Project Design Phase-I
Proposed Solution
Template

Date	30 september2022
Team ID	**PNT2022TMID00722**
Project Name	**Exploratory Analysis of Rain Fall Data in India for Agriculture**

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• Climate is a important aspect of human life. So, the Prediction should accurate as much as possible. In this paper we try to deal with the prediction of the rainfall which is also a major aspect of human life and which provide the major resource of human life which is Fresh Water. • Now climate change is the biggest issue all over the world. Peoples are working on to detect the patterns in climate change as it affects the economy in production to infrastructure
2.	Idea / Solution description	• In rainfall also making prediction of rainfall is a challenging task with a good accuracy rate. Making prediction on rainfall cannot be done by the traditional way, so scientist is using machine learning and deep learning to find out the pattern for rainfall prediction. • Provides extra support to maintain the agriculture.
3.	Novelty / Uniqueness	• This application is useful for the beginners in agriculture. • Seed maturity selection features are available.
4.	Social Impact / Customer Satisfaction	• Different types of crops can be planted for good health. • Helps in producing healthy crops and good fields.

5.	Business Model (Revenue Model)	• This comparative study is conducted concentrating on the following aspects: modeling inputs, Visualizing the data, modeling methods, and pre-processing techniques. The results provide a comparison of various evaluation metrics of these machine learning techniques and their reliability to predict rainfall by analyzing the weather data. We will be using classification algorithms such as Decision tree, Random forest, KNN, and

		xgboost.
6.	Scalability of the Solution	• When we predict rainfall correctly,it helps growth of crop and yielding will be better.