Climate Information to Support Early Warning Response Systems

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Over the past two decades climate scientists have made significant gains in understanding and prediction of seasonal temperature and precipitation anomalies. The ability to understand and predict, in a probabilistic way, seasonal rainfall and temperature anomalies is a great achievement. However, the adoption of seasonal climate prediction capability for early warning systems has not yet been widely accepted. This is, in part, the result of the mismatch between the products and services that the climate community is providing and the needs of the community it is trying to serve.

While the climate community has long recognized the need to involve users in the development of climate information, the nature of the involvement is not generally clear. This talk will discuss some of the factors that should be considered in interactions with users to develop early warning systems that can effectively manage climate risk. Among the necessary considerations are: 1) Awareness of factors other then climate effecting the system, 2) Understanding of the factors (Internal and External) which limit the users ability to interpret and act on information 3) Awareness that there may be alternatives to those offered in the use of climate information and 4) Understanding the flexibility in decision making and how much flexibility resides in the system. These factors will be discussed in a series of examples developed in work on regional projects.

The presentation will also briefly touch on the how experience with managing climate risk on seasonal time scales relates to the issues raised in managing climate risk in the face lower frequency climate variability and climate change.