

# SMART CROP PROTECTION SYSTEM

## PROBLEM STATEMENT

An intelligent crop protection system helps the farmers in protecting the crop from the animals and birds which destroy the crop. This system also helps farmers to monitor the soil moisture levels in the field and also the temperature and humidity values near the field. The motors and sprinklers in the field can be controlled using the mobile application. It also monitors the humidity and temperature of the soil in which we cultivating.

### 1. How does the crops get affected?

Crops gets affected due to the lack of protection system in the farm. The domestic and wild animals damage the crop because of the lack of protection and prevention methods. The crops also get affected when not providing the required monitoring systems

### 2. What are the boundaries of the issue?

Based on the information collected from the farmers, this issue leads to low productivity level, affects their capital costs, reduces the economic crisis and cause huge loss to the farmers.

### 3. What is the issue?

Crops in farms are many times ravaged by local animals like buffaloes, cows, goats, birds etc. This leads to huge losses for the farmers. It is not possible for farmers to barricade entire fields or stay on field 24 hours and guard it.

### 4. When does the issue occur?

Whenever there is any attack by animals occurs in crops on the agricultural field. When the monitoring systems were not fixed on the field then the soil moisture, humidity and the temperature lend of the surroundings could not be determined then that will lead for the occurrence of issue.

### 5. Where does the issue occur?

Mostly, this issue occurs in unsecured, not safe and in low maintenance fields where the animals get into the farm and make damages to the crops and destroy the place.

### 6. Why this is important that we fix the problem?

It is important to fix this problem as it ensures the safeguarding of the crop field and to increase the growth level of the crops by improving the food chain also it will increase the capital growth of the farmers and the state.