



Australian Government
Department of Climate Change

International Climate Change Adaptation Initiative

Pacific Climate Change Science Program



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International Climate Change Adaptation Initiative

- The Australian Government is investing \$150 million over three years, with \$35 million in 2008-09 to meet high priority climate adaptation needs in vulnerable countries in the Asia-Pacific region.
- Primary focus is Australia's neighbouring island countries, in the Pacific and East Timor, but targeted policy and technical assistance is also available for other countries in the Asia-Pacific region



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Objectives

The four objectives in the Initiative are to:

- Establish a sound policy, scientific and analytical basis for long-term Australian action to help developing partner countries adapt to the impacts of climate change;
- Increase understanding in partner countries of the impacts of climate change on their natural and socio-economic systems;
- Enhance partner country capacity to assess key climate vulnerabilities and risks, formulate appropriate adaptation strategies and plans, and mainstream adaptation into decision making; and
- Identify and help finance priority adaptation measures to increase the resilience of partner countries to the impacts of climate change.



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Initiative components

- The program consists of four principal components:
 - undertaking activities that generate robust scientific information on, and enhanced awareness of, present and future climate change impacts;
 - building the capacity of partner countries to develop adaptation plans and strategies based on targeted vulnerability assessments;
 - building the capacity of countries to identify and implement adaptation measures including through the provision of financing and coordination support where appropriate; and
 - supporting selected multilateral climate change adaptation financing mechanisms



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Initiative Management

- Minister for Climate Change and Water and Minister for Foreign Affairs share joint oversight of the Initiative
- Managed at officials level by Senior Officials Group
- Department of Climate Change has primary responsibility for science and vulnerability components
- AusAID leading on financing priority adaptation projects and multilateral support



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Design and consultation

- Two priorities in developing and designing the Initiative are:
 - Effective coordination with partner countries, other donors, multilateral agencies and Pacific regional organisations to ensure support is both relevant and complementary; and
 - To build the capacity of partner countries and support Pacific regional organisations to strengthen national and regional capacity to manage the impacts of climate change.
- Initial consultations with countries, donors and agencies through the second half of 2008, including at the Pacific Climate Change Round Table in Apia in October 2008.
- Major design workshop held in Brisbane 17-20 March 2009 - Pacific Island countries and East Timor and Pacific regional organisations.
- Consultations and capacity building ongoing throughout Initiative



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Funding priority adaptation needs

- Immediate adaptation measures under the Initiative include:
 - Pacific Future Climate Leaders program;
 - Global Environment Fund Small Grants Scheme;
 - Australia-Pacific Climate Change Adaptation Platform; and
 - Support to strengthen Pacific Meteorological Services.



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Pacific Climate Change Science Program

- \$20 million Pacific Climate Change Science Program
- Managed by the Department of Climate Change in collaboration with AusAID
- Delivered by the Bureau of Meteorology and the CSIRO through their research partnership in the Centre for Australian Weather and Climate research
- To help foster a cooperative research network for countries in the region, for other international science agencies and for Australian universities, to build climate science capacity in the region.



But we also need better climate science information

Photo courtesy of Jon Barnett, Melbourne University



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Pacific Climate Change Science Program

■ 5 components:

- Recent and current climate and trends
- Regional climate drivers
- Regional climate projections
- Ocean processes, ocean acidification and sea level rise
- Information synthesis and communication



Recent and current climate and trends

- Rigorous assessment of recent climate variability and change will underpin better understanding of likely climate change in the region
- Work will include:
 - Data rescue and management
 - Rehabilitation of meteorological data; including development and analysis of climate relevant observational data; and
 - Improved understanding of tropical cyclone climatology



Regional climate drivers

- Documentation and evaluation of the impacts of major regional drivers
 - El Nino Southern Oscillation
 - Inter-tropical Convergence Zone
 - South Pacific Convergence Zone
 - Monsoon
- Will examine impacts on individual countries as well as regionally
- Develop and maintain strong links with Pacific National Meteorological Services



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Regional climate projections

- Regional projections of likely changes to mean and extreme meteorological conditions (including tropical cyclones)
- Projections and tailored applications
- Temperature, precipitation, wind speed, evaporation, humidity and solar radiation
- Higher resolution downscale modelling
- Tropical cyclone research



Ocean processes

- Sea level projections for the Pacific region
- Effect of climate variability and climate change on extreme sea-levels
- ENSO variability and climate change – the role of ocean dynamics in the western tropical Pacific
- Acidification in the Southern Pacific Ocean region



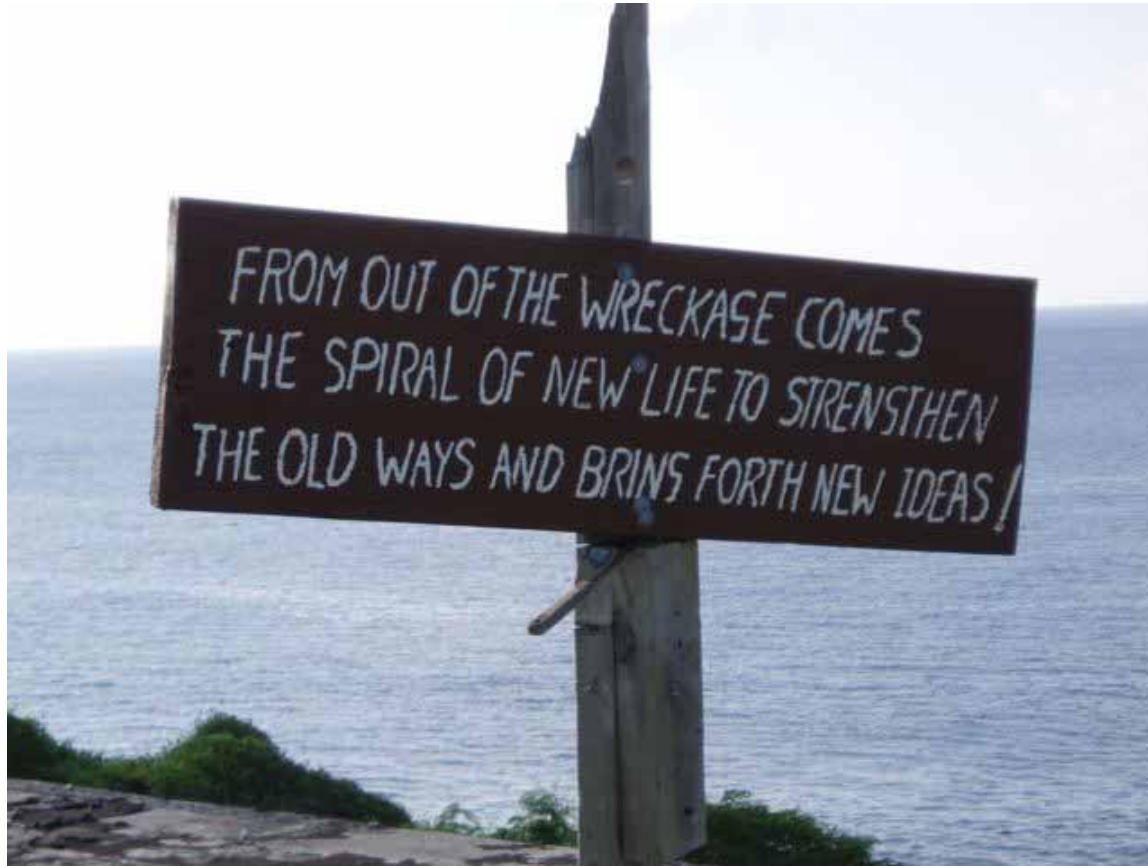
Information and communication

- Science information will need to be accessible and relevant to decision-makers and planners
- Ongoing consultation with regional stakeholders
- Workshops and interim projections and reports
- Final report on Climate Change in the Pacific – late 2011.



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Thank You

Picture courtesy of Jon Barnett, University of Melbourne