

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID11461
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)	In recent decades, the livelihood of many farming communities in the country has come under threat from the attacks of wild animals on crops. Heard of stray animals often enter to fields and destroy the crops which result in loss of crops for farmers. The currently available systems use a different type of methods like using loud noises, alarming conditions to prevent the animals from entering or destroying the crop field. In some systems, the animals are only detected using PIR sensors and notification is sent to the farmers. These systems are not reliable with different types of animals.
2.	Idea / Solution description	The protection from wild animal attack is done by placing sensors in the living unsafe areas. In our proposed work, PIR sensor is used.
3.	Novelty / Uniqueness	This project will be more helpful for farmers.Can be monitored and controlled from everywhere by using smart phones & WiFi once the set up is done . System can be done even in urban areas
4.	Social Impact / Customer Satisfaction	Agriculture is the major component of a developing country like India. The fundamental aim of agriculture is to lift stronger and more fruitful crops and plants and to help them for their growth by improving the soil and supplying the water. Now a days many people prefer organic products through which it would not harm the human ecosystem.

5.	Business Model (Revenue Model)	<p>IoT-based crop monitoring systems help to reduce the demand for pesticides, the costs involved, and the harmful impact of these chemicals on the farmer's health and environment.</p> <p>Better predictability and management: With the help of real-time farming monitoring and data analytics, predicting accurate harvest dates and ensuring the safety of crop production have become much easier for the farmers. Moreover, farmers have better control over the agricultural process.</p>
6.	Scalability of the Solution	<p>To extend or shrink the database management for crops and to provide cent percent efficient product in terms of both hardware and software components.</p>