## PROJECT WATER4AGRIFOOD

The water crisis: Global warming is the cause of climate change, weather anomalies and reduced rainfall. Over the last 50 years, the Mediterranean area has lost 100 millilitres of water per year. Agriculture in distress: The unpredictability of the rains is putting agriculture, especially rainfed agriculture that relies solely on rainwater, in crisis. The risk is that it will not be possible to ensure water in quantity and quality to the agri-food chain.

No agrifood without water. Global warming is the cause of climate change which, in turn, leads to weather anomalies that we can all experience. What we observe is the unpredictability of rainfall. Without effective rainfall, it is not possible to ensure water in quantity and quality to the agri-food chain.

The project was set up to understand how to use and exploit water in farming systems in the South.

Public research bodies and private companies have formed a partnership to finalise industrial research actions and experimental development insights to innovate the use of water in farms from which the raw materials for the agri-food chains originate. Possible solutions: It is urgent to find a remedy, or rather a range of solutions. A sort of tool box in which to choose the most suitable tool for farms.

Improving Mediterranean agri-food production under conditions of water scarcity seeks to find a solution to the problem of the lack of water available to farms and, more generally, to highlight its value for production purposes.

## Water4AgriFood

The Water4Agrifood project brings together expertise from industry and academic knowledge to build the right tools to make the best use of the water resources available to farms.

Regarding the development of sensors and data processing techniques for the remote monitoring of the geometry and water levels of the irrigation canal network, CNIT-RaSS performs the analysis and measurements acquired with a radar demonstrator exploiting some car-maker's hardware.





## Funding institution:

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Project partners

UniCT-Di3A, Suez, Planeta, Irritec, CREA, ISEA, Tecno.El, CER, Polyeur, Bonifiche Ferraresi, Agriservice.

Project duration

November 2020 - May 2023

**Involved countries** 

Italy



(a) Signal acquired in real environment (irrigation channel)



(b) Signal received. The central peak corresponds to the power received from the water surface, the main peaks on the left correspond to the power received from the concrete abutment of the bridge



(c) Signal received. The central peak corresponds to the power received from the water surface, the main peak on the left correspond to the power received from the reflecting panel placed on the concrete abutment of the bridge.

