

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID21789
Project Name	IOT based Smart Crop Protection System for Agriculture
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Crop damage cost by animal and bird reduces the crop yield. Crops are mainly damaged by the local animals like buffaloes, cows, pigs, goats.</p> <p>Wild animals are the special challenge for the farmers throughout the world. Farmers with large area of agricultural land find it very tedious to irrigate their land.</p>
2.	Idea / Solution description	<p>An animal detection system to detect the presence of animals and it offers a warning and diverts the animal without any harm.</p> <p>The system will continuously check for any animal to enter the field. Sensors are used to detect animal movement and to give signal to the controller.</p> <p>Further the animals are being diverted by generating sound and signals.</p>
3.	Novelty / Uniqueness	<p>The signal is being transmitted to the GSM (Global System for Mobiles) and instantly give farmers warning.</p> <p>The difficulty and the availability to spot just in-case the animals do not show off by alarm</p>
4.	Social Impact / Customer Satisfaction	<p>The complete safety of crops was ensured by the system from animals thus protecting the animal farmers loss.</p>

5.	Business Model (Revenue Model)	Gives raise to high yield of production. Farmers need not to stay on the field for 24 hours and protect it.
6.	Scalability of the Solution	This technology can be widen based on the area of the field that is used for protection.