

Animal Health Monitoring System Using IoT And Wireless Sensor Network

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Abstract – The proposed gadget addresses sustainable development goals (SDGs) along with no poverty, 0 hunger, and sustainable cities by means of enforcing a shrewd farm animal monitoring machine to enhance dairy production. Traditional farm animal's management in developing international locations faces inefficiencies due to limited technological advancements, which negatively affect productiveness and useful resource utilization. This research introduces a cost effective, clever dairy tracking gadget integrating Wi-Fi sensor nodes, the Internet of Things (IoT) and Node MCU generation. The gadget encompasses with three modules inclusive of a wise environmental tracking system, a cow collar prepared with sensors for tracking health and region, and water level indicator. Real-time information is processed and saved in a comprehensive database, enabling instantaneous signals for anomalies. The gadget enhances farm animal health and productiveness with the aid of minimizing human intervention, reducing labour fees, and automating vital functions. Its modular, plug-and-play layout offers scalability for programs in zoos and fowl monitoring, making it a sizable development in contemporary agricultural practices.

Keywords – Node MCU, cow collar, animal fitness tracking, Wireless Sensor Nodes (WSNs), Micro controller, Internet of Things (IoT), Sustainable Development Goals (SDGs).