

**Ideation Phase**  
**Problem Statements**

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| Date          | 17 October 2022                                       |
| Team ID       | PNT2022TMID30597                                      |
| Project Name  | Smart Farmer-IoT Enabled<br>Smart Farming Application |
| Maximum Marks | 2 Marks   |

**Customer Problem Statement:**

A farmer with a background in engineering. Together with his father, he has ventured into agriculture. Since he is just starting out in farming, he needs someone to help him through the first few years. He also wants to incorporate technology into farming to cut down on work and labour, increase productivity, produce more, and get ideas for how to improve the soil and plant the next crop. He is actively looking into a few agricultural products that can help him. Many beginning and experienced farmers face these issues.

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| Who does the problem affect?                 | Persons who do Agriculture   |
| What are the boundaries of the problem?      | Labour cost, Cope with climate change, soil erosion and biodiversity loss.   |
| What is the issue?                           | Loss of agricultural land and the decrease in the varieties of crops and livestock produced.   |
| When does the issue occur?                   | Increasing pressures from climate change, soil erosion, its mostly starts from first day farming   |
| Why is it important that we fix the problem? | It is required for the growth of better-quality food products. It is important to maximize the crop yield. It is important to maintain soil richness   |
| What solution to solve this issue?           | An application is introduced to know about various data about their land remotely, where they can schedule some events for a month or a day. It also provides suggestions to users based on the crop they planted. |

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| What methodology used to solve the issue? | Some search results info from internet based on crop planted. Arduino microcontroller to control the process and various sensors for data. An alert message using GSM. An app built using MIT App Inventor. |
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**Example**  
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