INTRODUCTION

The University of the South Pacific (USP), the East-West Center (EWC) and the New Zealand National Institute of Water and Atmospheric Research (NIWA) will convene a two-week Pacific Island Training Institute on Climate and Extreme Events from 15-28 June 2004 at the Suva campus of the University of the South Pacific. The Asia-Pacific Network for Global Change Research (APN) and the U.S. National Oceanic and Atmospheric Administration are sponsoring the Training Institute with additional contributions from USP, EWC and NIWA. The Institute is intended to enhance the capacity of Pacific Island jurisdictions to understand, anticipate and effectively respond to the consequences of current and future patterns of climate variability and climate-related extreme events such as droughts, floods and tropical cyclones both today and in the future.

Small island developing states, including those in the Pacific, are considered among the most vulnerable to the consequences of climate variability and change and associated extremes:

- Year-to-year variability such as the El Niño-Southern Oscillation (ENSO) cycle has significant consequences for Pacific Island nations and climate change projections suggested a possible increase in climate variability and associated extreme events;
- Economic plans for most Pacific Island nations are dependent on climate-sensitive sectors (e.g., agriculture and tourism) and resources (e.g., coral reefs);
- Water resources are already stressed in many jurisdictions and many low-lying atoll nations are completely dependent on rainfall; and
- Climate-related extreme events such as droughts, floods, tropical cyclones and high temperatures already present significant challenges to public safety and community infrastructure.

According to the 2002 World Disaster Report, the International Federation of Red Cross and Red Crescent Societies notes that the number of people in Oceania affected by weather-related disasters has increased from 1.2 million to 18 million over the past 30 years. Droughts make up one of the largest components of such disasters and experience during the 1997-1998 El Niño event highlights the significant consequences that such climate-related extreme events can have for Pacific Island communities. Increasingly, the disaster management community and development organizations like UNDP, ADB, the World Bank and national AID agencies are recognizing the importance of managing climate risk as an essential element of comprehensive emergency management programs and development planning. The potential economic benefits of proactive planning through climate adaptation were reflected in a recent Munich-Re analysis suggesting that the projected costs of damage inflicted by climate change could reach or exceed $300 billion per year.

The Training Institute on Climate and Society in the Asia-Pacific Region will help create a regional network of scientists, decision makers and institutions skilled in the use of climate information to support practical decision-making in key sectors such as agriculture, water resource management, fisheries, public health and safety, tourism and community planning and resource development.
INSTITUTE OBJECTIVES AND FOCUS

The overarching goal of the Training Institute is to enhance the regional network of scientists, forecasters, disaster management officials and resource managers skilled in the development and use of climate information to enhance the resilience of Pacific Island nations in the face of current and future patterns of climate variability and climate-related extreme events. Through an intensive, two-week program of lectures, small group sessions and collaborative research activities, the Training Institute has been designed to achieve the following learning objectives:

- Increased understanding of the consequences of climate variability and change on communities, businesses and natural resources in Pacific Islands with a specific emphasis on climate-related extreme events such as droughts, floods, tropical cyclones and high temperatures;
- Increased awareness of and familiarity with climate forecasting and assessment tools and information services, including forecasts of the ENSO cycle;
- Enhanced understanding of current and potential applications of these tools to reduce climate vulnerability in key sectors, including disaster management, water resources, public health, agriculture, tourism, fisheries and coastal resource management; and
- Exploration of the challenges and opportunities associated with the integration of climate information to support economic development and community planning in the Pacific.

Formal presentations and group discussions will be complemented with learning-by-doing research projects and case studies, emphasizing the use of data and insights drawn from the participants’ experiences.

The Institute program will focus on *enhancing capabilities to understand, anticipate and respond to climate-related extreme events* and include:

- **Patterns, processes and consequences of climate variability and change**, including an overview of the nature and societal implications of the Pacific climate system and in-depth discussions of the El Niño-Southern Oscillation (ENSO) cycle and the Interdecadal Pacific Oscillation (IPO) with an emphasis on the nature and consequences of climate-related extreme events (e.g., droughts, floods and tropical cyclones);

- **Impacts of climate-related extreme events on natural resources and key sectors**, with special attention to understanding and managing the risks associated with climate-related extreme events in selected sectors including: water resource management; subsistence and commercial agriculture; public health; disaster management; and coastal community planning and resource management;

- **Current and emerging forecasting capabilities** including, but not limited to: statistical and dynamical modeling techniques for forecasting seasonal-to-interannual climate variability; regional downscaling techniques; and recent experience related to the practical applications of ENSO forecasts in the Pacific;

- **Communicating climate forecast and risk assessment information**, with particular attention to communication with the media and the establishment and maintenance of an effective, two-way dialogue with decision makers in Pacific Island governments, communities and businesses; and

- **Climate vulnerability and adaptation** with a focus on integrating physical, natural and socio-economic considerations to produce understandable, useful and usable information to support decision making and extracting insights into climate change vulnerability and adaptation from regional experience responding to present patterns of natural variability (e.g., ENSO).
INSTITUTE PARTNERS AND OVERSIGHT

The *Pacific Islands Training Institute on Climate and Extreme Events* is an education and capacity-building program that will be undertaken jointly by the University of the South Pacific, the East-West Center and the New Zealand National Institute of Water and Atmospheric Research (NIWA). Contributions in the form of lectures, climate forecasting and assessment tools and resource materials are anticipated from a number of other regional partners including: the Australia Bureau of Meteorology (BOM), the International Research Institute for climate prediction at Columbia University, the Pacific ENSO Applications Center (PEAC), National Meteorological and Hydrological Services throughout Oceania, the South Pacific Regional Environment Programme, the risk management and water resource programs of the South Pacific Applied Geosciences Commission (SOPAC), and the weather and climate programs of the South Pacific Regional Environment Programme (SPREP) and other collaborators in the Pacific region. The Training Institute will draw on the growing body of experience and expertise within Pacific Island jurisdictions that are actively engaged in the use of climate forecasts and assessments to manage the risks associated with climate variability and change.

ELIGIBILITY

Participation in the Institute will be determined through a competitive process. Funding is available to support the participation of twenty qualified individuals from Pacific Island jurisdictions.

**Applicants must have academic and/or equivalent professional experience (preferably five (5) years or more) in disciplines relevant to the Institute’s theme.** Minimum academic qualifications include a university degree in a relevant discipline. Fields of study appropriate for Institute applicants include, but are not limited to: meteorology; oceanography; climate forecasting, research and assessment; Earth System Science; hydrology and water resources; natural hazards; biogeochemistry; agronomy and agriculture; geography; resource economics; environmental policy; sociology; anthropology; ecology; and coastal and marine resources.

**Preferably, applicants must either be actively involved in scientific research or in technical and management positions involving the use of scientific information.** Preference will be given to applicants involved in activities related to the Institute’s theme, particularly as part of ongoing or planned APN-sponsored projects although all qualified applicants will be considered. Applicants with purely administrative posts are unlikely to be selected.

**Applicants must be affiliated with a research, educational, or resource management institution, governmental or not, in the Asia-Pacific Region with priority given to APN Approved Countries from the Pacific (although they may be temporarily in another institution, for example as graduate students).**

**Preference will be given to applicants in the early stages of their careers** (within 8 years of graduation). Nevertheless, mid-career scientists, resource managers, technical analysts and government officials as well as advanced graduate students are also encouraged to apply.
SELECTION CRITERIA

Institute participants will be selected on the basis of:

- Academic and/or professional record;
- Demonstrated motivation, interest and qualification to promote the use of climate information to support decision making or pursue multi-disciplinary research;
- Conceptual clarity of the application essay (Statement of Interest);
- Relevance of the Institute’s theme to the applicant’s current research or professional activities;
- Participation in ongoing or planned APN-sponsored research or other regional studies of climate variability and change; and
- Reference Forms.

Geographic distribution and gender balance between participants will be additional considerations for selection. Selected participants must commit to exclusive dedication to Institute activities during the two-week period from 15 – 28 June 2004.

FINANCIAL SUPPORT

Applicants selected for Institute participation will be provided with round-trip airfare between the airport closest to their home institution and Suva, Fiji. Housing will be provided for participants at USP facilities on the USP Suva campus for the period of the Institute with additional days provided only as required by airline schedule constraints. Alternate or longer accommodations cannot be supported. Participants will receive a stipend to cover meal expenses (except when meals are provided as part of the Institute’s activities). The Institute will cover local transportation costs necessitated by Institute activities. Participants or their home institutions must cover all other expenses.

APPLICATION DEADLINE

Complete application materials must be received by the Pacific Centre for Environment and Sustainable Development (PACE-SD) at the University of the South Pacific in Suva, FIJI by 12 March 2004 in order to be considered. Applications arriving after that date or incomplete applications (i.e., missing some components) will not be considered. Mailed Applications are preferred but Applications can also be submitted by facsimile. It is the responsibility of the applicant to ensure that Applications (including reference forms) are complete and that they arrive before the deadline given above. Wherever possible, we strongly encourage applicants to mail the application package via a courier service or airmail. If you use a courier service, be sure to retain the air bill number and the date you sent the package so the package can be tracked should it be necessary.

Applicants who provide the Institute Director with an e-mail notification of the transmission of a completed Application Package will receive an e-mail confirmation of receipt of the package when it arrives.

HOW TO APPLY

Applicants must submit an original of the following applications materials listed below except item (g), the Academic/Professional Reference Form:

(a) Completed application form. Please fill in ALL the information requested in the form.
(b) A brief, specific description (one-page maximum) of your current research, academic or professional activities (Current Academic/Professional Activities). You should describe any multi-disciplinary or multinational activities or collaborations in which you have been or are involved. If applicable, participation in APN-sponsored activities should be described, including project title, project PI and applicant’s contribution.

(c) A short Statement of Interest (1-2 pages) explaining why you wish to participate in the Pacific Island Training Institute on Climate and Extreme Events, how you expect to benefit from participation, and how you expect to apply the knowledge gained during the Institute.

(d) Official confirmation of completion of the minimum academic requirements (e.g., copy of diploma, certificate or University transcripts for the highest degree completed).

(e) A recent Curriculum Vitae (2 pages preferred; 4 pages maximum), including list of publications and/or a description of any policy or management activities in which you have been directly involved.

(f) A completed Academic/Professional Reference Form filled out by a person who can comment on your academic/professional abilities. The Reference Form can be included with the application materials in a sealed envelope or submitted directly to the Institute Director at the East-West Center by the Application Deadline. The Academic/Professional Reference Form is included with the Application Form. Only one copy of the Reference Form is necessary.

Applicants are encouraged to send an original plus four copies of a completed Application package in order to facilitate review.

Except for University diplomas, certificates or transcripts, all documentation (including Application Form, Statement of Interest and Description of Current Academic/Professional Activities) must be completed in English.

Application packages should be submitted to:

Kanayathu Koshy  
Director, Pacific Centre for Environment & Sustainable Development  
University of the South Pacific, Suva, FIJI  
Phone: (679) 321-2184  
Fax: (679) 330-9176  
E-mail: koshy_k@usp.ac.fj

CONTACT INFORMATION

Any questions related to the 15-28 June 2004 Pacific Island Training Institute on Climate and Extreme Events should be addressed to:

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