

Digital Twin in Agriculture



MYAGRIDT: DIGITAL TWIN SYSTEM FOR INTEGRATED MULTI-CROP INTELLIGENCE

Implementing a robust IoT-based water quality monitoring system (WQMS) in real-time using the appropriate sensors and improving the sensor's accuracy is needed to optimize productivity and effectively manage Asian Seabass fish farming in tanks. The design of sensor casings serves a dual: protecting sensors that can't be submerged for extended periods and offer cost-effective maintenance.



DEVELOPMENT OF DIGITAL NURSERY MONITORING AND MANAGEMENT OF BAMBOO AND EUCALYPTUS

The system can monitor the environmental factors such as soil moisture, air temperature and relative humidity as an alert to the nursery managers based on the watering requirement of the selected plants. This system provides support in optimising plant growth in the nursery, consequently contributing to the production of high quality planting materials.



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MyAgriDT revolutionizes crop management by introducing a Digital Twin prototype that addresses the challenges of optimizing crop growth and yield. Unlike existing works, this system integrates multi-enterprise farm IoT systems and crop growth records into a centralized crop data lake, overcoming challenges related to data consistency and understanding of crop dynamics.