## Project Design Phase-I Proposed Solution

| Team ID   | PNT2022TMID08893 |  |
|---|------------------|--|
| Project Name Estimate the Crop Yield using Data Analytics |                  |  |
| Maximum Marks   | 2 Marks          |  |

| S.NO. | PARAMETER                                   | DESCRIPTION   |
|-------|---|---|
| 1.    | Problem Statement<br>(Problem to be solved) | The farmers are facing difficulties in analyzing the demand in market and soil quality analysis to achieve high crop yield through technology. A farmer should predict climatic conditions, decide what to grow & when to grow, should know the overall crop yield turnover and must be able to be sure of the crop yield in spite of the environmental and other parameters. |
| 2.    | Idea / Solution description                 | Analysis of important visualization using the previous years' data, creating a dashboard and by going the datasets to obtain most of the insights of Crop production in India. This helps them out to overcome loss in farming and business.  |
| 3.    | Novelty / Uniqueness                        | we can analyze, visualize data and give the farmers the option to choose which plant/crop to cultivate in which period of time/season. A one-stop solution for understanding and to get an insight about the previousyears' data related to the harvest and cultivation.  |
| 4.    | Social Impact / Customer<br>Satisfaction    | Availability to all the farmers who needhelp and as this is a simple approach, understanding issues will not arise.   |
| 5.    | Business Model (Revenue<br>Model)           | We can increase/enhance crop production and other raw materials. Also, Increase in productivity will result in increase of Revenue for the farmers.   |
| 6.    | Scalability of the Solution                 | With the data visual reports, farmers will be able to cultivate crop according to the area, climate, soil and other features that impact the crop yield and hence enhancing the result. Hence, the solution can be easily scaled to handle data needs, traffic and increased number of users.   |