Exploratory Analysis Of Rainfall Data In India For Agriculture

Problem Statement:-

India is an agricultural country and the secondary agro-based market will be steady with a good monsoon. India is export a large amount of Rice to world markets and the economic growth each year depends on agricultural products but sometimes bad monsoons can lead to the destruction of some crops. The bad monsoon will affect farmers and agriculture growth. In our analysis, we are trying to understand the rainfall in India over all the 10 years and current months, by the years and different subdivisions. The data gives information on observations and weather forecasts to farmers through Reports. This information is required to plan farming activities, appropriate use of irrigation and undertake sowing decisions in an optimal fashion and less loss of farmer before prediction.

Approach:-

- The Indian government weather website is provided by the overall data likes (past years data, current days).
- Weather forecasting is the application of science and technology to predict the state of the atmosphere for a given location and they are made by collecting quantitative data.
- Long range forecast (temperature and rainfall) is updated every month Monthly temperature anomaly (warmer or cooler than normal) and monthly percentage rainfall departure from the climatological mean for the whole of India are also provided.

Benefits:-

- Rainfall prediction given by Post-harvest helped farmers to save their produce The accuracy of medium-range forecasts was quite good.
- For all lead time of medium-range forecasts (10 years data, monthly data8-11 days,) the forecast was highly successful.