



Rainfall Variation and Frequency Analysis of Tiruppur District for Crop Planning, Tamil Nadu, India

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Abstract: Twenty years (1997-2016) daily rainfall data for Tiruppur district was collected from the TWAD (Tamil Nadu Water Supply and Drainage Board) to analyse the nature of distribution and frequency of rainfall. Average annual rainfall and annual rainy days during 20 years were 551 mm and 37 days. Highest monthly rainfall 148.4mm was in October mostly during the Northeast monsoon and highest rainy days were in October (8.06 days). Rainfall in winter, summer, southwest and northeast monsoon seasons were 56.81, 115.19, 66.2 and 327.03mm, respectively. The average annual rainfall of 551 mm can be expected to occur once in 2.2 years with a probability of 40 per cent. Monthly dependable rainfall is expected to occur every year from October to November. Based on results, the soil and water conservation structures, crop planning and management can be designed.

Keywords: Rainfall, Rainfall variability, Frequency analysis, Weibull distribution
