

Project Design Phase-I
Proposed Solution Template

Date	09 october 2022
Team ID	PNT2022TMID14780
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)	<ul style="list-style-type: none">✓ Animals like wild boars, buffaloes, cows, elephant, monkeys, birds, etc. damages the crop a lot which results in loss of production and so of farmer.✓ It is very difficult for a farmer to keep an eye on the field every time.
2.	Idea / Solution description	<ul style="list-style-type: none">✓ The system uses raspberry pi, PIR sensor to detect animal, camera module to look on animal, GSM module to send alert message to farmer, and a buzzer to divert the animals.✓ This system ensures the safety of farm and decreases the loss of farmers
3.	Novelty / Uniqueness	<ul style="list-style-type: none">✓ Hence, to overcome this issue, the designed system produces the sound to scare the animals, so that animals will automatically ran away.✓ The main aim is to prevent the loss of crops and to protect the area from intruders and wild animals which poses a major threat to the agriculture areas.✓ The GSM module is used to make a call to the farmer to alert him.✓ Therefore, the designed system is affordable and useful to the farmers. The designed system won't be harmful to animals and persons and it protects the farm areas. The system is capable to protect the farm in day and night with IOT monitoring

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ✓ The designed system won't be harmful to animals and persons and it protects the farm areas. The system is capable to protect the farm in day and night with IOT monitoring ✓ ✓ This system ensures the safety of farm and decreases the loss of farmers
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ✓ . It helps farmers to monitor a certain area and prevent theft and also provides proof of evidence. In the case of farmlands or agricultural lands surveillance is very important to prevent unauthorized people from gaining access to the area as well as to protect the area from animals
6.	Scalability of the Solution	<ul style="list-style-type: none"> ✓ the designed system is affordable and useful to the farmers.