

THE IMPACT OF EL NIÑO AND LA NIÑA ON SOUTHEAST ASIA

21st-23rd February 2000

Hanoi, Vietnam

WORKSHOP SUMMARY



Organized by the Indochina Global Change Network

Funded by the Asia-Pacific Network for Global Change Research

Sponsored by the Vietnam Union of Science and Technology Associations

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Organized by the Center for Environment Research Education and
Development with the assistance of the University of East Anglia on
behalf of the Indochina Global Change Network

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The workshop *The Impact of El Niño and La Niña on Southeast Asia* was organized on behalf of the Indochina Global Change Network by the Center for Environment Research Education and Development, Hanoi, Vietnam, with the assistance of the University of East Anglia, Norwich, United Kingdom

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SUMMARY

El Niño and La Niña are the terms used to describe the periodic warming and cooling of the tropical Pacific Ocean and the consequent disruption of the atmospheric circulation bringing extreme weather and climate to many low-latitude areas.

Both El Niño and La Niña events have severe impacts on the Indochina region, affecting patterns of temperature, rainfall and other weather variables such as the frequency of tropical storms. While some consequences may be beneficial, adverse effects on agricultural production, water supplies, flood and storm occurrence and other determinants of human well-being and economic health frequently occur.

At this time, the capacity of the nations of Indochina to protect local peoples, natural ecosystems and national economies against the impact of El Niño and La Niña is limited. Historic means of coping with natural hazards, developed over centuries and millennia, are severely stretched as climate extremes coincide with societal developments that increase the vulnerability of regional populations and economies.

The needs of the region are many and diverse - to ensure access to adequate human, technical and financial resources, to develop the scientific and decision-making infrastructure, to put in place the necessary communication channels between relevant governmental agencies and other stakeholders, including local communities, to promote awareness amongst stakeholders and the general public, to strengthen response strategies at the regional, national and community levels...

The Indochina Global Change Network was formed to strengthen the scientific capacity of the focal nations of Cambodia, Laos and Vietnam to respond to the multiple threats posed by global environmental change and related hazards. The Network is dedicated to the ideal of sustainable development, meeting present-day needs while ensuring environmental security across both space and time.

The workshop *The Impact of El Niño and La Niña on Southeast Asia* was organized by the Indochina Global Change Network to assist the scientific communities of the nations of Cambodia, Laos and Vietnam, and the other nations of Southeast Asia, to play their part in strengthening the capacity of the region to respond effectively to the impact of El Niño and La Niña.

By sharing experience both within the Southeast Asia region and further afield, by providing a forum for discussion, by providing access to resources available from the international community, and through specific recommendations for action, it is hoped that the workshop has taken a modest step towards enhancing the region's capacity to respond effectively to short-term climate variability and, in the longer-term, global environmental change.

The workshop participants advanced a series of detailed recommendations regarding practical action that should be taken promptly to strengthen the region's capacity to respond effectively to El Niño and La Niña events. They strongly endorsed moves towards a more proactive response to such hazards.

The workshop took place against a backdrop of changing conditions in the key indicator regions of the tropical Pacific Ocean. Recognizing their responsibility to respond to the latest information regarding the likely breakdown of the prevailing La Niña event, the workshop participants identified three key recommendations for immediate action that constitute a precautionary response to the latest assessment, preparing the ground for a more concerted response to the next El Niño event, whenever that should occur.

The workshop participants noted that a more definite assessment should be available by June 2000 and strongly supported the existing proposal that a regional outlook forum be held about that time.

The recommendations for action are that:

1. In each country, a workshop should be organized bringing together representatives from government agencies and other stakeholders to draw attention to the latest assessment, provide information about potential impacts, open channels of communication, ensure full cooperation, and mobilize support for the strengthening of response strategies, thereby facilitating further action as later developments dictate.
2. In each country, meteorological and climatological agencies should ensure prompt and continual monitoring of El Niño forecasts available internationally, and of local indicators of effects and impacts, and make this information widely available in appropriate forms.
3. Each national meteorological agency should formally request, as a matter of urgency, that the World Meteorological Organization make available regular El Niño advisory reports, as undertaken during the last El Niño event, to ensure a single, consistent, authoritative source of information. It is recognized that the preparation of operational assessments of this nature may not be considered to be within the existing remit of the World Meteorological Organization and will have resource implications. Nevertheless, El Niño and La Niña represent a global problem, requiring a high degree of international cooperation such as is already manifest in support for this agency. Moreover, the multiplicity of forecasts, at times divergent and of varying reliability, warrants the intervention of a single, authoritative agency to provide a clear guide to the scientific consensus.

Finally, the workshop participants endorsed a statement regarding the likely breakdown of La Niña conditions this year. This statement presents an expert assessment of the current forecasts and is carefully worded, calling for action without being unduly alarmist. It will be used as a basis for reports to relevant agencies and stakeholders, press releases and information for the general public, prepared by workshop participants on returning to their own countries.

The meeting was an activity of the Indochina Global Change Network, funded by the Asia-Pacific Network for Global Change Research and sponsored by the Vietnam Union of Science and Technology Associations. It was organized by the Center for Environment Research Education and Development, Hanoi, Vietnam, with the assistance of the University of East Anglia, Norwich, United Kingdom, and was held at the Fortuna Hotel, Hanoi, Vietnam, from February 21st-23rd 2000.

BREAKDOWN OF LA NIÑA LIKELY: NEED TO MONITOR KEY EL NIÑO INDICATORS AND OPEN CHANNELS OF COMMUNICATION

Statement issued by participants at the workshop
Impact of El Niño and La Niña on Southeast Asia
Hanoi, Vietnam
23rd February 2000

The latest evidence from oceanographic and atmospheric information from across the equatorial Pacific Ocean is suggesting that the current La Niña pattern will soon wane. Ocean-atmosphere model predictions, together with our understanding of the normal course of the life cycle of La Niña, suggest that the current La Niña will fade out by about June 2000.

Some predictions suggest that there is potential for warming of the ocean in the central and eastern Pacific beyond June 2000. Such warming would indicate a shift toward an El Niño phase (that is, the opposite pattern to La Niña) developing the second half of the year 2000, though of unknown magnitude at this stage.

It should be emphasized that the forecasts that are being made by some agencies of an El Niño in the Pacific Ocean this year are being produced while most indicators are still at a pre-development stage. Therefore, there still exists some time for conditions to take a different course over the next three months to May 2000.

Nevertheless, it is strongly suggested that local meteorological, climatological and other institutions, as a precautionary response to this assessment, should monitor key parameters, such as sea surface temperature and other El Niño indicators, very closely over the next three to six months in order to gauge the further potential, or otherwise, of El Niño development later this year.

It is further recommended that effective communication channels between local meteorological and climatological agencies, other relevant agencies and stakeholders in potentially-affected sectors be set up with some urgency in order to facilitate appropriate means of dissemination of warnings and other information and, if it proves necessary, more concerted action at a later date.