



PREEN newsletter

Pacific Resource and Environmental Economics Network

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Dear members of PREEN

We are pleased to present to you the July 2012 Edition of PREEN Newsletter. The edition includes highlights of recent publications on economic assessments of natural ecosystems, as well as overviews of the cost-benefit analysis workshops that have taken place since the beginning of the year. A special feature on the World Bank Pacific Disaster Risk Financing and Insurance (PDRFI) project is also included. We hope you will find this newsletter useful in keeping up to date with the economics research and events in the Pacific region.

The next edition of this Newsletter will likely be December 2012. We welcome new articles as they emerge so please feel free to share new events and findings with us in view of keeping the network informed of developments in the Pacific.

Best regards
Anja Grujovic

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Publications in the economics of coral reefs

The “economics of coral reef” component of the Coral Reef Initiatives for the Pacific (CRISP) and SPC project came to its final stage in 2011 with the delivery of the last study reports and publications.

Included in the delivery is a cost-benefit study on community-based marine protected areas in Vanuatu. The study has set the stage for discussion on implementation of financial instruments to internalize the costs and benefits of ecosystems and their management. The report and online link for accessing can be found at:

Pascal, N., 2011. Cost-Benefit analysis of community-based marine protected areas: 5 case studies in Vanuatu, South Pacific. Research report, CRISP-CRIOBE (EPHE/CNRS), Moorea, French Polynesia, 107pp. Accessible online at: cmsdata.iucn.org/downloads/nicolas_pascal_2011_cba_mma_spc.pdf

In addition, following a workshop held in Noumea in November 2010 by the CRISP / SPC on the economic dimensions of coral reefs, Proceedings to synthesize the impacts of economic studies on reefs in the Pacific in the last 10 years have now been released. The Proceedings can be found at:

Seidl, A., Pascal, N., Clua, E., 2011. Economics of Coral reef management in the South Pacific. Workshop proceedings: “Investing in Coral Reef: is it worth it?”. CRISP/3B/3B3 - Workshop report, 35p. Accessible online at www.crisp-online.com.

For more information, contact Nicolas Pascal, Environmental Economist at CRIOBE (nppacific@gmail.com)

Economics of Coastal Zone Management in the Pacific

Ram-Bidesi, V., P.N. Lal, and N. Conner 2011. Economics of Coastal Zone Management in the Pacific. Gland, Switzerland: IUCN and Suva, Fiji: IUCN.

In May 2012, IUCN launched a new resource book on the economics of coastal zone management in the Pacific. The book is a collaborative publication between IUCN and USP, with financial support from SPREP and SPC under the CRISP project. It discusses coastal zone management challenges by drawing attention to the effects of fundamental drivers of change; the ecological connectivity; and root causes of coastal resource and environmental issues using economic concepts, principles and paradigms. The potential role of market-based instruments in encouraging efficient and sustainable use of coastal resources is outlined through use of examples and case studies. The book also provides simple explanations on the conditions and circumstances where market-based instruments may be relevant or may require alternative management approaches to address coastal resource management challenges. The book is intended for a wide range of audience who deal with coastal management issues and problems with little or no background in economics.

For more information on the book and how to access it, contact Dr. Padma Narsey Lal, Visiting Scientist at CSIRO (Padma.lal@csiro.au).



USP academic, Dr Vina Ram-Bidesi with a copy of 'Economics of Coastal Zone Management in the Pacific' co-authored with Dr Padma Narsey Lal and Dr Nicholas Conner.

Climate Change Adaption in the Pacific: Making informed choices

In 2012, IUCN announced the finalisation of its overview report, Climate Change Adaptation in the Pacific: Making informed choices, a report commissioned by the Australian Department of Climate Change and Energy Efficiency, under Australia's International Climate Change Adaptation Initiative of the Pacific Adaptation Strategy Assistance Programme. The report:

- Provides an analytical framework(s) suitable for assessing economic and social costs and benefits of climate change adaption projects in the Pacific;
- Examines key constraints in undertaking economic and social assessments-based informed choices about the climate change adaption project in the Pacific; and
- Provides suggestions for overcoming key institutional and other constraints in the use of economic and social assessment in making informed choices about CCA in the Pacific.

The report is accompanied by four detailed background case studies, with formal citations as follows:

Lal, P.N. (2011) Climate Change Adaptation in the Pacific: Making Informed Choices. A report prepared for the Australian Department of Climate Change and Energy Efficiency (DCCEE), IUCN, Suva, Fiji.

McGregor, A., Kaoh, P., Mariner, L.T., Lal, P. N., Taylor, M. (2011) Assessing the social and economic value of germplasm and crop improvement as a climate change adaptation strategy: Samoa and Vanuatu case studies. Report prepared for the International Union for the Conservation of Nature (IUCN). IUCN, Suva, Fiji.

Gerber, F., Holland, P. and Lal, P.N. (2011) Assessing the social and economic value of climate change adaptation in the pacific region: A case study of water quality, quantity and sanitation improvements as an adaptation to climate change, Tuvalu. Report prepared for the International Union for the Conservation of Nature (IUCN). IUCN, Suva, Fiji.

Lal, P. N., Proctor, W. and Alexander, K. (2011) Social and economic assessment-based climate risk management: a case study of sea level rise and relocation of Lateu community, Vanuatu. IUCN, Suva, Fiji.

Lal, P.N. and Thurairajah, V. (2011) Making informed adaptation choices: A case study of climate proofing of road infrastructure in the Solomon Islands. IUCN, Suva, Fiji.

The reports can now be obtained on request from IUCN Oceania regional Office in Suva (luisa.tagicakibau@iucn.org) or from Dr. Padma Narsey Lal, Visiting Scientist at CSIRO (Padma.lal@csiro.au).



IPCC's Special Report on Managing Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX)

Addressing current disaster risks is seen as an important starting point for adaptation to climate change, according to IPCC's latest Special Report on Managing Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) released in late March of 2012. This report has significant implications for the climate change adaptation agenda in the Pacific (and globally), as well as on disaster risk management and development agendas generally, covering a diverse range of issues, including scientific, economic, social, institutional as well as governance dimensions of climate change management.

The SREX Report confirms and extends earlier assessments provided in the Assessment Report 4 that climate has changed, is changing and will continue to change over the next century, although there is a varying degree of confidence around the global and regional assessments of the intensity and direction of change in individual climate and weather extremes. The report looks at how climatic, environmental and human factors combine to create disasters and other impacts on society, and what we can do to reduce their risks.

Ultimately, the report emphasises that actions ranging from incremental improvements in governance, including institutional designs, and technology to more transformational changes are essential for reducing risk from climate extremes. There are several messages that are particularly pertinent to the Pacific Island nations, including that:

- addressing current and projected risks from climate extremes is integral to the pursuit of sustainable development during this century of climate change;
- addressing current disaster deficits is a good starting point for adaptation to projected changes in weather and climate;
- improved environmental management, including sustainable fisheries management, better catchment management, improved coastal management, and sustainable forestry management are examples of no-regrets adaptation option, producing win-win-win outcomes, of improved livelihoods, increased environmental conservation and biological diversity, and reduced weather and climate risks; and
- interdisciplinary and multistakeholder-based approaches are required to inform climate risk management decisions.

The full report can be downloaded from: <http://ipcc-wg2.gov/SREX/report/full-report/>

In light of issues relevant to the Pacific, an outreach program to the region on the SREX will to be held in the margins of key Pacific regional meetings this year. For more information contact Dr Padma Narsey Lal, SREX's Chapter 6 co-coordinating lead author (Padma.lal@csiro.au).



PACC Project: Integrating cost-benefit analysis to climate change

As indicated in the last PREEN newsletter, cost-benefit analysis (CBA) is being incorporated to SPREP's Pacific Adaptation to Climate Change (PACC) pilot/demonstration project. The rationale is to help inform decisions about pilot project option selection and design, as well as decisions about replication and up-scaling of implemented projects. The PACC CBA work program also aims to increase capacity in participating countries to apply CBA.

Three training workshops have now been completed as part of the PACC CBA Work Program. The first CBA workshop was held in Nauru on 1–4 November 2011 and focused on assessments of water sector PACC pilot projects. The second was held in Fiji on 24–27 January 2012 and focused on pilot projects in the food-security (agriculture) sector. The third was held in Samoa on 6–9 February 2012 and focused on pilot projects in the coastal sector.

Workshop delivery was a collaborative effort between SPREP/COMSEC, UNDP, SPC/GIZ, and SPC/SOPAC. Participant feedback indicated the workshops were a success. More information on the CBA Training Workshops and the PACC CBA Work Program can be found in the PACC CBA Work Program Interim Report (April 2012) – <http://www.sprep.org/regional-workshops/cost-benefit-analysis>.

The PACC project is now implementing CBA workplans for the projects, as developed at the training workshops.

For more information, contact Aaron Buncle, Climate Change Economist at SPREP (aaronb@sprep.org).

Cost-Benefit Analysis Training for Fiji Primary Industries

At the request of Fiji's Ministry of Primary Industries, SPC's Land Resources Division (LRD) organised a workshop on cost-benefit analysis from 23–25 April 2012. More than 15 staff from the Fiji Ministry of Primary Industries attended the workshop alongside several staff from LRD. The workshop had been requested by the Economic Planning and Statistics Division of the Department of Agriculture, Ministry of Primary Industries.

Workshop facilitators were economists Jonathan Bower, Resource Economist for LRD, Marita Manley, Technical Advisor on Climate Change for GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and Paula Holland, Manager of Natural Resources Governance Programme for the Applied Geoscience and Technology Division (SOPAC) of SPC.

The workshop generated considerable enthusiasm among participants who were supported to develop their own CBAs on existing projects and datasets. Department of Agriculture Economic Planning and Statistics staff resolved to take the CBA approach forward into both pre-project assessment and post-project monitoring and evaluation of their Demand-Driven Approach project which, according to the MPI web site, aims to “increase market access opportunities and services that will enable beneficiaries in the rural areas and outer islands to exploit those opportunities”.



Photo courtesy of Joeli Uluinayau (SPC).

Following a request from staff who attended the workshop from the Increasing Agricultural Commodity Trade (IACT) team in LRD, LRD Resource Economist Jonathan Bower has now run a second short CBA workshop for the IACT team on 30 April and 1 May 2012 to enable staff to run pre-project CBAs on IACT enterprise development projects.

All workshop materials and further details are available on the LRD Economics blog <http://lrdeconomics.wordpress.com>.



SPC Workshop on Improved Agricultural Statistics

From 28 May to 1 June 2012, Secretariat of the Pacific Community (SPC) hosted a regional training workshop on “Linking Population and Housing Censuses with Agricultural Censuses” at its headquarters in Noumea, New Caledonia. The workshop aimed to build practical capacity and reduce costs of collecting such data. To this end participants were presented with a more efficient, more integrated and less costly way to collect key agricultural statistics.

Participants from 16 Pacific Island countries attended the workshop, both from departments of agriculture and national statistical offices, a significant first for such a combination of personnel on a regional forum. SPC attendance comprised 6 SPC technical staff from Statistics for Development Programme (SDP). Facilitators came from Food and Agriculture Organisation and observers were present from the United Nations Population Fund (UNPF), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the Caribbean Community (CARICOM).

Workshop content was based closely on recently published FAO guidelines on the workshop topic, taking participants through issues such as the interrelationship of population censuses and agricultural censuses, how to build an effective sampling frame for an agricultural census based on the population census, the appropriate formulation of survey questions, and fieldwork and logistics. Participants also discussed key agricultural sector and food security statistics that are of importance to the region, including the National Minimum Development Indicators (NMDIs) relating to food security and to the agriculture and forestry sector.

Land Resources Division will soon recruit an Agricultural Statistics Officer to work closely with SDP to formulate and implement an agricultural statistics strategy to build the capacity of Pacific national-level statistical infrastructure to collect agricultural and forestry data.

For more information, contact Jonathan Bower, Resource Economist at SPC (JonathanB@spc.int).



Photo courtesy of Gladys Beccalossi (SPC).

Financial Management Training for Fisheries Officers in the Solomon Islands¹

The Ministry of Fisheries and Marine Resources (MFMR), in partnership with SPC and the Mekem Strong Solomon Islands Fisheries Programme (MSSIF), organized a week long introductory course in financial management for Fisheries Officers (FOs) in March 2012. The course, which counted 22 participants, was delivered by SPC's Nearshore Fisheries Development Section and facilitated by MFMR's Marketing Section.

The week-long applied course on economic evaluation and project management was designed to introduce FOs to financial concepts, project planning, fisheries economics and business. The general areas that the workshop covered included:

- Introduction to financial management;
- Vessel economics;
- Aquaculture economics;
- Project planning and budgeting; and
- Business management, marketing and banking.

The workshop was designed to give a rapid introduction to fisheries economics and financial management, with the objective of introducing general concepts and evaluation techniques that can be used in day-to-day work and transferred to the private sector.

The workshop is intended to increase financial capacity and provide opportunities for FOs to conduct viability assessments in their area of specialisation. That is, the provincial marketing centres, the seaweed farmers, the Honiara fish market and the small scale fishing vessels will have improved financial analysis and similarly, the private sector will have access to advice from MFMR FOs.

For more information contact Michael Sharp, Fisheries economist at SPC (michaels@spc.int).



MFMR Fisheries Officers at the workshop. Photo courtesy of Michael Sharp.

¹ An earlier version of this article appeared in SPC Fisheries Newsletter in April 2012.

SSNED Workshop on Milestone Judgments in Competition Law

The Small States Network for Economic Development (SSNED), in collaboration with the University of Technology Sydney, organised a workshop “Milestone Judgements in Competition Law”, on 10–11 May 2012 in Sydney. The purpose of the project was to organise a 2-day training workshop in order to offer high-level training on competition issues to judges and officials, operating in Ministries dealing with trade and commerce or related portfolios, in Pacific Small Island States. The workshop was also aimed at strengthening the human resources base of the public service in competition and fair trading issues. This is expected to have a lasting effect on the economy of these countries, especially by enhancing market efficiency and fostering a competition culture.

Participants were judges and nominated public officials from Fiji, Samoa, Solomon Islands, Papua New Guinea, Tonga and Vanuatu. The resource persons were representatives of the Malta Fair Trading Commission, University of Melbourne, Monash University in Australia, University of Technology Sydney, University of Queensland and George Washington University.

The workshop is expected to have a lasting effect on the economy of these countries by enhancing market efficiency. A well-developed competition policy will also serve to attract foreign investment, as this will signal the intention to undertake economic reform and the existence of good economic governance.

In addition, the training received by the judges and public officials will have a multiplier effect in that the trainees can pass on the knowledge gained to others. The workshop will serve to foster cooperation in competition issues between the Pacific Small Island States and regional organisations in the field of competition law and policy.

For additional information, contact Anna de Gaetano, Project Officer at SSNED (anna.degaetano@ssned.org).



Pacific Disaster Risk Financing and Insurance Program

The Pacific Disaster Risk Financing and Insurance (PDRFI) Program is a SOPAC-executed pilot activity to provide Pacific island countries with tailor-made advisory services to improve their macro-economic planning against natural disasters and develop a national disaster risk financing strategy as part of their broader disaster risk management and climate change adaptation agenda. In particular, this pilot aims to test the viability of catastrophe risk insurance in the Pacific by allowing the PICs to transfer catastrophe risk to the international reinsurance markets.

The PDRFI program builds on an integrated, three-tiered risk layering approach: self-retention, such as a contingency budget and national reserves to finance the management of small but recurrent disasters; a liquidity mechanism for less frequent but more severe events, such as contingent credit; and catastrophe risk insurance to cover major natural disasters.

The Pacific Catastrophe Risk Insurance Pilot, as part of the PDRFI program, is to be implemented in November 2012 for two years to test the viability of market-based catastrophe risk insurance solutions in the Pacific. The objectives of the pilot are to (i) test the credibility of the catastrophe risk models for market transactions; (ii) assess the risk appetite of international reinsurers for Pacific catastrophe risks; and (iii) demonstrate the viability of Pacific catastrophe risk insurance.

In light of all this, a two day workshop was co-convened by SPC-SOPAC and the World Bank from 3–4 May 2012 in Nadi, Fiji to give an overview of the Pacific Disaster Risk Financing Program. In attendance were representatives of the PDRFI pilot countries Republic of Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu as well as representatives from the Government of Japan, World Bank, Secretariat of the Pacific Community, AIR Worldwide and the Caribbean Catastrophe Risk Insurance Facility.

The purpose of the workshop was: (i) to introduce the participants to the concept of disaster risk financing to identify areas of technical assistance to help build capacity and (ii) to introduce the Pacific Catastrophe Risk Insurance pilot.

One of the key outcomes of the workshop was the commitment by those present to form a steering committee to help inform the design of the PDRFI programme and to have a regular progress update including a peer exchange of developments in each of the pilot countries.

A follow-up mission in each of the five pilot countries was conducted immediately after the PDRFI workshop to seek confirmation of interest from the Ministers of Finance, conduct legal due diligence and to brief senior Government officials on the programme itself. These missions convened a round table in each country with representatives from the Ministry of Finance, the Attorney General's Office, the National Disaster Management Office and National Planning. These round table meetings were then followed by individual meetings with the same stakeholders to address any areas of concern.

For any additional information, contact Samantha Cook, Economic Adviser at SOPAC/SPC (samantha@sopac.org).



Photo courtesy of Samantha Cook

Coral reef assessments

Led by the IUCN and funded by the AFD, the CRIOBE (Le Centre de Recherches Insulaires et Observatoire de l'Environnement de Polynésie Française) continues to carry out cost-benefit analyses on the community-based marine protected areas (MPA) in Fiji and Vanuatu. Sourcing data from fifteen sites, the goal is to extrapolate findings to strengthen the institutional support to the MPAs generally. In the same manner, the study will seek to identify appropriate means of financing the MPA network.

In parallel, the CRIOBE is coordinating the project "Economics of coral reefs" within the IFRECOR (French Initiative for Coral Reefs (French ICRI)). This 5-year project (2011–2015) aims to achieve valuation of coral reefs and associated ecosystems (mangroves and seagrass) for all French overseas territories (New Caledonia, Wallis and Futuna, French Polynesia and Clipperton for the Pacific), as well as to generate concrete experiences in establishing compensatory/mitigation measures and financing.

For more information, contact Nicolas Pascal, Environmental Economist at CRIOBE (nppacific@gmail.com).

Lifuka Island, Tonga: understanding climate change impacts on small islands

In an effort to support island countries predict and adapt to the impact of climate change, SPC and the Government of Tonga are presently using the island community of Lifuka, in the Ha'apai group of Tonga, as a case study to establish how climate change will impact the livelihoods of remote communities and assess which strategies might best help them. The outcomes of this activity, which is part of Government of Australia's Pacific Adaptation Strategy Assistance Program (PASAP) could ultimately help communities around the Pacific prepare for climate change.

Scientists and economists at SPC are presently working to determine the impact of sea level rise on low lying communities. Returning from a household survey of the Island to find out previous experience of coastal erosion and inundation, project oceanographer, Jens Kruger, is developing a model to predict which areas around the island will likely experience coastal erosion in the future. "Using this information, we can determine the area of a set-back zone the community might need to consider if they want to ensure their infrastructure is not under threat," he observed.



Coastal erosion on Lifuka island. Photo courtesy of Anja Grujovic.

Project economist, Anja Grujovic is now using this same information to estimate the likely pay off to Tonga of establishing a set-back zone to reduce inundation and comparing it to the value of setting up a sea wall or introducing new building standards. "The project is cutting edge" she observed. "Using the oceanographic data and socioeconomic information from a survey of households in Lifuka, we will not only be able to estimate the costs of different mitigation strategies, but we can also identify other issues that will help the community adapt, such as increasing awareness of local hazards".

Dr Jimmie Rodgers, Director General of the SPC, said that the project was one of the first of its kind in the Pacific and that the lessons learned will be valuable for all countries. "The Pacific is at the forefront of how climate change could affect the planet. What we learn here will inform how other parts of the region – and the world – might cope in the future," Dr Rodgers said.

For more information, please contact Paula Holland, Manager of Natural Resources Governance programme at SOPAC/SPC (paulah@sopac.org).

We look forward to receiving feedback and articles from our readers
Please send these to Paula Holland at paulah@sopac.org

The Pacific Resource and Environmental Economics Network...

Aims to progress economic analysis for sustainable resource management in the Pacific by providing a forum for practitioners in Pacific resource and environmental economics to exchange information, ideas and experiences for mutual learning and professional development.