A framework for drought early warning systems in Africa

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A framework for drought warning and mitigation in Africa is proposed to assist in establishing policy priorities based on scientific evidence. Overall, a science-based approach is a useful guideline, but a number of challenges are recognized. Risk-based approaches to preparing for drought are focused on acquiring accurate probabilistic information about the events themselves. When this is not possible, the strategy fails. In contrast, understanding and reducing vulnerability does not demand accurate predictions of the incidence of extreme drought. Nevertheless, if may be politically difficult to justify drought vulnerability reduction on economic grounds.

The evidence-based approach responds to four major questions: First, what is the science available? We evaluate the detection of the signs of impending drought. Second, what are the societal capacities? We evaluating the institutional framework that enables policy development. Third, how can science be translated into policy? We propose a framework for linking science indicators into definition of risk levels and analysing the signs of drought in an integrated vulnerability approach. Here we also respond to the question: Can policy be enforced? Evaluation of policy implementation and giving effect to early warning. Finally, how can society benefit from the forecast? Evaluating the provision of information to potentially affected groups. Here we also answer: What should society do with the warnings? In this final step we link the science indicators the actions/interventions that society needs to implement.