**PROJECT DESIGN PHASE-I** - **SOLUTION FIT TEMPLATE**

**Project Title**: IoT Based Smart Crop Protection System for Agriculture

**Team ID:** PNT2022TMID20093

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|  | **1.Customer Segments:**  Farmer is our customer. | **6.Customer Constrains:**  Low availability of improved or hybrid seed, lack of seed multiplication capacity, lack of irrigation and water constraints. | **5.Available Solutions:**  Install new or existing internet lines such as wifi and fiber optics in our location.  Invest more in farm productivity.  Adoption of new technologies better crop production. |  |
|  | **2.Job-to-be-done/problems:**  Protecting crops from animals by using PIR sensor. | **9.Problem Root Cause:**  climatic change, pollutants, irrigation problem, soil degradation, waste. | **7.Behaviour:**  The farmers must to know how to process seeds and prepare fields for planting. It can be done by better analysis of soil and plant conditions and provide actuate information about weather conditions. |  |
|  | **3.Triggers:**  Feeding a growing population, providing a livelihood for farmers, protecting the environment. | **10. Solution:**  We can know the real-time status of the crops by capturing data from sensors, using predictive analysis, we can make better decisions related to harvesting. It uses modern technology to increase quantity and quality of agriculture products. | **8.Channels of Behaviour:**  **Online:**  By creating apps farmers can directly ask the question and query to the agriculture experts also they can watch their videos related to new technology this helps in improving crops and raising harvesting.  **Offline:**  By supporting local farmers, people will not only save money within the community and improve the economy in the area but they will also get better quality products at lower prices. |  |
|  | **4.Emotoins:Before/After:**  Frustrated, disappointed, unfulfilled, anger, fear. | | |  |