

## Project Design Phase-I Proposed Solution

Project Name	IOT Based Smart Crop Protection System for Agriculture
Team ID	PNT2022TMID03994
Maximum Marks	2 Marks
Date	1 November 2022

S.NO.	PARAMETER	DESCRIPTION
1.	Problem Statement	Crops are attacked by the animals and birds often. So, the farmers decide to leave the areas barren due to such frequent animal attacks. Another major problem faced by the farmer is their dependency on nature and poorly maintained irrigation system. Current agricultural practice are neither economically nor environmentally sustainable and yields for many agricultural commodities are low. Poorly maintained irrigation system and almost universal lack of good extension service are among the factor responsible. This lead to poor yield of crops and significant financial loss to the owners of the farmland.
2.	Idea/ Solution description	Here we propose an automatic crop protection system from animals. This is a microcontroller-based system. This system use a motion sensor to detect wild animals approaching near the field. In such a case the sensor signals the microcontroller to take action.
3.	Novelty/ Uniqueness	Using IOT and embedded technology, crops are monitored and maintained automatically.
4.	Social Impact/ Customer satisfaction	Farmers get benefitted using this proposed system since this helps in remote monitoring and at the same time maintains the fields.
5.	Business Model	Prototype type helps in efficient growth of crops and also prevents financial losses and yields high performance.
6.	Scalability of the solution	With the help of solution sensor and transmission of data through wireless sensor network, the data is processed in the cloud and operation is performed by robots.

