

Project Design Phase-I
Proposed Solution Template

Date	04 November 2022
Team ID	PNT2022TMID28957
Project Name	IOT based Smart crop protection system for agriculture
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 to stay 24 hours in the farm to sentinel the crops. With the help of the IoT devices, you can know the real-time status of the crops by capturing the data from sensors
2.	Idea / Solution description	Smart Farming has enabled farmers to reduce waste and enhance productivity with the help of sensors (light, humidity, temperature, soil moisture, etc.) .Further with the help of these sensors, farmers can monitor the field conditions from anywhere.
3.	Novelty / Uniqueness	The SCPS work on the battery so that this project can be easily portable and also we are add solar panels and converter modules this can help the battery to charge from solar energy. The IOT device is used to indicate the farmer by a message while someone enter into the farm and we are used SD card module that helps to store a specified sound to fear the animals. the announcement of the threshold rate will be sent to the cell number or to the website. The result will be generated on a catalog of the mobile of the person to take the necessary action.
4.	Social Impact / Customer Satisfaction	Improve the productivity, Save lives for Farmers/help to farmer for to protect his farm Increased production: the optimisation of all the processes related to agriculture and livestock-rearing increases production rates

5.	Business Model (Revenue Model)	Community based solution by FAO's solution through contract farming
6.	Scalability of the Solution	This project is smart crop protection system for protect the farm from animals as well as unknown person. This projects contents arduino UNO, Nodemcu, LCD display, PIR sensor, flame sensor, sd card module, solar panel, solar charges converter. This whole project is work on 12v dc supply from battery. We used solar panel to charge the battery.