**Project Design Phase-I**
**Proposed Solution Template**

| Date | 02 October 2022 |
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| Team ID | PNT2022TMID05237 |
| Project Name | Estimate The Crop Yield Using Data Analytics |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

| S.No. | Parameter | Description |
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| 1. | Problem Statement (Problem to be solved) | • Crop production in India is one of the most important sources of income and India is one of the top countries to produce crops.<br>• Big data provides farmers granular data on rainfall patterns, water cycles, fertilizer requirements, and more. This enables them to make smart decisions, such as what crops to plant for better profitability and when to harvest. The right decisions ultimately improve farm yields. |
| 2. | Idea / Solution description | • Data analytics can help farmers monitor the health of crops in real-time, create predictive analytics related to future yields and help farmers make resource management decisions based on proven trends. Reducing waste and improving profits |
| 3. | Novelty / Uniqueness | • To increase quality and yields, it is crucial to understand the current nutrient levels of the soil to be able to ascertain which areas require improvement. |
| 4. | Social Impact / Customer Satisfaction | • Farmers are always looking for innovations and information to help them boost production and maximize returns on their products. |

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| | | •    The rise of digital technology has offered access to a wide range of opportunities for more informed and accurate actions in the field.<br>•    As a result, big data analytics are proving to be a real game-changer in the industry.<br>•    With the increased availability of data, farmers have more tools than ever at their disposal, offering numerous benefits. Knowledge is not only powerful, but it can make or break an agricultural producer's success. |
| 5. | Business Model (Revenue Model) | •   the agricultural entrepreneur to make easier and better decisions based on information. This work aims to sensitize farmers to the importance of adopting data-driven solutions to address the needs of this sector. |
| 6. | Scalability of the Solution | •   Increases in agricultural productivity lead also to agricultural growth and can help to alleviate poverty in poor and developing countries, where agriculture often employs the greatest portion of the population. As farms become more productive, the wages earned by those who work in agriculture increase. |