Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID54302
Project Name	ESTIMATION OF CROP YIELD USING DATA ANALYTICS
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Agriculture is one of the most important sources of income which eventually affect everyone's life. Indian agriculture is affected by various circumstances. This may directly or indirectly affect the life of a farmer. Feeding the growing population, loss of agricultural land and low production in the varieties of crops and livestock may be the root cause.
2.	Idea / Solution description	Increase in crop yield, better productivity of crops through effective techniques and efficient methods. A comparison of the subsequent crop yield predictions can be made with the entire set of existing available data and can be dedicated to suitable approaches for improving the efficiency of the proposed technique.
3.	Novelty / Uniqueness	Increase in knowledge of agriculture in terms of crop production from sowing the seeds till harvesting. It gives an overview on the total crop yield before even sowing the seed from the previous datasets.
4.	Social Impact / Customer Satisfaction	Agriculture sector contributes approximately 14% of the country's total Gross Domestic Product. Even though the agriculture sector plays an important role in the Indian Economy, there is a constant drop in this sector compared to the other sectors.
5.	Business Model (Revenue Model)	Regression analysis: we use this method for mainly two purposes. One is to predict the values of the dependent variables for individuals or to estimate the effects of few explanatory variables on the dependent variables. Regression analysis is a powerful statistical method which allows us to analyse the relationship between two or more variables of our own. The dependent and independent variables show a linear relationship between the slope and the intercept.

6.	Scalability of the Solution	Data analytics help the farmers to predict the market conditions, climatic changes,usage of fertilizers, factor-in inflation, and other variables that will help them plan the entire process even before sowing the seeds.All of this information assists farmers in making accurate and effective decisions that maximize the productivity