

# Renovation of Olive Cultivation Sector Using AI

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Thomas Jefferson once said: 'The olive tree is surely the richest gift of heaven.' However, despite their economic significance, olive crops remain vulnerable to diseases, resulting in farmers losing their yield and leaving them struggling to sustain themselves as their crops succumb to illness. The developing world has a significant lack of information regarding olive tree diseases, contributing to costly and time-intensive treatment approaches. Using Artificial Intelligence, olive diseases can be detected in fraction of seconds, making it 99.1% quicker and easier. Employing a special drone equipped with an autonomous navigation system for diseased trees treatment. OLIVY is a multi-platform system that uses different trained AI models for tree health analysing using the leaf of the tree , it supports the planning of olive disease management in developing countries by automatically collecting coordinates of infected areas and storing them in a substantial database, which holds immense potential for countries striving to access such crucial information. Furthermore, OLIVY incorporates a drone that is automatically activated when the trees are not healthy. It autonomously flies to the targeted tree, detects its trunk, and sprays liquid fungicides to help treat the disease. OLIVY revolutionizes olive crop management through an AI-based multi-platform system for precise solutions for disease control and crop disease treatment.