

Scoping Study Summary: International assessment of the value of Indigenous Knowledge to improve resilience to environmental change (Pacific region).

There were two main aims of this scoping study: (1) to provide an up to date survey of the current use of Indigenous Knowledge for building resilience to environmental change; and (2) to assess whether some of these strategies might be transferable by bringing together key stakeholders from different regions to share their experiences and management approaches.

A summary of the outcomes of the longer report follows. For further information please check: sharingknowledge.net.au

1.) The Pacific region comprises some 25,000 islands scattered over the world's largest ocean and is home to an estimated of 9.5 million people. Pacific peoples and cultures of have been among the most researched in the world and investigations into what they understand about climate change and its causes are only just beginning. Anecdotal evidence suggests that this understanding can and should be greatly improved to help with adaptation and mitigation efforts. For example in Kiribati, two national adaptation consultations held in 2003 brought together chief councilors and clerks, and representatives of elders, women and youth groups from each of the major inhabited islands. For the first time, people realized that what was happening to one atoll was also happening to the others.

Although Indigenous environmental knowledge may offer valuable insights for building resilience to environmental change, there is no government agency or non-government organization known to be focused specifically on documenting this knowledge for incorporation into learning initiatives at the community level. Climate change impacts on the social (including recreational) and cultural life of Pacific peoples, and is affecting island ecosystems, economic activity, and human health. These impacts are having serious implications on the livelihoods and cultures of traditional and indigenous peoples.

In time, one or more of the Pacific Island Countries and Territories (PICTs) will probably have to be completely evacuated because of flooding or saltwater contamination of fresh water resources. The Carteret Islands (Papua New Guinea) and Tuvalu are likely to be the first nations to be evacuated due to climate change, but Kiribati, the Marshall Islands and many other parts of the Pacific may also have to face this catastrophe. Internal relocation due to shoreline erosion and rising sea levels has already occurred in Vanuatu, Kiribati and Tuvalu. The three groups of coral atolls that make up Kiribati, home to an estimated 97,000 people, are barely two metres above sea level. On World Environment Day in early June 2008, the President of Kiribati issued an appeal for Australia and other countries to provide a new home for his people believing that his nation will be unlivable in 50 – 60 years.

Indigenous knowledge systems pertaining to climate and weather, and the seasons associated with flora and fauna, are poorly documented throughout the region and require research for a better understanding of this important aspect of IK to emerge. The National Institute of Water and Atmospheric Research (NIWA) established in New Zealand in 1992 has recently commissioned research into traditional knowledge of climate and weather used by the Samoan and Māori. This work was in response to a common theme emerging from numerous workshops and conferences in the Pacific region on climate change over the last decade. While such gatherings acknowledge and value the role of Western science in improving peoples' understanding of climate variability and change, they place much greater emphasis on the importance of documenting traditional knowledge and local observations in any response to climate change.

There is a common view in the Pacific region that climate is changing and affecting people's livelihoods. Waves are higher than they were a decade ago; the frequency and severity of storm events that leave behind damaged infrastructures costing millions of dollars have increased; landward movement and erosion of coast lines, droughts causing losses to farmers and the countries' economies, saltwater intrusion into fresh water resources, coral bleaching and the increase in waterborne diseases are examples of the some of the impacts of climate change observed by people living in the Pacific. Examples of traditional and innovative adaptation practices include:

- Traditional farming techniques to protect watersheds and for crop diversification.
- Changes of living area and a variety of movement patterns are used to deal with climatic variability;
- Change of hunting and gathering periods to adapt to changing animal migration and fruiting periods;
- Change of varieties and species. Livestock and plant varieties may be changed to take account of new disease challenges;
- Changes in food storage methods, such as drying or smoking foods according to climate variability and corresponding availability of food;

The Pacific Adaptation to Climate Change Project (PACC) is a regional UNDP/GEF project covering 13 Pacific Island Countries (PICs) being implemented by the Secretariat of the Pacific Environment Programme (SPREP). The main objective of the PACC Project is to enhance the adaptive capacity and resilience of the participating PICs to the impacts of climate change. The project is scheduled to have its inception meeting in 2008 and there may be an opportunity to add or strengthen IK as a component to the three country activities in food production and food security, coastal zone management, and water resources management.

2) Almost all of those consulted in this survey saw value in holding an international event bringing together individuals to discuss issues concerning IK including sharing lessons learned in connection with coping with environmental change and consulting on collective responses to environmental change. Learning about successful approaches to strengthen a sense of community and environmental stewardship will help build resilience throughout the region, strengthening food security and assisting with human health and social wellbeing. There was also no consensus as to where such an international event could be held or what might be the preferred timing but it may be worth considering adding a discussion on this at the Climate Change Roundtable being organized by SPREP and likely to be held in Samoa in late October 2008.