IoT Based Smart Crop Protection System for Agriculture

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PROBLEM STATEMENT:

Mr. Susairaj 65 years old man. He had an own farming land and do Agriculture for past 30 Years, as he is old now, he was not able to monitor crop manually, So he wish to monitor the field and protect the crops automatically using some parameters and to decide whether to water the crops or not, using remote application

Who does the problem affect?	Persons who do Agriculture.
What are the boundaries of the problem?	Peoples who Grow Crops and facing Issues of monitoring the irrigation and crops destroyed by animals and birds.
What is the issue?	If the crops provided with improper irrigation and destroyed by animals, this will damage the crops severely and then it brings the lots of loss to the farmers.

When does the issue occur?	Due to uncertain weather condition, it is difficult to decide whether irrigation is needed or not. When the crops are grown, then it can be destroyed by animals.

Where does the issue occur?	The issue occurs in agriculture practising areas, particularly in rural regions.
Why is it important that we fix the problem?	It is required for the growth of better-quality food products. It is important to maximise the crop yield.
What solution to solve this issue?	This issue could be solved by monitoring the soil parameters. It collects the data from the soil and made a decision whether the irrigation is needed or not. With the help of sensors, the animal's movement could be detected to prevent the crops from animals.

What methodology used to solve the issue?	Sensors, weather API and mobile application is used. Sensors are used detect the animals and birds' movement, and to detect the soil contents to make a decision whether to watering the plants or not.