

RAINFALL PROBABILITY ANALYSIS FOR CROP PLANNING IN ANUGUL BLOCK OF ANUGUL DISTRICT OF HIRAKUD COMMAND AREA OF ODISHA, INDIA

C.R.Subudhi¹, Sukanya Suryavanshi² & Nibedita Jena³

¹Professor, CAET, OUAT, Bhubaneswar, Odisha, India

^{2,3}Research Scholar, CAET, OUAT, Bhubaneswar, Odisha, India

ABSTRACT

This study was under taken in the U.G. thesis work in the Dept. Of SWCE, CAET, OUAT, Bhubaneswar during the year 2018-19. Anugul district has latitude of 20°50'40"N and a longitude of 85° 09'04"E. The district has been divided into four sub-divisions and eight blocks. Out of which the rainfall data of Anugul block was taken for thesis purpose. The average rainfall at Anugul block is around 1264.4 mm, Most of the rainfall occurred during kharif. So most of the crops get low yield due to improper crop planning. Thus, this study is proposed to be undertaken with the objective, probability analysis of annual, seasonal and monthly rainfall data of Anugul block. So rainfall data were collected from OUAT, Agril Meteorology Dept. from 2001 to 2017(17 years) monthly, seasonal and annual rainfall were analysed. Probability analysis has been made and equations were fitted to different distributions and best fitted equations were tested. Monthly, Annual and seasonal probability analysis of rainfall data shows the probability rainfall distribution of Anugul block in different months, years and seasons by using flood software. It is observed that rainfall during June to Sep is slightly less than 1000 mm and cropping pattern like paddy(110 days) may be followed by mustard is suitable to this region. Also if the kharif rain can be harvested and it can be reused for another rabi crop by using sprinkler or drip irrigation, which will give benefit to the farmers. Annual rainfall of Angul is 1264.4 mm at 50% probability level.

KEYWORDS: *Command Area, Crop Planning, Hirakud, Probability Analysis, Rainfall*

Article History

Received: 05 Mar 2019 | Revised: 14 Mar 2019 | Accepted: 17 Apr 2019
