

A Look at Societal Aspects of El Niño

Usefulness of forecasts to societies

It is easy to argue that El Niño forecasts are very useful to societies – to governments as well as to corporations and individuals. While people may understand to some extent the climate of the region in which they live, they are not necessarily aware of the many direct and indirect ways that its variations can influence their livelihoods. However, societies have to learn how best to use that forecast information for disaster preparedness and economic development planning. How to educate society about climate-society interactions is a major challenge to the meteorological community and to educators.

Public education about El Niño to improve societal response



Scientists and the media have helped to make El Niño a household word. As a result, people around the globe have a heightened awareness of what impacts they might expect in their regions. In a sense, scientists have successfully broadcast the notion of El Niño. The next stage is more difficult

because El Niño forecasts must be tailored to the different needs of specific users. Such increased public awareness, training and education programs need to be carried out, especially in the at-risk areas.

Although there remains considerable uncertainty with El Niño forecasts, people must be educated about the El Niño phenomenon and how best to cope with it. As difficult as it may be to explain climate-related probabilities to the public, the scientific community must respond to the challenge. It is important, however, to make people realize that, even though they make preparations in response to an El Niño forecast, there will still be adverse impacts with which they will have to contend. Even the most industrialized

societies have difficulties in protecting their countries (i.e., what they have called “climate-proofing”) from climate variability and from extreme climate-related events.

A first step toward educating people about the ENSO cycle involves

“educating the educators,” who would in turn educate the public. Today, the public tends to blame many of society’s ills on El Niño. Yet, many of those ills may have nothing to do with El Niño. Researchers can help the public and the media to determine which ills might legitimately be blamed on El Niño and which might be blamed on human activities. The need for climate-related education will vary from sector to sector and from user to user.



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While El Niño is a global phenomenon emanating from the equatorial Pacific Ocean, its impacts are local. Communities need a much-improved understanding of the ENSO cycle and its potential local societal and ecological impacts. Education, as an aspect of capacity building, must be carried out at all levels of society and not just at the highest political levels. Such education would go a long way toward improving societal interactions with the climate.

system in general and, more specifically, with the ENSO process.

Governments must support programs that produce personnel who can understand and use information derived from the monitoring and predicting of El Niño and its impacts. They need to reinforce the training of disaster managers, impact researchers, and those who require training to identify a country's at-risk populations and regions.

Funding to lessen societal impacts

Many of a government's problems that are related to difficulties in dealing with the forecasting of disasters center on inadequate funding. Several of the countries that are considered to be most vulnerable to El Niño's impacts are especially in need of financial assistance

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to carry out programs to cope with its occurrence. While the will of a government to take appropriate actions may exist once an El Niño event has been forecast, the financial mechanisms must also be in place at the time to enable the government to carry out those actions.

Along the same line, disaster-related funding from a national government to its regional and local governments needs to be made quickly to allow the funds to be used in an effective and timely way. This would enable those responsible at the local level to respond pro-actively, as they are truly on the frontlines



of disaster impact response, reconstruction and recovery. International funding responses to a disaster must also occur quickly to be effectively used by the affected regions. More importantly, such funds must be made available between ENSO's extremes, not only during them. This would enable preventive measures to be developed and implemented under normal, as opposed to crisis, conditions.

Role of media in how society responds

A primary function of a country's media is to inform the public, fulfilling an educational role. Forecast of the onset of the ENSO cycle is apparently a major global news event. However, once the unusual weather patterns end, media interest wanes. Fostering media interest in El Niño between extreme events can build public understanding of the phenomena and of the steps required to mitigate their effects. Scientists, and not just the national meteorological services, must strive to convince the media of the importance of El Niño information to society and to encourage the media to run stories about the ENSO cycle between the onset of its extremes.

Understanding the Scientific Issues Underlying El Niño

The level of scientific development varies widely from country to country. Some governments place a high value on maintaining a strong research establishment while others consider that to be a lower priority than dealing with chronic societal problems such as unemployment, poverty, and public health. Some

governments see no reason to use their scarce resources in a competition with other countries to produce global climate assessments. Rather, they have chosen to receive such assessments from elsewhere and then to modify them to meet national and local needs.