**Project Design Phase-I**

**Proposed Solution**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID14038 |
| Project Name | Exploratory Analysis of Rain Fall Data In India For Agriculture |
| Maximum Marks | 2 Marks |

**Proposed Solution:**

Project team shall fill the following information in proposed solution.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Farmers face the daunting task of gathering their harvest and taking the produce to market after excessive rainfall harmed the crops. Accurate and timely rainfall prediction is expected into inject a new intervention phase to the affected sectors afflicted by the negative propensities of rainfall extremes. Heavy rainfall can have impacts like damage or destruction of crops, so a tool is required that can predict the rainfall more accurately so that it helps farmers efficiently utilise crop production and water resources |
|  | Idea / Solution description | Using ML techniques like Classification Algorithm (Decision tree, KNN) will help in conducting a study of Rainfall data and predicting Rainfall rate. |
|  | Novelty / Uniqueness | We plan to add a new feature which helps the farmers to plant right crops in right time i.e. rainfall prediction for a particular duration. |
|  | Social Impact / Customer Satisfaction | A good balance rainfall prediction helps proper irrigation. And it can lead to faster growing plants, which can cut down on germination time and the length between seeding and harvest. |
|  | Business Model (Revenue Model) | Using technology and boosting agriculture will help in rising food production which will lead to growth in economy and profitable exports. India is country strongly depends on agriculture. It accounts to 17% to GDP and provides employment to 60% of population. |
|  | Scalability of the Solution | Citizens, Farmers, Vegetable sellers. |