

# **SmartFarmer - IoT Enabled Smart Farming Application**

## **Literature Review**

- The main factors in traditional farming are the monitoring of temperature, humidity, ammonia, rain, electrical conductivity, air quality, light intensity, and moisture in the litter by physical human interaction.
- Real-time data from the temperature sensor and humidity sensor assists the DSS in maintaining the necessary temperature for crop growth. Water usage is controlled using a rainfall sensor.
- Precision agriculture, often known as smart farming as opposed to traditional farming, is one of the new trends.
- The farmer can get a current and overall view of their field, including the water level, temperature, and humidity of the farming soil, by using IoT with real-time data feed.
- These sensors have a threshold of their own, which aids in automation, which facilitates use and lessens workload.
- Using a network of sensors, a decision support system (DSS) can intelligently distribute water and fertilizer used in crop production based on the age of the plant and information gathered from the soil and surrounding environment.
- Designing statistical data structures utilizing the information from the sensors installed in the farms allows the farmer to increase productivity.
- We use a mobile application that can plot the data using several representations to examine all parameters data in a graphical style, view live and historical data, and save those data in a secure location.
- If the end user is in a remote location, a small area local network can be used to access the data. Cloud technologies can be used to implement the current technology so that data can be accessed remotely.

## **References**

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