Title : Exploratory Analysis Of RainFall Data In India For Agriculture

Team ID: PNT2022TMID39146

PROBLEM STATEMENT:

- Climate is a important aspect of human life. So, the Prediction should accurate as much aspossible. 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 thedrinking purposes but also for farming,

- Making a good prediction of climate is always a major task now a day because of theclimate 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 witha 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 wastested 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 farmersto avail extension services through ICT means. • To enhance farmers knowledge on agricultural credit, insurance and legal aspect
Spatial analysis of IndianSummer monsoon Rainfall(Mar 26,2014)	Markand Oza C.M.Kishtawal	Understanding the variability in rainfall, analysis of Indian Summer monsoon rainfall using Spatial resolution