PROBABILITY ANALYSIS FOR PREDICTION OF ANNUAL MAXIMUM DAILY RAINFALL OF PHULBANI BLOCK OF KANDHAMAL DISTRICT ODISHA

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ABSTRACT

Kandhamla district is drought prone and hilly area so rainfall analysis will require finding out crop planning will be made accordingly to mitigate drought spell and drought situation for benefit of poor tribal farmers of the district. Probability analysis of annual maximum daily rainfall for different return periods has been suggested for the design of small and medium hydraulic structures. It has been observed that GEV distribution found suitable due to lowest Ch—square and lowest RMSE value. At 30% probability level the daily maximum rainfall of Phulbai can be taken as 160.3 mm, this can be taken for planning of different structures.

KEYWORDS: Probability Analysis, Crop Planning