

## Project Design Phase-I

### Proposed solution

|               |   |
|---------------|---|
| Date          | 19 September 2022   |
| Team ID       | PNT2022TMID37200  |
| Project Name  | <b>IoT Based Smart Crop Protection System for Agriculture</b> |
| Maximum Marks | 2 Marks   |

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | An intelligent crop protection system helps the farmers in protecting the crop from the animals and birds which destroy the crop. This system also helps farmers to monitor the soil moisture levels in the field and also the temperature and humidity values near the field. The motors and sprinklers in the field can be controlled using the mobile application. It also monitors the humidity and temperature of the soil in which we cultivating. |
| 2.    | Idea / Solution description              | <ul style="list-style-type: none"><li>➤ Separate equipment is used to prevent animals and birds from destroying the farm.</li><li>➤ Temperature, humidity and moisture of the soil is monitored regularly and motors and sprinklers in the field are controlled using mobile application of the farmer.</li><li>➤ The respective sensors and methods to prevent the animal accessibility will be set-up.</li></ul>                                       |
| 3.    | Novelty / Uniqueness                     | <ul style="list-style-type: none"><li>➤ Url link of the animal pictures those found on the field is send to the farmers mobile.</li><li>➤ In this project, the users can control the motors through web applications, which is developed to visualize the soil moisture, temperature and humidity values.</li><li>➤ Application will be used friendly.</li></ul>   |
| 4.    | Social Impact / Customer Satisfaction    | <ul style="list-style-type: none"><li>➤ Installation and set-up of the system is designed efficiently.</li><li>➤ Fear of crop protection will be overcome by the system.</li><li>➤ User friendly for illiterate farmers.</li><li>➤ The farmers need not be near the farm always.</li></ul>   |
| 5.    | Business Model (Revenue Model)           | <ul style="list-style-type: none"><li>➤ The price of the system is marketed as per the hardware setup cost.</li><li>➤ The value of the mechanism is explained in every platform and importance should be known to everyone.</li></ul>  |
| 6.    | Scalability of the Solution              | <ul style="list-style-type: none"><li>➤ Inspite of some natural interruptions in the farm, the readings will take down effectively.</li></ul>  |