



Project Partner: SMASP AGILE SL
Country: Spain
Industrial ecosystem: Agrifood
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~ Farming Artificial Intelligence Drone Optimized Precision Systems ~

FARMDROPS aims to revolutionise agricultural water management by creating an integrated, AI-driven decision support system using advanced drone technology. Our goal is to improve the agri-food industry's water system by reducing water waste, improving water efficiency and increasing crop productivity. To achieve this, we will develop an AI system capable of processing and analysing large amounts of data collected by drones equipped with high-resolution cameras, thermal cameras, infrared sensors and moisture sensors. This data will provide information on crop health, soil conditions, weather and water infrastructure, providing real-time, accurate and actionable insights for farmers and stakeholders. We will also create an open data platform that fosters a collaborative environment for analysis and decision-making between farmers, agronomists and water management experts. Field trials will be conducted across different farm types and climates to validate and optimise our system. We anticipate a significant reduction in water waste through early leak detection and intelligent irrigation strategies. At the same time, we expect to improve crop yield and quality by leveraging AI-driven insights for precision farming. In addition, our system will make farms more resilient to climate change

and other environmental stresses through predictive analytics and scenario analysis, ultimately creating a data-driven farming community that encourages knowledge sharing and collaborative development of best water management practices. Through FARMDROPS, we aim to set new standards for sustainable, efficient and productive agriculture, delivering significant economic, environmental and social benefits.



FARMDROPS

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