

## Ideation Phase

### Define the Problem Statements

Date	19 September 2022
Team ID	PNT2022TMID07140
Project Name	IOT Based Smart Crop Protection System for Agriculture
Maximum Marks	2 Marks

#### Customer Problem Statement Template:

Problem Statement 1	
<b>Focused Area</b>	<b>Digital Farming</b>
<b>Problem statement including use of ICT</b>	Develop affordable app-based solution for Soil health monitoring and suggest which crop to be sown based on it. (Technology Bucket: IoT, AI, ML etc.)
<b>Expected Output</b>	Create app-based solution to detect soil parameters like moisture content, temperature, relative humidity, nutrient, Ph, CEC, NPK etc. <b>Bonus Objective:</b> Provide remedies & alerts on soil deficiencies like Watering for low Moisture level, Fertilizers for Nutrient deficiencies etc.
<b>How Does it help</b>	Currently farmers follow Traditional Crop yielding pattern and irrespective of soil condition, farmers take routine crops. Farmers irrespective of whether soil nutrient requirement uses blanket fertilizers for crop. Because of these issues, losses in crop yielding and soil health gets affected. With the help of solution, farmer can plan which crop to take based on soil condition and plan quickly possible remedies for soil deficiencies.

Problem Statement 2	
<b>Focused Area</b>	<b>Smart Techniques for Crop Protection &amp; Management</b>
<b>Problem statement including use of ICT</b>	Develop smart & affordable solution to protect crops from wild animals. (Technology Bucket: IoT, UAV, AI, GPS etc.)
<b>Expected Output</b>	With the help of remote sensing technologies develop crop protection solution from wild animal attacks. Provide alerts on any crop damage in case animals destroy crops.
<b>How Does it help</b>	In Vidarbha region, Main Cash Crops such as Pigeon Pea, Green Gram, Black Gram, Jowar, Cotton, Soybean etc. present and are badly affected by wild animals like Deer, Rohi (Neel Gai), wild Pigs, Peacock etc. In few districts in Vidarbha crop loss is more than 35%. Main Wild animals attacking crops in region are Akola, Buldhana Washim etc.