

Project Design Phase-I Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID06157
Project Name	Project – IOT Based Crop Protection system
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Crops in farms are many times ravaged by local animals like buffaloes, cows, goats, birds, and fire 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.,
2.	Idea / Solution description	To overcome the problem we propose automatic crop protection system from animals and fire. This is an arduino Uno based system using microcontroller. This system uses a motion sensor to detect wild animals approaching near the field and smoke sensor to detect the fire. In such a case the sensor signals the microcontroller to take action. The microcontroller now sounds an alarm to woo the animals away from the field as well as sends SMS to the farmer and makes call, so that farmer may know about the issue and come to the spot in case the animals don't turn away by the alarm. If there is a smoke, it immediately turns ON the motor. This ensures complete safety of crops from animals and from fire thus protecting the farmer's loss.
3.	Novelty / Uniqueness	In our project we find out two solution for two problems we used two sensor one is motion sensor and other is smoke sensor
4.	Social Impact / Customer Satisfaction	In our projects it alerts farmer by sending message as well as it makes call. I think it is one of the best idea to make a call because we can gain quick response and then if the field get fired means motor automatically on .so we think it is one of the best satisfaction for customer
5.	Business Model (Revenue Model)	It is cost effective . It improve the yield . It saves time for farmer. By using this crop protection system farmer can increase their income.

6.	Scalability of the Solution	It is user friendly. It is used everyone. It has more advantages
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