

STUDY OF TEMPORAL RAINFALL SCENARIO ON MACRO TO MICRO LEVEL AREAS

Avadhesh Kumar Koshal*

Faculty of Sciences, Motherhood University, Roorkee, Haridwar

Email: akkoshal@hotmail.com

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Abstract: The present study of the twenty five years (1990 to 2015) temporal data of rainfall of India (Country) to Uttar Pradesh (State) and Western U.P. (a part) to Meerut (District) studied to understand pattern of annual and monsoon rainfall. The average normal monthly rainfall of study area of country level to state and District level are observed in India 1152.3mm, in U.P. 955.3mm, in Western U.P. 743.2mm & in Meerut 836.7mm. The long term data analysis of year wise June, July August and September contributes rainfall in India 867.3mm, in U.P. 825.7mm, in Western U.P. 653.4 and In Meerut 692.2mm in south west monsoon rainfall season respectively. The overall study of temporal data of rainfall observed 251% rainfall in the part of Western U.P. whereas observed minimum 80% in the India level. The cumulative study of rainfall data observed in India the cumulative values are observed negative in years 1990-1993 & 2001-2014 The western U.P. positive values in year 1990-1994, 1997 & 2009 to 2015 whereas in Meerut district observed cumulative negative in year 1990 to 1993 & 2015. The overall study of data overall in India has lowest in normal (39%) whereas monsoon rainfall observed 33% precipitation ratio. The monsoon rainfall anomaly were observed in years of 1994 (1.74) , 2008(2.13), 2003 (2.15) & 1.56 (1994) showing the highest positive normal rainfall anomaly in India, U.P., Parts of Western U.P. & Meerut respectively. In future, expected normal annual and south west rainfall may be less in year 2030 observed 1005.1mm, 513.4 & 725.7 India, Parts of Western U.P. & Meerut district respectively whereas the monsoon rainfall future expected rainfall are observed in India 812.5mm, in Parts of Western U.P. 417.5mm & in Meerut district 246.3mm. The expected annual & monsoon rainfall in year 2016 to 2030 rainfall patterns are declining stage. This is dynamic view to overall scenario of long term data study of future prospect.

Keyword: Anomaly, Drought, Monsoon, Precipitation, Western U.P.

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*Corresponding Author