PROJECT SCOPE

Project Name: Smart Agriculture System Based On IOT.

1.Project Purpose Statement:

Agriculture is the science and art of cultivating plants. It was the key development in the rise of sedentary human civilization.

This project will make it possible for ranchers and farmers to collect meaningful data through IOT application. With the population growing rapidly, the demand can be successfully met if farmers implement agricultural IoT solutions in a prosperus manner. Smart agriculture system is an emerging concept, because IOT sensors are capable of providing information about agriculture fields and then act upon based on the user input. Monitoring environmental conditions is the major factor to improve yield of the efficient crops. Thus, it will help the farmers ease in their workflow.

2. Objectives:

- Implement modern science and technology in the agriculture sector for increasing the yield.
- Monitoring environmental factors that affects and complete solution to improve the yield of the crops
- To boost production quality and efficiency of farming products.
- Data-driven agriculture helps both grow more and better products.
- to design a IoT platform to manage operational data and events on farms and demonstrate as a service functionalities for increasing sustainability.

3. Background:

The practice of agriculture is also known as "farming", while scientists, inventors and others devoted to improving farming methods are also said to be engaged in agriculture. Subsistence farming is who farms a small area with limited resource inputs, and produces only enough food to meet the needs of his/her family. At the other end is commercial intensive agriculture, including industrial agriculture. Modern agriculture extends well beyond the traditional production of food for humans and animal feeds.
Farmers living in different areas have different climates, landscapes, microorganisms, plants and animals so they must adapt their growing practices to local conditions. However, all farmers rely on ecosystem services.To grow crops, it helps if farmers understand local growing conditions (such as knowing when the rainy season starts, which crops grow well together, soil moisture content).When the crops are growing, farmers must water (or rely on rainfall), weed and kill crop pests. Once the crops are mature, the farmers harvest them

4.Benifits Of Projects:

Our proposed system will be highly beneficial to farmers as farming accounts to more than 60% of occupation in our country. Also crop production will be increased if our system is used as it uses IOT & different sensors to gather information regarding irrigation outputs & also provides protection to crops. Also farmers can use remote technology to activate/deactivate electric motor which are powered by clean sources of energy thus keeping the environment clean.

5. Out of Scope

It does not provide information regarding damaged crops.

6. conclusion

Internet of things and cloud computing collectively makes a system that control agriculture sector effectively. This system will sense all the environmental parameters and send the data to the user via cloud. User will take controlling action according to that this will be done by using actuator. This asset allows the farmer to improve the cultivation in a way the plant need. It leads to higher crop yield, prolonged production period, better quality and less use of protective chemicals.