

## Data-driven innovation in support of a frozen fruit value chain

### Supporting a frozen fruit business of small farmers - Greece

Ploutos' Sustainable Innovation Pilot 1 (SIP1) aims at helping fruit producers in Greece to reduce production costs and increase their revenues, at an environmentally friendly way.

In the context of SIP1, IoT weather stations were installed in PROODOS' fields, covering two different climate/soil zones and a Smart Farming (SF) solution, gaiasense™, was launched to allow farmers to optimise their use of inputs (irrigation, fertilizers, pesticides). It was connected to a traceability app, which allowed authorized users to access data from the farm logs in relation to the produced frozen fruit and enabled the reuse of collected data for acquiring certificates and labels that can lead to increased product value.

- 💡 **Outcomes:** The adoption of the SF and traceability solutions helped to reduce the pesticide use by 45%-64% and the farm production costs by 56-63%, while 2 sustainability related certificates and labels were acquired.
- 💡 **Practical Recommendations:** There is a need to educate and familiarize farmers with the new technology through demonstrations on the field and the support of farm advisors. In addition, it's very important to raise awareness on the new collaborative business models that are based on cross-value chain collaboration, data sharing and fair distribution of extra value captured.
- 💡 **Problems:** A key problem was the difficulty in communicating clearly to the farmers the value of the proposed innovations, because the impact is usually visible after 2-3 years.
- 💡 **Outlook:** As regards the future implementation of this solution, it's important to ensure the active engagement of the farmers. Moreover, data collection should have a 2 to 3-year time span, to capture variations in climate conditions and allow safe conclusions to be drawn.

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### Description of project activities

The Ploutos project will develop a Sustainable Innovation Framework that follows a systemic approach to the agri-food sector, building on three pillars: Behavioural Innovation, Sustainable Collaborative Business Model Innovation and Data-Driven Technology Innovation. The project will deploy 11 Sustainable Innovation Pilots, where using a Multi-Actor Approach, new innovative solutions and methodologies will be implemented, tested, assessed and derive practical lessons learned. A Ploutos Innovation Academy will be established as a vehicle for integrating the know-how, best practices and assessments developed across the project and derived from the Sustainable Innovation Pilots.

### Objective of the project

The main objective of Ploutos project is to help rebalance the agri-food value chain and enhance its sustainability (economic, environmental and social) by establishing a Sustainable Innovation Framework that is powered by an innovative combination of behavioral change, collaborative business model innovation and data-driven technological services.

## PLOUTOS CONSORTIUM



-  33 Partners
-  11 Pilots
-  10 Countries
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