

Automatic Cattle Feeding System

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Abstract: *This project focuses on the development of an Arduino- based automatic cattle washing system, designed to enhance farm productivity by automating the washing process and ensuring proper hygiene for livestock. Traditional cattle washing methods rely heavily on manual labor, making the process time- consuming, inconsistent, and prone to inefficiencies. To address these challenges, this system provides a fully automated and efficient solution for maintaining cattle cleanliness and health. The Arduino microcontroller serves as the central control unit, managing the washing operations based on pre- programmed sequences. Sensors are employed to detect cattle presence, ensuring precise water usage while preventing unnecessary wastage. The system incorporates automated spraying mechanisms to provide uniform and thorough cleaning, reducing the spread of infections and improving overall animal welfare. Designed to be energy-efficient, scalable, and easy to maintain, this automated system minimizes human intervention, optimizes water usage, and ensures consistent hygiene standards across farms of all sizes. By implementing this Arduino-based automatic cattle washing system, farmers can reduce labor costs, enhance livestock health, and adopt a sustainable, modern approach to cattle management.*

Keywords: Automation, Arduino, Hygiene ,Sensors, Livestock

