**PROPOSED SOLUTION**

**EXPLORATORY ANALYSIS OF RAIN FALL DATA IN AGRICULTURE**

**PROBLEM STATEMENT:**

India is an agricultural country and secondary agro based market will be steady with a good monsoon. The economic growth of each year depends on the amount of duration of monsoon rain, bad monsoon can lead to destruction of some crops, which may result in scarcity of some agricultural products which in turn can cause food inflation, insecurity and public unrest. In our analysis we are trying to understand the behavior of rainfall in India over the years, by months and different subdivisions.

**SOLUTION DESCRIPTION:**

First we will see the distribution of rainfall over months. We will see what exactly is monsoon, different types of monsoon winds in India, which subdivisions of India receives rainfall from which monsoon winds and why only particular subdivisions receive highest rainfall during this monsoon season.So basically, during the summers, the Indian subcontinent heats up more as compared to the Indian ocean as the sun is directly over the landmass. So we receive low rainfall during summer season. So with all these information following steps to be followed.

* Collecting the dataset
* Comparing current data with previous data
* Analysis and summarizing of when the rainfall occurs.

**UNIQUENESS/NOVALITY:**

* Advanced app features.
* Cost of maintenance is easy.
* Regular updates of data regarding rain.
* Easy investigation of data with graphical representation.
* Easy analysis of rainfall for stabilizing the crop production.

**SOCIAL IMPACT/CUSTOMER SATISFACTION:**

* Determine how fast a crop will grow from seed including when it will be ready for harvesting.
* With the rainfall data we can forecast tropical cyclones.
* We can monitor flood and drought conditions.
* We can make measures to store the fresh water earlier.
* Easy for farmers for cultivating the crops.

**BUSINESS MODEL (FINANCIAL BENEFIT):**

The valuable information can save you from wasting water and money, while also preventing you from over-saturating the ground. A rain measuring instrument can also help you monitor if your plants and grass are getting too much water if you notice unusually large amounts of rainfall over a period of time.

**SCALABILITY OF SOLUTION:**

This application is used to track the rainfall data for agricultural yields .So that, it can increase the food production and we can built the storage for rainfall for increasing water supply.