

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

Date	30 September 2022
Team ID	PNT2022TMID25946
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)	With the changing of climate, without caring much about soil replenishing and due to several crop diseases, agriculture faces increasing problems leading to considerable yield losses of crops.
2.	Idea / Solution description	Crop yeild prediction is of great importance to global food production. The four most important factors that influence crop yield are soil fertility, availability of water, climate, and diseases or pests.Estimation of these, will help to increase the crop production. An accurate crop yield prediction model can help farmers to decide on what to grow and when to grow.
3.	Novelty / Uniqueness	Great dashboards are clear, intuitive, and customizable. They display information clearly and efficiently with several visualizations. They show trends and changes in data over time. The most important widgets and data components are effectively presented in a limited space.
4.	Social Impact / Customer Satisfaction	Crop yield simulations help to understand the cumulative effects of water and nutrient

		<p>deficiencies, pests, diseases, the impact of crop yield variability, and other field conditions over the growing season.</p> <p>Accurate yield predictions not only help farmers make informed economic and management decisions but also support famine prevention efforts.</p>
5.	Business Model (Revenue Model)	<p>Estimation of crop yield is created as a dashboard. This will be utilized by food production companies and beverages. By this way, the product will fetch more revenue to the organisation.</p>
6.	Scalability of the Solution	<p>A dashboard is created. And this will be useful not only for farmers to increase crop production, but also for Department of Agriculture and Farmers Welfare to make better decisions and also for agricultural students to understand better about agriculture.</p>