

Abstract

Project Name: Project Kushora (A Digital Agriculture Solution with Predictive Intelligence for Enhanced Farm Management)

Category: Digital Agriculture and Predictive Intelligence

Project Kushora is a digital agriculture platform integrating Internet of Things (IoT), predictive analytics, satellite imagery, drone surveillance and conversational AI to enhance farm management in different regions. It addresses livestock tracking, crop health monitoring, environmental sustainability and decision support. It features:

Livestock Management

Solar-powered smart collars with GPS and geo-fencing capabilities enabling real-time tracking and overgrazing prevention using predictive analytics.

Drone Surveillance

CNN-based analysis of drone-captured images detects crop diseases and nutrient deficiencies.

Satellite Imagery

Sentinel-2 and Landsat data provide insights on vegetation health, soil moisture, and weather patterns via NDVI analysis.

IoT Sensors

Monitor soil, weather and humidity to optimize irrigation and resource use.

Conversational AI

A Botpress-powered chatbot delivers real-time farming advice. The platform offers a user-friendly dashboard, solar-powered scalability, and cost-effective solutions to boost productivity, sustainability, and food security.

User Interface

