

Project Design Phase-I
Proposed Solution Template

Date	25 September 2022
Project Name	Project – 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 the farms are many times devastated by the wild animals and low productivity of crops is one of the reasons for this. It is not possible to stay 24 hours in the farm to guard the crops. An intelligent crop protection system helps the farmers in protecting the crop from the animals and birds which destroy the crop. This system shall also include remote monitoring and control of pump to avoid the farmer to visit the farm in night time.
2.	Idea / Solution description	Safety of people and animals, Low cost solutions , lower dependency on power, Simple solution to suite the farmer community
3.	Novelty / Uniqueness	The device will also monitor the soil moisture levels, temperature, and humidity values and send them to the IBM IoT Platform . The image will be retrieved from Object storage and displayed in the web application. Users can also control the motors through web application
4.	Social Impact / Customer Satisfaction	Improve the productivity, save lives of farmers.
5.	Business Model (Revenue Model)	Community based solution by FAQ's Solution through contract farming
6.	Scalability of the Solution	Wild animals may easily cause significant yield losses and provoke additional financial problems. Another aspect to consider is that wild animal crop protection requires a particularly cautious approach. In other words, while utilizing his crop production, every farmer should be aware and take into consideration the fact that animals are living beings and need to be protected from any potential suffering.