management system, combining weather patterns and soil information with crop traits, to foster the sustainable production of olive tree orchards.



HOW

An integrated solution, Agricolus© OLIWES, will be configured and deployed in selected olive tree farms to address different climatic and farming conditions. OLIWES is a cloud ecosystem, which provides the most modern technologies of data collection, analysis, and visualisation, delivered with a user-friendly interface. The functional features of OLIWES include the following areas: i) orchard management; ii) field scouting; iii) forecasting models; iv) Decision Support System. Open protocols and standards facilitate the integration of IoT sensors, interoperability, and data exchange.

BENEFIT

The expected benefits are the following: optimisation of water and nutrient management with data-driven decisions, implementation of IPM solutions and preventive measures through forecasting models, time series analysis of long-term data records and comparison of farmer performances to achieve sustainable crop production and protection.