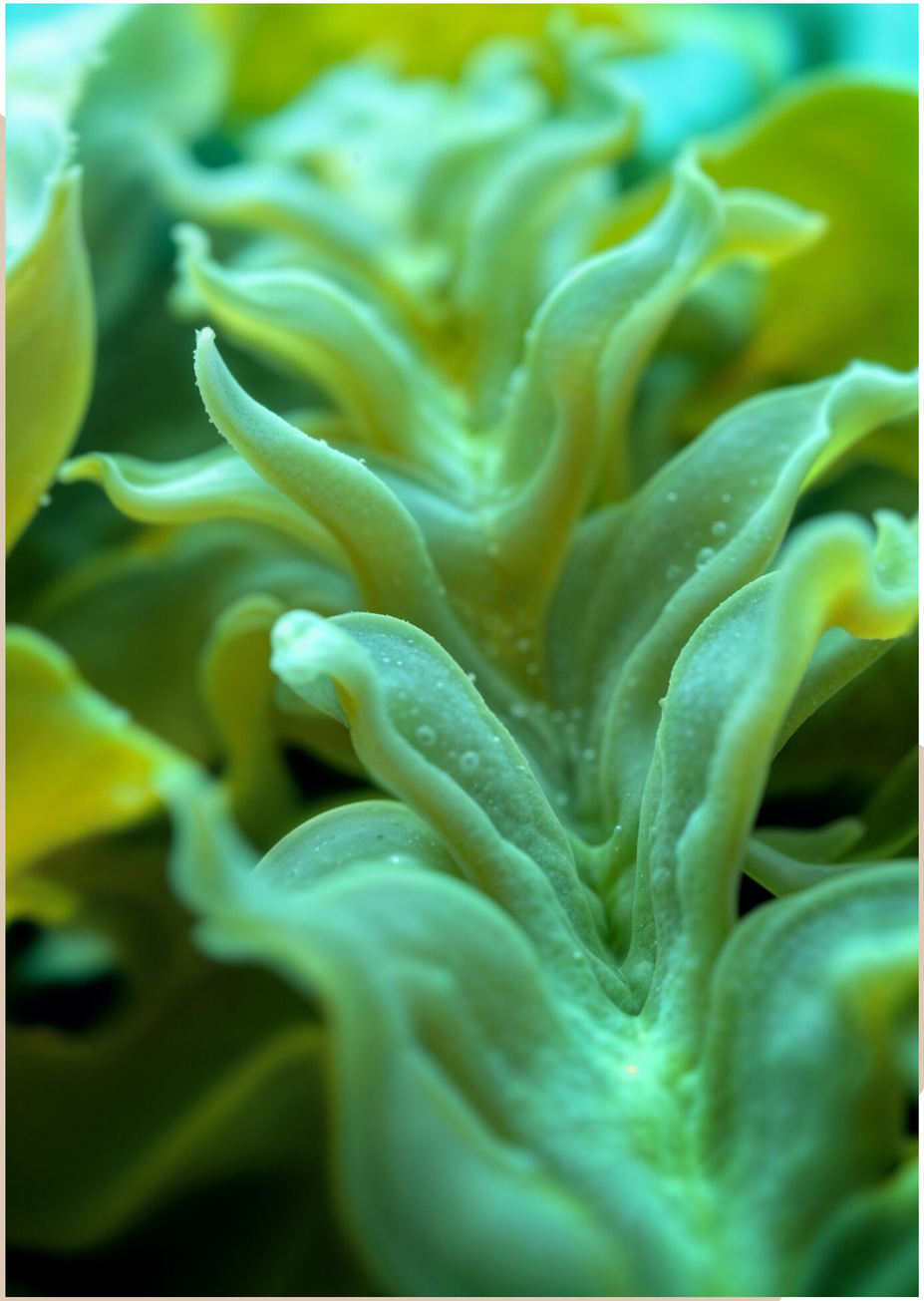
Microcontroller-Driven Indoor Hydroponic Fodder System

1. A novel solution for sustainable fodder production.
2. Utilizes IoT-based sensors and automation technologies.
3. Addresses agricultural challenges: limited land, water scarcity, and climate change.
4. Aims to provide high-quality, nutrient-rich fodder year-round.



Why We Use This Product

Key Benefits:

* Resource Efficiency: Uses 70-90% less water than traditional methods.

*Year-Round Production: Independent of seasonal changes.

*Economic Stability: Reduces operational costs through automation.

*Technology Adoption: Encourages smart farming practices.

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System Components:

Sensors: Monitor temperature, humidity, light intensity, and water quality.

Actuators: Control LED grow lights and water pumps

Functionality:

Real-time data collection and feedback.

Automated adjustments to maintain optimal growth conditions.

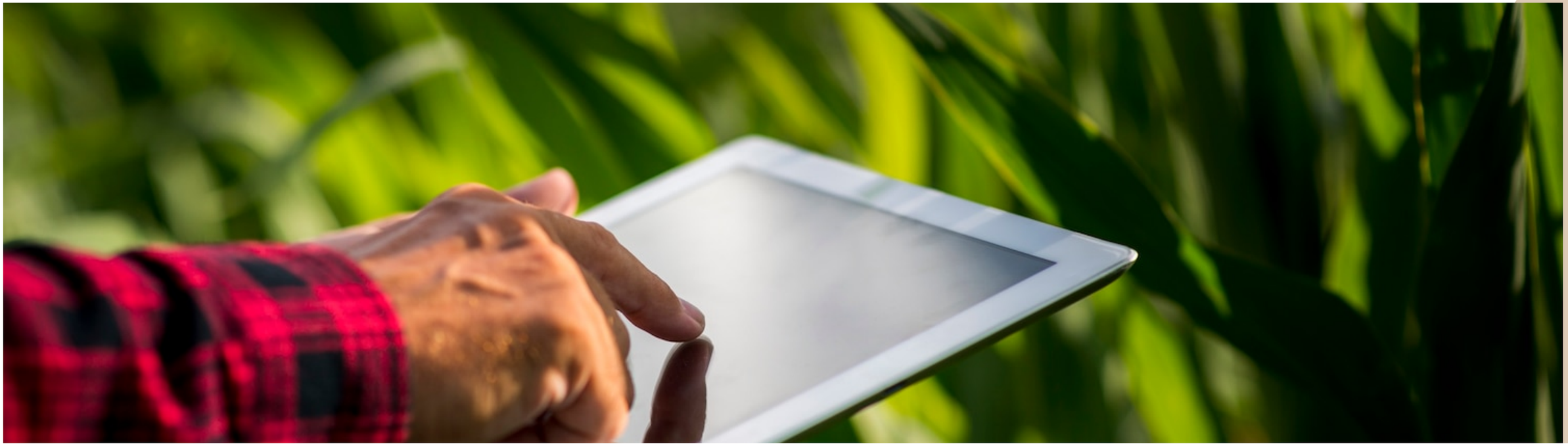
User-friendly web application for remote monitoring.

IoT Components

Microcontroller:
Central unit (e.g., Arduino or ESP8266) for data processing and control.

Sensors:
DHT11: Measures temperature and humidity.
TDS Sensor: Monitors nutrient concentration in water.
Moisture Sensor: Detects moisture levels in the growing medium.

Connectivity:
Wi-Fi module for remote access and control via mobile/web applications.



Thanks!