Project Design Phase-I
Proposed Solution Template

Date	03 november 2022
Team ID	PNT2022TMID30068
Project Name	Project – Exploratory analysis of rainfall data In agriculture
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)	• Heavy and irregular rainfall can have many impacts like destruction of crops and farmer lands • Limited food access • Unsustainable Agricultural practice
2.	Idea / Solution description	• Proper analysis of amount of rainfall helps to prevent crop losses • By calculating the product of the rainfall intensity and the duration (i.e., the rainfall depth) for each rainfall duration, the cumulative rainfall distribution can be derived • It is important to exactly determine the rainfall for effective use of water resources, crop productivity and pre-planning of water structures
3.	Novelty / Uniqueness	• Application uses IBM Watson to predict the future outcomes • With the help of Machine Learning we can predict rainfall by extracting the hidden patterns from historical weather data • The speed and accuracy of AI technologies when it comes to processing data in extreme weather conditions that scientist will have a better chance of alerting people in danger
4.	Social Impact / Customer Satisfaction	• It is very useful to take decision for farmers • It prevents from the damage of crops • Irrigation method is improved with the help of weather forecasting
5.	Business Model (Revenue Model)	• Implementing this method can help the farmers to cultivate the crops based on the water need • This method can prevent the wastage of crops • By predicting the rainfall in correct manner, it helps the farmer to cultivate seasonable crops and have a better gain

6.	Scalability of the Solution	• This will help the major Agriculture based company to maximize their growth efficiency, save resources and optimize their production • It will predict the amount of rain in a specific well or division in advance by various regression technique • It will help to make a proper plan