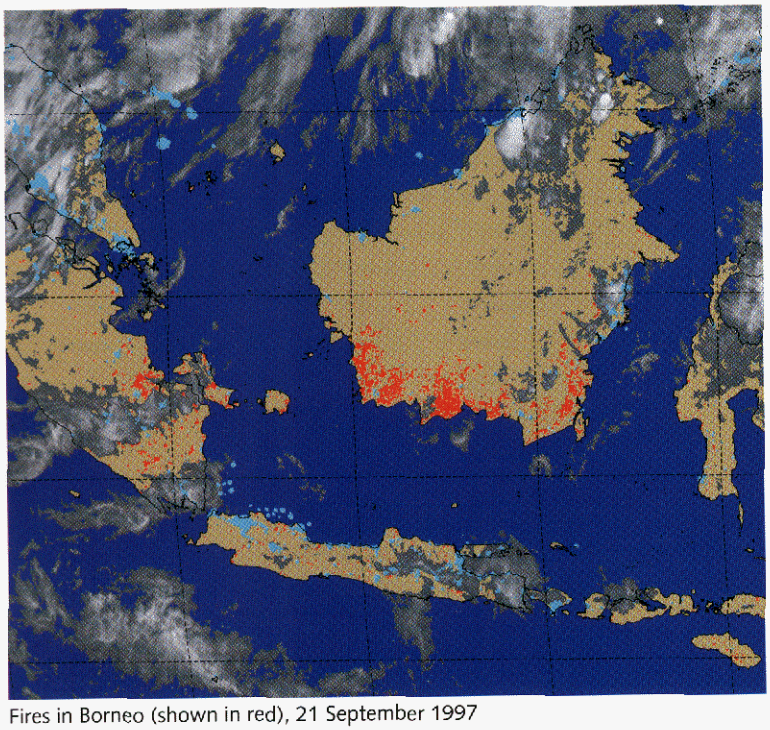

Fires in Borneo (shown in red), 21 September 1997

internationally, to undertake their own comprehensive national assessments. The studies described in this document offer a model for such assessments.

FBA assessments provide a government with insights into regions, sectors and populations that are likely to be at increased risk during an El Niño event. For example, since the early 1970s, many researchers have focused on the impacts of El Niño on Peruvian fisheries but few, if any, had given any thought to its devastating impacts on Peru's textile industry. As another example, the 1997–98 El Niño had a negative effect on the mining sector in Papua New Guinea, because the Fly River went dry as a result of severe drought. As a result, supplies could not be shipped by river transportation into or out of the mining region. Few, if any, studies have looked at El Niño's impacts on the mining sector. Thus, FBA can help government agencies to produce El Niño and La Niña vulnerability maps. It would be misleading, however, for decision makers to rely only on information about the last El Niño or La Niña, as impacts can vary from one event to the next.

Countries in the process of strengthening their scientific establishments can rely in the meantime on FBA techniques for an improved understanding of climate-sensitive physical processes, how these processes interact with human activities and ecological processes, and to identify potential El Niño-related problems before they occur. El Niño events come in different strengths, and various aspects of society are constantly changing. As a result, the impacts from one event to the next will not be exactly the same, even though there are sure to be some similarities.

The Need for Capacity Building

Many countries are in need of human capacity building in the area of climate impacts research and in ENSO-related sustainable development and disaster planning. Government agencies, policy makers, and the wide range of users of climate and weather information need to be made aware of the many not-so-obvious ways that climate variability affects their activities. The ENSO cycle is important to them, because it has predictive skill associated with it and because it lends itself to strategic decision-making.

Educators at all levels in a country's educational system should encourage their students to study climate-society-environment interactions. Building national capacity with regard to climate issues (climate change as well as ENSO and other climate-related extreme events) can reduce a country's dependence on outside expertise, if not for monitoring or forecasting, at least for analyzing the information they receive from abroad directly or by way of the Internet. This would help to improve the level of trust and respect between disaster-aid recipients and donors, when it comes to coping with disasters.

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