



Trends in risk and an integrated approach to reducing societal vulnerability to drought

Vulnerability in the context of drought is often increased due to social factors such as population density, conflict and urbanisation.

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Although a normal part of climate, drought is an extreme climatic event, often described as a natural hazard. It has substantial impacts on both developing and developed countries, and yet the characteristics of these impacts differ considerably. The ability to cope with drought also varies considerably from one country, region or population group to another.

The United Nations International Strategy for Disaster Reduction's Drought Discussion Group recommends a new paradigm to reducing societal risk to drought, an approach which makes people and the reduction of their vulnerability to drought as the focal point. This approach recognizes that the risk associated with drought for any region or population group is a product of this exposure to the natural hazard and the vulnerability of the society to the event. Hence, both an improved understanding of meteorological drought in terms of societal exposure (i.e.,

probability of occurrence at various severity levels and duration) as well as a better understanding of the micro and macro context of people's vulnerability to drought is required. Vulnerability to drought is dynamic and reflects the reality that societies are constantly changing. Exposure to drought varies regionally and over time, and there is little, if anything, that can be done to alter its occurrence. It is also essential to understand purely meteorological phenomena such as precipitation and



temperature trends, and their variability, since these variables may indicate potential changes in the frequency and severity of future drought episodes.

Vulnerability is the result of social factors. Population is not only increasing but also shifting from humid to more arid climates, and from rural to urban settings for many locations. As population increases, so do the pressures on water and other natural resources. Conflicts between water users increase accordingly. An increasingly larger number of people are also forced to reside in climatically marginal and thus drought prone areas. Urbanization is placing more pressure on limited water supplies and overwhelming the capacity of water supply systems to deliver that water to users, especially during periods of peak demand. An increasingly urbanized population

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is also increasing conflict between agricultural and urban water users, a trend which will only be exacerbated in the future. Increasingly sophisticated technology decreases our vulnerability to drought in some instances while increasing it in others.

Greater awareness of our environment and the need to preserve and restore environmental quality is placing increased pressure on all of us to be better stewards of our natural and biological resources. Environmental degradation such as desertification is reducing the productivity and increasing the vulnerability to drought events for many landscapes. All of these factors emphasize that our vulnerability to drought is dynamic and must be reevaluated periodically. We should expect the impacts of drought in the future to be different, more complex, and more significant for some economic sectors, population groups, and regions.

The traditional approach to drought management has been generally reactive and response oriented. This crisis management approach has been largely ineffective and has increased vulnerability to drought in many cases because of a greater reliance on government and donor organisations. Reducing future drought risk will require a more proactive approach, one that emphasizes preparedness planning and the development of appropriate mitigation actions and programs. However, this approach has to be multi-thematic and multi-sectoral. Improved drought early warning systems are essential to drought risk because the information provided can be used by decision makers at all levels to make timely management and policy decisions. Building institutional capacity for reducing drought risk is the key to creating more drought resilient societies.