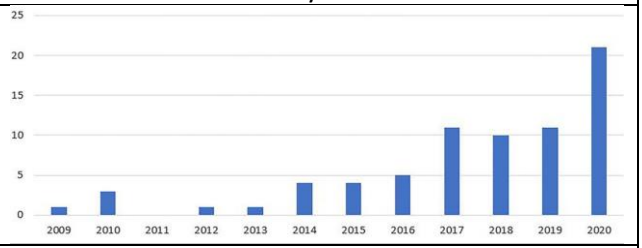
Project Design Phase-I
Proposed Solution Template

Date	31 october 2022
Team ID	PNT2022TMID48639
Project Name	Project – IOT Based 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)	Farmers need to deal with many problems including how to cope with climate change, soil erosion and biodiversity loss. Creating a smart automatic system will benefit the farmers in many different ways.
2.	Idea / Solution description	The monitoring is done by placing sensor in the crop field. The temperature, humidity , soil moisture sensors are used to sense the various parameters of the soil and based on soil moisture value land get automatically irrigated by ON/OFF. The sensor parameters and motor status will be displayed on android application.
3.	Novelty / Uniqueness	1.Crop protection 2.Soil testing and its Quality 3.Real-Time analysis of soil demand 4.Sensor based field 5.Intelligent irrigation system
4.	Social Impact / Customer Satisfaction	1.Intelligent data collection 2.High crop productivity 3.Reduced impact on natural ecosystem 4.Less runoff chemicals into rivers and ground water 5.Increased worker safety
5.	Business Model (Revenue Model)	
6.	Scalability of the Solution	Scalability of crop monitoring is that it can detects motion reliably in indoors as well as in day or dark, consumes less energy (0.8w–1.0w) and communication has become quicker. It cannot be protected against harsh, dirty, or electrically noise environment.