Research **P***A*per

International Journal of Agricultural Engineering / Volume 8 | Issue 2 | October, 2015 | 255-260

⇒ e ISSN-0976-7223 Visit us : www.researchjournal.co.in DOI: 10.15740/HAS/IJAE/8.2/255-260

Weekly rainfall variability and probability analysis for resource planning at Hadagali, Karnataka

HANUMANTHAPPA RAMDURG, G.V. SRINIVASA REDDY, D. KRISHNAMURTHY, B. MAHESHWARA BABU AND M. NEMICHANDRAPPA

Received : 18.06.2015; Revised : 29.08.2015; Accepted : 27.09.2015

See end of the Paper for authors' affiliation

Correspondence to :

G.V. SRINIVASA REDDY Department of Soil and Water Engineering, College of Agricultural Engineering, University of Agricultural Sciences, RAICHUR (KARNATAKA) INDIA Email : gvsreddymtech@ rediffmail.com ■ ABSTRACT : Daily rainfall data of 35 years (1978-2012) of Hadagali were used for weekly analysis to study the variability and the probability level of occurrence. The highest mean weekly rainfall (42.5 mm) was received during 39th SMW. The CV was less than 150 per cent during 22-33, 35 and 37-42nd SMW, indicated that the rainfall was consistent during those weeks. The rainfall analysis showed that the crop could be recommended under dry land during 22-33, 35 and 37-42nd SMW as the rainfall was more consistent during these periods as compared to 18th to 21st SMW, which also fell under south west monsoon period. The study indicated that rainfall amount of more than 20 mm of rainfall could be expected during 38-40th SMW with 50 per cent probability, which hints for rain water harvesting.

KEY WORDS : Daily rainfall, Co-efficient of variation, Standard meteorological weeks, Variability, Probability

■ HOW TO CITE THIS PAPER : Ramdurg, Hanumanthappa, Reddy, G.V. Srinivasa, Krishnamurthy, D., Babu, B. Maheshwara and Nemichandrappa, M. (2015). Weekly rainfall variability and probability analysis for resource planning at Hadagali, Karnataka. *Internat. J. Agric. Engg.*, 8(2): 255-260.