**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 22 September 2022 |
| Team ID | PNT2022TMID30005 |
| Project Name | Estimate The Crop Yield Using Data Analytics |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | **India is generally an agricultural country.**  **Now a days the most important emerging field in the real world is agriculture and it is the main occupation and backbone of our country. Recent developments in Information Technology for agriculture field has become an interesting research area to predict the crop yield.**  **Crop yield prediction is the methodology to**  **predict the yield of the crops using different parameters like rainfall, temperature, fertilizers, pesticides and other atmospheric conditions and parameters** |
|  | Idea / Solution description | * **Crop production in India is one of the most important sources of income and India is one of the top countries to produce crops.**   **• Where Digital Farming and Precision Agriculture allow precise utilization of inputs like seed, water, pesticides, and fertilizers at the right time for the crop for maximizing productivity, quality, and yields.**  **• Most of farmers practice traditional farming patterns to decide on crops to be cultivated in a field. Based on analytics farmers can take better decisions for healthy crop production.** |
|  | Novelty / Uniqueness | **The main objective is collecting agricultural dataset which can be used to analyzed for useful crop yield forecasting. To predict the crop yield with the help of data mining technique, advanced methods can be introduced to predict crop yield and it is also helps the farmer to choose the most suitable crop, thereby improving the value and gain of the farming area** |
|  | Social Impact / Customer Satisfaction | * **Extreme weather events, such as periods of high temperature, heavy storms, or droughts, can severely disrupt crop production.** |
|  | Business Model (Revenue Model) | **\*Increasing innovation and productivity.**  **\*Reducing waste and improving profits.** |
|  | Scalability of the Solution | Frontiers | The Applicability of Big Data in Climate Change Research: The  Importance of System of Systems Thinking  Big Data Analytics in Agriculture Market Trending Factors and Growth  Drivers Impacting Worldwide by 2022-2028 - gerona  Regression Method in Data Mining Simplified 101 |