SmartFarmer - IoT Enabled Smart Farming Application

IDEA 1:

ABSTRACT:

- To meet the growing demand of irrigation in India due to uncertain climatic conditions it is necessary to focus on sustainable irrigation approaches and improving the efficiency of the existing irrigation systems.
- The main purpose of this paper is to analyze the soil moisture level and to afford with auto irrigation to the crops.
- This system also senses Humidity, temperature and to detect if there are any obstacles in the concerned area and to reduce the human intervention (farmers) for complete automation of the system.

ADVANTAGES

- It allows farmers to maximize yields using minimum resources such as water, fertilizers, seeds etc. Automatic braking system
- It is cost effective method .

DISADVANTAGES

- Smart farming continually requires internet connectivity.
- This is the same as applying the brake and such an event could inadvertently cause the stroller to flip over

IDEA 2

ABSTRACT

- Farming is a major input sector for economic development of any country.

  Livelihood of majority of population of the country like India depends on agriculture

- In this project, it is proposed to develop a Smart Farming System that uses

  advantages of cutting edge technologies such as IoT, Wireless Sensor Network and

  Cloud computing to help farmers enhance the way farming is done

- Using sensors like temperature, humidity, moisture etc. are used to get

  information about the field and help farmers to take precise decisions on insights

  and recommendations based on the collected data.

ADVANTAGES

- Real-time Analysis of Soil quality
- Real-Time visibility on performance
- Real-Time Data and Production Insight
- Increased Quality of Production
- Accurate Farm and Field Evaluation

DISADVANTAGES

- Given any security measures, the system offers little power and can lead to various kinds of network attacks.
- It is very complicated to plan, build, manage and allow the broad technology to IoT framework.

IDEA 3

ABSTRACT

- Smart agriculture is an emerging concept, because IOT sensors are capable of providing information about agriculture fields and then act upon based on the user input.

- It is proposed to develop a Smart agriculture System that uses advantages of cutting edge technologies such as Arduino, IOT and Wireless Sensor Network.

- Monitoring environmental conditions is the major factor to improve yield of the efficient crops.

- The system has a duplex communication link based on a cellular-Internet interface that allows for data inspection and irrigation scheduling to be programmed through an android application. Because of its energy autonomy and low cost, the system has the potential to be useful in water limited geographically isolated areas.

ADVANTAGES

- Comes with plenty of features.
- Can be used from childbirth to preschool years.
- Is sturdy and very safe for the child.

DISADVANTAGES

- This is major challenge in adopting smart agriculture farming at large scale across the countries.

- The smart farming based equipments require farmers to understand and learn the use of technology.