Research Paper Engineering

A Drought Analysis of Patan District by Departure Analysis

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ABSTRACT

In the Patan District the drought analysis by the Departure Analysis such that various effects of seasonal rainfall and its characteristics. Patan Districts has Harij taluka is drought effected prone area in seasonal rainfall analysis and Satalpur taluka is less affected in seasonal rainfall. Harij taluka is most drought prone area in 50 years.

Keywords : Drought, Departure, Seasonal Rainfall

INTODUCTION

Drought is a shortage of water in the simple terms, we understood. It has a drastic effect on the society and its harms and our human feeling. Any administrator has to handle the situations, which are like drought, flood, cyclone etc. Because people believe that state is a welfare agency. State has to help the society crisis in conditions of natural crisis. So to predict, monitor, asses and control the drought it is necessary for each responsible administration.

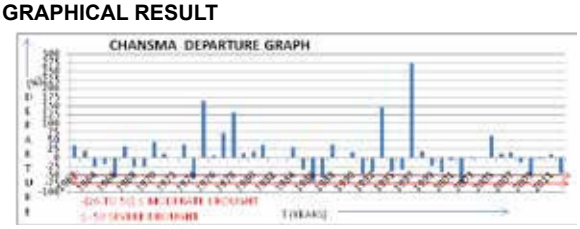
STATEMENT OF PROBLEM IDENTIFICATION

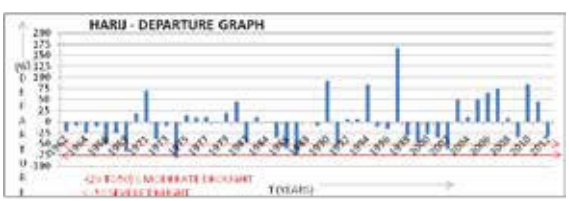
Patan District is drought prone area in Gujarat State. Patan District is located in Northern Gujarat. Patan District has a 5600 Sq.Km area in Gujarat State. Patan District has five rivers but there are non- perennial rivers. Patan District has an only supporting factor of rainfall and its better management. In this time the rainfall is uneven distribution and uneven season. There are the causes to analysis the drought, drought characteristics, drought intensity, and drought proper management in future to be needed the Patan District.

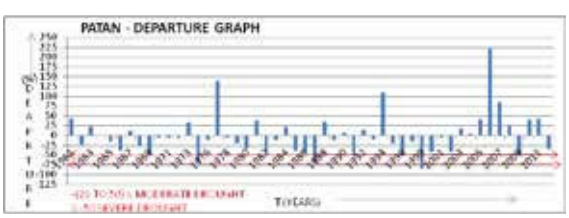
DROUGHT ANALYSIS BY DEPARTURE ANALYSIS

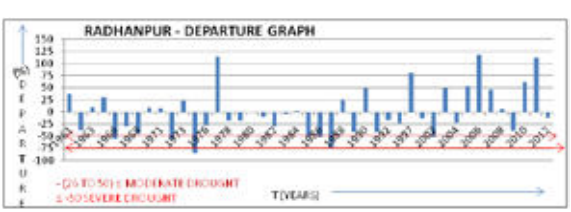
The deficiencies of seasonal basis seasonal rainfall departure analysis has been carried out the data from period of 1961 to 2012 have been used for this analysis. Seasonal normal for the seven chosen taluka of Patan district have been calculated as the summation of normal month (June to September). Only for month i.e. June, July, August, September are taken in account while estimating seasonal normal as the south west monsoon is active for these four months in the state.

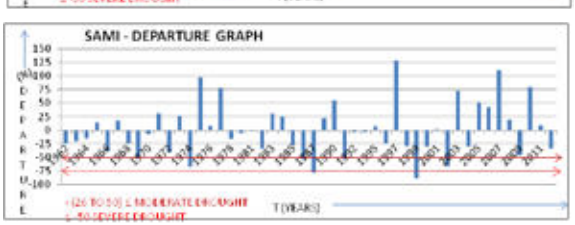
GRAPHICAL RESULT

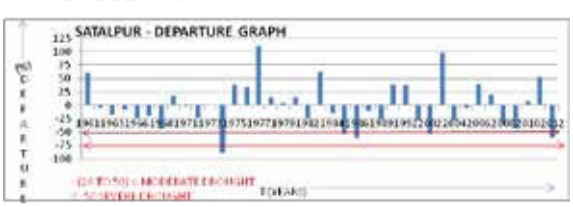


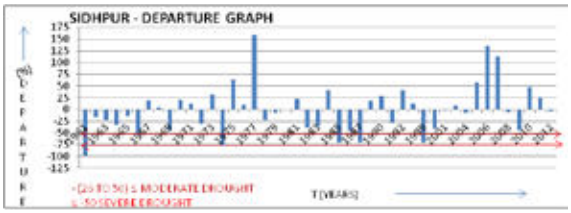












COCLUSION

The most prone taluka is Harij taluka which has a percentage of moderate drought 24 % highest and 14 % severe drought highest in Sami and total percentage of drought is 36 % in Harij taluka. So it concludes that the **Harij taluka** is the **most drought prone** area in the Patan district. The minimum drought prone area is Satalpur taluka where severe drought is 10%. The minimum moderate drought prone area is Satalpur taluka with 12%.

ACKNOWLEDGEMENT

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