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Rainfall and dry spell analysis for beed district

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ABSTRACT

Efficient utilization of water resources is essential increasing agriculture production. Rainfall has a major role in rainfed agriculture. The important characters of rainfall influencing production from rainfed farming are the date of onset monsoon, the duration of rainy spells, the dates of occurrences and duration of intervening dry spell and distribution of weekly /minimum rainfall and number of rainy days. The daily rainfall and evaporation data of the beed district was obtained for the analysis from the collector office, Beed. This data was analyzed to find the minimum, maximum and normal monthly rainfall, average annual rainfall and number of rainy days .the dates of onset and end of effective monsoon were determined for individual years by applying the criteria stated by Ashok Raj (1979). Also mean dates of OEM and end of / monsoon with standard deviation were determined. Dry spells were found during every year. Mean dates of critical dry spells along with their mean duration were also determined. The average dates of starting and ending of wet spells were also determined. The present study revealed that, the average monthly rainfall for Beed was found to be varied from 4.39 mm to 190.41 mm. The average annual rainfall at Beed was / recorded as 758.23 mm. The average number of rainy days was found to be 37.6 days. The mean dates of OEM were found to be June 29. The mean date of end of monsoon was found to be October 9. The mean dates of critical dry spells were July 14 with duration of 21 days for first, August 21 with mean duration of 23 days for second, August 27 with mean duration of 21 days third and September 24 with mean duration of 21 days for fourth CDS. The mean dates of wet spells were June 29 to July 13 for first, August 4 to August 20 for second and September 24 for third wet spells.

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Key words : Rainfall, Dry spell analysis

INTRODUCTION

Efficient utilization of water resources is essential in increasing agriculture production. The population unlike the water resources is increasing rapidly. Agriculture production of different region of India reveal the low of production of different crops, as compared to most returns from our farm land is efficient utilization of water resources.

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Rainfall has a major role in rainfed agriculture. The rainfall distribution in our country is most uneven and varies considerably from region to region and rainfall is year to year. South-West monsoon is the chief source of rainfall and rainfall is concentrated during four monsoon months at most of the places. Crop planning is an important task on the part of the cultivator, in unirrigated land especially in dry land situation. In rainfed areas crop planning is solely dependent on the distribution pattern and amount of rainfall, particularly during *Kharif* season.

The important characteristics of rainfall influencing production from rainfed farming are the date of onset of monsoon, the duration of rainy spells, the date of occurrences and duration of intervening dry spells and distribution of weekly minimum rainfall and number of rainy days. The occurrence of certain amount of rainfall at times, can determine the success or failure of crops. Drying of crops, germination of seeds, and disease control during growing periods, applying irrigation, fertilizers, pesticides are some important agriculture activities for which