

## **ABSTRACT**

Elucidation of drought as a ‘creeping hazard’ can be observed carefully because it emerges slowly and have a prolonged existence, sometimes over several years. The drought can be illustrate by the given definition “Drought is a natural disaster of less than average precipitation in a given area, resulting in prolonged shortages in water supply regardless of air, surface water, or ground water”.

The metrological, hydrological and agricultural impact of drought does effect the socio-economic status of an individual, a region and country or a piece of land. This explains its two dimensional roots, as the first classified under direct impacts on human lives by destroying the agriculture sector and water quality as well and the other root illustrate the indirect impacts as drought lead to malnutrition from starvation to many other humanitarian disasters. To understand the drought as creeping hazard the GIS and RS techniques were used for completion of selected objective. These technique were applied in data processing data analysis and data interpretation. The data was collected from two basic type of sources i.e. primary and secondary documentation which helps to analyze area of interest by statically and geospatially. After collection of respective material it was being processed by using latest version software’s for example Arc GIS 10.3, Erdas Imagine, Spss and Microsoft Excel. The drought impact assessment leads to the final step of research which is conclusion and results, those were presented through Maps, tables and graphs. According to requirement of subject the data is discussed under three focus strings. Firstly results were made under statically observation of data in which the drought does impact socio-economic lives of native resident and it has been calculated that about 64% people face shortage of water during drought and 74% people do live in muddy/ kacha house due to affordability. Secondly time series analysis has been used to monitor visible climatic fluctuations according to which the extreme drought era of 1997 to 2003 the desert temperature range was -21.67 to 34.49 °C and rainfall ranges from 7.6 to 523.2 mm. Thirdly the spatial analysis helps to find the visible changes in AOI with the passage of time in which the built-up area is increased by 2%, open land has been decreased by 58%, vegetation is increased 48%, agriculture 7% increased and water availability is also increasing due to “Tobas” and “Dahars”.