Title : Exploratory Analysis Of RainFall Data In India For Agriculture

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PROBLEM STATEMENT:

- ❖ 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. Fresh water is always a crucial resource of human survival – not only for the drinking purposes but also for farming,

- ❖ Making a good prediction of climate is always a major task now a day because of the climate change.

- ❖ 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. So as 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.

- ❖ A bad rainfall prediction can affect the agriculture mostly framers as their whole crop is depend on the rainfall and agriculture is always an important part of every economy. So, making an accurate prediction of the rainfall somewhat good.

ABSTRACT:

The present investigation included rainfall probability analysis of previous 34 years rainfall data (1980-2013) with the prime objective for prediction of annual rainfall of Allahabad district. The observed values were computed by weibulls formula (1939). The annual rainfall values were estimated by proposed prediction models Viz. Gumbel and Log Normal (Chow 1964). The rainfall data in the above distribution and their corresponding rainfall events were estimated at 2.9, 11.4, 20.0, 40.0, 51.4, 60.0, 80.0 and 97.1 percent probabilities level. The goodness of fit was tested by Chi-square test. It clearly indicates that the Gumbel distribution was found to be best model for predicting the annual rainfall (mm). While Log Normal distribution is fairly close to the observed annual rainfall (mm).

LANGUAGES USED:

- ❖ Python

LITERATURE SURVEY:

PROJECT TITLE	AUTHOR	OBJECTIVE/OUTCOME
Agriculture India farm department and agricultural tips (2008)	Dí. P. ChandíaShekaía	To enhance awareness about source of extension, information and services among farmers. • To encourage farmers to avail extension services through ICT means. • To enhance farmers knowledge on agricultural credit, insurance and legal aspect
Rainfall Prediction with Agricultural Soil Analysis(2020)	Nidhi Kamble , Darshan Ganeshpure , Aditya Katte , Prof. Aruna Pavate	This paper presents an analysis of the soil knowledge & treatment of different sets of computer instructions and (statement about a possible future event) ways of doing things. This system can suggest related (material that makes plants grow better) for the given soil sample and cropping pattern. the best Indian areas' square measure chosen for the end of the day (rain, snow, etc.) analysis. Testing showed that the results of the proposed system are best. The longer term work mainly focuses on improving the farm-related area
Spatial analysis of Indian Summer monsoon Rainfall(Mar 26,2014)	Markand Oza C.M.Kishtawal	Understanding the variability in rainfall, analysis of Indian Summer monsoon rainfall using Spatial resolution
Regional Rainfall prediction using support vector machine classification of Large-scale Precipitation(2020)	Eslam A.Hussein, Mehídad Ghaziasgaí, Chíistopheí Thíon	Large-scale precipitation maps can under some conditions give useful information for predicting regional rainfall..