

Analysis of Climate Drought and its Impact on Water Resources in the Zayanderood River Basin

Drought, rising temperatures and evapotranspiration, increased consumption patterns and poor management of water crisis are fundamental factors. Zayanderood River because of the combination of these factors, due to severe economic challenges, social and management of water resources. The analysis of the data stations measuring precipitation and discharge procedures watershed in the period 1973-2010 and trend analysis, kriging and the correlation coefficient is used. The results of this basin are facing 5-year consecutive droughts. Graphical map also shows the increasing trend of rainfall, the frequency of days with precipitation, 5 and 10 mm in the Great Basin. The rainfall between 230 to 380 mm and 1414 mm rainfall decline in the south (less than -2 at 95% confidence level) in annual precipitation. Frequency of days with precipitation is 5 and 10 mm. The resulting effect is the reduction of the inflow dam. However, wide range of basin has uptrend in precipitation. This represents a decrease of precipitation and frequency of precipitation days 5 and 10 mm. The most frequent occurrence of droughts causes water resource management challenges in the basin. Lack of document use planning, planting pattern of inappropriate and appropriate use of the features of climate and water allocation on the severity of the crisis has added to the regions beyond.

Key Word: Climate drought, Water resources, Crisis, Zayanderood.