

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

Date	18 October 2022
Team ID	PNT2022TMID20403
Project Name	Estimate the Crop Yield using Data Analytics
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>It is a well-known fact that in India, agriculture employs the bulk of the population (about 55%). There are obstacles to expanding crop production in India because of weather changes. The task of achieving desired crop yield goals has grown difficult.</p> <p>A vast amount of agricultural data is created continuously. As a result, the big data era has brought with it agricultural data. Utilizing electronic devices for data collection benefits from smart technologies.</p>
2.	Idea / Solution description	<p>Using technologies like data analytics and machine learning, we will analyse and mine this agricultural data in our project to obtain relevant results that will be provided to farmers for a higher crop output in terms of productivity and efficiency</p> <p>Also to increase agricultural productivity and decrease the waste.</p>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>Identifying appropriate problem or conditions and soil types for each crop by visually showing the relationship between numerous parameters.</li><li>Improved and accurate display</li></ul>
4.	Social Impact / Customer Satisfaction	<p>The customer will be able to identify the perfect circumstances for growth so they may create strategies to increase crop yield and revenue.</p>

5.	Business Model (Revenue Model)	Numerous factors, including soil fertility, climate, rainfall, and others, will have an impact on crop output, which will have an impact on revenue. Crop yields and income are increased through examination of each factor's ideal conditions..
6.	Scalability of the Solution	Crop yield can be boosted by using the knowledge gained through the examination of many parameters, such as weather patterns and soil types.