



JAMBAVANTHA

Jambavantha Smart Irrigation System

Revolutionizing Modern Agriculture

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+100000K

Empowering around 118 million
Indian Farmers with AI driven
irrigation.

What is Jambavantha?

Jambavantha Irrigation System is an AI-driven smart irrigation and soil nutrition management solution that optimizes water and fertilizer usage for farmers. The system integrates IoT sensors to collect real-time soil moisture and nutrient data and cross-checks it with crop-specific requirements and weather forecasts (via OpenWeather API).



The Importance of Modern Agriculture



Global food demand is rising



Resource constraints (land, water, labor)



Climate change and its impact on agriculture



Need for innovation and efficiency in farming practices

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Challenges in Traditional Farming



- Leads to water and fertilizer wastage
- Farmers lack access to real time soil and weather data
- Inconsistent crop yields due to improper nutrition management.
- Water scarcity and inefficient resource use



Our Solutions

❑ Smart Irrigation

- Real-time soil moisture sensing
- AI-based irrigation decisions

❑ Weather-Aware Controls

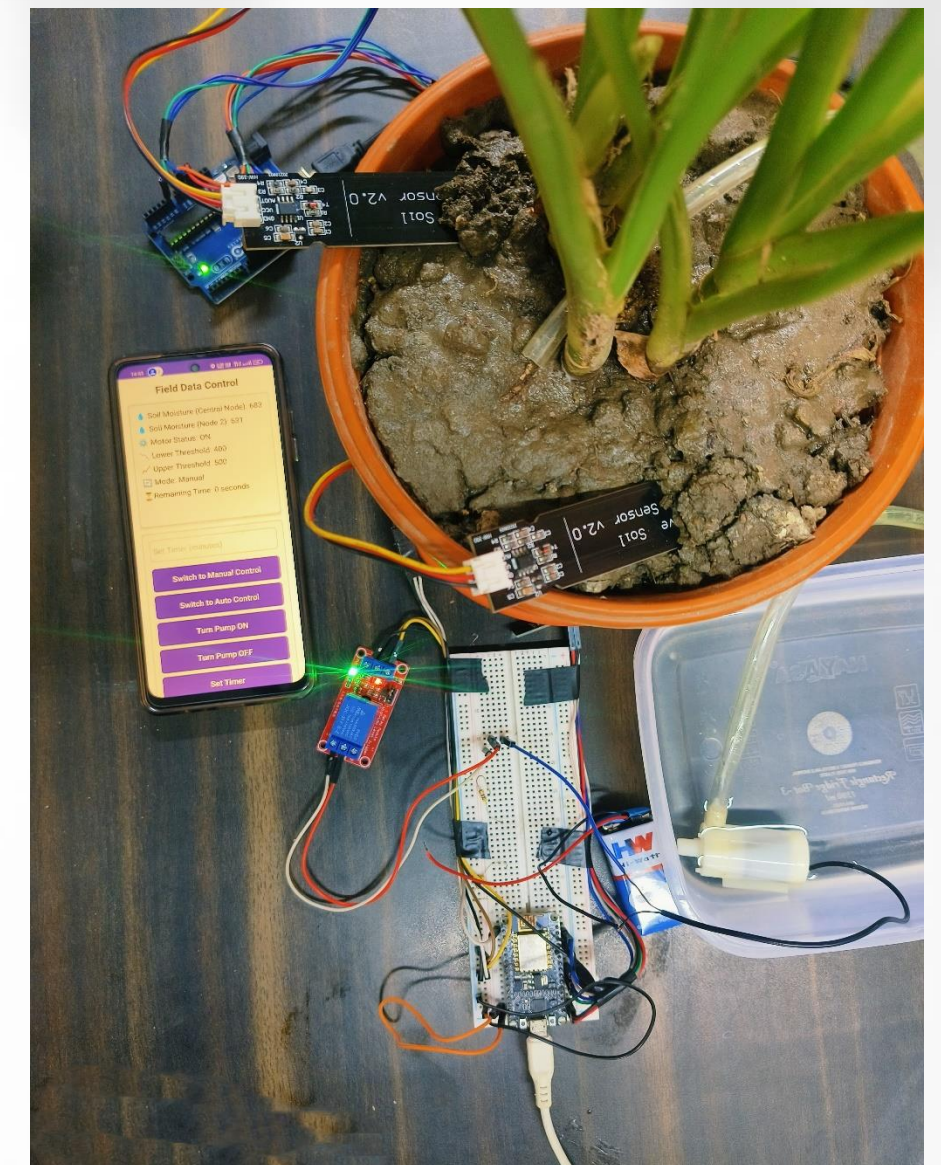
- Auto shut-off if rain is forecasted (Open Weather API)

❑ Automated Fertilization

- AI detects deficiencies
- Releases liquid fertilizers during irrigation

❑ Mobile App Integration

- Multilingual
- Manual & auto modes
- Real-time alerts and historical trend tracking





Case Studies

20%

Improved crop yield by 20%
using sensor-based irrigation

40%

Reduced water usage by 40%
in drought-prone areas

40%

Real-time pest detection,
saving \$50,000 in crop
losses

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Impact & Social Responsibility



- **Creating opportunities for smallholder farmers**

Creating opportunities for smallholder farmers by providing affordable, data-driven irrigation and nutrition management. Empowering them to boost yields, reduce waste, and improve livelihoods with smart technology.

- **Partnerships with local governments and NGOs**

Partnering with local governments and NGOs to expand reach, ensure affordability, and support adoption in rural communities. These collaborations will help deliver training, subsidies, and infrastructure support to smallholder farmers.

- **Reducing poverty and enhancing rural livelihoods**

Reducing poverty by increasing farm productivity and lowering input costs through smart resource management. Enhancing rural livelihoods with better crop yields, higher incomes, and sustainable farming practices.



Future of Jambavantha

Jambavantha aims to become a complete smart farming solution—scaling nationwide, integrating pest and disease prediction, and supporting offline and voice-based access—empowering farmers with sustainable, AI-driven agriculture..

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AI Powered Smart Irrigation System

Soil Moisture

210

Remote Moisture

261

Pump Status

ON

Operation Mode

Auto

Lower Threshold

400

Upper Threshold

500

Timer Remaining

Not active

Sensor 1



Sensor 2



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Competitors Analysis

Competitor	Focus	Key Features	Strengths	Weaknesses
Fasal	AI-powered precision agriculture	IoT sensors, crop-specific advice, disease prediction	AI + regional language support	Limited automation in fertilization
BharatAgri	Personalized crop advisory	Soil testing, irrigation & fertilizer scheduling	Wide reach, multilingual app	Focuses more on advisory than automation
Agsmartic	Smart farm automation	Wireless irrigation, solar-powered automation	Good hardware integration, solar-powered	Expensive for small farms
Kritsnam Tech.	Water flow monitoring & analytics	Smart flow meters, dashboard analytics	Strong niche in water monitoring	Not a full irrigation solution
CropIn	Agri-data intelligence	Farm digitization, predictive analytics	Enterprise scale, works with governments	Less direct access to smallholder farmers
Jambavantha (You)	AI smart irrigation & nutrition management	IoT, AI, weather-aware auto irrigation, auto fertilization	Full automation + affordability + real-time insights	New entrant, needs scale and outreach

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Our Team

Team Leader

ANKIT KUMAR

Team Member

AJAY GUPTA

Team Member

AMIT KUMAR
CHOUBEY

Team Member

ANUSREE NASKAR

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Thank You.

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Contact Us

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