



PREEN newsletter

Pacific Resource and Environmental Economics Network

Issue 08

July 2013

Dear members of PREEN

Welcome to the June 2013 Edition of the PREEN Newsletter.

This edition includes reviews of current work in the field including a recent publication on economic valuations of ecosystem services in the Pacific. You will also find news from the launch of the economic assessment of cyclone Evan in Fiji and the Pacific meetings on Disaster Risk Management and Climate Change in the Pacific as well as upcoming events and announcements.

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 be in December 2013. We welcome new articles as they emerge so please do share your new findings, projects and events with us in view of keeping the network informed of developments in the Pacific.

Best wishes

Anna Rios Wilks
PREEN coordinator

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Assessing the cost of natural disasters: launch of the Fiji Post Disaster Needs Assessment of Cyclone Evan

The Post Disaster Needs Assessment of cyclone Evan, carried out by the Government of Fiji, was launched this June. The Fiji Times reports that Inia Seruiratu (Honourable Minister for Rural and Maritime Development and National Disaster Management) said at the launch that the PDNA was “a credible, rigorous and globally recognised standard methodology”.

The PDNA is the most extensive analysis that Fiji has undertaken after a natural disaster and quantifies not only the damages to infrastructure and assets due to the cyclone, but also the loss in economic flows during and after the cyclone and its ripples across the broader economic landscape. The PDNA also considers the impact of the cyclone on human development and addresses the short and long term needs of Fiji during its recovery and reconstruction. The impact of the cyclone on each economic sector is estimated and this is then aggregated to enable an estimate to be made of the overall impact of the cyclone event on the economy.

The results show that the sector that suffered the most damage and loss as a percentage of the total was the hotel and restaurant sector (36%). This was followed by the housing sector (26%) and the agriculture sector (20%). The overall loss to the country due to the cyclone was estimated to be approximately 108 million USD (a 0.1 per cent decrease in the forecasted GDP for 2013)¹.

The full PDNA will be hosted on the government of Fiji website within the next few weeks (<http://www.fiji.gov.fj>) but can also be found by searching in the Pacific Disaster Net website (<http://www.pacificdisaster.net/pdn2008/>).

Alternatively, or for more information please contact Paula Cirikiyasawa from the Strategic Planning Office, Ministry of Strategic Planning, National Development and Statistics at: pcirikiyasawa001@planning.gov.fj or Paula Holland at: paulah@spc.int.

Pacific Platform for DRM and CC

Between 1–11 July 2013 the Secretariat of the Pacific Community (SPC), the United Nations Office for Disaster Risk Reduction (UNISDR) and the Secretariat of the Pacific Regional Environment Programme (SPREP) hosted a series of Pacific regional meetings in Disaster Risk Management (DRM) and Climate Change (CC) in Nadi, Fiji. These meetings culminated in the 2013 Joint Meeting of the Pacific Platform for Disaster Risk Management and Climate Change Roundtable in which extensive discussions were held on the development of an integrated regional strategy for DRM and Climate Change for the Pacific.

The aim of the Joint Meeting was to begin creation of the joint regional strategy for DRM and CC, which will replace the two separate current regional frameworks for action (the Pacific Islands Framework for Action on Climate Change 2006–2015 and the Pacific Disaster Risk Reduction and Disaster Management Framework for Action 2005–2015). This will further align the objectives of these two closely related and often overlapping areas and will unite the region's efforts in these two areas by 2015 in order to more effectively deal with the climate and disaster related challenges faced by communities of the Pacific.

The main outcome of the final meeting was the Statement of the Joint Meeting which will be used as a foundation for the strategy's development. It is hoped that these meetings will ensure successful high level dialogue in the coming 18 months so that the strategy can be endorsement by the Pacific Islands Forum Leaders in 2015.

As well as extensive high level dialogue, presentations and discussions covered a wide range of topics from case studies of DRM and CC adaptation work in the Pacific to how best to involve the private sector in DRM. Of particular interest to members may be the session on the Role of Science and Economics in Disaster Risk Reduction. This session highlighted the importance

¹ The full PDNA can be downloaded at: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CD8QFjAD&url=http%3A%2F%2Fwww.gfdrr.org%2Fsites%2Fgfdrr.org%2Ffiles%2Ffiji_Cyclone_Evan_2012.pdf&ei=4YDkUcLnNcqUiQfZhiDIDQ&usq=AFQjCNE6SMSa3TI22fyuDtlk4BFID_zg&sig2=jW6gxfnY52GrZqArLRuMYw&bvm=bv.48705608,d.aGc



Source: Pacific Disaster Net Photos (<https://picasaweb.google.com/pacificdisasternet>)

of combining both physical and social sciences in order to make informed decisions on how best to combat climate change hazards and to mitigate natural disasters.

For more information about these events, please download the list of links at: http://www.pacificdisaster.net/dox/JM_2013.pdf

PREEN CATCH-UP MEETING

We were pleased to hold an informal PREEN meeting in May, to which many members were able to attend. Members discussed possible new services and activities for the PREEN. Several recommendations arose including more presentations from members and visiting experts in the field, the establishment of a PREEN policy brief series, support in the writing of proposals and the sharing of possible research topics for masters students.

To this end, an updated PREEN website will be launched next month including new features to address these requests (see the upcoming events section for more details).



Economic valuation of ecosystem services from coral reefs in the South Pacific: Taking stock of recent experience

The economic valuation of coral reefs ecosystem services is seen as a promising approach to demonstrate the benefits of sustainable management of coral ecosystems to policymakers and to provide useful information for improved decisions. Most coral reefs economic studies have been conducted in the United States, Southeast Asia and the Caribbean, and only a few have covered the south Pacific region. In this region, coral reefs are essential assets for small island developing states as well as for developed countries. Accordingly, a series of ecosystem services valuations has been carried out recently in the south Pacific, to try and supply decision-makers with new information².

Applying ecosystem services valuation to the specific ecological, social, economic and cultural contexts of the south Pacific is not straightforward. This paper analyses how ex-ante valuations may address the various management challenges of coral reef regions in general and for the south Pacific. Bearing in mind that economic valuation has to match policy-making contexts, the authors emphasize a series of specific considerations when conducting and applying ecosystem services valuation in South Pacific ecological and social contexts. The paper also examines the decision-making situations in which ex-ante valuations took place and concludes that, although ecosystem valuations have been effectively used as a means to raise awareness with respect to coral reef conservation, methodologies will have to be further developed, with multidisciplinary inputs, if they are to provide valuable inputs in local and technical decision-making.

This paper can be found in the Journal of Environmental Management 116 (2013) 135-144.

For further information please contact Nicolas Pascal: nicolas.pascal@criobe.pf



Source: <http://www.flickr.com/photos/usfwspacific/5565696408/sizes/o/in/photostream/>
Photo: USFWS Pacific.

² Project carried out by Yann Laurans, Nicolas Pascal, Thomas Binet, Luke Brander, Eric Clua, Gilbert David, Dominique Rojat and Andrew Seidl.



A financial and economic case for public investment in marine protected areas (MPAs): evidence from Vanuatu and St. Martin

Marine Protected Areas (MPAs) are known to enhance some of the Ecosystem Services (ES) provided by coral reefs and can have a positive economic effect on local community well-being. Clear identification of these effects may improve local stakeholder support for protection and better inform decision-makers in their investment and policy decisions.

Nicolas Pascal, Andrew Seidl Philippe Méral and Eric Clua conducted cost-benefit analysis (CBA) for five small-scale MPAs (<1 km²) in Vanuatu (south Pacific) and for a single larger MPA (28 km²) in Saint-Martin (Caribbean), providing estimates of financial returns on investment (RoI) in each case.

Six ES were evaluated: (i) fish biomass; (ii) tourism; (iii) protection against coastal erosion; (iv) bequest and existence values; (v) social capital; and (vi) CO₂ sequestration. Subsequently the impacts of the MPA on these six services were quantified. The cost of MPAs, the benefit:cost (B:C) ratio and the Returns on Investment (RoI) were estimated.

After at least 6 years of MPA implementation, all RoI except one were found to exceed 1, implying that financial benefits from the MPAs exceeded costs. Based on a 25 year project life, the expected B:C ratios were also positive (4.1 for Vanuatu and 2.1 for Saint-Martin, respectively). The findings, supported by the sensitivity analysis, clearly illustrate the benefits provided by MPAs to local communities and promote MPAs as efficient public tools among the policy-makers community.

For further information please contact Nicolas Pascal of CRIOBE: nicolas.pascal@criobe.pf

UP COMING PROJECTS



MacBio

IUCN has advised of the imminent start of its 5 year MacBio project on the value of ocean and coastal resources. The project – which is a joint effort between IUCN, GIZ and SPREP – will target 5 Pacific island countries (Vanuatu, Solomon Islands, Fiji, Tonga, and Kiribati) and will include:

- 5 national studies on the economic value of coastal resources
- 1 regional study on the economic value of coastal resources

The project will include a focus on capacity building in Natural Resource Economics including training for national officials. PREEN members will be targeted for advice on specific case studies to include in the work as well as to consider the implications of valuations for policy development.

For more information please contact Epeli Nakautoga of IUCN: Epeli.NAKAUTOGA@iucn.org



CBA-P

This is a joint initiative between SPC, SPREP, GIZ, PIFS, UNDP and USP to build capacity in economic analysis of natural resources in the face of climate change. The work has two essential components:

- Capacity building in CBA of individual projects
- Economic analyses of the impacts of CC on different sectors.

The work will include in-country training as well as tertiary training support.

For more information please contact Aaron Buncle of SPREP: aaronb@sprep.org

RESCCUE

This project targets the protection of coastal environments in Vanuatu, Fiji, New Caledonia and French Polynesia. The project will conduct technical assessment of coastal ecosystems, their economic valuation and assess opportunities for financing conservation. The project will commence this year.

For more information please contact Olivier Auguin of SPC: oliviera@spc.int

IFRECOR

This project will last for four to five years and targets the economic assessments of sea grass, coral reefs and other living coastal resources. Several assessments have been completed but more are to come. For more information please contact Nicolas Pascal of CRILOBE: nicolas.pascal@criobe.pf



Source: <http://www.flickr.com/photos/pacificklaus/5008082020/in/photostream/>
Photo: Klaus Stiefel



UP COMING EVENTS AND ANNOUNCEMENTS



9th Pacific Islands Conference on Nature Conservation and Protected Areas

PREEN members are invited to be part of this Session to highlight any new work on the economic dimensions of natural resource management which will be held between 2-6 December 2013.

See <http://www.sprep.org/pacificnatureconference> for more info.

Volunteers wishing to be part of this session should contact Adam Daigneault of NZ Landcare on: daigneaulta@landcareresearch.co.nz

New PREEN website

After conducting a survey and noting member recommendations, PREEN is pleased to announce that a new PREEN website and PREEN online forum will soon be enabled. The forum will allow the posting of questions and answers on economic analysis in the Pacific and increase member's ability to keep up to date with current issues. As some development will take time, the site will continue to adjust. Once up and running all members will be advised of the new site link.

We look forward to receiving feedback and articles from our readers

Please send these to anna@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.