

## PROJECT DESIGN PHASE I

### PROPOSED SOLUTION

Date	10 November 2022
Team ID	PNT2022TMID43224
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Develop system for predicting potential pest, disease, insect attacks on crop and yield prediction of crops
2.	idea\solution description	This system uses a motion sensor to detect wild animals approaching near the field and smoke sensor to detect the fire.
3.	Novelty / Uniqueness	Unlike genetic resources found in the natural world, agricultural crops are truly a human mediated form of biodiverist.
4.	Social Impact / Customer Satisfaction	Agriculture creates both jobs and economic growth. Communities also hold agricultural-based events, such as crop and livestock judging competitions and 4-H exhibits at their county fair. Many communities benefit from having Famers Markets

		where smaller farmers can interact directly with consumers.
5.	Business Model (Revenue Model)	On farms, IoT allows devices across a farm to measure all kinds of data remotely and provide this information to the farmer in real time. IoT devices can gather information like soil moisture, chemical application, dam levels and livestock health – as well as monitor fences, vehicles and weather.
6.	Scalability of the Solution	In future it can be enhanced by sending message directly to the fire department in case there is a mass wild animals attacks the fields. The controlling and monitoring of the soil moisture level can be automated by taking care of the crops in case of low moisture level, without notifying the farmers