

Pilot Workshop: Economic assessment of disasters in the Pacific 22-25 March 2011, Port Vila, Vanuatu



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SOPAC WORKSHOP REPORT (PR7)

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List of Acronyms

DALA	Disaster and Loss Assessment
DIMS	Disaster Information Management Systems
ECLAC	Economic Commission for Latin America and the Caribbean
ESCAP	Economic and Social Commission for Asia and the Pacific
GFDRR	Global Facility for Disaster Recovery and Reduction
IUCN	International Union for Conservation of Nature
PIC	Pacific Island Countries
UNISDR	United Nations International Strategy for Disaster Reduction
SOPAC	Applied Geoscience and Technology Division of SPC

1. BACKGROUND OF INITIATIVE

Information on the economic cost of disasters is critical for effective disaster risk management. This information will help identify priority areas for assistance to:

- inform actions following a disaster:
 - plan and prioritise government recovery and rehabilitation work;
 - mainstream investment in disaster risk management to national planning and budgetary processes.
- advocate for disaster risk management:
 - demonstrate that disasters do affect development in terms of economic growth;
 - demonstrate areas where disaster reduction support is needed and why.

Such information is also crucial to assess changes in the scale of disaster impacts over time. This provides baseline data from which to assess the investment potential of specific disaster risk management interventions and advocate for their introduction.

Conventional problems in assessing disasters

Conventionally, assessment of the economic impact of disasters can be a challenge. First, a lack of resources means that countries are limited in the degree to which they can physically go out and assess impacts. Second, consistent assessments of impacts are frequently confounded by a lack of a standardized methodology.

The result is that economic assessments of disasters may be inconsistent or only partially done over time, which will confound effective disaster risk management. Consequently Pacific Island Countries (PICs) face the following issues:

- in-country time series monitoring of disasters can be misleading;
- inter-country comparisons of disaster impact cannot be conducted;
- the likely benefits of future interventions cannot be accurately predicted; and
- advocacy for disaster risk management is undermined (in the absence of baseline data on the costs of disasters).

1.1 Project Objective

In light of the above gaps, a pilot workshop was conducted to strengthen regional capacity to accurately and consistently assess the economic costs of disasters. Technical input for the workshop was provided by the SOPAC Division of SPC, Economic Commission for Latin America and the Caribbean (ECLAC), Economic and Social Commission for Asia and the Pacific (ESCAP) and the International Union for Conservation of Nature (IUCN). Financial support for the workshop was sourced from the World Bank's Global Facility for Disaster Recovery and Reduction (GFDRR) and delivered through the United Nations International Strategy for Disaster Reduction and ESCAP.

The pilot workshop was intended to present participants with a general framework for the consistent assessment of disasters and assess the relevance and practicality of this framework. On the basis of discussions held during the workshop, follow-up action and future support needs for the region in disaster assessment would then be determined.

- 1.2.1 Preparation for regional training workshop
- 1.2.2 Provision of regional training
- 1.2.3 Refinement of materials and technical reporting

1.2.2 Pilot nature of the workshop

The workshop was intended to act as a pilot exercise in training for the Pacific from three perspectives:

- Little formal training (if any) has been provided in the Pacific on the consistent valuation of disasters. This workshop would provide some awareness on a process for this.
- The workshop would introduce Pacific island agencies to the ECLAC-developed Disaster and Loss Assessment (DALA) framework. ECLAC have extensive expertise in training and applying the framework. The framework is favoured by World Bank (WB), European Union and the United Nations but has had little application in the Pacific and awareness of it is consequently low. The workshop would therefore assess interest from the PICs in adopting the framework in the region and determine training needs on this basis.
- Several international or regional agencies had planned to conduct training in disaster valuation and post-disaster needs assessment in the Pacific: SOPAC, ESCAP and the World Bank. At the same time, any training in the use of the DALA framework would benefit from ECLAC expertise as this agency is the most familiar with its use and intricacies. To this end, ECLAC provided the training and guidance to ESCAP on the DALA that enabled them to support the only Pacific-based application of the DALA in Samoa in 2009 following the tsunami disaster. With the objective of bringing together key assessment agencies to present one joint exercise – and deliver one joint message – on disaster valuation, UNISDR generated agreement among partners to carry out a joint workshop and allocated a portion of its GFDRR managed resources for this purpose. Such a joint training exercise in disaster assessment had not been conducted before. As well as ensuring value for money, this approach would ensure consistency in the assessment of disasters across all key agencies valuing – or planning to value/ training in valuation – disasters in the region. This was intended to minimise confusion and variation across the Pacific in practice.

General workshop information

The workshop was delivered over 4 days in Port Vila, Vanuatu, from 22 to 25 March 2011. As the workshop was only a pilot, representatives of eight PICs were sponsored:

- Vanuatu
- Fiji
- Papua New Guinea
- Solomon Islands
- Cook Islands
- Samoa
- Tonga
- Palau

The first seven of these countries were selected because of their high exposure to natural hazards and related disasters. The eighth (Palau) was included as it had articulated as a disaster risk management priority¹ that training in the economic assessment of disasters is a national policy imperative.

¹ Developed in connection with the Palau National DRM Framework 2010.

The provision of the workshop was intended to provide each country with the chance to include two participants as follows:

- One from the national planning/finance ministry; and
- one from the National Disaster Management Office.

The purpose of targeting national planning/finance ministry staff was to expose planning staff to information on the impact of disasters. Planning/finance ministry staff could also consider how to mainstream disaster information into national planning processes. Staff from National Disaster Management Offices were targeted in the workshop as being key to the coordination of national post-disaster damage assessments.

1.2 Activities Undertaken

In 2010 a SOPAC grant agreement was signed with ISDR to support the delivery of a pilot workshop. In the same year, another agreement to the same ends was signed between ECLAC and the WB-GFDRR. In January 2011, a contract was signed between SOPAC and IUCN to secure their involvement in the pilot exercise on the grounds of their experience in disaster economics. On the grounds of all three agreements, a partnership between all organisations was established – augmented by the inclusion of ESCAP – to co-develop the workshop and put together the expertise on the rationale and application of the DALA in the Pacific context.

Specific activities to implement the project are summarised below in relation to activity codes stipulated in the SOPAC-ISDR contract:

- 1.2.1 Prepare regional training workshop on Assessing the Economic Impacts of Disasters
- 1.2.2 Provide regional training on Assessing the Economic Impacts of Disasters
- 1.2.3 Refine materials and provide technical reporting

1.2.1 Preparation for regional training workshop

A workshop development group was established comprising one representative each from ECLAC and IUCN and two from SOPAC. The workshop development group were:

SOPAC	IUCN	ECLAC
Paula Holland Samantha Cook	Padma Lal	Asha Kambon

This group convened face to face in September 2010 to agree a workshop outline and content details. The workshop outline developed was circulated and agreed among workshop partners. Staff from the partner groups prepared materials for the workshop over October 2010-March 2011.

1.2.2 Provision of regional training

The workshop was piloted in March 2011. The workshop agenda followed is given in Annex 1. Presenters involved in the workshop are noted in Annex 2. Twenty-three Pacific island participants from NDMO and national finance/planning ministries participated in the workshop; nineteen were male and four female. Workshop participants are listed in Annex 3.

1.2.3 Refinement of materials and technical reporting

Outputs from the workshop activity are regional training materials provided to participants in the form of hard copy text as well as Power Point presentations.

CONSTRAINTS AND CHALLENGES

Development of the workshop was constrained by the wide geographical spread of key workshop developers. Five agencies were involved in either workshop development and/or workshop delivery (SOPAC, ESCAP, ECLAC, IUCN and UNISDR) while their offices were spread across five countries and three continents. This resulted in limited opportunity for face to face planning and preparation in workshop materials/content. The result was that presentations in the early sessions of the workshop were not seamless and some overlap occurred.

Additionally, given the reliance on the expertise from ECLAC in the design and delivery of the DALA, necessarily many of the presentations given in the workshop were not Pacific-based. While effort was made to ensure that Pacific examples were provided throughout the workshop, participants did express their concern that the workshop lacked sufficient Pacific emphasis.

Funding for the workshop came from the World Bank Global Facility for Disaster Risk reduction (GFDRR) via:

- UNISDR to the value of US\$ 48 000; and
- ECLAC/ESCAP to the value of US\$ 68 000.

Organising expenditure across the two agencies was complicated.

Reception of Pacific island participants to the workshop

The importance of the workshop was highlighted by the presence of the Vanuatu Acting Minister of Finance & Economic Management – the Honourable Marcellino Pipité – to open it. The Acting Minister noted the importance of economic assessment of disasters to the mainstreaming of disaster risk management and national planning (Annex 4). The workshop was closed by the Director General George Bogiri of Internal Affairs which hosts the National Disaster Management Office, reflecting the importance of assessment to this Department. Local press attended the closing ceremony and provided television coverage of an interview concerning the workshop with SOPAC representative, Samantha Cook, Economics Adviser, Disaster Risk Programme.

Feedback from participants on the suitability and potential to use the DALA in the Pacific was sought via two sets of discussions. In feedback Round 1, general levels of comfort with the DALA were sought. One group of Pacific island participants expressed comfort with the DALA framework. This likely partly reflected the fact that some of the work recommended in the DALA framework is always implemented during national assessments. By comparison, representatives of the Cook Islands and Fiji observed that there were assessment methodologies in operation already to assess direct damage already and considered that there might be value in exploring other assessment options before committing to the DALA approach.

In the second feedback session, participants were asked for their views on the suitability of the DALA in their specific countries:

- Do you think DALA could be relevant to your country situation?
- For DALA to be effectively applied in your country, what are some prerequisites?
- What steps would you need to take at this stage to help the government/NDMO consider DALA as a standard assessment tool?

- What types of external assistance would you need to help implement the DALA methodology as a standard assessment approach in your country?

Generally country representatives considered that the DALA framework was relevant to their countries but considered that assistance would be needed to operationalise the framework in the countries (Table 1). Some countries were keen on the idea of formal training or briefing sessions on the DALA methodology; however, a lot acknowledged that the best training would come from learning by practical experience of completing a DALA in their country. A Pacific-based guide would complement this.

Table 1. Perceptions of the relevance of DALA nationally.

<p>Vanuatu</p> <ul style="list-style-type: none"> ▪ DALA framework relevant to Vanuatu. Do not have a systematic framework, encounter difficulties in the past using assessment tools. Difficult to convince donors about assistance. Not satisfied with our reports. Vanuatu could use the DALA within the existing framework ▪ Need to strengthen DRM NAP, sectors to be more proactive, more technical manpower ▪ Need to work with Finance and Planning ▪ Require better coordination between sectors, assistance with technical aspects ▪ Country leadership critical 	<p>Fiji</p> <ul style="list-style-type: none"> ▪ DALA framework relevant to Fiji ▪ Require a report to be submitted to Provincial Development /NDMO office recommending to: <ul style="list-style-type: none"> - Run a national workshop on DALA involvement all sectors - Run sectoral training ▪ Would need to convince Permanent Secretary for Provincial Development from Rural Development in order to proceed ▪ Need to work on baseline data. Require resources for training and capacity building to come up to par ▪ Would also need to revisit baseline data, look at the national data assessment templates and align these with the DALA methodology. Expertise for training would be required
<p>Solomon Islands</p> <ul style="list-style-type: none"> ▪ DALA framework relevant to Solomon Islands. Arrangements in national development Plan could mainstream to this ▪ We have to convince NDMO and other agencies who might use DALA 	<p>Papua New Guinea</p> <ul style="list-style-type: none"> ▪ Papua New Guinea appreciated being made aware of the framework and will discuss at home ▪ The framework would appear to complement the National Strategic Plan ▪ Arrangements in national development plan could mainstream to this ▪ Papua New Guinea would need all agencies to understand concept and have in country training at sector levels
<p>Samoa</p> <ul style="list-style-type: none"> ▪ DALA framework relevant to Samoa ▪ Require government support, capacity building and support of relevant ministries. Also Statistics, Works. Also think of incorporating it to existing plans (response plans etc) ▪ Need CEOs of relevant ministries, involved in awareness ▪ Require local regional and international programmes and workshop made available ▪ Technical assistance would be needed in the form of training programmes and networking, secondments for hosts, hands on experience 	<p>Cook Islands and Tonga</p> <ul style="list-style-type: none"> ▪ Need ministries behind it ▪ Need to include the DALA in the DRM NAP ▪ Cook Islands would need to take the proposed assessment Framework to National Disaster Management Council to give it some teeth across the ministries. If we want push into all sectors, need a Cabinet submission ▪ There would be a need for training, as well as technical assistance to supervise

<p>Palau</p> <ul style="list-style-type: none"> ▪ DALA framework very relevant to Palau ▪ Require high level advocacy team to present the method to President and Cabinet ▪ Require training for sectors as well as for President ▪ Require funding and technical assistance for training and capacity building 	
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Additionally, informal discussions with country representatives suggested that some countries (Fiji and Palau) might be keen to progress matters and secure training in the DALA. Additionally, the representatives of Fiji and the Cook Islands recommended that they should look at how they might improve their existing national assessment forms to capture some of DALA aspects not covered. Similar discussions were held with Fiji relating to the existing Fiji Disaster Information Management Systems (DIMS) Initiative. Several countries therefore stated that they would raise the issue of the DALA with their respective governments upon return to their home country.

Lessons learned and recommendations

1.2.3 Follow-up discussions

There is a need for follow-up discussions to be held at a number of levels to identify the commitment of countries and partners to increasing DALA capacity in the region. Discussions should include:

- discussions within each individual partner agency who supported the pilot workshop to consider their own interest and capacity to support progression of the DALA framework and to identify other key partners.
- Discussion between key partners agencies (preferably with presence in the Pacific) to assess potential respective roles in DALA capacity building and implementation. In this respect, access to economic expertise available to the region must be considered. Additionally, MoUs between Partner agencies would need to be developed in the future to ensure effective collaboration.
- Further discussion with Pacific island countries to identify commitment to the training and support programme:
 - by individual countries; and
 - potential consideration of the DALA framework at a regional level – such as at the Pacific Platform for Disaster Risk Management Meeting (2011).
- Discussion with key donors to resource future training and the preparation of Pacific-specific examples and exercises in post-disaster scenarios. In this respect, it is recommended that SOPAC, UNISDR and other relevant staff who expect to attend the Global Platform flag with donors the regional interest in the DALA. This brief report to the UNISDR could inform those discussions.

Ricardo Zapata – a key partner in the workshop exercise – stated that he will flag the delivery of the pilot workshop with GFDRR in Washington upon his return so that they are prepped for any discussion of possible future activities.

1.2.4 Development of a concept

Drawing on what is known to date and the responses of workshop participants to the DALA, a concept should be developed to progress the building of DALA capacity involving one or two of

the most enthusiastic countries as a building block. ECLAC recommends the development of a Train-the-Trainers package in which regional expertise in the DALA is established from which national counterparts can be trained and assisted. Upon informal discussions, such a training package would need to include:

- National training:
 - Introductory training on the framework of the DALA, including sectoral training for key sectors to implement the DALA nationally; and
 - preparation of case studies and national exercises and examples based on actual disasters experienced in the national context.
- The establishment of regional technical backstopping capacity (a core technical backstopping for DALA implementation as well as regional capacity to train up future technical staff nationally and regionally):
 - Introductory training for institutions in the region involved in assessments; and
 - advanced training to (i) back stop national assessments); and (ii) act as future trainers in the framework.
- The development of Pacific-friendly training materials. Present materials are by necessity based on experience outside of the region (as only one DALA has been conducted in the Pacific to date). A Pacific-based version of the guide would need to be developed, once DALA methodology has been used in several disaster situations.
- Face-to-face planning sessions to underpin future training delivery to Pacific-ise the materials (as well as generate any future guide).
- Medium-term access to ECLAC expertise to facilitate both the training and the establishment of technical backstopping for DALA implementation (that is, hands-on support to carry out DALA in post-disaster scenarios in the Pacific as they occur). This would also support the build up of additional case studies and examples.

ANNEX 1 Detailed agenda of workshop followed

Time	Day/ session	Item	Activity	Resource Persons	Purpose	Comment	Mins
MONDAY 21 MARCH							
14:00- 16:00		Registration					5
TUESDAY 22 MARCH							
8:30- 8:35		Opening session	Prayer	Invite Pacific islander	Formalities		5
8:35- 8:45			Welcome from Vanuatu	Hon. Marcellino Pipité, Acting Minister of Finance & Economic Management			10
8:45- 8:50			Welcome statement Housekeeping	S. Cook	Purpose of the workshop inc. consistency for internal planning, mainstreaming and advocacy		5
8:50- 9:30		Participants - Introduction and Workshop Expectation				40	
9:30- 9:35		Group photo				5	
9:35- 10:15	MORNING TEA						
1	Pacific SIDS and disaster s						
10:15- 10:35	1.1	Natural hazards	Presentation and interactive discussion	Salesa Kaniaha Vanuatu Department of Met & Geohazard	Provide an understanding of the scientific basis for key hazards in the Pacific		20
10:35- 10:55	1.2	Economic, social and environment vulnerability	Presentation and interactive discussion	P. Lal	Generate understanding of the economic, social and environmental characteristics that influence susceptibility and vulnerability of PICS, inc. Fiji disaster and poverty evidence		20

					Identify how Pacific lifestyle and social structures affect vulnerability eg., provide social insurance against disasters (such as remittances, extended family practices etc.) and or the key social and lifestyle factors that can undermine this and increase susceptibility and vulnerability		
2	Disaster risk management						
10:55-11:15	2.1	What is DM and DRR?	Presentation followed by discussion	A. Planitz	Exploration of differences between DRR and DM; Explain panorama of DRM components and their differences		20
11:15-11:30		Actors/ functions	Roles and Responsibilities in the event of a disaster and post disaster, including recovery and rehabilitation	P. Holland	Generate understanding of which agencies tend to do what in relation to DRM, e.g., UNOCHA responding to humanitarian crisis, IDA assessing initial damage for emergency construction etc., economic valuation for post recovery planning, detailed sectoral for detailed policy planning etc. Ask PICs what is their process following a disaster (call in ministries, ask them to collect data etc.)	Use question to PICs to id minimum data they generate. This can be used to compare against baseline data needed to do the assessment	15
11:30-11:45		Information requirements at different stages of disaster risk management	Short presentation, followed by guided questions		Checking with participants what data they need to deal with their work in DRM, what data they collect, how they store it and what they do with it		15
11:45-12:00		Emerging baseline data in the region	Exposure Database project	L. Biukoto			15
12:00-13:00	LUNCH						
	2.2	Overview of key concepts in DRM	Clarifying concepts		Provide clarity on and explore concepts related to natural disasters and their effects and impacts		
13:00-13:20		Threats Hazards Risks Vulnerability Resilience	Presentation	S. Cook			20

13:20-11:40		Pathway of event, effects and impacts	Presentation	P. Lal	Explain how the same impact may be manifest in different sectors	Talk about hazards, and interaction between hazards and socioeconomic & environment to understand effects and impacts	20
13:40-14:00		Understanding change	Presentation	P. Lal	Clarifying the difference between baseline situation and the effect and how you would need to use baseline data to assess the magnitude of the event		20
14:00-14:30	AFTERNOON TEA						
3	Disaster evaluation						
14:30-15:15	3.1	Introduction to a consistent assessment framework (DALA)		R. Zapata			45
		Key concepts for disaster valuation			Use of terminology to ensure consistent valuation		
		Uses of valuation			Explaining how to use the data in the context of NAPs, NSDSs and other national planning		
15:15-16:00	3.2	The affected population		A. Kambon	How to define who are the affected and their characteristics		45
		Sustainable Livelihoods					
		Gender issues					
WED 23 MARCH							
	3.3	How to assess productive sectors		ECLAC	Understand how broadly to assess the sectors, the data needed and potential tools to use to secure the data	When considering minimum data needs, link to session 2.1 above	
8:30-9:15		Agriculture			Understand how broadly to assess agriculture the data needed and potential tools to use to secure the data		30
9:15-9:30			Presentation	P. Lal	Case study of the Fiji sugar sector following floods of 2009	to draw out the key steps of DALA and how these were covered in the Fiji sugar flood study	30
9:30-10:15		Tourism		ECLAC	Understand how broadly to assess the tourism sector the data needed and potential tools to use to secure the data		45

MORNING TEA							
10:15-10:45		Commerce			Understand how broadly to assess the commercial sector the data needed and potential tools to use to secure the data		30
11:30-11:45			Presentation	P. Holland	Case study on the Nadi and Ba Business Sector following floods of 2009		30
11:45-12:30	3.4	How to assess infrastructure		R. Zapata	Understand how broadly to assess infrastructure, the data needed and potential tools to use to secure the data		45
LUNCH							
12:30-13:30	3.5	How to assess social sectors			Understand how broadly to assess the sectors, the data needed and potential tools to use to secure the data		
13:30-14:15		Health		A. Kambon	Understand how broadly to assess the health sector, the data needed and potential tools to use to secure the data		45
14:15-15:00		Education		A. Kambon	Understand how broadly to assess the education sector, the data needed and potential tools to use to secure the data		45
AFTERNOON TEA							
15:00-15:30		Housing		A. Kambon	Understand how broadly to assess the housing sector, the data needed and potential tools to use to secure the data		30
16:15-16:30		Exercise		A. Kambon		Assessment of a social sector	30
16:w30-17:00		Sustainable livelihoods approach		A. Kambon			30
THURSDAY 24 MARCH							
8:30-9:15		Macroeconomic analysis		O. Bello/ D. Smith	Understand the secondary effects on the national economy		45
9:15-10:00	3.6	Implementation and coordination		R. Zapata	Understand how to coordinate the activity, avoid double counting and manage teams		45
		Managing Logistics		A. Kambon	Starting the process, accessing National counterparts, timetable, setting field visits, etc		

10:00-10:30	MORNING TEA						
10:30-11:00		Managing Data		A. Kambon	Information management		30
4	Valuing in practice						
11:00-12:00	4.1	Samoa Case Study	Present case study of finished product of assessment in the Pacific	D. Smith, N. Ratavanong and Samoa participants	See an example of formal assessment conducted recently in the Pacific		60
12:00-13:00	LUNCH						
13:00-end of day		Field trip		Pacific			
FRIDAY 25 MARCH							
8:30-10:00	4.2	Assessment exercise	Group work facilitated by A. Kambon on application of assessment	Course participants	Apply the theory using a hypothetical case study		90
10:00-10:30	MORNING TEA						
10:30-12:00		Assessment exercise cont'd					90
12:00-13:00	LUNCH						
13:00-14:30	4.3	Report back of teams on case study findings	Presentation by groups followed by discussion		Sharing views and outcomes of the theoretical assessment	We will approach once the funding is in from ECLAC and invitations have gone out	90

14:30-15:00	AFTERNOON TEA						
5	Options for the future of assessment						
15:00-15:40	5.1	Reflections on feasibility Where to from here	Guided questions, facilitated discussion	P. Lal			20
6	Closing						
15:40-15:50	6.1	Comments from organisers		All partner agencies			
15:50-16:30	6.2	Award of Certificates		George Bigouri, Director General of Internal Affairs			35

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ANNEX 4 Opening Remarks

**Hon. Marcellino Pipité
Acting Minister of Finance and Economic Management
Workshop on the Economic Assessment of Disasters
Port Vila, Vanuatu; 22-25 March 2011**

Distinguished Delegates, Ladies and Gentlemen

It gives me great pleasure as the Minister of Finance and Economic Management to welcome you all to this Workshop on the Economic Assessment of Disasters.

This workshop is important for a number of reasons and timely as it is taking place when numerous major disasters are occurring around the world; some man-made and others natural. As we all unfortunately know disasters cost a lot to our societies in terms of human lives, social and economic infrastructure and well-being and further worsen the vulnerability of our island countries. Climate change adds another dimension to cyclones, earthquakes, droughts and so on.

For small island countries, a single major cyclone would simply destroy a major part if not all of its economic and social infrastructure and thereby reducing decade-long investment and achievement overnight. The challenge we face is indeed enormous. How do we cope with such natural forces? It is critical to have a good understanding of the damages caused by disasters and more so to be in a position to assess the costs of such damages. Knowing the economic costs of disasters would certainly help to better understand such events and their impact on the development of our island countries, therefore better preparation and prevention may be put in place. Another reality we face is the capacity level of our countries to respond timely to disasters in terms of assessment, relief and reconstruction programs. In Vanuatu, faced with cyclones, earthquakes, volcanic eruptions, drought, etc, the Government has established a Disaster Fund as a measure to timely respond to disasters; however we also face capacity problems.

Therefore, this workshop is important in that it would provide you with an opportunity to exchange views and experiences on the impacts of disasters in our societies. Such information would be of high interest to our governments as well as our development partners in adequately responding to disasters. Such information is vital if our governments and development partners were to respond appropriately by way of planning and prioritizing recovery and rehabilitation work. It would also certainly contribute to renewed approach to town-planning, infrastructure design and so on and more importantly ensure disaster risk management becomes an integral part of national planning and budget preparation and adoption.

In this regard may I take this opportunity to thank the Applied Geoscience and Technology Division of the South Pacific Community, the ESCAP and the World Bank Global Fund for Disaster Risk reduction for co-organising and funding this first workshop of its kind in our region.

It would be of high importance that participants come up with clear recommendations on how to strengthen regional capacity to accurately and timely assess the economic impact of disasters for the benefit of island governments and donor partners and ultimately for a timely response to the needs of the victims.

With these words, I now declare the Workshop on Economic Assessment of Disasters officially open.

Thank you.