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INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE (ICID)

JAIN LOGIC - AGTECH SOLUTIONS FOR COMMUNITY IRRIGATION PROJECTS

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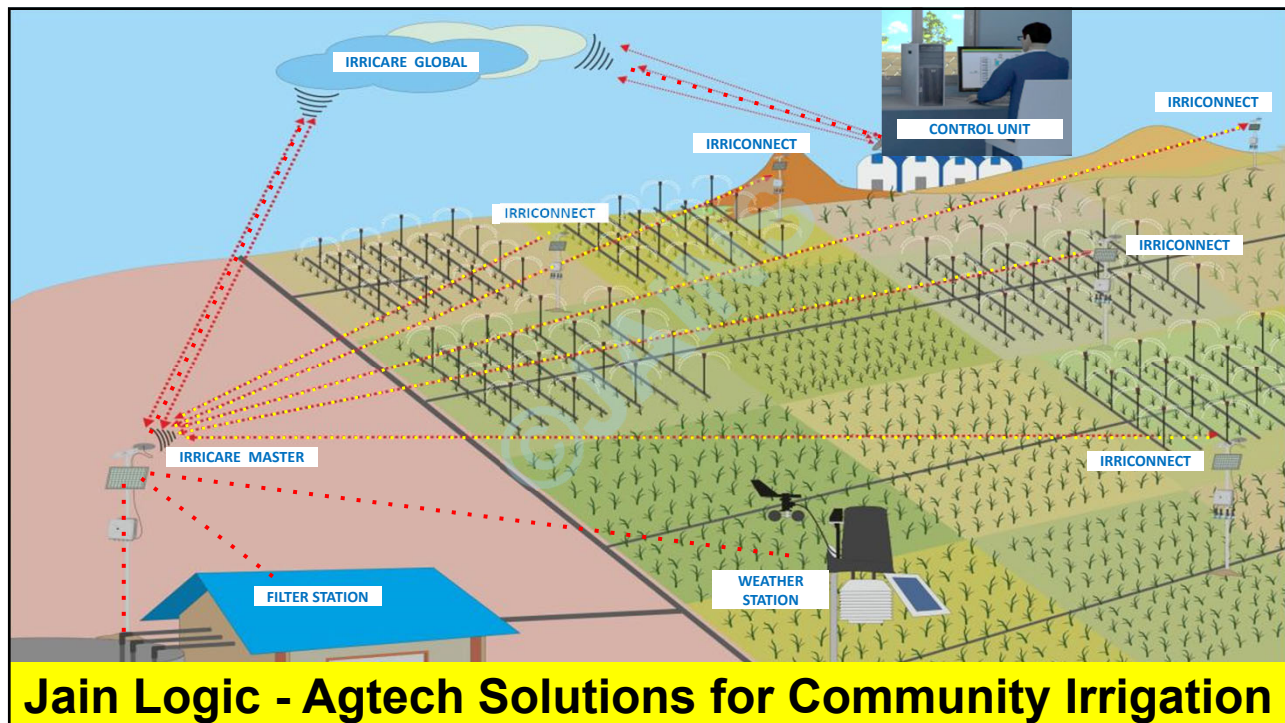


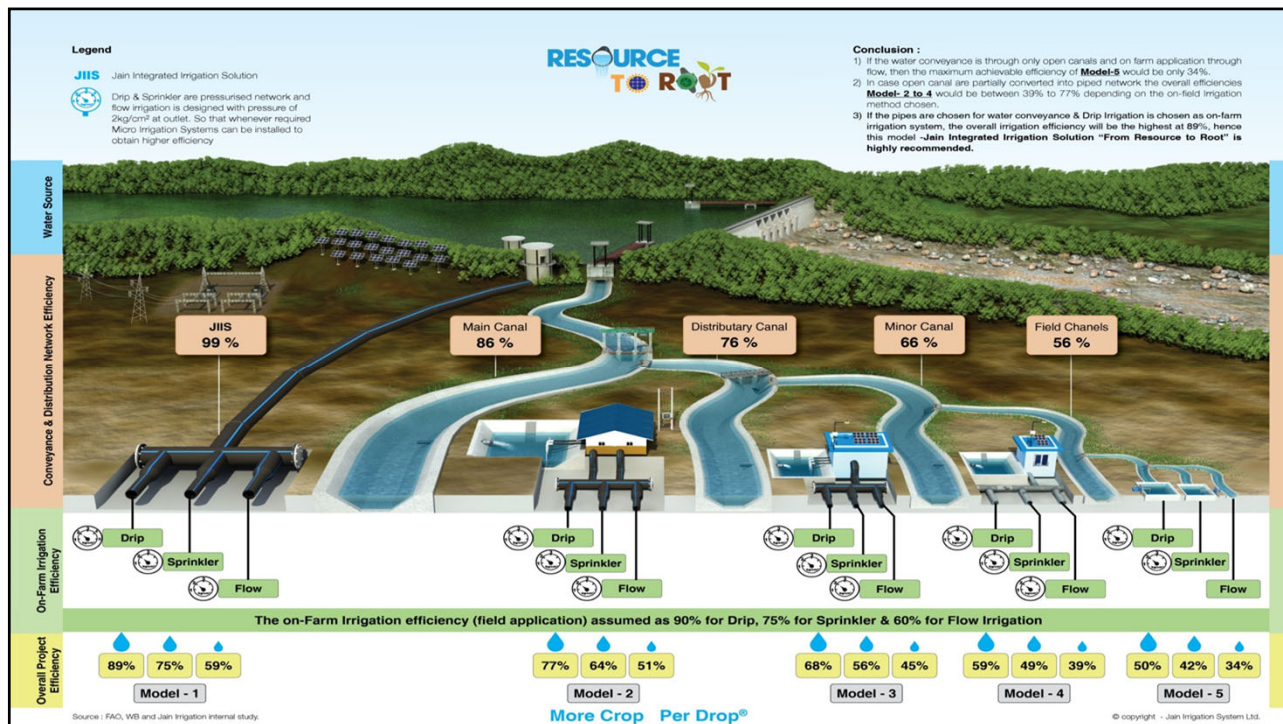
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Indo-Global Irrigation Summit 2025
24-25 June 2025, New Delhi, India



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Why AgIOT is important for large irrigation projects???

- ▣ Huge land to control
- ▣ Thousands of valves to operate
- ▣ Effective water management
- ▣ Seizing the water once crop is harvested
- ▣ 24/7 Monitoring of system
- ▣ Trend analysis
- ▣ Report generation
- ▣ Instant fault reporting & control


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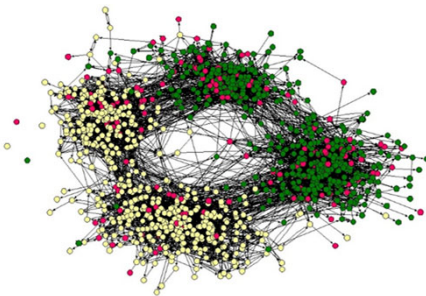
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Challenges

- Wiring is Complex
- No electricity available
- Line of sight not possible
- Must have 'Centralize' control
- Remote monitoring , Control & analysis



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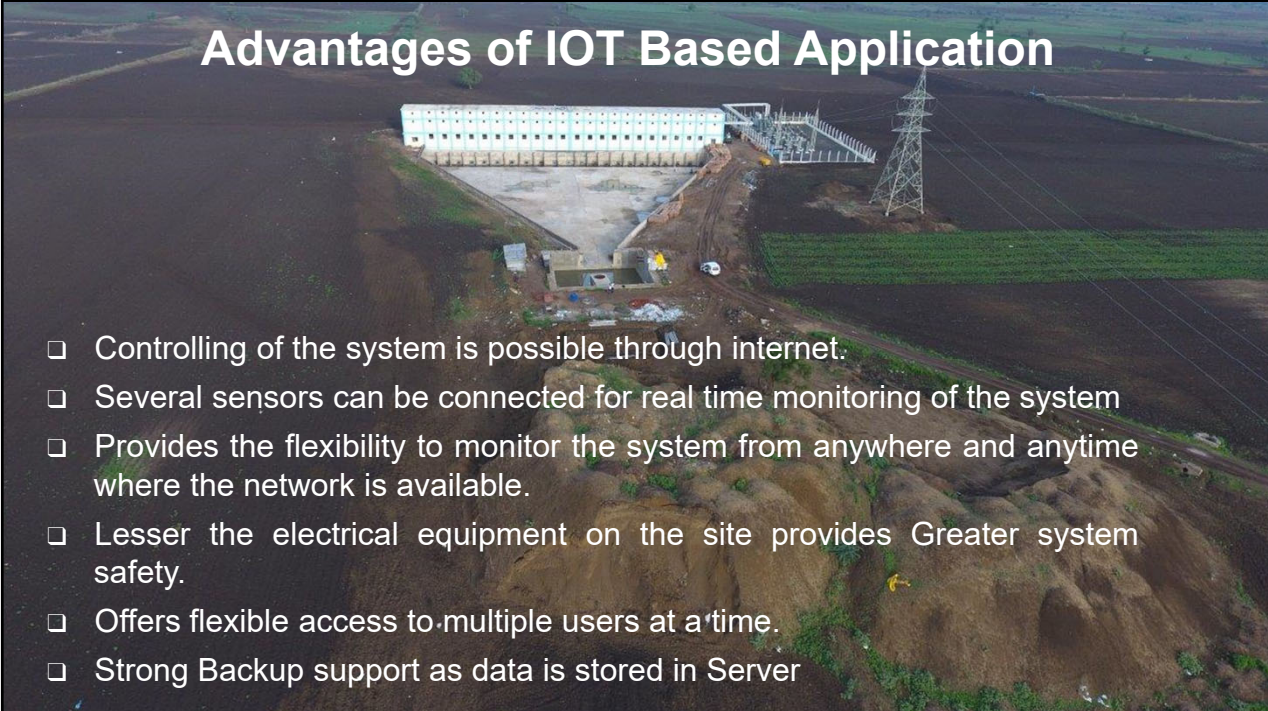
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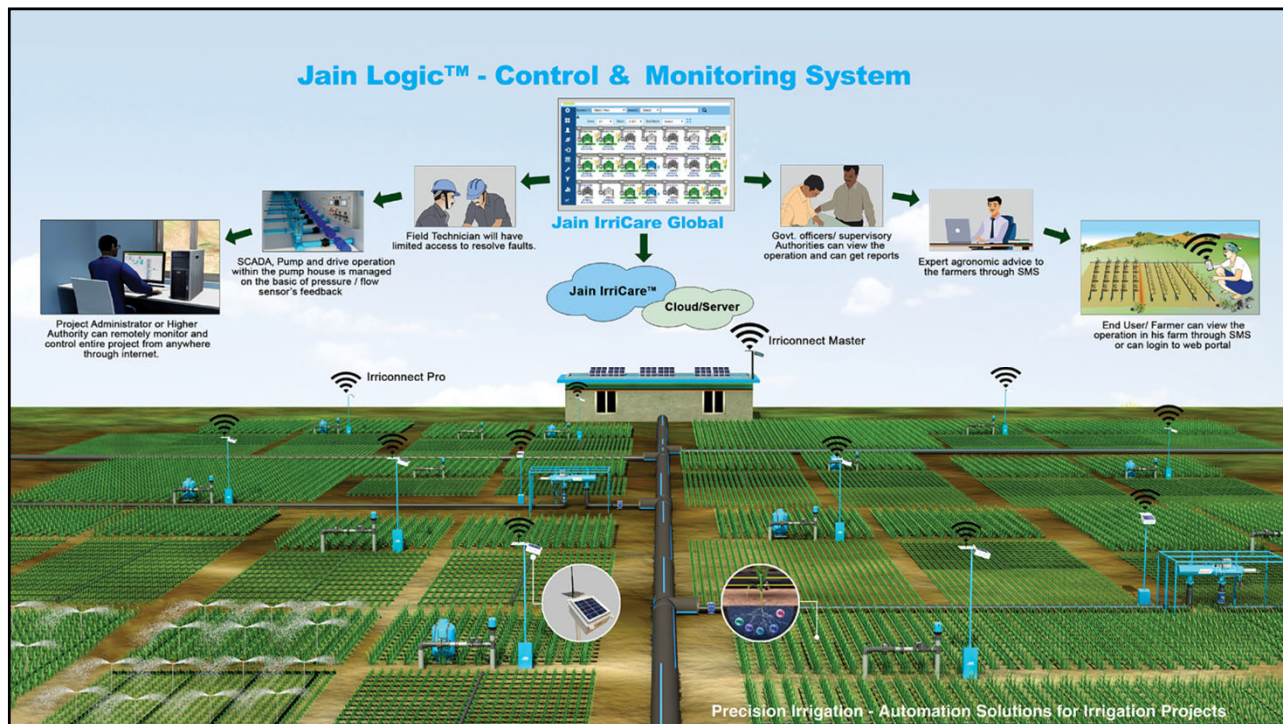
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Advantages of IOT Based Application


- Controlling of the system is possible through internet.
- Several sensors can be connected for real time monitoring of the system
- Provides the flexibility to monitor the system from anywhere and anytime where the network is available.
- Lesser the electrical equipment on the site provides Greater system safety.
- Offers flexible access to multiple users at a time.
- Strong Backup support as data is stored in Server






Components developed for AgIoT






■ **Irriconnect-Master** (Base Station)




■ **Irriconnect-Pro (Programmable RTU)**


- 8DO
- 4DO
- 8DO+4AI+4DI
- 20DO

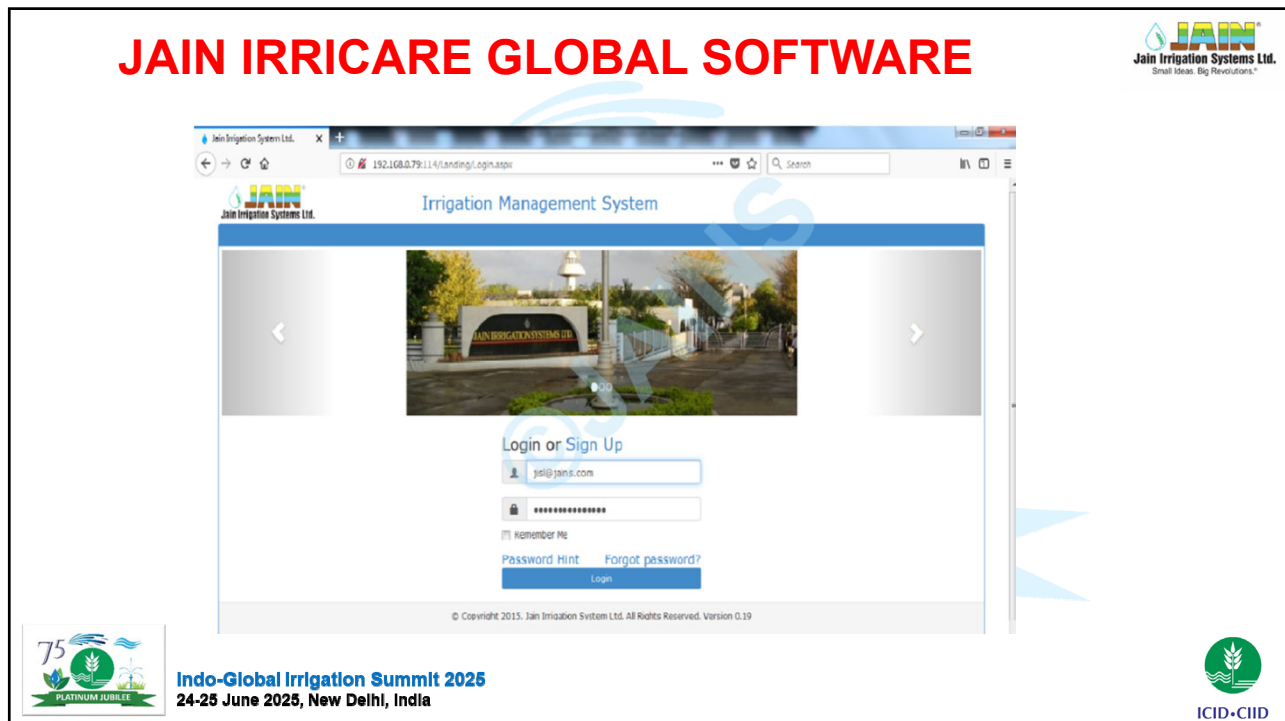
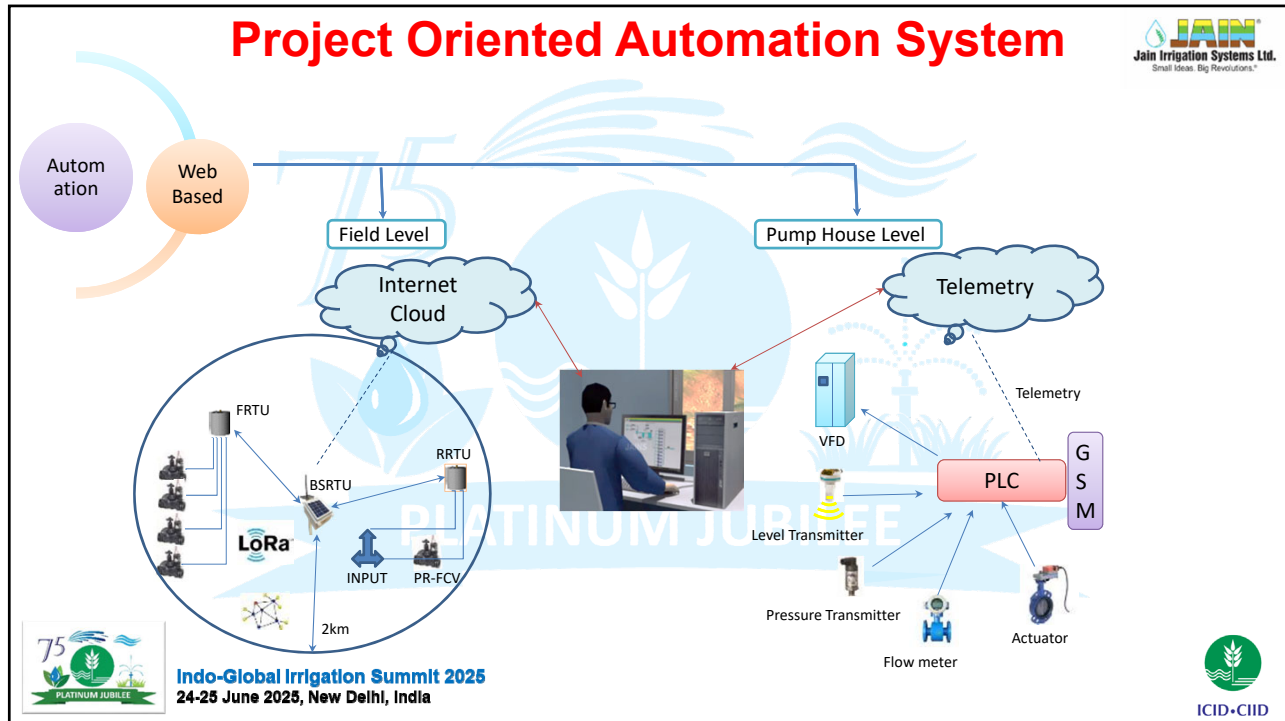


■ **Irriconnect-HH (hand-Held unit)**

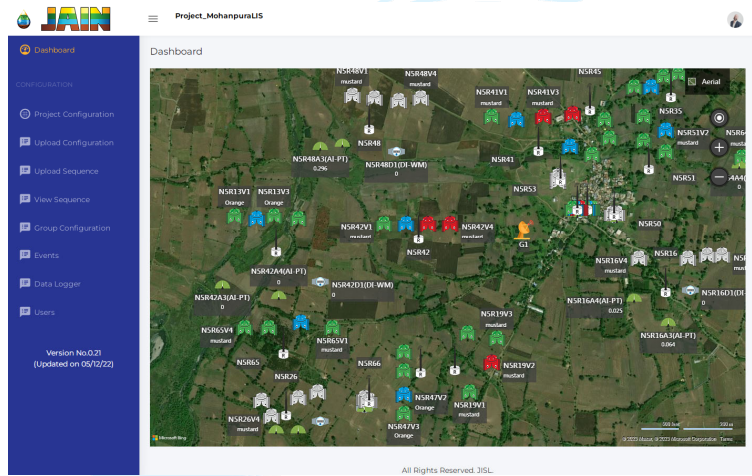


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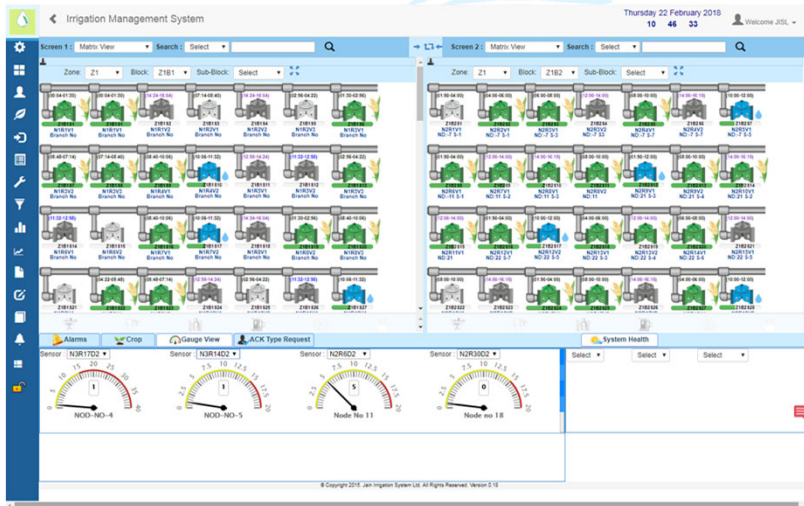
Dashboard – Map View



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Dashboard – Matrix View



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Event Logbook



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Health Management System



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Challenges to Use Digi-tech in Agriculture



- Power to run IOT devices: Most of the IOT devices are in the remote field. Solar power or non-rechargeable batteries are the only power source.
- Theft and vandalism in remote area.
- Communication: Through GSM or RF.
 - RF – Uses free band available in India (865-867MHz)
- Need a separate RF band for agriculture.
- There is a requirement of establishment of common protocols to facilitate interoperability (follow ISO 21622)
- Accessibility- Scalability – Reliability - Accountability of the solutions.
- Prices of sensors...
- Gap between technologist and users (farmers)



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