**Drought and its management-causes and impacts**

# Impacts of drought

Drought impacts are non-structural and extend to large geographical regions. The recent drought events highlighted the vulnerability of our societies to this natural hazard. Owing to the creeping nature of drought, its effects often take weeks or months to appear. Precipitation deficits generally appear initially as a deficiency in soil water; therefore, agriculture is often the first sector to be affected. If no precipitation period continues, then users who rely on surface water (i.e., reservoirs and lakes) will suffer first followed by those who rely on subsurface water (i.e., ground water). Obviously, the length of the recovery period is a function of the intensity of the drought, its duration, and the quantity of precipitation received following the drought period.

## -Economic Impact of droughts

Economic impacts of drought are influenced by a country's stage of economic development. Least developed or semi-subsistence economies have large agricultural sectors which are shaken immediately by meteorological or agricultural drought. The result is a decline in GDP, agricultural exports, employment opportunities, and domestic purchasing power. The remainder of the economy tends to be less affected due to non-existence of economic linkages between the sectors.

## -Agricultural impacts

Agricultural drought is regarded as lack of sufficient moisture qualitatively, in the crop root zone in soil profile for normal/ high productivity. gricultural drought results from below-normal precipitation and/or above-normal temperatures/wind that evaporate moisture from soils and plants. The location, extent, and severity of drought impacts to agriculture depend on underlying social and ecosystem vulnerabilities, access to irrigation, types of crops grown, and other factors.

## -Social, economic and political impact

In order to formulate policy guidelines for the evaluation of social, economic and political impacts of drought and aridity, it is necessary to identify and synthesize the main issues. More specifically, the focus, firstly, falls on the identification, analysis and synthesis of common denominators in the socio-economic and political arenas that come into play in drought impacts. It also becomes necessary to have a synoptic review of current national and international legal and policy frameworks. It is proposed to enumerate the main socio-economic and political aspects that come into play in drought impact evaluation. In this regard - and to provide a backdrop to the formulation of policy guidelines - two prominent dimensions are addressed, namely: vulnerability to drought and mitigation measures on a macro and micro level respectively.

## -Ecological impacts

One of the most dangerous and harmful effects of drought is exerted on the natural resources, habitats and ecosystems. These damages have not been studied deep enough and discussed properly in the past, the issue has been raised only in recent years. Special attention should be paid to combine environmental effects, such as the increasing pollution and the increasing volume of various wastes, in particular toxic wastes and materials in the environment. These combined and complex effects can become stronger during drought periods, mainly caused by the much lower dilution and natural purification capacity of the recipients. Economic estimation of these damages is much more difficult than of other indirect drought impacts, at most of the countries there are no data available in this field at the moment.