LITERATURE SURVEY
EXPLORATORY ANALYSIS OF RAINFALL DATA IN INDIA FOR AGRICULTURE

INTRODUCTION:

Rainfall has been a major concern these days. Weather conditions have been changing for time being. Rainfall forecasting is important otherwise, it may lead to many disasters. Irregular heavy rainfall may lead to the destruction of crops, heavy floods that can cause harm to human life. It is important to exactly determine the rainfall for effective use of water resources, crop productivity, and pre-planning of water structures.

SIGNIFICANCE:

- Though the reduction of rainfall activity during the entire summer monsoon season leads to reduction in crop yields.
- Monsoon is one of the most important seasons for farmers for a country so dependent on its agroindustry.

- Most of the Indian agriculture land is irrigated by the southwest monsoon. Crops such as a wheat, rice, pules which are a staples in Indian diets, need heavy rainfalls to grow. Hence we must care about the rainfall.
- 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.

OVERVIEW:

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.

TECHNIQUES USED:

We will be using classification algorithms such as Decision tree, Randomforest, KNN, and xgboost. We will train and test the data with these algorithms. Data set is collected.

After that analysis the collected data. Then do the exploratory analysis. Classify the data and the testing was done. Some of the Machine learning library are imported.

Analysis of classification algorithm at the forest area, coastal area. Then finally rainfall analysis was identified.

Literature survey:

Multiple facters are used for analysis. Data science is the major part this project. Machine Learning algorithms are used classification .

For this purpose classification and regression algorithms are used. Various data was collected from different resources.

REFERENCE:

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