Project Report Abstract

PROJECT TITLE

Design and Implementation of an Automated Smart Irrigation System

TEAM MEMBERS

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INSTITUTION

ABC Institute of Technology

ABSTRACT

This project presents the design and development of an automated smart irrigation system utilizing real-time environmental data for efficient water management in agricultural fields. The system employs soil moisture sensors, microcontroller-based control units, and an IoT-enabled dashboard for continuous monitoring and remote operability. Key objectives include reducing water wastage, minimizing human intervention, and promoting sustainable agriculture. System performance was evaluated in multiple environments, demonstrating an average water saving of 35% compared to conventional irrigation methods. The results indicate strong potential for scalability and real-world application in resource-constrained settings.

KEYWORDS

Smart Irrigation, IoT, Automation, Agriculture, Water Management

IMPORTANT NOTES

- Abstracts should provide a concise summary of the project, methodology, and findings.
- Include essential information: project title, team, institution, objectives, methods, results, and keywords.
- Keep the language clear and avoid detailed background or excessive technical details.
- Review for clarity, brevity, and accuracy before finalizing.