SMARTFARMER-IOT ENABLED SMART FARMING APPLICATION

Submitted by

THANGAPRABAGARAN J (113219041123)

BARATH KUMAR S (113219041018)

THARUNKUMAR S (113219041126)

NITIN KUMAR L (113219041077)

BACHELOR OF ENGINEERING IN ELECTRONICS AND COMMUNICATION DEPARTMENT

PROBLEM STATEMENTS:

1.Even if the farmers adopt IOT technology they won't be able to take benefit of this technology due **to poor communication infrastructure**. Farms are located in remote areas and are far from access to the internet. A farmer needs to have access to crop data reliably at any time from any location, so connection issues would cause an advanced monitoring system to be useless.

2.In smart farming the communication protocol used for interaction within the smart farms, these protocols were effective for only **shortage distance coverage areas** and the the intelligent devices have been operated using batteries, this has reduced the operational hours of the edge nodes devices since they stop transmitting data once they run out of power

3.Since IOT devices interact with older equipment they have access to the internet connection, there is no guarantee that they would be able to access drone mapping data or sensor readouts by taking benefit of public connection. An enormous amount of data is collected by IOT agricultural systems which is **difficult to protect.** Someone can have unauthorized access IOT providers database and could steal and manipulate the data.

4.Equipment needed to implement IOT in agriculture is **expensive.** However sensors are the least expensive component, yet outfitting all of the farmers' fields to be with them would cost more than a thousand dollars. Automated machinery cost more than manually operated machinery as they include cost for farm management software and cloud access to record data. To earn higher profits, it is significant for farmers to invest in these technologies however it would be difficult for them to make the initial investment to set up IoT technology at their farms.