



**“Field-testing and demonstration of Digital and Space based technologies with Agro-ecological and Organic practices in systemic innovation”**

## Decision Support Systems for Agriculture



**Decision Support System; DSS; innovation in agriculture; farming data analysis**

**Greece**

PestNu is a comprehensive project that helps farmers improve crop quality and prevent potential issues through a variety of tools and products. These tools gather and process data in a database, which can then be accessed through PestNu's Decision Support System (DSS).

PestNu's DSS, developed by CERTH & SIDROCO, is a user-centric cloud-based Farm Management System that provides circular economy strategies and best practices for efficient decision-making in agriculture. Farmers can use DSS to get detailed information about their crops, including suggested actions and strategies to improve yield and prevent threats. Additionally, DSS produces an analytical report on demand, containing historical data gathered from cultivation. By processing data with algorithms, DSS can provide farmers with recommendations that are based on the latest information and best practices in the industry.

The benefits of DSS usage are:

- Process large amount of data and extract useful information
- Comparison of current with previous conditions in the field
- Beneficial and comprehensible analysis of the crop
- Punctual and immediate notification when issues or threats are detected
- Reduction of required time for physical presence at the production field

The objectives of DSS are to:

- Reduce the usage of fertilizers and pesticides
- Avoid preventable issues and threats occurred at the production field
- Improve the working conditions of farming
- Increase the income and reduce the production costs of the farmers
- Motivate people to involve with farming



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