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## Second Meeting of the SOPAC Division Noumea, New Caledonia, 3-9 November 2012 (SOPAC-2)

AGENDA ITEM	TITLE
3.	SOPAC DIVISION HIGHLIGHTS AND EMERGING ISSUES
3.3	Disaster Reduction Programme 2011/2012 Report
3.3.2	Full Narrative Report of the DRP

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### PURPOSE

This paper provides details of the achievements of the Disaster Reduction Programme (DRP) of the SOPAC Division over the period November 2011 – August 2012. Further details of Work Plan implementation for the SOPAC are also captured in Annex 1.

While the bulk of the work completed during the reporting period (November 2011 – August 2012) addressed the planned activities of the SOPAC DRP, there were also a number of unplanned activities which the Programme responded to in the interests of supporting further institutional strengthening and capacity building within the Pacific islands region. Those activities that were unplanned are marked with an asterisk (\*).

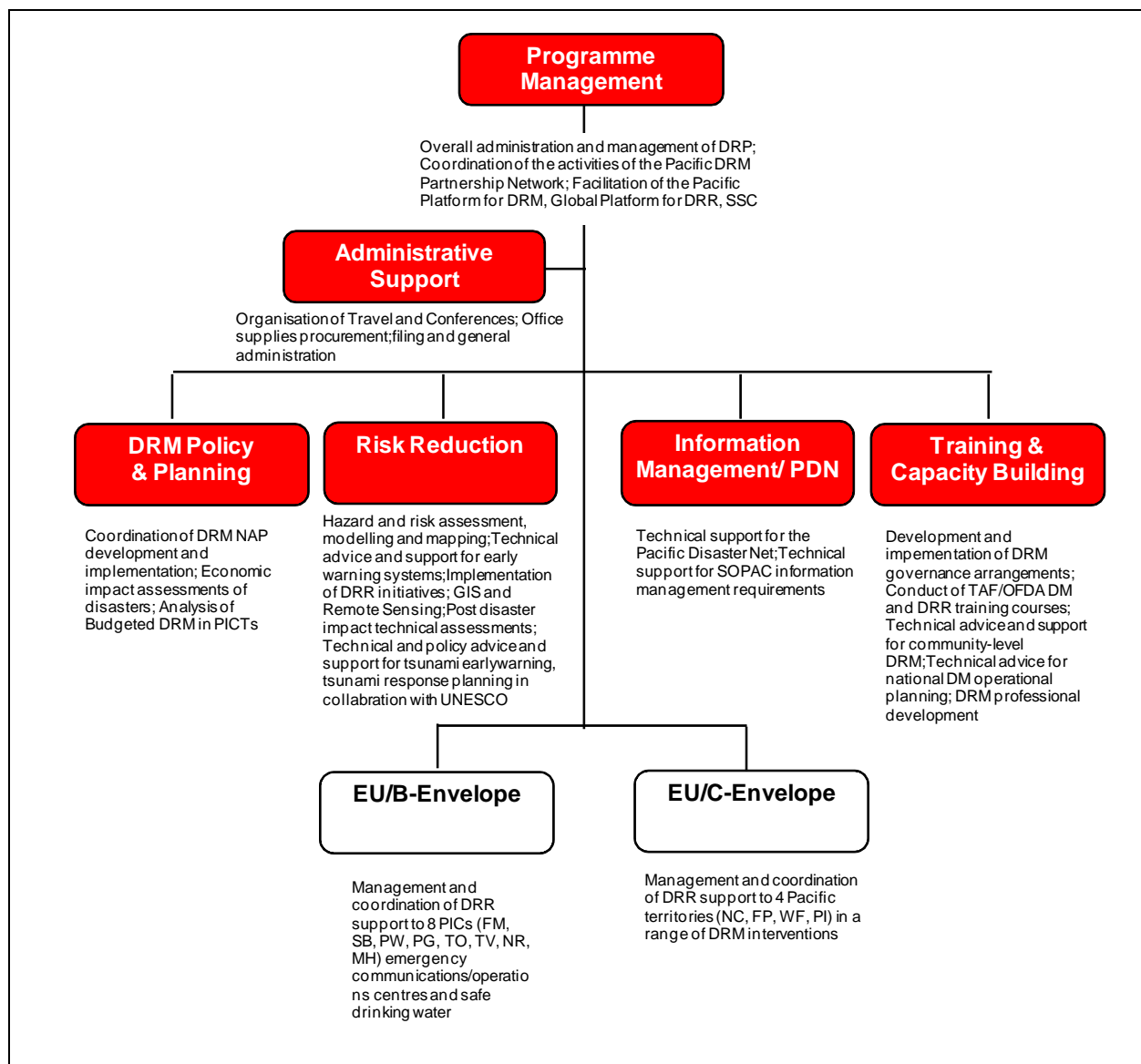
### BACKGROUND

The focus of the SOPAC annual Work Plan is defined under the SOPAC Division Strategic Plan 2011 – 2015 and within this context the DRP exists to provide PICTs with technical and policy advice and support to strengthen disaster risk management practices. The DRP carries out this responsibility in coordination and collaboration with other technical Programme areas within the Division, other Divisions of SPC and also with a range of regional and international development partners and donors.

The DRP is comprised of six (6) technical teams each with a 'Team Leader' who reports to the Deputy Director DRP. It also includes a Programme Management/Administration unit. The technical teams are:

- DRM Policy & Planning
- Risk Reduction
- Training & Capacity Building
- Information Management/Pacific Disaster Net
- EU EDF 9 B Envelope Project
- EU EDF 9 C Envelope Project

The current structure of the DRP is shown below.



The elements shaded in ‘Red’ represent the core functional teams. The two EU projects (B Envelope and C Envelope) will phase out in July and December 2013, respectively.

As at 31<sup>st</sup> August 2012 there was a total of 23 staff in DRP inclusive of EU projects and other staff.

## WORK PLAN IMPLEMENTATION – By Functional Team

### DRM POLICY & PLANNING and PROGRAMME MANAGEMENT

## Resources for Disaster Risk Management (DRM) in Pacific Island Countries (PICs)

### EDF 10 ACP-EU Natural Disaster Facility (NDF)

Preparatory work towards the EDF 10 ACP-EU Natural Disaster Facility continued during the reporting period and following the approval of an Identification Fiche by the European Union in early 2012, an Action Fiche and Technical Administrative Provisions (TAPs) document was prepared and submitted to the ACP Secretariat and the European Commission for consideration in June 2012.

The NDF will provide Pacific ACP States (14 independent Pacific island countries plus Timor Leste) at national and regional level a total of €20 million over 5 years from 2013 for investments in Disaster Risk Management and Climate Change Adaptation.

SOPAC Division has been informed that the Action Fiche and TAPs had been approved in Brussels and further work is underway to complete additional documentation to enable the commencement of the assistance to the region in early 2013.

An integral part of the preparatory efforts have also been taking place at national level within most of the target Pacific ACP States. Commencing in June 2012 SOPAC working closely with the UNISDR have been conducting country missions to facilitate national progress reviews of the Hyogo Framework for Action and the Pacific DRR and DM Framework for Action. The progress review process is, amongst other things, being used to develop initial drafts of Country Implementation Plans (CIPs) for the NDF. These draft CIPs will be revisited and finalised with the relevant national authorities during the inception phase of the NDF in 2013.

### *World Bank Global Facility for Disaster Reduction and Recovery (GFDRR)*

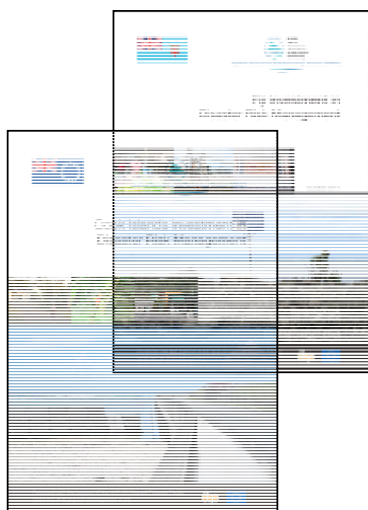
SPC/SOPAC provided counterpart support to the World Bank's Global Facility for Disaster Reduction and Recovery to establish 'Windows' of funding for DRM and Climate Change Adaptation (CCA) to the region. The GFDRR will provide approximately €11.6 million for DRM and CCA. A 1<sup>st</sup> Call for Proposals in relation to Window 1 and Window 2 of the GFDRR programme was issued on 21 December 2011 and a few Pacific island countries and regional organisations responded by the closing date of 3 February 2012.

The current status of the proposals submitted from the Pacific are as follows:

	Organisation	Project	Coverage	Amount (USD)	Current Status
1	World Bank EAP	Community Resilience to Climate and Disaster Risk Project	Solomon Islands	2,998,000	At Stage 1; proposal includes external partners (NGOs)
2	World Bank EAP	Increasing Resilience and Preparedness against Volcanic Risks and Weather Extremes	Vanuatu	2,970,000	At stage 2; proposal includes external partners (NGOs)
3	Vanuatu NDMO	DRM Strengthening Project	Vanuatu	935,000	Proposal subsequently integrated into a GEF/EU/GFDRR grant on 'Increasing Resilience to Climate Change and Natural Hazards in Vanuatu'. See No. 2 above
4	Act for Peace	Community-focussed Integrated DRR Project	Fiji, Solomon Islands, Tonga, Vanuatu	1,000,000	Declined – discussion initiated to include parts of proposal in government led DRM programs

5	World Vision	Strengthening National/Local Disaster Management Offices, Sectoral Ministries and Communities on DRR and CCA in the Pacific	PNG, Solomon Islands, Vanuatu	885,740	Declined
6	Tonga JNAP Secretariat	Tonga Meteorological Service DRR Project	Tonga	1,000,000	Declined
7	PNG National Disaster Centre	Comprehensive Multi-Hazard Risk Assessment	PNG	800,000	Declined
8	Spanish Red Cross (in association with Cruz Vermelha de Timor Leste)	Integrated Community-Based Risk Reduction	Timor Leste	1,000,000	Declined - discussion initiated with GoTL and external partners on DRM program for TL
9	Save The Children	Support to DRM in the Education Sector	Solomon Islands	1,000,000	Declined
10	WHO	Strengthening DRR through Community Mobilisation via the District Health System	Timor Leste	833,700	Declined - discussion initiated with GoTL and external partners on DRM program for TL
11	Save The Children	DRR for primary School Children in Timor Leste	Timor Leste	704,000	Declined - discussion initiated with GoTL and external partners on DRM program for TL
12	UNDP	Pacific-Caribbean South-South Cooperation for SIDS	Pacific, Caribbean	550,000	Declined
13	SPC/SOPAC	Operational Wave Forecasting for Early Warning Systems	Fiji	747,637	Progressed to a Stage 2 application
	<b>Total</b>			<b>\$15,424,077</b>	

## Improving the understanding of PIC investments in DRM



### *DRM Investment Profiles for PICs*

As part of the ongoing effort to improve advocacy for improved DRM within PICs, the SOPAC Division continues to produce DRM investment profiles for interested Pacific island countries. These are developed using support available through the EDF9 ACP-EU Natural Disaster Facility.

Profiles have been completed for Vanuatu, Cook Islands, Fiji and the Marshall Islands with a final draft in place for Papua New Guinea. Work has commenced on developing profiles as well for Niue and Tuvalu.

These profiles present a high-level desk-based assessment of the

potential economic costs of a disaster and to identify the level of investment in DRM. This will be used to draw attention to the benefits of investing in Disaster Risk Reduction (DRR) versus the cost of a disaster.

## **Examining opportunities to enhance risk financing and insurance for Pacific island countries**

### *Pacific Disaster Risk Financing and Insurance (PDRFI) Programme*

Building on the Pacific Catastrophe Risk Assessment and Financing Initiative, the World Bank in collaboration with the SPC SOPAC Division and with funding support from the Government of Japan and the World Bank's Global Facility for Disaster Reduction and Recovery, is leading an initiative entitled *Pacific Disaster Risk Financing and Insurance (PDRFI) Program*. The PDRFI aims to assist Pacific Island Countries (PICs) in strengthening their financial resilience against natural and climate-related disasters. The programme helps PICs to strengthen disaster risk management, institutional capacity, and access to a broader range of financial instruments and markets. It complements ongoing disaster risk reduction and climate change adaptation activities, focusing particularly on adverse natural events that cannot be fully mitigated through disaster risk reduction operations.

The PDRFI programme provides the PICs with advisory services and financial instruments for developing and implementing national disaster risk financing and insurance strategies. It assists the PICs in the improvement of their macroeconomic planning against natural disasters and the design and implementation of national disaster risk financing strategies, as part of their national disaster risk management and climate change adaptation agendas. It also promotes the development of market-based catastrophe risk insurance to be offered by the private insurance and reinsurance industry.

The World Bank and SOPAC Division convened a workshop in Nadi, Fiji, from 3rd to 4<sup>th</sup> May 2012 to launch the pilot for the PDRFI. The purpose of the two-year PDRFI pilot is to:

- test the credibility of Pacific catastrophe risk models on reinsurance/capital markets;
- assess the risk appetite of international reinsurers for Pacific catastrophe risks;
- ascertain the viability of Pacific catastrophe risk insurance; and
- help countries develop their national disaster risk financing strategies.

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, SOPAC Division, AIR Worldwide and the Caribbean Catastrophe Risk Insurance Facility. The workshop endorsed the objectives of the pilot and agreed to work collaboratively to ensure its successful completion.

Following the workshop the World Bank and SOPAC Division undertook missions to all pilot countries for the remainder of May with the objective being to obtain confirmation of interest from the ministers of Finance, legal due diligence and legal opinion from the Attorney General offices and to brief senior government officials on the programme itself.

To facilitate the pilot the Government of Japan is providing US\$5.4 million to cover the costs of premium payments by the target countries. Funding support is also being provided to the SOPAC Division to facilitate its counterpart role.

## **Improving the understanding of disaster impacts on Pacific island countries**

*Training of Trainers on Damage and Loss Assessments, Post Disaster Needs Assessment and Human Recovery Needs Assessment, 13<sup>th</sup> – 17<sup>th</sup> February 2012, Vienna, Austria*

Four (4) representatives of the SPC SOPAC Division attended a 5-day Training of Trainers programme in Post Disaster Needs Assessment and Human Recovery Needs Assessment in Vienna, Austria, in February 2012. The training, supported by the World Bank GFDRR was intended to build the capacity of GFDRR partner organisations and regional institutions in conducting post disaster needs assessment and in providing training in post disaster assessment for their member countries. During the training, participants were introduced to the methodology for:

1. assessing damages and losses;
2. determining the needs for recovery and reconstruction; and
3. ensuring the improved resilience of communities and countries following recovery.

The training also familiarised participants with the role and relevance of partnerships between UN, EU, World Bank and donor agencies in supporting disaster-prone countries to reduce the risk of future disasters.

The learning from this training will be used to inform the design of a post-disaster damage, loss and needs assessment framework and course for the Pacific region. It is intended that once the course has been designed and funding attained a group of experts across the Pacific will be trained who can then conduct post disaster assessments in the region and train their country counterparts.

### *Economic Assessment of Disasters in the Pacific*

Pursuant to the post disaster needs assessment training of trainers programme in Vienna, Austria, in February 2012; and ongoing discussions with the World Bank and GFDRR, DRP has developed a proposal for funding the development of a Pacific regional pool of experts to undertake damage and loss needs assessment in the event of a major disaster in the region. The proposal which seeks approximately US\$650,000 funding support from the World Bank GFDRR helps the systematic and standardised documentation of the economic impact of disasters over time through which the impact of disasters over time can be more accurately monitored. The proposed activity will inform DRM and development planning and provide baseline data to assess the value of increased investments in DRR.

The proposal has progressed to the second stage of consideration within the World Bank and GFDRR and an outcome is anticipated in the first quarter of 2013.

## **Integrating DRM and Climate Change to strengthen coordination and facilitate improved service delivery to PICs**

### *Integrated regional strategy for DRM and Climate Change by 2015*

In October 2011 the SOPAC Division Meeting and SPC CRGA endorsed the implementation of a 'Roadmap' or process, to develop an integrated regional strategy for DRM and Climate Change by 2015. The shared aim of DRM, Climate Change Adaptation and Mitigation (CCA&M) is to reduce the vulnerability of societies to hazards by improving the ability to better anticipate, resist, prepare for, respond to and recover from their impacts. An integrated approach, that reduces the risks from multiple hazards or phenomenon, whether climate-related or geophysical

and of sudden or slow onset, is more effective in reducing vulnerability and improving resilience to the multiple risks posed to sustainable national development in the Pacific region.

In relation to the 'Roadmap', DRP has organised and/or helped to facilitate or contribute to a series of consultations over the first 6 months of 2012 which yielded results pertinent to the formulation of the integrated regional strategy. These are:

- Launch of the World Bank's Policy & Practice Note for Climate and Disaster Resilient Development in the Pacific Islands Region, 4<sup>th</sup> – 5<sup>th</sup> June 2012, Suva, Fiji



- Regional Workshop on the National Progress Reviews for the Hyogo Framework (HFA) and Pacific DRR and DM Framework for Action (RFA) for the 2011 – 2013 period, 7<sup>th</sup> – 8<sup>th</sup> June 2012, Suva, Fiji
- Heads of Fisheries Meeting, 5<sup>th</sup> – 8<sup>th</sup> June 2012
- National Progress Reviews for the HFA and RFA in all 14 Pacific island countries, June – August 2012
- Development of a regional Education

framework for Climate Change Adaptation and DRM

On 5<sup>th</sup> June 2012 SPC and SPREP signed a Letter of Agreement specifically in relation to the 'Roadmap'. The agencies agreed to contribute resources to facilitate the 'Roadmap' and in so doing facilitate the appointment of and resourcing for a Steering Committee to oversee the process; coordinate and facilitate joint meetings of the Pacific Platform for DRM and Pacific Climate Change Round Table in 2013 and 2015 to support finalisation of the integrated regional strategy; jointly recruit and appoint a *Roadmap Coordinator* to be the technical advisor and coordinator of the Roadmap process and that the incumbent be situated at the SOPAC Division and; contribute resources to support the Roadmap Coordinator in the exercise of assigned responsibilities.

SOPAC is in the process of recruiting an Advisor to manage the 'Roadmap' requirements over the period 2012 – 2015. The position has been advertised and a selection is anticipated by the end of October 2012.

## **Strengthening national, regional and global partnerships for Disaster Risk Management in the Pacific**

### *South-South Cooperation – Pacific and Caribbean SIDS*

The SOPAC Division has supported a programme of South-South Cooperation with Caribbean Small Island Developing States (SIDS) led and managed by UNDP Pacific Centre since 2009. The programme helps to strengthen the sharing of knowledge, skills and experience in DRM and Climate Change with the Caribbean. During the reporting period a series of activities were undertaken as follows:

- 6<sup>th</sup> Caribbean Conference on Comprehensive Disaster Management, December 2011 – SOPAC Division was represented by Samantha Cook, Disaster Economist, who presented work being undertaken in the Pacific in relation to the Pacific Catastrophe Risk Assessment and Financing Initiative and also on country DRM investment profiles. Other participants from the Pacific were Hon. Mark Brown, Minister for Finance, Cook Islands; Charles Carlson, Director EMCI, Cook Islands; Antonneth Arnambat and Karen Bernard, UNDP Pacific Centre.

- Visit to Kiribati, May 2012 – This involved a joint visit by Caribbean participants, UNDP and SOPAC Division staff. The purpose of the visit was to provide Caribbean participants with a first-hand understanding of innovative water resources and sanitation practices used in an atoll setting. The Caribbean was represented by Dr Lorna Innis of the Coastal Zone Management Unit in Barbados and Dr David Farrell of the Caribbean Institute of Meteorology and Hydrology.
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- In December 2011, a visit was undertaken by the technical advisor from Fiji Meteorological Service (which coordinates Pacific regional training) to offices of the Caribbean Institute of Meteorology and Hydrology (CIMH), to view facilities and assess training opportunities to address gaps identified in the Pacific region, with the goal of building capacity for climate risk management.
  - From August 2011 to May 2012 four meteorology technicians from Samoa, Vanuatu, Solomon Islands and Papua New Guinea undertook a 9-month mid-level training at CIMH in Barbados. It is the first time that Pacific students have studied at CIMH. The training will improve the capacity of the target countries, especially remote locations, to provide quality data inputs for weather forecasting and climate projections, and will provide WMO certification enabling countries to meet quality management standards for the aviation industry. It is anticipated that the students will be able to support the replication of the training nationally and regionally in the Pacific; and the Vanuatu trainee has already developed a strategy for this for consideration by his department.
  - Based on a collaboration between Caribbean and Pacific researchers, a checklist on how to ensure gender equality in disaster risk management in SIDS has been prepared and will be officially launched at the 4<sup>th</sup> Session of the Pacific Platform for DRM in September 2012.
  - Research has been undertaken on case studies on the gendered dimensions of climate change adaptation in Pacific and Caribbean SIDS, to highlight gender differences and lessons learned. The publication of the research is to be completed in 2012.

#### *International Recovery Platform Forum, Kobe, Japan, 19<sup>th</sup> – 21<sup>st</sup> January 2012\**

Samantha Cook of SOPAC attended the International Recovery Platform Forum held in Kobe, Japan in January 2012 to share information in relation to the SPC SOPAC Division's role in assisting Pacific island countries in recovery from disaster events.

The International Recovery Platform is mandated to address gaps in recovery, and the International Recovery Forum 2012 aimed to explore mechanisms for regional cooperation in promoting resilient recovery. A follow-up workshop for the Pacific conducted by the International Recovery Platform and UNISDR was held in Suva, Fiji, from 4<sup>th</sup> for 6<sup>th</sup> September 2012 for participants from Fiji and Samoa.

#### *First Implementation of Small Island Development States Mauritius Strategy (ISLANDS project of the Indian Ocean Commission – IOC) Regional Technical Workshop, Mauritius, 24<sup>th</sup> – 26<sup>th</sup> January 2012\**

Samantha Cook attended the regional workshop in Mauritius in response to an invitation to the SOPAC Division from the IOC.



The objective of the workshop was to contribute to an increased level of social, economic and environmental development and deeper regional integration in the Eastern and Southern Africa-Indian Ocean (ESA-IO) region through the sustainable development of SIDS. The attendance of the SOPAC Division increased cooperation at a regional level contributing to regional integration, sharing of experiences and transferring expertise, setting and promoting best practices, defining strategies and action plans.

The specific purpose of the attendance was to share the Pacific regional experience to date in relation to the Pacific Catastrophe Risk Assessment and Financing Initiative.

### *Support to the FAO Case Studies\**

In February 2012, the SOPAC Division agreed to support the development of a case study led by SPC's Fisheries, Aquaculture & Marine Ecosystems (FAME) Division and the UN Food and Agriculture Organisation. The case study assesses the vulnerability of the fisheries and aquaculture sector in Pacific island countries and territories to climate change by examining: (1) the potential impacts of projected changes to the atmosphere and ocean on oceanic, coastal and freshwater fish habitats and stocks, and aquaculture; (2) the sensitivity and adaptive capacity of these resources and the economies and communities that depend on them to such changes; (3) the adaptation strategies and policies required to minimise the threats from climate change and maximise opportunities; (4) the gaps in knowledge remaining to be filled to improve understanding of the sector's vulnerability; and (5) the recommended investments needed to launch priority adaptations and regularly assess their success.

The contribution by the SOPAC Division was on the integration of Climate Change Adaptation and DRM with a focus on the emerging trends in CCA and DRM governance in the Pacific. The case study document has been finalised and will be published before the end of 2012.

### *Report: Platforms for Enhancing Private Sector-Humanitarian Collaboration\**

In November 2011, the SOPAC Division contributed to the development of a report by the Humanitarian Futures Programme (HFP), at King's College London on the added value of platforms, networks, brokering organisations and ad hoc alliances, in supporting more effective private sector engagement in humanitarian action. The Pacific Platform for Disaster Risk Management was identified as a successful model from which the study could learn. The research explored the added value of 'Platforms' to promote private sector engagement in humanitarian action. Previous research by the Kings College had showed that both humanitarian and private sector stakeholders felt there was a lack of understanding about mechanisms to promote the private sector's involvement in humanitarian action, and to help break down existing barriers that stand in the way of effective partnerships.

The final report was produced in April 2012. SOPAC will include the report in the reservoir of literature required to inform the ongoing development of the integrated regional strategy for DRM and Climate Change which is due for finalisation by 2015.

### *Pacific Platform for Disaster Risk Management, 17<sup>th</sup> – 21<sup>st</sup> September 2012*

The SOPAC Division has been working closely with a range of regional and international development partners and donors to conduct the 4<sup>th</sup> Session of the Pacific Platform for DRM which will be held in Noumea, New Caledonia, from 17<sup>th</sup> to 21<sup>st</sup> September 2012.

In 2012, the Platform will combine with the Pacific Regional Water & Sanitation Consultations with the following objectives:

- Facilitate improved learning and the sharing of experiences among PICTs and partners in DRM through discussions on a range of topics including; early warning, training and capacity building; community-based DRM; rethinking DRM arrangements in the Pacific and the implementation status of the Hyogo Framework for Action and the Pacific DRR and DM Framework for Action.
- Enable interaction between the disaster and water/sanitation communities in the Pacific to identify and discuss common issues and strategies at a regional level.
- Provide opportunity for participants to contribute to a renewed regional framework to guide the sustainable management of water resources in the Pacific and the formulation of the integrated regional strategy for DRM and Climate Change 2015 including the Post-2015 Global Framework for Disaster Risk Reduction.

There are approximately 200 participants registered for the Platform/RWSC in 2012.

*Note: The draft joint Outcomes Statement of the 2012 Pacific Platform for DRM and Regional Water & Sanitation Consultations is at Annex 3.*

## **Improved understanding of national and regional progress in Disaster Risk Management**

### *2011 – 2012 National Progress Reviews of the Hyogo Framework and Pacific DRR & DM Framework for Action*

Through collaboration with the UNISDR and SPREP, the SOPAC Division has supported the conduct of national progress reviews of the Hyogo Framework for Action (HFA) and Pacific DRR and DM Framework for Action in all Pacific island countries for the period 2011 – 2013. The reviews were conducted between June and August 2012.

DRM progress in each country is self-assessed at a national level against 22 indicators for the HFA and a report will be uploaded into an on-line portal once endorsed by the relevant national authorities. The review process combines a literature review, individual consultations and a multi-stakeholder workshop.

The results of the progress review will provide inputs into the following:

1. The development of joint DRM and Climate Change National Action Plans (where applicable).
2. The development of draft Country Implementation Plans specifically to articulate country DRM priorities in connection with individual national allocations under the EDF10 ACP-EU Natural Disaster Facility.
3. The development of an integrated regional strategy for DRM and Climate Change by 2015.
4. A country and Pacific regional perspective in relation to the development of a post-2015 framework for disaster risk reduction consistent with the United Nations General Assembly Resolution 66/199.

In addition to the national reviews, the SOPAC Division is also developing a regional progress report for DRM which is targeted for completion by October 2012.

Funding support for the reviews has been provided through a range of sources such as the UNISDR, EDF 9 ACP-EU Natural Disaster Facility and AusAID National Action Planning (NAP) Facility.

## Mainstreaming of disaster risk into national development planning and decision-making frameworks

### *DRM and Joint DRM/Climate Change National Action Plans (JNAP)*

The progress to date of national exercises to facilitate the mainstreaming of disaster risk into national development planning and decision-making frameworks in Pacific island countries covered thus far by the SOPAC Division in collaboration with partner organisations is listed in Annex 2.

The overall summary of direct donor support for NAP/JNAP development and implementation through the SOPAC Division is provided in the table below:

Facility	Status
ACP/EU Natural Disaster Facility	Contribution Agreement signed with the ACP and EU in May 2009.
	4 technical positions filled with appointments up to December 2013
	Total budget over 4 years is €1,868,000
	Facility implementation to be completed by 31 <sup>st</sup> December 2013
AusAID NAP Facility	Total budget over 3+ years from 2008 is A\$2,265,000 and the full amount has been provided to SPC SOPAC Division
	Facility implementation to be completed by 31 <sup>st</sup> December 2012

## Strengthened Institutional DRM Capacity

### *Electronic Initial Damage Assessment (IDA) form and training for NDMO and Divisional offices in Fiji*

DRP, in collaboration with the Fiji National Disaster Management Office (NDMO) and the Fiji Lands Information System office, successfully developed an online IDA that will enable district disaster coordinators to enter data gathered by field assessors and reports generated at divisional and national Emergency Operation Centres. This is part of the Disaster Information Management System (DIMS) supported by the AUSAID through the National Action Plan Facility.

The online system is aimed at enhancing the timely transfer of basic damage information to inform primarily the humanitarian effort but will also assist disaster recovery efforts.

Training for the online IDA system has been held in the Central, Western and Northern Divisions for Provincial Administrators, District Officers, Assistant District Officers and Clerical Officers.

### *Development of the National and selected Local Tsunami Response Plan – Fiji*

Support was provided to Fiji during the reporting period for *tsunami* response strengthening. Technical advice assisted in the development of a National Tsunami Response Plan which has been endorsed by the National Disaster Management Council. This included the provision of mapping support to demarcate safe zones.



Support to Fiji in this area also covered the design and development of *tsunami* warning signage and siren system for Suva and Lami. Through an agreement with the Fiji Ministry of Provincial Development a total of F\$44,000 has been provided to procure the signage and siren system for Lami, as well as signage for Suva. SOPAC has collaborated closely with a number of partner organisations in these efforts such as the Suva City Council, University of the South Pacific, Lami Town Council and Ministry of Provincial Development.

### *Kiribati DRM Governance Arrangements*

A draft of the Kiribati DRM governance arrangements has been submitted to the Office of the President in 2012; however, given recent interest by Kiribati to integrate its strategic approaches to DRM and Climate Change, further discussions are required to revisit the draft arrangements. The initiative will be pursued with GIZ in 2013 given its interests to collaborate with the SOPAC Division in this area.

### *Marshall Islands DRM Governance Arrangements*

Draft DRM governance arrangements were developed for Marshall Islands in 2011 and will need to be revisited in connection with the ongoing development of the Joint National Action Plan for Climate Change Adaptation and DRM. The JNAP, also developed in 2011, is awaiting finalisation by the Government.

### *Nauru – Strengthening of the NDRMO and Airport Control Tower*

In connection with an agreement with the Commissioner of Police in late 2011, support has been provided in 2012 to the National Disaster Risk Management Office through the purchase of office equipment targeted at enhancing emergency/disaster coordination capacity. The agreement with the Police is part of a package of support to Nauru in relation to the development of a Joint DRM and Climate Change Adaptation National Action Plan.

Under the same assistance, computer equipment including internet connections and software has been provided to the Airport Control Tower under the Ministry of Transport and Telecommunications to enhance its early warning role.

The total value of support provided to Nauru was A\$44,300. This was funded under the AusAID National Action Plan Facility managed by the SOPAC Division.

### *Papua New Guinea – Review of the 1984 Disaster Act*

A DRM mainstreaming programme supported by the SOPAC Division and UNDP was endorsed by the National Disaster Committee in May 2010. An initiative under the programme is the review of the 1984 Disaster Act. The review commenced in late 2010 and continued over the course of 2011. In early 2012 a draft set of new DRM governance arrangements was completed and this has been submitted to the National Disaster Centre for consideration and further consultation with national stakeholders. Feedback from the National Disaster Centre on the approved arrangements is awaited.

### *Papua New Guinea – Communications Equipment for the Police*

Under the DRM mainstreaming programme supported by the SOPAC Division and UNDP, an agreement was established with the Police in Papua New Guinea for the provision of communications equipment for ten (10) outposts in Morobe Province. The equipment has been purchased in 2012 and is awaiting deployment to Morobe. The equipment is to facilitate the work of the Police in their role as 'first responders' for emergency/disaster events. The total value of the equipment is PGK204,264.

### *Solomon Islands – Mass Casualty Exercise with the National Referral Hospital in preparation for the Pacific Festival of Arts\**

In June 2012 following a request from the NDMO technical advice and support was provided to the Solomon Islands for the conduct of a mass casualty exercise involving the National Referral Hospital. The exercise scenario involved the collapse of a stage at the Festival of Arts and the evacuation of injured performers. The exercise was intended to strengthen emergency response coordination in the event of an incident at the festival and also in terms of general response preparedness for emergencies and disasters.

### *Equipment for NDMO, Provincial Disaster Centres and Climate Change Division – Ministry of Climate Change, Environment and Disaster Management (MECDM) in the Solomon Islands*

In connection with an agreement with MECDM in November 2011, a range of equipment has been purchased to address the needs of the NDMO, provincial Disaster Centres and the Climate Change Division. This assistance has been provided in connection with a 2-phase approach to the development of a Joint DRM and Climate Change Adaptation National Action Plan for the Solomon Islands. The total value of the assistance provided was A\$80,000.

### *Exchange Visit to the State Coordination Centre in Melbourne, Australia – Solomon Islands, Vanuatu and Nauru NDMOs*

In line with agreements developed with the Solomon Islands, Nauru and Vanuatu in late 2011 and early 2012, an exchange visit was organised for the NDMO Directors and Operations Managers (Solomon Islands and Vanuatu only) to the State Coordination Centre in Melbourne,



in February 2012. The purpose of the visit was to provide a first-hand appreciation to the target countries in terms of operational systems in use in Victoria at state, regional and local levels.

The three-day visit involved discussions at the State Control Centre in Melbourne on the operational systems used in inter-agency preparedness and response to emergencies and disasters as well as a field trip to local and regional coordination centres.

This activity helped participating countries to learn from the experiences that a metropolitan country like Australia (and more specifically the State of Victoria) faces in terms of emergency and disaster preparedness and response. The activity gave the participants insight into various

methodologies and tools and has encouraged the NDMOs to improve their own operational systems.

There was particular interest in the Australasian Inter-service Incident Management System (AIIMS) and to examine possibilities of additional support from the Victorian agencies to adapt AIIMS for the countries that participated in the visit.

The visit also provided the opportunity for discussions with the Australasian Fire and Emergency Services Authorities Council, Country Fire Authority and State Emergency Service on possible twinning arrangements that could be established to support DRM capacity building for Pacific island countries.

### *Tsunami Early Warning Siren System for Nuku'alofa, Tonga*

The SOPAC Division undertook a mission to Tonga in March 2012 to discuss a range of DRM priorities. During the course of the mission a special request was submitted for funding support to enable the establishment of a tsunami siren system for Nuku'alofa. The request was supported in the context of ongoing assistance to Tonga in relation to the implementation of its Joint Climate Change and DRM National Action Plan.

As at July 2012 the Government has finalised the selection of a provider for the siren system. The SOPAC Division is providing F\$35,000 for the system based on specifications provided by the Tonga Met. Service.

### *Refurbishment of the National Emergency Operations Centre – Vanuatu*

Support was provided to the NDMO for the refurbishment of the National Emergency Operations Centre in connection with Vanuatu's DRM priorities articulated in an agreement signed with SOPAC in December 2011. The refurbishment included new partitioning, furniture and equipment and the total amount provided was A\$55,000.

This support will significantly enhance the NDMOs management of post emergency/disaster response at a national level and also with disaster coordination agents at a provincial level.

### *Establishment of the National Advisory Board for Climate Change and DRM in Vanuatu\**

In March 2012, the SOPAC Division provided technical advice and support to the Government of Vanuatu in its efforts to establish a National Advisory Board (NAB) for Climate Change and Disaster Risk Management. The initiative is being spearheaded by the Vanuatu Meteorological and Geohazards Department working in close consultation and collaboration with the NDMO and other national agencies and partner organisations. The NAB is intended to be the apex body dealing with DRM and Climate Change and its establishment will require the review of existing DRM institutional arrangements. The National DRM Council currently carries the overall mandate for DRM.

### **Improving the communication of DRM from the DRP, SPC SOPAC Division**

The DRP facilitates the development and circulation of the *Snapshots* newsletter. The newsletter is issued on a monthly basis and provides countries and partner organisations with

an account of the DRP's work plan implementation. Seven (7) issues have been produced from November 2011 through to August 2012.

In addition to the issuance of these newsletters, DRP provides visibility to its work programme and to the general progress on DRM in the Pacific through the SOPAC Division website and the Pacific Disaster Net web portal.

## RISK REDUCTION

### Increased capacity in-country for informed decision making in the management of vulnerability and risks

#### *Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) – Phase 3*

The Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) has provided Pacific Island Countries (PICs) with disaster risk modelling and disaster risk assessment tools. These have been developed with the financial and technical assistance of a number of partner agencies such as the World Bank, ADB, AIR Worldwide, NZ Institute of Geological and Nuclear Sciences and Pacific Disaster Center working with DRP over a 2-year period from 2010.

The tools include the following:

- Regional historical hazard and loss database for major disasters.
- Regional probabilistic hazard models for major hazards: earthquakes (both ground shaking and *tsunami*) and tropical cyclones (wind, storm surge and excess rainfall).
- Regional and national geo-referenced exposure database containing components for buildings and infrastructure, agriculture and population.
- Information on major cash crops and population.
- Country-specific catastrophe risk models and country risk profiles which includes maps showing the geographic distribution of hazards, assets at risk, and potential losses that can be used to prioritise DRM interventions.

Phase 3 of the PCRAFI aims to provide further technical assistance to the PICs to refine these disaster risk assessment tools and develop applications to support DRM and Climate Change Adaptation interventions.

- **Application 1. Pacific Disaster Risk Financing and Insurance.** The programme provides the ministries of Finance and Planning with tailor-made advisory services to help 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. It also helps the PICs develop an integrated disaster risk financing strategy, relying on an optimal combination of reserves, contingent credit, insurance, and donor grants. The Government of Japan is funding the programme over the next two years under a pilot programme which will benefit 5 PIC – Vanuatu, Solomon Islands, Marshall Islands, Samoa and Tonga.
- **Application 2. Rapid post-disaster damage estimation.** The Pacific Risk Information System (PacRIS) provides disaster managers and first responders with tools and information to quickly gain an overview following a disaster on areas and population affected and the likely severity of the event in terms of potential fatalities, injuries and building, infrastructure and crop damage. Support for this is being provided by GFDRR through the World Bank.
- **Application 3. Mainstreaming risk information into urban and infrastructure planning.** PacRIS ensures that disaster risk and climate change information and considerations form an integral part of the urban and infrastructure planning process.

The Pacific Risk Information System is the largest collection of geospatial risk information for the Pacific. It contains detailed, country-specific information on assets, population, hazards, and risks; a comprehensive regional historical hazard catalogue (115,000 earthquake and 2,500 tropical cyclone events) and historical loss database for major disasters, as well as country-specific hazard models that simulate earthquakes (both ground shaking and *tsunami*) and tropical cyclones (wind, storm surge, and excess rainfall) and contains risk maps showing the geographic distribution of potential losses for each country as well as other visualisation products of the risk assessments, which can be accessed through an open-source web-based platform [paris.sopac.org](http://paris.sopac.org).

DRP is progressing preparations with the World Bank and the ADB for Phase 3 of PCRAFI and a formal agreement is expected to be signed before the end of 2012. Funding support anticipated from the World Bank to be provided to the SOPAC Division for Application 1 is approximately US\$300,000. Funding for Application 2 is anticipated at approximately US\$900,000. Funding from the ADB for Application 3 is estimated at US\$650,000 over the period 2012 - 2014.

### *34<sup>th</sup> International Geological Congress, Brisbane Australia, August 6 – 10 August 2012*

SOPAC provided support to facilitate the participation of 13 Pacific Island participants at the 34th Session of the International Geological Congress in Brisbane, Australia, in the period August 6 – 10 2012. Over 6000 delegates from 14 countries were present.

The Pacific Islands delegation with Dr Gary Greene from the Circum Pacific Council shared exhibition space to promote 'Pacific Islands Geosciences'. Prior to the IGC, Geoscience Australia working with SPC and other organisations trained 40 representatives from 13 ASEAN and Pacific Island Countries to use a range of Open Source hazard and risk modelling tools to develop hazard maps and impact scenarios for a range of natural hazards including earthquakes, *tsunami*, volcanoes and tropical cyclones. Participants expressed that there is a need for additional training in this area.

There were two presentations from the Pacific during the main conference on the theme: *Geohazards: Earth monitoring for improved forecasting of natural hazards*. The session covered uses of real-time environmental monitoring to help forecast natural hazard phenomena such as the monitoring of earthquakes and ground deformation using real-time seismographic and geodetic networks and their use in forecasting *tsunami* and volcanic eruptions. The presenters from the Pacific were as follows:



- Lameko Talia (Samoa) presented on the Samoa Seismic Network highlighting the support provided by the Government of China in extending the number of realtime stations in the country.
- Esline Garaebiti (Vanuatu) presented on the progress made by Vanuatu in developing their national seismic monitoring capability for regional earthquake and *tsunami* warning using the example of the New Caledonia-Vanuatu regional seismic network. Esline also noted their contributions to the Melanesian Volcanological Network with their support to Solomon Islands in establishing real-time seismic monitoring on Savo.

### *GIS4DRM*

The use of tools such as Geographical Information Systems (GIS) and Remote Sensing (RS) to support disaster risk management initiatives is relatively limited in Pacific Island Countries. Through the past year, national agencies involved in the PCRAFI data collection and



consultations have shown an interest in using the data to support their own initiatives and progress through ongoing support.

Ongoing technical support to countries include:

- Introduction to GIS for DRM: This introductory training is aimed at developing GIS applications to support the existing work of the agencies involved. A training session with Ministry of Provincial Development and the Fiji National University was held in May 2012. An advanced training session is planned for Fiji and Papua New Guinea later in the year.
- Atlas: requests for high resolution imagery usually happen soon after the event. Using the image catalogue at the SOPAC Division and the available data collected under the PCRAFI, atlases are being developed for a number of areas. It is intended that these will be made available online for partners and national agencies to download and use.
- Strengthening Disaster Information Management Systems: a number of countries have developed and are maintaining information management systems to support disaster/emergency management efforts. The SOPAC Division continues to provide technical support as and when required.

## **Improving the understanding of *tsunami* risk in the South West Pacific**

### *Tsunami modelling and mapping in Tonga*

Geoscience Australia and the SOPAC Division through its Ocean and Islands and Disaster Reduction programmes, with AusAID support, are aiming to improve *tsunami* response planning in Tonga. *Tsunami* inundation models are being developed using a range of scenarios i.e. earthquakes that produce damaging *tsunami* that could potentially impact Nuku'alofa, Tonga. The hazard maps produced will be used to inform *tsunami* evacuation plans for Nuku'alofa and its surrounds; including the early warning system being developed. A workshop is planned in October 2012 to discuss with the National Disaster Council in Tonga scenarios to evacuate the city. This workshop will also discuss potential evacuation sites and routes for the community. A final workshop with a wider group of stakeholders is planned for early 2013.

## **Support to Strengthening Early Warning Systems in the Pacific**

### *UNESCO Programme*

DRP has since 2011 collaborated closely with UNESCO/IOC on strengthening early warning capacity in the Pacific islands region. In 2011 and 2012 the collaboration addressed the development of draft *Tsunami* Warning Plans and Standard Operating Procedures in Vanuatu, Fiji, Tonga and Samoa. In July 2012, UNESCO and other partners collaborated with DRP in supporting the participation of country representatives to the 14<sup>th</sup> Session of the Regional Association V (SW Pacific) Tropical Cyclone Committee (TCC) in Apia, Samoa, from 16<sup>th</sup> to 20<sup>th</sup> July.

### *Emergency Managers Weather Information Systems – Upgrade*

DRP, working in collaboration with the United States National Oceanic and Atmospheric Administration (NOAA) and SPREP, provided support to Pacific island countries from November 2011 for the upgrade of Emergency Managers Weather Information Systems (EMWIN).

The EMWIN were deployed in the late 1990s through early 2003 with National Disaster Management Offices and Meteorological offices through assistance from the NOAA and an EU-funded Tropical Cyclone Warning System Upgrade Project for the Pacific Islands. The NOAA in

mid-2011 announced that given a change in the satellite system used for EMWIN all existing EMWIN users needed to have new equipment (receiver, PC and software) installed to be able to receive the EMWIN direct broadcast after the changeover date of 14<sup>th</sup> December 2011.

In the arrangement with NOAA, the SPC SOPAC Division agreed to provide funding support to two technical specialists to address the required equipment upgrades. The NOAA provided funding for the equipment. The status of upgrade exercises in the Member countries covered is as per the table below:

Country	Status
Cook Islands	Complete
Fiji	Complete
Nauru	Awaiting confirmation of dates from National DRM Office
Papua New Guinea	To complete between 20 September and 9 October 2012
Solomon Islands	Complete
Tuvalu	To complete between 15 and 27 October 2012
Vanuatu	Complete

During the upgrade exercise the specialists also completed the upgrade of the EMWIN unit housed in SOPAC.

## Strengthening flood risk management in Fiji

### *Nadi Integrated Flood Management Project*

The Nadi Integrated Flood Management Project aims to demonstrate the effectiveness of integrated flood management for the Pacific using the Nadi catchment as a case study. The project was designed to complement and enhance the work of the GEF-funded IWRM Demonstration Project in the Nadi catchment and builds on synergies such as the Pacific HYCOS Project, EU-funded IWRM national planning programme and the AusAID NAP Facility.

The three components of the project are:

1. Institutional Strengthening of Flood Forecasting and Warning Systems
2. Flood Risk Assessment and Identification of Mitigation Measures and Dissemination
3. Institutional Strengthening for Integrated Flood Management

In April 2012, a LIDAR (light detection and ranging) survey was undertaken by contracted UK-based Network Mapping Limited of the lower Nadi catchment to provide elevation data of the area which is essential for 2D flood modelling and mapping.

A field survey of buildings not previously assessed as part of PCRAFI was undertaken in February 2012. This building dataset for Nadi will be used in the flood risk assessment component of the work. In April 2012, a second assessment for flood impacts was carried out in Nadi with Land and Water Resources Unit of the Department of Agriculture, Hydrology Unit of the Water Authority of Fiji and the District Office Nadi. A consultant from the New Zealand National Institute of Water and Atmospheric Research was also involved in the assessment to determine peak flood flows. The information collected is important for the flood risk assessment work to be undertaken as part of the project.



It is intended that the methodology used in the Integrated Flood Management Project could be replicated for other catchments in the Pacific.

The project is funded in a large part by the World Bank GFDRR at an overall value of approximately US\$830,000 over the period 2011 – 2013.

### **Capacity Development Opportunities for Risk Reduction Team Staff**

- In 2011, from 17 to 28 October, Joy Papao attended the 7th International Training Course on GIS for Disaster Risk Management in Bangkok, Thailand\*. The course highlighted disaster risk assessment and disaster management applications including rapid mapping in a post-disaster event.
- Pacific Risk Management 'Ohana (PRiMO) Partners Meeting 2012 was held in Honolulu, 13–15 March\*. Susan Vocea represented SPC SOPAC Division and participated as a panellist on the Information Discovery, Access, and Sharing for Disaster Risk Management in the Pacific session.
- Amrit Raj and Susan Vocea both attended the 2012 Understanding Risk Forum in South Africa from 2 to 6 July 2012\*. The Forum provided an opportunity for knowledge exchange and sharing best practice in disaster risk assessment. Several training sessions were organised for participants.

## **INFORMATION MANAGEMENT/PACIFIC DISASTER NET**

### ***Strengthening information management to support DRM***

#### *Pacific Disaster Net Content*

The Pacific Disaster Net web information portal was launched in 2008 and is developing into the leading DRM information resource for the Pacific region. The feedback and acknowledgement given the PDN in the global and regional arena confirms its standing amongst other key web information portals.

More than 520 websites are regularly researched for new information by the PDN Team. The table below highlights the growth over a 12-month period between August 2011 and August 2012.

Content	August 2011	August 2012
Documents	7000+	9300+
Events	1264	1287
Contacts	620	690
Calendar entries	500	650
Videos	27	73

The PDN is available on line and offline as the 'Local Edition' (on DVD) with frequently updated versions for meetings, trainings and on request and as 'Mobile Edition' for handheld devices (such as smartphones).

Another highlight for the PDN this year was a number of hands-on introductions which were facilitated by the PDN team to familiarise user groups with the portal navigation. These included the new DRM course at the University of the South Pacific (USP) as well as regional partners and stakeholders during their meetings.

Two mailing lists cover more than 1500 contacts and stakeholders for DRM in the Pacific region and globally and they support the distribution of frequent updates such as the weekly PDN

newsletter, a monthly DRM calendar with training, meeting and conference updates and occasional vacancy announcements or other news.

To improve the user friendliness and address volume issues as well as technology updates the PDN is preparing for a redesign. Comprehensive consultations with users, PDN partners and stakeholders resulted in a new system architecture which follows the identified user needs. Next steps include the recruitment of consultants to develop the new Pacific Disaster Net system.

PDN Partners contribute to its development and maintenance amongst other donors such as AusAID and the European Union.

### *PDN Strategic Plan*

With funding support from the UNISDR, DRP working with the support of a range of PDN partner organisations (IFRC, UNDP Pacific Centre, UNOCHA and UNISDR) has developed a Strategic Plan for the PDN. The primary aim of the plan is to provide guidance over a 3-year period, 2012 – 2014 in terms of the future development of the web information portal and consequently to facilitate the sourcing of donor support for new or emerging initiatives in a more focussed way.

Subsequent to the development of the strategic plan, DRP has facilitated further discussions with PDN partners on resourcing to address priority actions and an agreed approach is anticipated within the coming months of 2012. In line with the agreed resourcing approach/strategy partners will collaborate to secure the requisite funding support. Under the proposed budget for the SOPAC Division in 2013 a provision has been made to address a range of priorities under the PDN Strategic Plan.



### *DesInventar – Disaster Loss Database*

A major function of the PDN is to examine means by which Pacific island countries and territories can be provided with relevant information to inform their efforts at reducing disaster risk. Following a series of discussions with the UNISDR over the course of 2011 an attempt has now been made to add a further dimension to the reservoir of information on disaster available to the region by developing a Pacific regional disaster loss database.

With support from the UNISDR a project has been established to develop a Pacific regional Disaster Loss Database using the DesInventar methodology. The initiative will strengthen capacities in the Pacific in terms of providing information on disaster losses to support national planning and investment decisions which currently do not necessarily take into account disaster risks. Disasters and their impacts represent major losses for governments and communities.

The project will provide improved access to regional disaster data for the Pacific and enabling national and regional institutions to monitor, analyse and disseminate information on key hazards and vulnerabilities. Subsets of the regional data can be archived and extended at national level, in future projects. It will cover all Pacific island countries and territories.

The project components are described below:

1. Generation of a regional disaster loss database:
  - a. Appropriation of the DesInventar methodology for developing national databases and development of a Pacific version of the information system<sup>1</sup>, guidelines and training materials.
  - b. Familiarisation of relevant DRP staff with the methodology and tools for building national disaster databases; hands-on training on establishing and utilising the database with migration, collection, storage, and dissemination of disaster loss data; building an institutional framework that will ensure the maintenance and regular updating of the database and making it available to stakeholders to analyse risks in their specific areas of operation and inform the design of risk reduction interventions.
  - c. Data collection, migration and acquisition.
  - d. Data validation and cleaning.
  - e. Establish links with other online systems.
  - f. Institutionalisation of disaster loss data – UNISDR and DRP will continue to support the collection and analysis of disaster data on a continuous basis and its integration into planning and decision-making processes.
2. Development of analysis capacity in the SOPAC Division.
3. Regional disaster impact report prepared jointly by UNISDR and the SOPAC Division (DRP) to feed into relevant regional and global initiatives for progress reporting on disaster risk reduction, e.g. the biennial Global Assessment Report for Disaster Reduction.

The project, if successful, will contribute directly to the process that is underway in terms of the formulation of an integrated regional strategy for Disaster Risk Management and Climate Change by 2015; and by extension the post-Hyogo framework process.

As of August 2012 the project documentation has been finalised between DRP and UNISDR (signed in June 2012) and the recruitment process for a Regional Desinventar Officer to be based in the SOPAC Division Disaster Reduction Programme has been completed.

The project duration is targeted at 9 months and has an overall value of US\$92,974.

This regional initiative is intended to be continued eventually at the national level in the future and will support as well as draw from existing systems such as the DesInventar database in the Solomon Islands and Vanuatu.

### *DRR Project Portal*

The SOPAC Division is the Pacific focal point for the Asia Pacific DRR Projects Portal which was established in 2010.

The initiative has established a system that enables stakeholders involved in DRR initiatives at a regional level to provide coherent support in implementing the efforts of the national governments and addressing more effectively the challenges at the regional level.

The portal helps regional policy makers to identify progress and gaps for further interventions in DRR and improves information sharing on past, ongoing and planned DRR initiatives. It facilitates better coordination and programme planning by regional stakeholders, enhances use of resources, reduces duplication, shares lessons learned and identifies gaps in DRR efforts at a regional level. Thus it contributes to:

- improved regional planning and programming on DRR;

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<sup>1</sup> DesInventar is a multi-lingual software already existing in Spanish, English, Farsi, Sinhalese, Thai and other languages.

- highlight areas of cooperation among regional and sub-regional organisations;
- add to the periodic progress reviews and reporting processes at regional and sub-regional level; and
- assist donors and decision-makers to channel resources and efforts that can meet their own policy and programmatic imperatives.

The Pacific launch of the portal was undertaken during the Pacific Platform for DRM meeting in August 2010 in Suva, Fiji. It is available on line (<http://drrprojects.net>). As at August 2012 the portal has 1007 project records covering the Asia and Pacific regions.

A new stock take and update of Pacific regional project information from partners and stakeholders in the portal is currently underway with support from DRP.

### *Cook Islands DRR Projects Portal*

In line with the ongoing development of the Asia Pacific DRR Projects Portal, collaboration between DRP and the Asian Disaster Preparedness Center (ADPC) has seen the expansion of the concept at a national level in the Pacific in the Cook Islands.

Under an agreement between SPC SOPAC Division and ADPC, in February 2012, at a value of US\$50,705, work is underway to support the Cook Islands with the establishment of its DRR Projects Portal. Part of this assistance includes the recruitment of a Disaster Information Officer to be responsible for developing and populating the portal, a manual for its operation and for knowledge transfer to ensure the sustainability of the initiative.



As at the end of August 2012, the Disaster Information Officer has been recruited and 43 projects for DRM and Climate Change have been identified for entry into the portal. A workshop facilitated by ADPC in Bangkok in July 2012 focused on experience sharing of the national pilot projects and discussed links with other information systems as well as future information requirements on the regional and national level.

The project will end on December 2012.

### *Climate Change Information Systems*

DRP, through the support of the PDN team, has been providing technical advice to SPREP on the development of the Pacific Climate Change Portal.

In addition, in collaboration with GIZ, support is also being provided for national level efforts at establishing Climate Change information systems in Fiji, Tonga and Vanuatu.

### *PDN Introduction for Regional Red Cross Disaster Managers*

Through collaboration with the International Federation of Red Cross & Red Crescent Societies an awareness session for the Pacific Disaster Net was undertaken during the IFRC Pacific Regional Disaster Management Meeting in May 2012. The purpose of the session was to:

- provide a Pacific Disaster Net (PDN) hands on introduction;
- understand the role and purpose of PDN;

- understand how to access the portal and its content;
- be able to retrieve and share information; and
- be able to use the extended functionalities like the Local Edition (Offline version on DVD).

There were 24 participants from the Red Cross national societies attending the meeting.

## TRAINING & CAPACITY BUILDING

The Training and Capacity Building (TCB) unit was established to provide support, advice and technical assistance in the areas of Human Resources and Institutional strengthening for DRM. The TCB unit brings together existing personnel under the Pacific Disaster Risk Management Program (PDRMP) which is supported by The Asia Foundation/USAID Office of US Foreign Disaster Assistance with other DRP personnel.

### Increased Human Resources DRM Capacity

#### *Pacific Disaster Risk Management Program (PDRMP)*

During this reporting period *Emergency Operations Centre (EOC)* training has been a key focus, with eight courses held in the region: Federated States of Micronesia (3), Fiji (2), Nauru (1), Palau (1) and Vanuatu (1). In all countries (excluding Fiji) the training has complemented recent construction or renovation of national or state EOC facilities.

A new training course, *Introduction to Disaster Risk Reduction (DRR)* was launched in Samoa in July. This course has been developed for the Pacific region and is designed to provide an introduction to the fundamental concepts of risk reduction, including how risk is identified and how appropriate reduction or management measures are selected, financed and implemented. Following the successful launch this course will be customised for delivery in seven more countries over the next 12 months (Cook Islands, Federated States of Micronesia, Fiji, Marshall Islands, Solomon Islands, Tonga and Vanuatu).

Basic training, through the *Introduction to Disaster Management (IDM)* course have been provided six times during this reporting period in the Federated States of Micronesia (1), Fiji (2), Nauru (1), Solomon Islands (1) and Vanuatu (1).

In Fiji the cadre of national trainers has been expanded through a *Training for Instructors* course held in July 2012. Eighteen potential trainers attended the course to develop their training and facilitation techniques. These trainers will further support the institutionalisation of DRM training for Fiji within the Public Service Commission and implementation of disaster management training under the National Disaster Management Office (NDMO).



The table below highlights the courses conducted and the number of participants for each per country during the reporting period.

Participants	Introduction to Disaster Management (IDM)	Initial Damage Assessment (IDA)	Emergency Operations Centre (EOC)	Exercise Management (ExMan)	Training for Instructors (TFI)	DRM Workshop (included aspects of EOC, IDA, ExMan)	Introduction to Disaster Risk Reduction (DRR)
Cook Islands						22	
Federated States of Micronesia	22	43	59	21			
Fiji	46	23	48		18		
Nauru	22		21				
Niue							
Marshall Islands							
Palau		24	23				
Samoa							19
Solomon Islands	69	69					
Tonga							
Vanuatu	18	14	15				
<b>Total</b>	<b>177</b>	<b>173</b>	<b>166</b>	<b>21</b>	<b>18</b>	<b>22</b>	<b>19</b>

### *Development of graduate courses in DRM*

Technical assistance has been provided to the Fiji National University (FNU) and the University of the South Pacific (USP) for the development and delivery of accredited graduate-level courses in Disaster Risk Management. At the University of the South Pacific this has included the delivery of guest lectures during the face-to-face workshop for students enrolled in the EV424 *Disaster Risk Management* course.

For the Fiji National University (FNU), the first of four courses that will form a Graduate Certificate in Disaster Risk Management has been completed. The first cohort of students began their studies in August 2012. Lecturers from the Fiji National University are part of this first cohort and will take on the teaching responsibility with technical back-up support from SPC (SOPAC Division) personnel from Semester 1, 2013. Development of the second course in this programme is currently underway and will be completed by end-2012.

### *PDRMP Training for Police in Federated States of Micronesia*

In collaboration with the Australian Federal Police (AFP) Pacific Police Development Programme, support has been provided for disaster management training to Police and other key response personnel in the Federated States of Micronesia. This is a continuation of a programme that began in Samoa in 2010. Collaboration with the AFP has extended the reach of the suite of DRM training to a wider range of national stakeholders and is facilitating a more consistent understanding of DRM concepts and processes across the region.

### *Extension of DRM training for nursing students in the Solomon Islands*

Building on the successful partnership between the Solomon Islands College of Higher Education (SICHE), Solomon Islands NDMO and PDRMP, a four-day version of the Introduction



to Disaster Management and Initial Damage Assessment courses was developed for delivery to nursing schools in the Solomon Islands. The combined course was delivered to students at SICHE in April 2012 and again to students training at the Atoifi Hospital in August 2012 and Munda Hospital in September 2012. In 2012, 117 nursing students have completed this training. Significant to note the latter two courses were delivered by national trainers from the Solomon Islands trained through the PDRMP.

## EU EDF 9 B ENVELOPE PROJECT

The aim of the project is to build resilience in selected communities to mitigate against hazards focusing on disaster management and providing access to safe drinking water. The eight participating countries are: Federated States of Micronesia, Marshall Islands, Nauru, Palau, Papua New Guinea, Solomon Islands, Tonga and Tuvalu. A time extension and budget increase was approved in 2011 with the project now scheduled to close in June 2013 with a budget of €9.7 million.

### Improved access to safe and clean drinking water

#### *Marshall Islands*

The focus in the Marshall Islands is to improve access to safe drinking water. Installation of 350 rainwater catchments for Majuro and 250 rainwater catchments for Ebeye has been completed including 173 tanks in the outer islands. The supply and installation of a further 580 water tanks for households on Majuro commenced in August 2012 and is scheduled to be completed in March 2013. Further support to the Environmental Protection Agency (EPA) was provided with more water



quality monitoring equipment. All activities in the Marshall Islands will be completed by March 2013.



#### *Nauru*

The intervention in Nauru is in addressing water security. The project has completed the construction of 45 community rainwater catchment shelters over community tanks which will ensure they provide a longer service to the community in addition to desalinated supply. Six large concrete tanks at the Nauru Utilities Authority complex have been repaired, increasing storage capacity. Construction of a steel frame building housing the six tanks was completed in June 2012 that will provide a more secure environment reducing the risk of possible contamination. Installation of guttering to 150 households is currently in progress and due to be completed in the last quarter of 2012.

### *Tonga*

The objective of the project in Tonga is to improve access to safe drinking water. Construction of 23 new pump sheds and extending the electrification grid at the Mataki'eua well field has been completed. To reduce risk of contamination of the water lens twenty six (26) new electric pumps were installed replacing diesel operated pumps. Water is being extracted from the water lens more efficiently and new water meters are providing valuable data on extraction rates for better management of the water resource.

The Ministry of Health has identified 10 villages on Tongatapu that are considered a priority for improvement of their village water supply. The villages include Kolongo, Talafo'ou, Fatuma, Holonga, Vaini/Pakilau, Ha'ateiho, Ha'alalo, Kala'au, Fahefa and Fatai. New water pump sheds have been constructed at all villages and six new submersible pumps are being installed including one standby generator. The mufflers discharging exhaust fumes from diesel operated pumps has been extended to reduce risk of contamination of the water lens.

Supply and installation of 105 (10,000 litre) rainwater catchments in Eua (33 tanks), Ha'apai (39 tanks) and Vava'u (33 tanks) have been completed. A contract was signed with Tonga Community Development Trust in July 2012 to undertake awareness in the outer islands on promoting good water management practices. The training and awareness programme is expected to be completed by December 2012.

The project is currently working with the Ministry of Lands, Environment, Climate Change and Natural Resources to drill six boreholes on Tongatapu to monitor water quality. Drilling work commenced in June with three boreholes completed and remaining work to be completed in September 2012. A new vehicle was also provided to the Ministry to assist in their fieldwork. The data collected from the boreholes will provide valuable information on monitoring salinity and quality.

### *Tuvalu*

Installation of 310 rainwater catchments with 10,000 litre capacity has been completed targeting households in Funafuti. With some balances remaining a further 25 rainwater catchments are currently being installed which is expected to be completed by December 2012. With the majority of houses on Funafuti dependent on rainwater the rainwater tanks will provide increased storage to support the household during periods of dry weather.

Raising awareness of the importance of water and promoting good management and conservative practices is important due to the dependency on rain water. The project is working closely with the Government and Non-State Actors in Tuvalu to educate communities, households and Government officials on how to maintain clean water catchments and monitoring water quality. A workshop was held in Funafuti in May 2012 with participants from Government, communities and Non-State Actors promoting good water management practices. A follow-up training will be held in the latter half of 2012 to ensure skills are applied particularly in water quality monitoring.

## More robust emergency communications and overall national disaster response coordination



### *Federated States of Micronesia*

The focus in FSM is to strengthen the early warning system network and renovate the Emergency Operation Centres in each State. Renovation of Emergency Operation Centres in Yap, Kosrae, Chuuk and Pohnpei States has been completed. Construction of a national Emergency Operation Centre in Palikir commenced in January 2012 and is scheduled to be completed in November 2012. Early warning communication network will be strengthened

with the supply of HF and VHF radios in the outer islands in all States with installation to commence in the last quarter of 2012. The project has installed six Rural Internet Connectivity units in certain States and more training will be provided in disaster management.

### *Palau*

Construction of the new Emergency Operation Centre in Palau has been completed and a new vehicle was also provided to the National Disaster Management Office. Further training support will be provided to the NDMO including other key stakeholders.

### *Papua New Guinea*

The overall aim is to improve early warning communication through strengthening the seismic and weather monitoring networks including strengthening communication between the national and provincial disaster management offices.

Strengthening of the seismic network will include establishing ten new (10) seismic stations at Alotau, Kavieng, Kimbe/Hoskin, Kuta/Buka, Misima, Lae/Mt. Lunaman, Port Moresby, Tabubil and Mt. Hagen. The seismic stations will transmit real time seismic data through Telecom's network to the main hub at the Port Moresby Geophysical Observatory. The seismic stations will also be installed at Telekom sites in the Provinces. Installation of the seismic stations is due to commence in September 2012.

Support has been provided to the National Disaster Centre in enhancing their capacity to provide early warning communication. Provincial disaster managers have been provided with a phone with twelve months unlimited calls through an arrangement with a mobile phone company. Supply and installation of 148 VHF/HF radios will commence in the last quarter of 2012 targeting Provincial Disaster Committees in each province. Some equipment as listed in the table below have also been provided to NDC to support their field visits to the Provinces

NDC Support	Equipment
Provide appropriate equipment to NDC to support field missions and improve communication network.	The following items have been supplied: <ul style="list-style-type: none"> <li>- Install new phone network at NDC Office</li> <li>- Supply life jackets, tents, sleeping bags, cooler, first aid kit, back packs, torch, hand flares and orange canisters</li> <li>- Supply GPS unit and binoculars</li> <li>- Office equipment: Trimmer, Binding Machine, Desk Lamps, Inkjet Printers, HP Designjet Plotter, PA System, Overhead Projector, Computer Flat Screens and</li> </ul>

NDC Support	Equipment
	Desktops, Laptop Bags, Flash Drives, Printer/Scanner/Copier, Electronic Whiteboard, Desk Top Speakers, Laptops, Camera, and appropriate Software - One 50" Plasma TV screen for NDC - One 3KVA diesel generator

The National Weather Service (NWS) has taken delivery of five (5) Automatic Weather Stations (AWS) and twenty (20) data logging rain gauges. NWS has completed installation of AWS's at Por Island (Siasi Island Group), Misima Weather Office, Tambul and Aiyura (Highlands Provinces). The installation at Buka (Bouganville) will be undertaken in the third quarter of 2012. Data logging rain gauges are being installed when NWS staff undertake scheduled visits to Provinces.

### *Solomon Islands*

The country focus is to strengthen disaster management through infrastructure development. A new Emergency Operation Centre has been built at Lata (Temotu Province) and in Kirakira (Makira Ulawa Province). The building at Lata has been completed and Kirakira is due to be completed in October 2012. Construction of an EOC at Gizo (Western Province) is due to commence in September 2012. Some support for training will be provided to the disaster management office and other key stakeholders.

In addition to the core deliverables of the project, support has also been provided to other teams within the DRP, and the SOPAC Division as follows:

### *Niue – Emergency Operations Centre Design & Review of Building Code*

Under a package of support provided in connection with the development of a Joint DRM and Climate Change Adaptation National Action Plan, technical assistance was provided to Niue by the B Envelope Project Engineer, John Tagiilima, for the design of a purpose-built National Emergency Operations Centre. The basis of the design drew significantly from the designs used by the EU EDF B Envelope Project.

In addition, the project is also providing technical advice and support to Niue for the review of its National Building Code and supporting legislation. A mission was undertaken to Niue in the second quarter of 2012 to discuss the terms of reference for the review. An advertisement of the TOR is to be published in September 2012.

## EU EDF 9 C ENVELOPE PROJECT

This mechanism provides Pacific overseas countries and territories (OCTs) €5.665 million over 4 years to support national actions to reduce vulnerability to natural disasters and water-borne diseases. The EDF 9 C Envelope also seeks to facilitate OCT access to regional learning schemes and initiatives in the areas of disaster risk management and water and sanitation. The four participating countries are: French Polynesia, New Caledonia, Pitcairn Islands and Wallis and Futuna. This project is based on the premise that, by mitigating risk, disaster loss – in terms of human life, infrastructure damage and economic impact – will be reduced or avoided. Each territory works towards this objective based on its own set of priorities and particular environment, some opting for a focus on sanitary risk (New Caledonia, Pitcairn Islands), others natural disaster risk (French Polynesia, Wallis and Futuna). Strong emphasis is placed on the use of science to inform decision-making: support is provided in generating data, quantifying and monitoring risk, to inform decision-making in a range of sectors: disaster preparedness and response, coastal development planning, water resource management, sanitation, environmental protection, and economic development.

### Territorial Component

Following the signature of seven agreements in 2011, implementation is underway in all four territories.

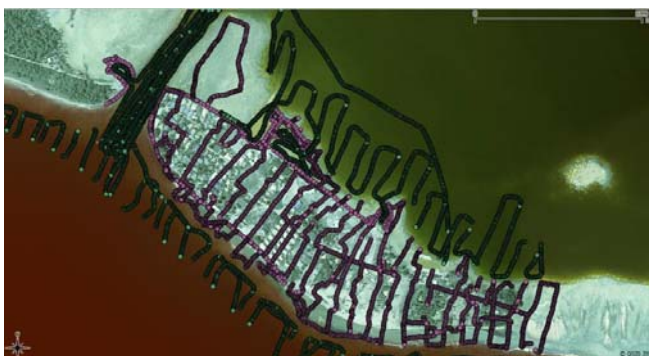
#### French Polynesia (FP)

French Polynesia seeks to reduce natural disaster risk in two vulnerable zones: the Marquesas archipelago highly exposed to *tsunami*, and the Tuamotu archipelago facing severe and recurrent cyclonic swells. The FP allocation totals €1,085,000 or 21.5 % of the project budget.

#### *Tuamotu Archipelago – Reducing the risk of storm surge*

Under the framework of FP's national disaster risk prevention policy, this activity seeks to provide an accurate definition of the inundation hazard from tropical cyclone waves in select areas of the Tuamotu archipelago. Results will feed into revised land use and disaster plans, with a view to enhance people's safety and protect coastal infrastructure (applications also extend to the pearl culture and tourism industry, environmental protection and maritime security).

Following extensive bathymetric, oceanographic and topographic data collection in 5 atolls (Rangiroa, Manihi, Kauehi, Arutua and Apataki), SOPAC's efforts in 2012 focused on processing and analysing the data to enable the development of cyclone wave models and inundation maps. This work led to the testing of new tools (such as Xbeach which investigates wave transformation over fringing reefs); these will now become standard procedures for future



modelling at SPC and should benefit similar upcoming projects. As of end 2012, several reports, bathymetric maps and emerging models (1D and 2D) will be available, awaiting refinement in 2013.

As part of this project, the SOPAC Division will undertake an economic analysis of inundation mitigation options in coastal areas (particularly as they relate to

housing). The Terms of Reference have been agreed to and a literature review is underway. Subject to the arrival of a new economist, the field collection component will be conducted in October 2012, with preliminary results to be presented to French Polynesia shortly thereafter.

#### *Marquesas Archipelago – Strengthening the tsunami alert system*

The Marquesas archipelago is remote and highly exposed to *tsunami*. With 10 deficient sirens, this activity seeks to strengthen the *tsunami* alert system through the repair of faulty sirens and the capacity building of local technicians to diagnose malfunctions and make minor repairs, reducing the dependence on costly, Papeete-based resources.

A private French Polynesia-based supplier, ASSYSTEM was selected in 2011 to conduct the repair of all tsunami sirens and build the capacity of local technicians in system maintenance, malfunction diagnosis and basic repairs. With two visits to the five concerned sites (Hiva Oa, Ua Pou, Ua Huka, Nuku Hiva, and Fatu Hiva), ASSYSTEM was able to test the entire *tsunami* siren park, repair all faulty sirens and train six municipal technicians, increasing local autonomy in the maintenance and repair of sirens. This activity is complete.

#### **New Caledonia (NC)**

New Caledonia seeks to mitigate public health risk arising from contaminated drinking water, inadequate sanitation, and increasing climate, population and industrial pressures on water resources. The NC allocation amounts to €1,550,000 or 30.6% of the total project budget.

#### *Reducing public health risk in New Caledonia through water safety planning (national reach)*

Faced with periodic epidemic outbreaks due contaminated drinking water, New Caledonia seeks to increase access to safe drinking water by assisting municipalities in the development of water safety plans and the subsequent implementation of key corrective measures. The premise of water safety planning is that by identifying entry points for the contamination of drinking water and systematically addressing these deficiencies, water-borne diseases and epidemics should be reduced significantly.

In 2011 and 2012, nine municipalities (La Foa, Farino, Sarraméa, Moindou, Touho, Hienghène, Poum, Ouvéa and Bourail) received technical and financial support to improve the quality of their drinking water. Funding for these improvements is shared between the town's budget (25%) and EDF 9 C funds (75%). Improvements are based on the identified needs of each



municipality and include a wide range of measures: regular monitoring of water quality (with data recorded and analysed), monitoring the performance of the water supply system (and remedial action to reduce wastage), development of awareness materials on water usage and safety, addition of new water storage and treatment facilities and protection of these structures (with fences, locks), improvements to rainwater harvesting, cleaning of water reservoirs, new regulations prohibiting access to water catchment areas, introduction of new water treatment techniques (chlorination, diverter, first flush), training of technicians and volunteers to assess water quality and infrastructure maintenance needs, review of payment options for drinking water and installation of individual water meters to prevent wastage. Improvements in all nine municipalities were completed by

end of July 2012. Left-over funds will be used to benefit water quality improvements in one additional municipality: Ouegoa.

In September 2012, five new water safety plans will be initiated for the following municipalities: Voh, Koné, Pouembout, Canala and Lifou. New Caledonia sanitary agents will train and accompany municipal teams in identifying contamination entry points and remedial action. These actions, collectively, should contribute to improved drinking water quality in New Caledonia.

*Enhancing New Caledonia's capacity to manage wastewater collaboratively (national reach)*

This activity falls under New Caledonia's efforts to address significant sanitation gaps threatening the country's fresh water resources, its UNESCO world heritage lagoon and the public health of its people. Before launching into infrastructure improvements, New Caledonia is seeking to reform the governance of its sanitation and wastewater arrangements. Through a multi-year, multi-stakeholder approach, the country is working on defining this new structure based on a diagnosis of the sanitation situation in the country and the development of options for the new sanitation agency.

By end of 2011, the feasibility study for the establishment of a multi-stakeholder national sanitation agency was completed. It offers several scenarios for the new sanitation agency, including options for its legal status, institutional and technical mandate, and funding mechanisms. In parallel, a study tour to metropolitan France was organised for mayors to learn about collective and individual solutions to sanitation and meet institutional, technical, administrative and financial stakeholders involved in solving sanitation issues in metropolitan France. In early 2012, results were presented to Congress. Congress was unanimous in asking the Government to continue leading this initiative towards the creation of the sanitation agency OPANC; a vote is planned for late 2012.

*Reducing public health risk through integrated water resource management in the Voh-Koné-Pouembout (VKP) area, Northern Province, New Caledonia*

The VKP zone is facing rapid industrial development with the establishment of a large nickel mining project. The population rate is growing rapidly as the industrial pole attracts new workers and their families, who in turn require a range of services (e.g. fresh food, schools, homes, electricity). This situation puts pressure on limited water resources, increasing the risk of water scarcity and contamination. To meet these challenges, VKP water stakeholders have come together to manage water resources collaboratively under a Water Management Committee following an integrated water resource management approach. EDF 9C funding is used to co-finance a range of initiatives to enhance the knowledge of water resources, of its usage and the risks it faces, improve the protection of water environments, improve water management and governance, and encourage learning and experience sharing.

In 2012, progress was made on all the above components:

- To enhance knowledge of ground and surface water, a number of studies are underway or completed, such as the feasibility study for the setup of anti-salt dams, the study of the Koné river to assess the hydrological sustainability of the water table, the modeling of the Pouembout water table, the investigation presenting data gathered from a network of piezometers installed on the Voh river, and the hydro-geological study of the Koné River water table.
- To provide VKP water stakeholders with a more accurate assessment of water needs, several initiatives are under implementation, including installing individual water meters for the Koné communities and public buildings, the study of the needs and particular usage of

water for agricultural purposes in Pouembout, the training of farmers in cultural practices, corn irrigation and the use of probes.

- In terms of environmental protection of water resources, water safety plans will be developed with the support of the New Caledonia sanitary agency DASS; this concerns the three municipalities of Voh, Koné and Pouembout. Preliminary discussions and preparations are currently taking place.
- To enhance water resource management and governance, progress was made on several fronts: a review is underway of the guiding strategy for access to drinking water in the VKP zone (which will include results of the water consumption analysis); new regulations to grant authorisations for domestic water use have been introduced; discussions are taking place with private specialised agencies to devise IT solutions for matching water needs and availability; a first draft proposal is available seeking to formalise the establishment of the VKP Water Management Committee.
- The water management committee has been active in raising the awareness of communities in reducing water usage, particularly in schools, through press articles and with the general public through the delivery of water bills.

The multi-faceted work conducted by the VKP water management committee should contribute to reducing the pressure on water resources and ensuring its safety and availability for a growing population.

### **Pitcairn Islands**

Pitcairn Island is increasingly facing long, severe periods of drought and variability in rainfall patterns. For a remote island, highly dependent on rainfall, this situation can have a dramatic impact on water available for domestic consumption and agricultural production. This activity seeks to strengthen water security for the 50-strong population on the island. Priorities include the systematic assessment and monitoring of water resources and weather patterns, feeding this data into drought mitigation measures such as improved water collection, storage, and distribution. The Pitcairn Island allocation totals €300,000 or 6% of total project budget



Starting in mid-2010, SOPAC has been providing Pitcairn with monthly analysis of water and rainfall data collected on the island. This analysis, in the long term, should allow for enhanced anticipation of dry periods and related water consumption and storage needs. New water and weather monitoring equipment was procured this year such as rain gauges and temperature thermometers.

In June/July 2012, SOPAC undertook a 10-day field visit to Pitcairn Island. The objective was to conduct training in water quality testing and monitoring, map all existing water facilities using GIS technology, and design actual water improvements on Pitcairn. The visit resulted in the identification of rainwater harvesting and spring flow collection improvements, including sites for new tanks, equipment to be procured and delivery mechanisms. These activities should contribute to improving Pitcairn Island's water security.



## Wallis and Futuna

Wallis and Futuna seeks to enhance its capacity to prepare for and respond to disasters, particularly *tsunami*. To do so requires a more accurate assessment of the inundation hazard from *tsunami*. This component is led by regional applied research agencies NIWA and IRD and will provide Wallis and Futuna with critical information (such as inundation maps and *tsunami* scenarios) for more focused and effective disaster-related planning. The bulk of the €387,000 funding (7.6% of total project budget) is used by the territory to enhance disaster preparedness through the acquisition of complementary disaster response equipment, the updating of disaster response plans, improved coordination of disaster response, and increased public awareness.

The *tsunami* modelling component is complete with bathymetric maps available for Uvea and Futuna-Alofi, models developed for several trans-Pacific and regional *tsunami* scenarios and the identification of inundation impact. A French expert has been identified to review disaster response plans; and he will assist Wallis and Futuna during October-December 2012. His role will also be to assess the current disaster response arrangements in place and make a series of recommendations. Information materials have been developed to raise awareness of communities in preparing for and responding to *tsunami* alerts. To enhance communication during disaster response, a study was conducted to assess current radio communication coverage throughout the two islands. The results have led to the identification of new telecommunication equipment (including radio transmitters) to be procured. Recruitment is underway to provide support to all villages in developing their emergency response plans, including the identification of emergency shelters. These combined efforts will enable Wallis and Futuna to enhance its preparedness to disasters and particularly *tsunami*.

## Regional Component

In addition to national actions, the EDF 9 C Envelope seeks to promote regional exchanges between OCTs and their Pacific neighbours in the areas of disaster management and water and sanitation. The budget for the regional component amounts to €263,000 (5.2% of the overall budget).

Considerable activity took place on the regional front:

- In a Pacific first, OCTs took part in a 3-day study visit to Fiji in November 2011. Fourteen OCT representatives toured different areas of the main island, Viti Levu, to learn about local activities to improve water, sanitation and disaster preparedness. One of several locations, the OCT delegation toured was downtown Nadi, to see the effects of the 2009 floods and visited sites that are part of a Global Environment Facility demonstration project, which aims to use integrated water resources management to reduce the impact of flooding. Vinesh Kumar, Nadi GEF project manager, said he believed the exchange benefited all parties: *“We hope that by highlighting the holistic approach we are using to lessen the impacts of flooding, our OCT friends will take home some new ideas on how to deal with their local issues. We also see this as the start of a close relationship where we can also learn from some of the activities in the OCTs.”*



- As host to the 2012 Pacific Disaster Risk Management (DRM) Platform and Regional Water and Sanitation Consultations to be held in September 2012, New Caledonia is set to play an active role in promoting its approach to disaster risk and water resource

management. With a large delegation representing all four OCTs, the meeting will allow for 'French' models to be presented alongside Anglophone approaches, and for mutual learning and exchanges to take place.

- Following the establishment of a regional project fund worth €170,000, eight initiatives were selected to strengthen regional learning and integration in water resource and disaster risk management. Such exchanges include: a study tour to Australia for New Caledonia public health officers to gain knowledge in asbestos risk management, the development of a standard *tsunami* risk signage policy for Pacific OCTs, a regional workshop on water governance to identify Pacific-specific good practice and lessons learned, exchanges between French Polynesia and Hawai'i on the inclusion of natural disaster risk in coastal development planning regulations, and a regional workshop on water safety planning to encourage cooperation between OCTs and PICs in this area. All initiatives are currently under implementation.
- Another objective under the regional component is to make available to francophone Pacific territories the SOPAC Division's repository of information for DRM, Pacific Disaster Net ([www.pacificdisaster.net](http://www.pacificdisaster.net)). The web portal, currently only in English, will be modified with the addition of a French interface and the inclusion of OCT resources. The translation will begin in 2013 once the redesign of the PDN interface is complete. Since 2011, the PDN manager has established contact with key OCT stakeholders, providing a solid basis for future cooperation. Following the presentation of the web portal and its capabilities, OCT-based French disaster managers have expressed interest in also using PDN as host to the emergent FRANZ website.
- Given the time-bound nature of the project, the EDF 9 C Envelope is working to strengthen ties between the SOPAC Division and OCTs beyond 2013. As part of the development of the New Caledonia Joint Country Strategy in 2011-2012, SOPAC Division services were identified and secured to service New Caledonia needs over the long-term. This tool is a useful conduit for cementing institutional ties between the Division and OCTs. In the same vein, the project facilitated a meeting between the SOPAC Water and Sanitation Programme and OCT water stakeholders in November 2011. This first 'get-together' allowed OCTs to grasp the range of services provided by the SOPAC Division in this area. SOPAC support to OCTs post-project is a critical issue which needs further attention.

To consolidate territorial advances in disaster and sanitary risk management and the regional integration of OCTs in this area, the SOPAC Division applied for a 12-month extension which was granted by the European Commission early 2012. The EDF 9 C Envelope is now scheduled to close in November 2013.

## ISSUES AND OPPORTUNITIES

### Opportunities in 2012 – an Update

At the SOPAC Division meeting held in October 2011 the SOPAC presented a range of *Opportunities* to enhance DRM capacity building support in the Pacific. An update of the progress in relation to these is laid out below:

#### *Integrated Regional Strategy for DRM and Climate Change Adaptation & Mitigation*

In 2011 the SOPAC Division and SPC CRGA endorsed a 'Roadmap' or a process towards the development of an integrated regional strategy for Disaster Risk Management and Climate Change by 2015. Following the meeting and subsequent approval by the SPC CRGA, SOPAC Division has in coordination with SPREP and UNISDR undertaken a series of consultations to commence the 'Roadmap' process. A detailed account is in the next section of this report.

### *DRM Competency Framework*

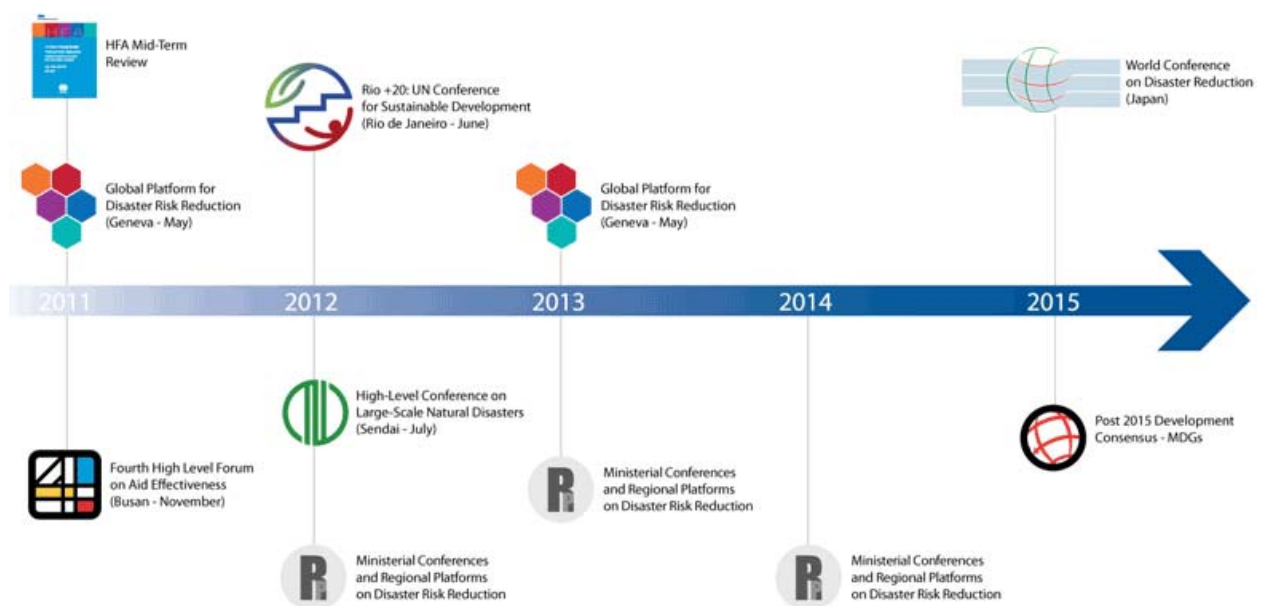
With the support of the Training and Capacity Building Working Group of the Pacific DRM Partnership Network work will be undertaken on the development of a DRM Competency Framework in 1 or 2 Pacific island countries. A competency framework identifies the 'minimum standards' of competence that are required at different levels (e.g. national, local government, provincial etc) and the development of this facility within a Pacific island country context will greatly enhance DRM capacity building efforts.

The SOPAC Division commenced preparatory discussions with a few strategic partners in the period following the Division meeting in 2011. It was agreed between partners that the SPC SOPAC Division would lead the initiative with the support of the NZ Ministry of Civil Defense & Emergency Management and UNOCHA. It was further agreed that two countries, Solomon Islands and Cook Islands be the focus of a pilot to establish a competency framework and under the 2012 budget F\$20,000 was set aside to facilitate in-country consultations and follow up for the initiative.

### *UNISDR Advisory Group for a Post 2015 Global Framework for DRR*

The UNISDR is taking the lead to develop a global DRR framework to succeed the existing Hyogo Framework for Action which runs its course by 2015. In the Pacific the UNISDR has pledged to work closely with SPC and other development partners and it is anticipated that the integrated regional strategy for DRM and Climate Change come into play in 2015, the process for which has already commenced, will help to constitute the Pacific's contribution to the post-Hyogo framework.

The UNISDR has commenced the process of the post-Hyogo framework by launching an online dialogue on 27 August 2012 which will continue through to 30 November 2012. The dialogue is part of a macro process outlined in the diagram below, which all regions including the Pacific are contributing towards.



The UNISDR Advisory Group for the post-Hyogo framework has been formed and comprises 15 experts in various fields linked to DRM.

Details of the post Hyogo Framework process can be obtained through the following web link:  
<http://www.preventionweb.net/posthfa/>

*Rio+20 UN Conference on Sustainable Development, 4<sup>th</sup> – 6<sup>th</sup> June 2012*

The SPC was represented at the UN Conference on Sustainable Development in 2012 by the SOPAC Director, Dr. Russell Howorth. Following the conference the SPC has undertaken a review of the Rio+20 results matrix as part of a collaborative effort between CROP agencies. The purpose of the review is to examine the relevance to the Pacific of the sustainable development commitments made in Rio, identify gaps and also opportunities for moving forward.

*Early Warning Working Group*

Following the 2011 Pacific Platform for DRM, the SOPAC Division working closely with UNESCO agreed to take the lead in establishing a Pacific regional early warning working group to coordinate and complement the efforts of other working groups and Pacific Island Countries and Territories to assist in the development of early warning systems both at regional and national levels and to establish clear standard operating procedures for relevant agencies, as well as simplify and standardise early warning messages and alerts for inclusion in ongoing education and public awareness programmes.

The initiative is still being pursued in 2012 and further discussions will be undertaken in the context of the 2012 Pacific Platform for DRM.

*Framework to guide Community-Based Disaster Risk Management (CBDRM)*

There is a significant level of investment being made in community level DRM (and climate change adaptation) across the Pacific and SOPAC and other partner organisations have been concerned that such support reflects 'best practice' and that efforts undertaken through project initiatives are able to be sustained particularly by responsible national agencies.

Little progress has been made towards this initiative given the challenges in identifying a Chair for the CBDRM Working Group of the Pacific DRM Partnership Network. As of August 2012 both UNDP and Act for Peace have agreed to co-Chair the working group and to look into a framework to guide CBDRM amongst other potential initiatives.

**Issues and Opportunities in 2013***Issue****Resourcing to Support Core Staff Positions***

The Disaster Reduction Programme, as with other technical programmes in the SOPAC Division continues to be challenged to retain specialist skills in areas that would address the strategic needs of Members in relation to DRM. Approximately 43% (10 of 23 staff) of the overall staff in 2012 are funded through projects which will end in 2013 and therefore the ongoing delivery of services to Members is at significant risk. The table below highlights the range of specialist skills areas which are at risk. It is pertinent to note that these issues have been raised on an annual basis through reports to the SOPAC Division annual meeting (and previously to the former SOPAC Governing Council), and reports to donors and regrettably the issue has not been addressed.

Name	Area/Skills
<b>EU EDF B Envelope – ends July 2013</b>	
George Beck	Support in the establishment/strengthening of emergency operations coordination and communications, and water services capacities at national institutional and community level; project management expertise
John Tagiilima	Engineering advice and support in a range of DRM interventions; specialisation in water sector engineering; project management expertise
<b>EU EDF 9 C Envelope – ends November 2013</b>	
Frederique Lehoux	Leadership of DRM advocacy and technical advice and support to the French territories at national and sub national level; bilingual capacity for interface between SOPAC Division and the French territories
Yolaine Take	Dedicated administrative and financial management support to DRM initiatives for French territories; bilingual capacity for interface between SOPAC Division and the French territories
<b>EDF 9 ACP-EU Natural Disaster Facility – ends December 2013</b>	
Samantha Cook	Economic analysis of disaster impact, analysis of DRM investments; technical and policy advice and support in risk financing and insurance; technical advice and support in national DRM and sustainable development planning; DRM advocacy
Noa Tokavou	Disaster/emergency preparedness and response operational planning and coordination; national and community level DRM and public health technical advice and support; DRM training development and facilitation
Waisale Naqiolevu	DRM/Climate Change Adaptation and development planning technical advice and support; project management; monitoring, evaluation and reporting skills
Joy Papao	GIS/Remote sensing expertise; hazard mapping and risk assessments; technical advice and support for DRM interventions
<b>Pacific DRM (Training) Programme under The Asia Foundation/Office of US Foreign Disaster Assistance – ends July 2013</b>	
Emele Bola	Training course materials design and development specialisation; administrative and financial management support
Aminisital Koroi	Dedicated DRM training support in the North Pacific based in SPC northern regional office in Pohnpei; experience and skills in community level engagement in Federated States of Micronesia

While new funding opportunities (new projects) may emerge over the course of the coming year(s), the ongoing dependence on project funding to address core work areas is untenable and a solution must be found so that the Programme, and consequently the Division and the wider SPC, can maintain consistency in service delivery over an extended period of time.

### *Opportunities*

#### ***Building Strategic Alliances to Strengthen Emergency/Disaster Preparedness and Response***

Following an NDMO and DRP visit to the State Control Centre in Melbourne, Australia, in February 2012, there has been an ongoing collaboration between SOPAC, the Australasian Fire and Emergency Services Council, The Asia Foundation and the UN Office for the Coordination of Humanitarian Affairs to build a strategic alliance between members of the Pacific Islands Fire Services Association, Pacific NDMOs and AFAC members with the purpose of strengthening emergency/disaster preparedness and response in Pacific island countries.

A concept note for the establishment of a strategic alliance has been developed and will be discussed at the 2012 Pacific Platform for DRM in September 2012. It is anticipated that the concept will be endorsed by Regional Disaster Managers and thus resourcing will be required

from 2013 to enable commencement of the alliance. The SOPAC Division is taking the lead role in this initiative.

### ***2013 Joint Meeting of the Pacific Platform for DRM and Pacific Climate Change Round Table***

Following consultations undertaken over the course of 2011 and 2012 it has been agreed between SPC and SPREP that in 2013 there will be a joint meeting of the Pacific Platform for DRM and the Pacific Climate Change Round Table. The main purpose of the joint meeting would be to allow stakeholders to contribute to the development of the integrated regional strategy for DRM and Climate Change which is targeted for completion by 2015. The joint meeting will also provide a useful hub to which a number of regional meetings, dealing with the issues of disaster and climate risk, could also be anchored such as the Pacific Meteorological Council and Regional Water and Sanitation Consultation.

SPC SOPAC Division, SPREP, UNISDR and other partners will collaborate to coordinate and facilitate this major meeting.

### ***Transition of the Pacific DRM (Training) Programme from The Asia Foundation to SPC SOPAC Division***

The current Pacific DRM (Training) Program supported by The Asia Foundation with funding from the Office of US Foreign Disaster Assistance will run its course by July 2013. Over more than 10 years the TAF/OFDA programme, as it is commonly referred to, has provided DRM training at the regional as well as at the national levels in a number of Pacific island countries. The responsibility for the continuation of the training programme will rest with the SOPAC Division; and consultations have commenced internally to develop a new strategy for DRM training for 2013 and beyond.

**Annex 1 – Work Plan Progress Report as at 31<sup>st</sup> August 2012**

Disaster Reduction Programme – Work Plan Progress Report, 31st August 2012			
Disaster Reduction Programme [DR]			
Reference	Activities / Task	Indicators	Progress as at 31/08/11
CR 1.1	DRM Policy & Planning		
	Economic impacts of disasters identified in member countries	Assessments of the economic impact of disasters undertaken and reports developed on a needs basis	No requests received from PICs during the reporting period
	Regional support provided to assist national implementation of the Framework for Action 2005-2015 through the EDF10 ACP-EU Natural Disaster Facility	<p>National Action Plans developed and implemented in Pacific ACP States</p> <p>Support provided for strengthening of disaster information management capacity through Pacific Disaster Net</p> <p>Opportunities provided for Pacific ACP representation at DRM meetings, conferences and training</p>	<p>A separate annex on DRM NAP implementation progress is provided as part of the SOPAC report. In addition, a narrative progress report for the ACP-EU NDF has been submitted to the ACP Secretariat and the EU in line with agreed reporting requirements.</p> <p>PDN mission to Vanuatu scheduled for June 2012 deferred by the NDMO due to unavailability of facilities at USP Emalus Campus</p> <p>No funding support from the NDF was allocated to facilitate Pacific ACP participation in meetings etc during the reporting period.</p>
	Regional support provided to assist national implementation of the Framework for Action 2005-2015 through the AusAID National Action Plan Facility	National Action Plans developed and implemented in member countries.	The progress of implementation of NAPs under this activity is reported in the same annex for the above item. In addition, a separate narrative report has been produced in accordance with the requirements of AusAID.
	Implementation of MOU between SOPAC/SPC, UNISDR and WB GFDRR	<p>Advocacy and policy guidance provided to member countries on the integrated regional strategy for DRM and Climate Change</p> <p>Effective coordination of the Pacific DRM Partnership Network</p>	<p>High level advocacy support for DRM through this facility was provide din the context of the High level Dialogue during the 2011 Pacific Platform for DRM held in Auckland, NZ wherein discussions took place on a roadmap to develop an integrated regional strategy for DRM and Climate Change Adaptation &amp; Mitigation by 2015</p> <p>This facility provided funding to support a FTE within the SOPAC to</p>

			provide support in coordinating the activities of the Pacific DRM Partnership Network
	Regional Synthesis Report on Progress of implementation of the Hyogo Framework for Action and Pacific DRR and DM Framework for Action	Regional Synthesis Report completed by December 2012	Consultant recruited in June 2012 and draft report under development and targeted for completion by October 2012
	Implementation of 'Roadmap' for an Integrated Regional DRM and Climate Change Strategy by 2015	Roadmap Coordinator appointed and deliverables are implemented:  New integrated regional DRM and CC strategy developed  Regional synthesis report on DRM and CC developed  Case studies of DRM and CC best practice developed	Consultations on the integration of DRM and CC undertaken in various regional meetings in June 2012  Position description for Roadmap Coordinator and funds secured to undertake recruitment. Advertisement anticipated in September 2012.
	Support the implementation of South-South Cooperation with the Caribbean SIDS and partner organisations	South-South Cooperation programme implemented	SOPAC participation at the 2011 Caribbean Comprehensive Disaster Management conference  Visit to Kiribati by reps of Barbados Coastal Management Unit and Caribbean Institute of Meteorology and hydrology in May 2012
	Pacific Disaster Risk Insurance & Financing Solutions Programme (PCRAFI 3 Project with WB)	Implement Application 1 of PCRAFI 3 - Macroeconomic planning and disaster risk financing and insurance Risk insurance pilot conducted in 5 PICs	Workshop to launch the PDRFI programme undertaken in Nadi on 3 <sup>rd</sup> – 4 <sup>th</sup> May 2012  Country missions to all 5 pilot PICs (Vanuatu, Solomon Islands, Tonga, Samoa and RMI) undertaken over the course of May to obtain support from the respective Ministers for Finance for the pilot project. Follow up missions to be staged in September 2012
	IDDR activities promoted and advocated in member countries.	International Day for Disaster Reduction activities promoted and supported in member countries	Advisory on IDDR support to be sent to PICs in September 2012
	Community based disaster risk management capacity building	Community based disaster risk management training & capacity building conducted in member countries	No requests for support received during the reporting period
	2012 Pacific Platform for DRM	4th Session of the Pacific Platform for DRM successfully conducted	Funding secured for the Platform which will be conducted in Noumea, New Caledonia from 17 <sup>th</sup> – 21 <sup>st</sup> September 2012.  The 2012 Platform will combine with the Pacific Regional Water and Sanitation Consultations also scheduled for the same period.



CR 1.2	Risk Reduction		
	Early warning systems strengthened in member countries.	EMWIN systems assessed and where necessary repaired and/or strengthened.  Knowledge products for EWS developed.	Support provided for EMWIN upgrades in Vanuatu, Fiji, Tuvalu, Solomon Islands, Cook Islands in late 2011 and 2012
	Post disaster technical impact assessments	Hazard impact analysis support provided to countries following major disaster events	No requests received from countries for support.
	Support Hazard research to support DRR initiatives in Pacific countries	Hazard research undertaken in collaboration with relevant scientific and technical agencies	No specific hazard research work undertaken apart from the activities under the PCRAFI initiative which is reported separately
	Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) - Phase 3	PCRAFI 3 applications implemented: 1. Macroeconomic planning and disaster risk financing and insurance (implemented by SOPAC P&P Team under DR 1.1) 2. Rapid post disaster estimation 3. Mainstreaming risk information into urban and infrastructure planning	<ol style="list-style-type: none"> <li>1. Workshop for target PICs undertaken in May 2012 and country missions to Vanuatu, Solomon Islands, Samoa, Tonga and RMI.</li> <li>2. Grant agreement with WB under preparation to secure US\$900,000.</li> <li>3. Discussions with ADB underway for US\$650,000 for this component</li> </ol>
	Implement the Nadi Integrated Flood Management Project	<p>Delivery and adoption of standard operating procedures for flood warning services</p> <p>Delivery and use of high-resolution topography (using LiDAR) model for the low-lying areas of Nadi</p> <p>Use of a 2D flood inundation model and flood hazard and risk maps to recommend flood mitigation measures and dissemination of the methodology to the Pacific region</p> <p>Development and dissemination of integrated flood management policy documents outlining strategies and action plan</p>	<p>LiDAR model developed in 2012</p> <p>Work continuing on flood inundation models and hazard maps. To continue throughout 2012.</p>
	Emergency management communications and coordination strengthened in member countries.	Emergency management communication and coordination systems strengthened in member countries with the support of Emergency Management Australia (EMA).	No support provided under this item in 2012. Emergency communications support provided to FSM and PNG under the EU EDF9 B Envelope project
	Support for Pacific Tsunami Warning System through UNESCO	Tsunami early warning support provided to member countries and territories through UNESCO	<p>Stocktake of Tsunami EW requirements for Fiji, Vanuatu and Tonga completed and submitted to UNESCO Samoa office in commenced in November 2011</p> <p>Support provided to Samoa for the review of the Tsunami EWS commenced in December 2011.</p>

			Support provided for the Pacific Tsunami Warning System South West Pacific Working group Meeting in Apia in July 2012
<b>CR 1.3</b>	<b>Information Management/Pacific Disaster Net</b>		
	Pacific Disaster Net web information portal developed to assist member countries.	PDN strengthening and enhancements undertaken in an on-going manner with the support of the Pacific DRM Partnership Network	PDN currently holds more than 9300 documents, 1287 events, 690 contacts, 650 calendar entries and 73 videos  Partnership support provided in 2011 and 2012 for the PDN Strategic Plan development process
	Pacific Disaster Net Redesign	PDN web portal redesigned in accordance with the specifics defined in the PDN Strategic Plan	Recruitment process for a specialist to undertake the PDN redesign is ongoing. Two rounds of advertisements have not yielded a suitable candidate.
	Regional Desinventar Project	<ol style="list-style-type: none"> <li>1. Regional disaster database using the DesInventar methodology established and institutionalized</li> <li>2. Pacific regional data from different sources collected, migrated and integrated.</li> <li>3. Links with existing online systems in the Pacific region and globally built</li> <li>4. Capacity developed in the region through the implementation of applications for analyzing disaster risk and economic impact of disasters to inform policy and programming at the national and regional level</li> <li>5. Results from the regional analysis compiled and presented in a Regional Risk Assessment Report with support from UNISDR and available for the 2013 ISDR Global Assessment Report on Disaster Risk Reduction</li> </ol>	<p>Agreement signed with UNISDR in June 2012 for US\$92,974 to fulfill the requirements of the project over a 10-month period.</p> <p>A Regional Desinventar Officer has been selected for the project and will commence service at SOPAC in September 2012.</p>
	Cook Islands DRR Projects Portal	<ol style="list-style-type: none"> <li>1. Inventory of hazard and risk assessments undertaken at national level</li> <li>2. National stocktake of DRR interventions</li> <li>3. Methodology for tracking of DRR investments developed</li> </ol>	<p>Collaboration with ADPC on this initiative resulted in an agreement for US\$50,705 to complete the requirements of the project which will run from February to December 2012.</p> <p>A Disaster Information Management Officer has been recruited by SOPAC in consultation with Emergency Management Cook islands and work on the deliverables commenced in May 2012</p>
<b>CR 1.4</b>	<b>DRM Training &amp; Capacity Building</b>		
	National disaster management arrangements	National disaster management arrangements reviewed and institutional	Reviews of DRM governance arrangements are ongoing in RMI, Tuvalu

	reviewed and institutional strengthened plans adopted in member countries.	strengthening plans developed.	and Kiribati and are targetted for completion in the latter part of 2012. The review of the 1984 Disaster Act for PNG was completed in late 2011 and a decision is awaited from the National Disaster Centre.
	Regional disaster risk management training programmes in countries aligned to the TAF/OFDA programme	TAF/OFDA courses conducted based on PIC requests	The SOPAC narrative report provides details of the training conducted.  A total of 740 596 Pacific participants across 9 countries have received training across the range of courses offered under the programme in the period October 2011 to August 2012
	Region's interests represented at relevant International conferences, meetings and forums by appropriate participants from member countries.	Pacific Island representatives attend relevant conferences, meetings and forums and reports received and distributed by SOPAC.	Support to:  Esline Garaebiti (Vanuatu) to attend the SW Pacific Working Group of the Pacific Tsunami Warning System meeting in Samoa from 10 – 15 July 2012  Athanasie Worwor (Vanuatu) to attend Volcano Hazards Monitoring Training in Hawaii from 28 June – 6 July 2012  13 representatives of PICs to attend the International Geological Conference in Brisbane, Australia 30 July – 10 August 2012
	Disaster Risk Management training programmes institutionalised within the region.	Accredited training programme developed in partnership with relevant tertiary institutions	Technical assistance provided to the Fiji National University (FNU) and the University of the South Pacific (USP) for the development and delivery of accredited graduate-level courses in Disaster Risk Management. At the University of the South Pacific this has included the delivery of guest lectures during the face-to-face workshop for students enrolled in the EV424 <i>Disaster Risk Management</i> course.  For the Fiji National University (FNU), the first of four courses that will form a Graduate Certificate in Disaster Risk Management has been completed. The first cohort of students began their studies in August 2012. Development of the second course in this programme is currently underway and will be completed by end-2012.
	Disaster risk management training programmes conducted in member countries that are not aligned to TAF/OFDA Regional Programme (FM, KI, NU, PG, PW, TV)	TAF/OFDA courses conducted based on PIC requests	No requests received for training
	Emergency exercises conducted to test disaster response capabilities in member countries.	Exercises designed and conducted in member countries with the support of the Pacific Emergency Management Training Advisory Group (PEMTAG) members	Support provided for a Table Top exercise in the Solom Islands to test Tsunami SOPs in November 2010

	DRM Competency Framework	DRM Competency Framework developed to help guide DRM training and capacity building  Pilot undertaken in the Solomon Islands and Cook Islands	Consultations undertaken with partner organizations in 2011 however further concerted efforts are required over the latter part of 2012.
<b>EDF 9 B Envelope Project</b>			
	EU EDF 9 B Envelop Implementation	Coordination of EDF 9 B Envelope projects undertaken and projects implemented in Palau, FSM, Tonga, Solomon Islands, PNG, Tuvalu, RMI	The SOPAC narrative report for 2012 provides details on the progress of implementation of the B Envelope Project. In addition, there is a separate progress report available for the information of the target countries as prepared in accordance with the requirements of the EU
<b>EDF 9 C Envelope Project</b>			
	Coordination of EU EDF 9 C Envelope	Coordination of EU EDF 9 C Envelope Project undertaken and project activities implemented in French Polynesia, New Caledonia, Pitcairn Islands and Wallis & Futuna	The SOPAC narrative report for 2012 provides details on the progress of implementation of the C Envelope Project. In addition, there is a separate progress report available for the information of the target countries as prepared in accordance with the requirements of the EU

**Annex 2 – NAP/JNAP/DRM Mainstreaming Progress in Pacific Island Countries as at 31<sup>st</sup> August 2012*****Cook Islands*****Background**

The National Action Plan (NAP) for the Cook Islands was developed in 2008 by a NAP Advisory Committee appointed by the Government of the Cook Islands with the support of representatives of the Pacific Disaster Risk Management Partnership Network (Partnership Network) namely: SOPAC and the United Nations Development Programme Pacific Centre (UNDP PC). It was approved by the Cook Islands Cabinet on 25th November 2008.

A Letter of Agreement was concluded between SOPAC and the Office of the Prime Minister of the Cook Islands in July 2009 to facilitate funding support towards the implementation of the Cook Islands NAP. The Letter of Agreement provided for support in the following areas:

- Printing of the DRM NAP for use in advocacy and awareness campaigns
- Promotion of the new DRM governance arrangements through media and other forms of communication
- Develop a policy for disaster response funding
- Undertake architectural design for a National Emergency Operations Centre
- Undertake a review of safety shelters and evacuation systems on Rarotonga and develop an implementation plan to address deficiencies
- Develop emergency response plans and conduct exercises for relevant agencies
- Review communications systems and procedures used by the Police, Met Service, EMCI and other agencies; purchase VSAT capability to enhance communications.

**Results Achieved**

The results achieved in connection with the Letter of Agreement are:

- Workshop conducted in July 2009 to promote the new DRM governance arrangements as captured in the National DRM Plan 2006
- DRM awareness programmes implemented on television and radio
- Assessment of the structural credibility of safety shelters undertaken by the Ministry of Infrastructure

- Agency level response planning workshop conducted in August 2009
- Review of Cook Islands Communications Systems for Early Warning
- Computer equipment and software procured for Emergency Management Cook Islands in connection with improvements planned for early warning systems
- Early Warning Information Systems database known as FERN – Frontline Emergency Response Network developed with further data entry to take place. FERN was demonstrated to Regional Disaster Managers at their annual meeting in Fiji in August 2010 and has ignited interest from a number of countries for similar information systems to be developed for them.
- NAP Advisory Committee meeting facilitated by EMCI on 26<sup>th</sup> August 2010 to review DRM NAP priorities

### **Current Status**

Following a progress review of NAP implementation in July 2010 the then Prime Minister, Hon. Jim Marurai, requested SOPAC to assist the Cook Islands to develop and implement a Joint DRM and CCA (Climate Change Adaptation) National Action Plan and this support commenced on 18<sup>th</sup> October 2010.

As a result of the decision to integrate DRM and CCA the focus of support to the Cook Islands in relation to the ANF changed significantly. Whereas initially the intention had been to provide funding for a revised set of DRM priorities following the progress review in 2010, the change made it incumbent on SOPAC to support the JNAP planning process in 2011. In this regard therefore

SOPAC provided support to the Cook Islands (following a further request from the current Prime Minister, Hon Henry Puna) through a 3-month technical assistance programme from September to November 2011 whereby a consultant was engaged to:

- Finalise a draft JNAP for consideration by the Government
- Assist in the establishment and institutional strengthening of *Climate Change Cook Islands* under the Prime Minister's Office
- Provide advice on JNAP implementation arrangements and in particular financing strategy and resource mobilisation

The 3-month technical assistance was funded through the ACP-EU Natural Disaster Facility.

The draft JNAP has now been finalized by the Government and discussions on implementation are to proceed within the context of the Cook Islands preparations for the EDF10 ACP-EU Natural Disaster Facility which will be available in 2013.

## ***Federated States of Micronesia***



### **Background**

The Federated States of Micronesia had initially requested support for a Joint DRM and CCA National Action Plan in September 2009.

SOPAC has undertaken two engagements (in September 2009 and February 2010 respectively) to scope out a potential JNAP development process and to commence the implementation of the process through the conduct of community level Vulnerability & Adaptation assessments. A report on the V&A assessments was due in June 2010 and this is still being awaited from the Office of Environment & Emergency Management (OEEM).

In March 2011 further discussions were held with the Director of the OEEM to work out an approach whereby in-country technical assistance would be provided jointly by SOPAC and SPREP (through the PACC Project) to coordinate the JNAP effort. These discussions were followed up in July of 2012 during the national progress review for the Hyogo Framework and Pacific DRR and DM Framework.

### **Current Status**

The development of a JNAP was discussed within the context of the national progress review of the Hyogo Framework and Pacific DRR and DM Framework for Action which was undertaken in Pohnpei from for a 2-week period from 23<sup>rd</sup> July 2012. As a result there is now agreement for a way forward which will see:

- the development of a national DRM and Climate Change policy;
- development of State level Joint Actions Plans for DRM and Climate Change;
- the development of a JNAP – aggregating the results/focus of State level plans

SOPAC is to discuss the process with partner organisations and develop a draft timetable for the FSM processes for consideration by OEEM and other relevant agencies. The Manager of the SPC Northern Pacific Regional Office based in Pohnpei has agreed that the NPRO coordinate the JNAP effort for partners and the Government.

**Fiji****Background**

The Government formally requested SOPAC support for their NAP on 14<sup>th</sup> July 2009. In the request SOPAC was to assist the Government of Fiji to develop a DRM NAP through an incremental approach that involved the implementation of an initial range of actions pending further comprehensive consultations on a formal NAP document.

Following consultations with the Government of Fiji in 2009, SOPAC has been providing support in a number of areas as follows with a budget of A\$200,000 committed for the following:

- Support for an Integrated Flood Management Project for Nadi working in collaboration with the World Bank and the GEF funded Integrated Water Resources Management Project also focused on Nadi
- The strengthening of baseline data and information to enhance disaster and development decision-making through a Information Management for DRR and DM project in partnership with UN agencies and local stakeholders. This initiative has been labeled as the Disaster Management Information Systems (DIMS) project
- Support for DRM within Fiji's Agriculture sector.
- Tsunami early warning and response for Fiji and as well at a local level for Suva and Lami
- The development of a DRM investment profile to support advocacy efforts

**Current Status**

The NAP initiative for Fiji has now evolved further and there is renewed interest to develop a Joint DRM and Climate Change Adaptation NAP. In November 2011 discussions were undertaken with the Permanent Secretary for Provincial Development regarding the specifics of a JNAP process. These discussions follow closely behind the endorsement of a JNAP concept earlier in the year by the Fiji Climate Change Country Team and the National Environment Council. The JNAP process has been discussed by the National Disaster Management Council.

The Fiji Joint NAP will be developed following a 2-phase process. Under the first phase a range of existing DRM and CCA initiatives will be supported for immediate implementation. The second phase will then involve a formal JNAP planning process which is likely to take 4-6 months to complete.



In addition, and linked to the JNAP exercise for Fiji, SOPAC will continue to provide support in terms of the finalisation of the national DRM governance arrangements and supporting legislation.

The DRM and CCA priorities to be funded in 2012 are as listed below.

- Ongoing support for the Fiji Disaster Information Management Systems (DIMS) Project
- Ongoing implementation of the Nadi Integrated Flood Management Project
- Development of the National and selected Local Tsunami Response Plan
- Support for the implementation of the Suva Tsunami Response Plan
- Conduct of a feasibility study to examine the potential merger of the NDMO, National Fire Authority and Ambulance Services
- Support for the implementation of the Lami Tsunami Preparedness and Response System
- Provide GIS Training to NDMO
- Procurement of equipment to support the Climate Change unit under the Ministry of Foreign Affairs
- Purchase of SimCLim software and training in use of the climate modeling software

#### Fiji JNAP Activity Implementation Progress

- As part of support for the Fiji DIMS Project, electronic versions of Initial Damage Assessment form developed and training on use of IDA forms and upload into electronic database planned for Fiji's Central, Western and Northern Divisional Offices in May 2012
- Quotations obtained for Tsunami Warning signage and sirens for Lami area outside Suva. Installation to take place by September 2012
- Tsunami Response Plan for Suva endorsed by the NDMO
- GIS for DRM Training conducted by SOPAC from March 12-23 2012, with participants from Fiji NDMO, Development & Planning Unit's of Divisional Commissioner's Office's, Ministry of Health and Department of Public Health with a follow up Advanced GIS Training slated for August 2012
- A preliminary economic analysis to examine the potential merger of the Fiji NDMO, National Fire Authority and Ambulance Services has commenced and is targeted for completion in July 2012.
- Contract awarded for LiDAR survey of Nadi River Catchment and in process of evaluating expressions of interest for Nadi Flood modeling work. Contract negotiations in process for Ba River LiDAR survey.
- Equipment purchased for Climate Change Unit and staff training arranged and conducted in New Zealand

***Kiribati*****Background**

The Government of Kiribati had requested SOPAC in April 2010 to undertake a review of the existing DRM governance arrangements represented by the National Disaster Act 1993. The intention was that the implementation of the new governance arrangements would lead to a NAP-type programme wherein a range of disaster management and disaster risk reduction priorities would be identified and addressed.

Given the significant investments made by Kiribati over the years in terms of climate change adaptation, and in terms of the similarities in focus between CCA and DRM, the eventual Kiribati DRM NAP will ensure that any overlaps in relation to previous CCA investments will be taken into account.

Three missions have been undertaken to Kiribati in June 2010, August 2010 and March 2011 respectively. Following the mission in March 2011 draft DRM governance arrangements have been developed and as well a draft set of DRM priorities for implementation. The draft governance arrangements require further review and SOPAC is working with partner organizations to complete the requisite work in 2012.

**Current Status**

During discussions in Suva in early June 2012, Kiribati officials indicated to SPREP and SOPAC that a request will be submitted to them for a JNAP. The work on the JNAP will contribute to the finalization of the earlier work on the DRM governance arrangements; it is anticipated that Kiribati will opt for a mechanism that integrates both its DRM and Climate Change institutional arrangements.

## ***Marshall Islands***



### **Background**

The development of the NAP for the Marshall Islands was completed in late 2007 by a team of the Pacific DRM Partnership Network (SOPAC, PIFS and UNDP PC) working with a NAP Task Force appointed by Government. The 3-year initial implementation programme estimated the overall costs of the NAP to be US\$2.5 million.

SOPAC finalised a Letter of Agreement with the Chief Secretary's Office in November 2009 to facilitate the release of funds for implementation of the following actions:

- Conduct professional editing and printing of the NAP document (for use in awareness activities)
- Review of the National DRM governance arrangements and development of related legislation
- Strengthening of the National Emergency Operations Centre (NEOC)
- Development of an National Emergency Response Plan and response plans for relevant agencies
- Develop Standard Operating Procedures for the NEOC
- Undertake table top and operational exercise to test response plans and NEOC SOPs
- Review current situation for land use and settlement planning by conducting a study on land use and building codes implementation

### **Results Achieved**

- Review of the DRM governance arrangements completed and a draft of revised arrangements being further revised by SOPAC together with other partner organizations before being re-submitted to the Chief Secretary's Office for consideration in 2012
- Draft Emergency Response Plan developed and under consideration by the Chief Secretary's Office

### **Current Status**

The above demonstrates that in the 2 year period since the Letter of Agreement was signed with the RMI Government there has been very limited progress in addressing the agreed actions for implementation. This is largely due to challenges faced by the RMI government in terms of providing counterpart support. The Chief Secretary's Office (CSO) and the National Emergency Management Coordination Office (NEMCO) have been plagued

by a lack of adequate human resource capacity to fulfill legislated DRM responsibilities and as a consequence the required counterpart support for NAP implementation has also suffered. A progress review of the NAP in 2010 revealed that while there has been some useful progress overall in NAP implementation such progress has been incidental. It was also learned that there is a need for increased awareness and understanding of the NAP in order for there to be further progress.

To try and address the challenges the RMI was offered support by the World Bank Global Facility for Disaster Reduction & Recovery for a technical expert to assist in NAP implementation. The offer of assistance has not been taken up but there was a renewed interest by the CSO as of late 2011.

In 2010 the Government decided to develop a Joint DRM and Climate Change National Action Plan (JNAP) and a Climate Change Policy. The JNAP was seen as a means to implement the Climate Change Policy and also give renewed interest in the actions initially identified under the DRM NAP. A draft JNAP was developed with the support of SOPAC and SPREP in April 2011 with further support required to finalise the document for presentation to Cabinet.

***Nauru***



## **Background**

In November 2011 a team from SOPAC and The Asia Foundation/US Office of Foreign Disaster Assistance undertook a mission to Nauru in response to a request that had been submitted to SOPAC earlier in the year for DRM NAP support.

The mission combined formal training through an 'Introduction to Disaster Management' course with consultations on a NAP with key stakeholders and a presentation to the National DRM Council. As a result of the consultations and the meeting of the NDRMC on 16<sup>th</sup> November 2011 the initial request for a NAP has now evolved to become a request for support to develop and implement a Joint DRM and CCA NAP.

The Nauru JNAP process will comprise of 2-phases. In the first phase SOPAC will assist in the implementation of a range of DRM priorities that have been identified by the Commissioner of Police as the official DRM focal point for Nauru. The second phase involves the JNAP planning process which is proceeding with the assistance of SOPAC, SPREP and GIZ.

## **Current Status**

The immediate priorities for implementation as established by the Commission of Police are:

- Support to NDRMO for office equipment and capacity building/training opportunities for the National Coordinator;
- Support to Director Civil Aviation /Airport control tower (computer equipment for the meteorology service for 24/7 monitoring);
- Emergency Operation Centres (EOC) Training for response agencies;
- Support for the revision of DRM governance arrangements (i.e. NDRM Plan and 2008 DRM Act);
- Development of Tsunami and other key hazards response plans and arrangements.

A Letter of Agreement to formalise the SOPAC assistance to Nauru in relation to the above priorities was signed in November 2011.

#### Implementation Progress of Immediate DRM Priorities

1. Office equipment procured for the newly established NDRMO Office in Nauru
2. Emergency Operations Training conducted by SOPAC/TAF/OFDA in April 2012
3. Visit to Victoria Country Fire Authority, State Coordination Centre in Australia by Deputy National Controller Nauru NDRMO, facilitated by SOPAC in February 2012

Following discussions between GIZ, SPC and SPREP a Joint country engagement was undertaken May 2012 with SPC-GIZ designated to lead the CC Policy and JNAP process with support from SPREP and SOPAC.

The Joint country engagement took place from the 1<sup>st</sup> May to 14<sup>th</sup> May 2012. A 2 day workshop was held from the 2-3 May with CC/DRM stakeholders participating. The JNAP planning process for Nauru as its first step involves identifying CC/DRM priorities already documented in key documents including 'RONAdapt' – Nauru's NAPA document, Nauru's Water Policy and sectoral documents that identify CC/DRM priorities from previous consultation exercises. It was discussed that with several consultations having already taken place in Nauru, that there was a need to consolidate the various already identified priorities into the JNAP with the workshop designed to validate the identified priorities; identify any gap areas not being addressed and constraints to the implementation of these priorities. The results of the first JNAP/CC Policy engagement are as follows:

1. CC/DRM priorities identified and validated with gaps and constraints discussed.
2. Key stakeholder group identified to oversee development and implementation of the JNAP/CC Policy comprising of CIE and NDRMO officials
3. JNAP/CC Policy process and key milestones identified
4. Workshop Report developed to inform JNAP/CC policy development
5. First DRAFT Results Matrix developed

Following the workshop joint consultations were held between SPC, GIZ, SPREP and the Government of Nauru officials from the Department of Commerce, Industry and Environment (CIE) and the NDRMO (National Disaster Risk Management Office). This meeting allowed for identifying the key actions and milestones toward developing the JNAP with planned endorsement by the Nauru National Development Committee in October 2012.

A second joint country engagement was undertaken in 13<sup>th</sup> August 2012 and the results from the partnership team are awaited.

***Niue***



## **Background**

In March 2011 SOPAC in collaboration with SPREP commenced a process to develop a Joint DRM and CCA NAP for Niue following a request from the Secretary to Government. A further 2 missions were again undertaken in May and October 2011 respectively and following these a draft JNAP has been handed over to the relevant Government agencies for consideration.

## **Current Status**

In January 2012 further consultations were undertaken in Niue in relation to the draft implementation arrangements for the JNAP by SOPAC and PIFS.

SOPAC has finalised a Letter of Agreement with the Secretary to Government to implement a range of DRM priorities linked to the draft JNAP. This will cover the following:

- Support for a JNAP Unit within the Department of Environment
- Review of the Niue Building Code

- Review/retrofitting of evacuation centres in the Upper Terrace

Over the course of April and May 2012 the Government informed SOPAC that the decision had been made to integrate the JNAP actions directly into an updated revision of the Niue Sustainable Development Plan. As a result DRM and Climate Change Adaptation interventions will be mainstreamed into the national development strategy. Niue will also prepare a brief version of the JNAP for circulation.

SOPAC is awaiting feedback from Niue on the finalization of the 2 documents.

***Palau***



## **Background**

In June 2009 Palau requested support from SOPAC for the review of the 1999 National Disaster Plan and the implementation of priorities arising from the review as a 'Phase 1' approach to the development of a DRM NAP. The outcome of the review is the 2010 Palau National DRM Framework (NDRMF) and SOPAC is now providing support for the implementation of identified priorities through a Letter of Agreement which has just been updated in February 2012.

## **Current Status**

The implementation of the NDRMF priorities have been addressed to some extent and SOPAC is currently undertaking a follow up with NEMO.

The NDRMF priorities supported for implementation with a progress update are in the table below.

<b>NDRMF Priority Action</b>	<b>Lead Agency/Support Agencies</b>	<b>Status as at 31 August 2012</b>
1. Strengthening of NEMO	<b>NEMO/SOPAC</b>	Computers and related equipment purchased in 2011
2. Publication of NDRMF and summary pamphlets in English and	<b>NEMO</b>	English pamphlets developed a TA and endorsed by

NDRMF Priority Action	Lead Agency/Support Agencies	Status as at 31 August 2012
Palauan		NEMO in December 2011. Translated version to follow
3. Undertake NDRMF awareness programmes at Cabinet level	<b>NEC Sub Committee</b>	On going
4. Undertake NDRMF awareness programmes for senior officials within each Ministry	<b>NEC Sub Committee</b>	On going
5. Undertake NDRMF awareness programmes at State Government level in each State		To await completion of the Palauan translation of pamphlets
6. Develop 'general' Emergency Response Plan for adaptation by Government agencies and State governments	<b>NEMO/SOPAC</b>	No progress to date
7. Conduct disaster management training using courses from the Pacific DRM Training Programme (TAF/OFDA): <ul style="list-style-type: none"> <li>- Introduction to Disaster Management</li> <li>- Initial Damage Assessment</li> <li>- Emergency Operations Centres</li> <li>- Exercise Management</li> <li>- Training for Instructors</li> </ul>	<b>NEMO/SOPAC &amp; TAFOFDA</b>	IDA and EOC training undertaken in March 2012
8. Develop supporting legislation for NDRMF	<b>Office of the Vice President/NEMO &amp; SOPAC</b>	No action to date
9. Conduct economic impact assessment training for Bureau of Budget and Planning officials.	<b>NEMO/SOPAC</b>	Training for 2 Palauan officials undertaken as part of a regional capacity building pilot held in Vanuatu in March 2011
10. Develop Standard Operating Procedures for the National Emergency Operations Center	<b>NEMO/SOPAC</b>	The new NEOC was officially opened in August 2011 and this activity will now be pursued in 2012
11. Undertake table top and operational exercise to test ERP and NEOC SOPs	<b>NEMO/SOPAC &amp; TAFOFDA</b>	To follow development of ERP and SOPs
12. Conduct training in Comprehensive Hazard and Risk Management for Hazard Mitigation Sub Committee	<b>NEMO/SOPAC</b>	No action to date
13. Conduct GIS/RS training for relevant national agencies	<b>NEMO/SOPAC &amp;</b>	Training provided in 2011 by UNESCAP as part of a



NDRMF Priority Action	Lead Agency/Support Agencies	Status as at 31 August 2012
	Lands	separate arrangement with NEMO
14. Review the establishment of the National Planning Committee	<b>Office of the Vice President/NEMO,</b> Bureau of Planning & Budgeting, SOPAC	No action to date

In February 2012 SOPAC received a communication from NEMO requesting JNAP support and the decision was made for the first step for the JNAP to entail the biennial progress review of the Hyogo Framework for Action and Pacific DRR and DM Framework for Action. The progress review was completed between 18<sup>th</sup> – 22<sup>nd</sup> June. Findings from the review and a draft JNAP planning process were presented to the National Emergency Committee on 26<sup>th</sup> June 2012.

SOPAC will undertake consultations with partner organisations on the draft JNAP planning process to ascertain interest in supporting Palau. It is likely that the remaining process for the JNAP will commence in 2013.

## Papua New Guinea



### Background

Following missions by SOPAC and UNDP in 2010 a DRM Mainstreaming Programme (DRMMP) was endorsed by the National Disaster Committee at its meeting held on 12<sup>th</sup> May 2010. It comprises six focal areas for support as follows:

Focal Area 1	DRM High level advocacy
Focal Area 2	Mainstreaming of risk into national and sectoral planning processes
Focal Area 3	Strengthening DRM governance arrangements
Focal Area 4	Strengthening the capacity of technical DRM agencies such as the National Disaster Centre, Fire Services, Department of Mineral Policy & Geohazards Management and the Police
Focal Area 5	Strengthening DRM capacity at provincial level in Morobe Province
Focal Area 6	Improving risk information flows to strengthening development decision-making at the national level

PNG opted not to develop a NAP given its size and related challenges. Instead the DRMMP is being seen as a 'default' arrangement which if successful could be the catalyst for further DRM investments at a national level. PNG did opt to develop a Joint DRM and CCA Action Plan at provincial level (Focal Area 5).

### Current Status

Focal Area	Progress as at 31 <sup>st</sup> August 2012
1	Draft DRM Investment Profile developed and submitted to Department of National Planning and the Department of Finance. Already endorsed by the National Disaster Centre.  SOPAC to present the profile in PNG before the end of 2012.

Focal Area	Progress as at 31 <sup>st</sup> August 2012
2	<p>DRM sector Plan developed with SOPAC and UNDP support in 2010 and reflected in PNG's Medium Term Development Plan 2011 – 2015</p> <p>SOPAC is supporting the review of the Physical Planning Act and the development of the Sustainable Land Use Policy in 2012.</p> <p>A meeting was held in PNG between SOPAC and DLPP with an LOA developed between SOPAC and the Department of Lands and Physical Planning (DLPP) for PNG Kina \$110,000 to support national stakeholder consultations and TA to support the Review of the Physical Planning Act. It is envisaged that the Sustainable Land Use Policy (SLUP) and Physical Planning Act Review will occur in parallel with the SLUP feeding into the Physical Planning Act Review to integrate DRM/CC considerations.</p> <p>Support to the Department of Education for the development of an Education in Emergencies Policy has been deferred until further notice.</p>
3	<p>Review of the 1984 Disaster Act completed in 2011 and a draft set of new DRM governance arrangements currently being considered by the National Disaster Centre.</p>
4	<p>Communications equipment procured for the Police to strengthen Police emergency response capacity in Morobe province. Installation of the communications equipment in 10 Police outposts in the Province of Morobe will take place in June 2012. SOPAC is awaiting confirmation from PNG Police so that travel costs can be facilitated by SOPAC.</p> <p>In service training courses for the PNG Fire Service under development. Support will facilitate technical assistance for new course development in 2012. LOA between SOPAC and the PNG Fire Services (PNGFS) signed in March 2011 for the amount of PNG Kina \$188,600. Delays have been experienced in securing TA to implement the activities in the LOA. Dr. James Macpherson has been identified as the TA to carry out the activities and SOPAC is awaiting a workplan for the proposed activities which will take approximately 18 months to complete.</p> <p>GIS training conducted in 2011 by SOPAC for the Department of Mineral Policy &amp; Geohazards management. UNDP procured equipment for DMPGM in 2010.</p> <p>A follow up GIS Training for Advanced Users is scheduled to take place in 2012 with UNDP PNG providing support for the training venue and on the ground costs. SOPAC is to cover costs for 2 trainers.</p>
5	<p>Joint DRM and CCA Action Plan developed for Morobe in 2011 with SOPAC support. Currently being considered by relevant authorities.</p> <p>The final draft of the Morobe Action Plan is being reviewed and considered by the Morobe Action Plan Task Force. In parallel to the Action Plan review, completion and approval process several key priority actions were identified in the Morobe Action Plan Task Force Meeting held in Lae City in March 2012, facilitated by SOPAC.</p>

Focal Area	Progress as at 31 <sup>st</sup> August 2012
	<p>These initiatives were identified to utilize funding support provided by SOPAC through an LOA with the PNG National Disaster Centre. Funding allocated for the Provincial Plan for Morobe amounts to PNG Kina \$200,000 with the following priority activities identified to receive funding:</p> <ol style="list-style-type: none"> <li>1. Ensure GIS/Hazard Maps are developed and trialed or piloted in two districts (Markham and Nawaeb) of Morobe</li> <li>2. Capacity Development of PDC's <ul style="list-style-type: none"> <li>• Training of staff and volunteers to be involved in DRM programs and related activities</li> <li>• Improve on communication infrastructures (Maintain, improve, purchase and install or replace) in the 9 districts (VHF) and ensure process and procedures for communication is adhered to and sustained at all levels with regard to DRM matters in the province.</li> </ul> </li> <li>3. Establish process for regular monthly awareness and dissemination of DRM messages is conducted and sustained at all district and LLG levels</li> <li>4. Establish and improve on networks and coordination in Morobe</li> </ol> <p>UNDP procured equipment for Provincial Disaster Coordinators in 2010.</p>
6	<p>Expressions of Interest advertised for TA to conduct landslide Susceptibility Hazard Mapping and Seismic hazard Mapping. Support for this provided by SOPAC working in conjunction with DMPGM</p> <p>Discussions progressing with the Rabaul Volcano Observatory on identifying priorities for high resolution imagery to be procured by SOPAC.</p>

SOPAC is to undertake a follow up mission to PNG before the end of the 3<sup>rd</sup> quarter in 2012.

## **Samoa**



### **Background**

The NAP process for Samoa had been following a 2-phased approach whereby the first phase involved the implementation of specific priorities endorsed by the Disaster Advisory Committee in relation to the National Disaster Management Plan 2006 (NDMP).

The priorities for the implementation of the NDMP were concluded with the Samoa Disaster Management Office in a Letter of Agreement in mid February 2009. The priorities were to be implemented by 31<sup>st</sup> December 2009.

At the end of September 2009 Samoa was impacted significantly by a tsunami and as a result much of the efforts in relation to the 2-phase NAP process were set aside. During 2010 a progress review of DRM was undertaken as part of the review process of the Hyogo Framework for Action and the Pacific DRR and DM Framework for Action. Following the progress review the Samoa Disaster Management Office (DMO) and the Ministry of Natural Resources and Environment (MNRE) as its parent Ministry decided that a formal NAP should be developed to carry forward a set of priorities that had emerged from the review consultations.

### **Results Achieved**

The following has been achieved in relation to the implementation of NDMP priorities as set in 2009:

- Community level DRM workshops implemented in Savaii in 2009
- Laptop computers purchased for the DMO in 2010
- SamoaTel Directory issued with DRM information included in special section

## Current Status

A draft NAP was developed by the DMO and in early December 2011 SOPAC and the UNISDR was requested to provide technical assistance to help in finalizing the NAP which is focused on DRM specifically. An updated NAP document inclusive of draft implementation arrangements was developed and discussed with the DMO from 6<sup>th</sup> – 10<sup>th</sup> December.

The NAP has now been approved and further discussions on the implementation of priorities have taken place. The DMO is seeking support for a national early warning system and establishment of a digital emergency radio network. A Letter of Agreement for NZ\$127,000 has been developed by SOPAC for this purpose.

## *Solomon Islands*



## Background

The NAP process for the Solomon Islands originally commenced in April 2008 with the conduct of a SOPAC High Level Advocacy Team mission. Following the mission the then Prime Minister, Hon Dr. Derek Sikua, requested support for the development and implementation of a NAP for the Solomon Islands. A NAP planning process however was deferred by the NDMO in favour of the implementation of selected priorities under the NDMO Corporate Plan. The NDMO Corporate Plan had evolved to help consolidate the new DRM governance arrangements which were developed in 2009. The Corporate Plan priorities which SOPAC has supported are:

- The development of a Disaster Information Management System (DIMS) enhancing the availability of information to the NDMO during emergency operations, as well as for planning and implementation of preparedness, community outreach and DRR activities
- Standard Operating Procedures for the National and Provincial Disaster Operation Committees

## Current Status

In November 2011 discussions resumed with the NDMO on a NAP and during a mission to the Solomon Islands, the then Permanent Secretary of the Ministry for Environment, Climate Change and Disaster Management (MECDM) which is responsible for the NDMO, requested SOPAC support for the development of a Joint DRM and CCA National Action Plan (JNAP). The JNAP planning process has commenced and will be comprised of 2-stages. Under the first stage the Solomon Islands will receive capacity building support for the NDMO and the Climate Change Division of MECDM. The support addresses the following:

- Procurement of office equipment for the NDMO, Provincial Disaster Centres and Climate Change Division
- Exchange visit for NDMO staff to the State Coordination Centre in Melbourne, Victoria
- Attachment programme for NDMO staff with SOPAC – 2 months

Under the second stage the JNAP is to be developed with the support of SOPAC and other partner organizations. A draft planning process for the JNAP has been developed and is being considered by the Permanent Secretary for MECDM. To support the JNAP planning process the World Bank's TA support based in the NDMO will provide counterpart assistance together with selected officials of the NDMO and Climate Change Division. Following a call for expressions of interest amongst the PDRMPN, several regional partners have indicated their interest in participating in the JNAP planning and development for the Solomon Islands. These partners include UNOCHA, UNISDR, GIZ, UNDP and SPREP. It is envisaged that SPC, GIZ and SPREP will lead the JNAP development for the Solomon Islands.

### Progress of Solomon Islands JNAP Activities Implementation

Following the identification of priority activities to be implemented alongside the comprehensive JNAP planning process, the Solomon Islands NDMO and Climate Change Unit have received SOPAC support for:

1. Visit to the Melbourne Country Fire Authority, State Coordination Centre in Victoria, Australia with SOPAC providing funding support for attendance by 2 personnel from the Solomon Islands NDMO
2. Office equipment procured for the Provincial Disaster Centres, NDMO and the Climate Change Unit
3. Training for 5 Climate Change Unit officers facilitated by SOPAC. Training provided by ClimSystems in Hamilton, New Zealand with software licenses procured for SimClim and PlanGro
4. Two NDMO staff selected to participate in attachment programme with SOPAC for a period of 2 months commencing 14<sup>th</sup> May 2012.



## Background

A Joint Climate Change and DRM NAP was endorsed by Cabinet on the 28<sup>th</sup> July 2010 following a development process that had commenced in October 2009. Pursuant to the Cabinet approval SOPAC and the National Emergency Management Office concluded a Letter of Agreement for the implementation of selected JNAP priorities.

The priorities for the Tonga Joint NAP being implemented by SOPAC are shown in the table below.

JNAP Priority	Implementation Status as at 31 <sup>st</sup> August 2012
1. Printing of 200 copies of the final edited JNAP	Completed 2010
2. Conduct training and development of agency response plan	Completed 2010
2 Build capacity of social workers on disaster trauma counselling	Completed 2011
3. Conduct assessments and training on the impacts of CC on vector /waterborne and nutritional related diseases	Completed 2011
4. Incorporate water, food hygiene, and sanitation management in disaster preparedness and evacuation plans	Completed 2011
5. Train emergency providers in water and food hygiene practices during disasters	Completed 2011
6. Strengthen and maintain training for health care providers to provide response during disasters	Support for the establishment of a Health Disaster Officer position provided in 2011  Recruitment underway by the Government



JNAP Priority	Implementation Status as at 31 <sup>st</sup> August 2012
7. Strengthen provision of relief supplies	Support provided to Tonga Red Cross for tents in 2011

*In December 2011 the Tonga JNAP Secretariat was requested to develop a progress report on the JNAP. This was submitted on 7<sup>th</sup> February 2012 is now available as a separate document and obtainable from SOPAC.*

Discussions between SOPAC, UNESCO/IOC and the Tonga Meteorological Office in May 2012 identified a further activity requiring SOPAC support to procure and install Tsunami Warning sirens for the Nuku'alofa CBD area. A Letter of Agreement has been developed between SOPAC and the Tonga Meteorological Office for the amount of FJD \$35,000 for Tsunami siren warning system installation. Tenders for the system were called by the Government and a selection made in July. The installation of the system is expected by October 2012.

**Tuvalu**



## Background

The Government of Tuvalu through the Office of the Prime Minister had in January 2010 requested SOPAC support for a review of its national DRM governance arrangements. The request was pursuant to earlier discussions held between SOPAC and the Tuvalu DRM focal point during the 2009 meetings of the Pacific Platform for DRM which were held in Fiji in May 2009.

In response SOPAC undertook a mission to Tuvalu from 23<sup>rd</sup> – 25<sup>th</sup> February 2010 to scope out a review process and engage stakeholders in initial consultations. The National Disaster Committee endorsed a proposed review process at their meeting on 24<sup>th</sup> February 2010. This paved the way for the second country engagement from May 25<sup>th</sup> – June 1<sup>st</sup> in which there were consultations undertaken with a range of stakeholders.

A third visit was undertaken to coincide with Exercise Tropical Twilight: from 4<sup>th</sup> – 16<sup>th</sup> July 2010. The exercise had been organised jointly by the Government of Tuvalu and the NZ Defence Force to test emergency response coordination capacities. SOPAC's involvement in the exercise had

provided the opportunity to reaffirm ministerial roles and responsibilities and to help develop operational sections of the DRM governance arrangements.

A first draft of revised DRM arrangements was developed in August 2010. However due to a range of challenges it was not possible to conclude a decision on the draft in the remainder of 2010. In April 2011 SOPAC and partners such as UNOCHA, UNDP PC, SPREP, UNISDR and TAF/OFDA met in Suva to discuss the draft arrangements with the SOPAC consultant. Feedback from the consultations have contributed to further revisions and a final draft has been circulated in February 2012 for final partner input before it will be re-submitted for consideration by the Government.

As the work on the arrangements has progressed the Government in March 2011 requested SOPAC and SPREP to support the development and implementation of a Joint Climate Change and DRM National Action Plan. This request effectively superseded the earlier request for a DRM NAP although it did not negate the work already completed on draft DRM governance arrangements. Following receipt of the request a joint SOPAC and SPREP team undertook a JNAP planning missions to Tuvalu in May, July and October 2011. The missions have resulted in the development of a JNAP and Climate Change Policy for Tuvalu. Both documents have been finalised and endorsed by the Government.

### **Results Achieved**

- Draft set of new DRM governance arrangements developed and under consideration. To be finalised in 2012
- JNAP and Climate Change Policy developed and approved

### **Current Status**

- Draft Governance arrangements completed and endorsed at Secretary level and awaiting endorsement by Cabinet.
- JNAP implementation discussed in July 2012 within the context of preparations for the EDF10 ACP-EU Natural Disaster Facility which will commence in 2013.

## Vanuatu



### Background

The Vanuatu NAP was developed and approved in 2006. As a result of discussion on implementation priorities SOPAC agreed to support the following:

- Action 1.4 Review the existing DRR&DM arrangements, including the Disaster Management Act of 2000, the National Disaster Management Plan and other relevant legislation, Plans and organizational arrangement to give effect to a stronger DRR&DM organizational arrangement. This covers all government tiers and their linkages with the community (community to area councils to provinces).
- Action 6.1 Compile and monitor historical and time series data on geological, hydrological and meteorological hazards for vulnerability assessment and early warning.
- Action 7.1 Review and provide for information and communication systems for DRR&DM at the national, provincial and community level as appropriate, including information management, modelling and other analytical tools.
- Action 7.2 Identify, implement and maintain people focused and integrated early warning and dissemination systems, and communication networks from national to provincial and community levels, using appropriate means, medium and language.

### Current Status

SOPAC has provided on going support to Vanuatu during the latter part of 2010 and over the course of 2011. Based on the outcomes of a progress review of NAP implementation undertaken in May 2010, workshops were held with the NAP Task Force in December 2010 and February 2011. The purpose of these workshops was to determine a revised set of NAP implementation priorities following consideration of the recommendations of the progress review.

The NAP Task Force workshops resulted in a revision of the initial 2006 NAP results matrix and specifically the thematic areas. The workshops also identified a range of new implementation priorities. The revised NAP Themes are as follows:

<b>Theme</b>	<b>Broad Outcome</b>
1. Governance	Increased transparency and accountability and effective decisions at all levels supported by an appropriate institutional framework and mechanisms for systematic and coordinated disaster risk management
2. Mainstream DRR and DM into Development Planning and Budgeting at all levels	National, sectoral, corporate, provincial and local levels plans and national budget allocation explicitly integrate disaster risk management considerations
3. Strengthening Disaster Management	Effective and rapid recovery of communities from disasters assisted by effective and well coordinated disaster management systems
4. Knowledge and Information Management	Timely availability of, and access to, accurate information on all hazards, vulnerability and risk to enhance decision making at all levels on disaster risk management and development

The priorities identified by the NAP Task Force in February 2011 were not acted upon immediately by the Vanuatu National Disaster Management Office (NDMO) since it was undergoing changes of staff at different levels in the early part of 2011.

In the interim SOPAC was able to progress a revised NAP priority with the Reserve Bank of Vanuatu. The RBV became an active member of the NAP Task Force in December 2010 at the invitation of the NDMO. The interest of the RBV is in the mainstreaming of disaster risk into national planning and financial systems and in this regard it requested support from SOPAC for funding of its annual Business Expectations Survey wherein it included questions to gauge understanding and interest in disaster risk management by the local business community in Port Vila and Luganville. The outcomes will inform strategies to enable the future and more active engagement of the private sector in DRM.

The new Director commenced service with the NDMO in mid 2011 and SOPAC was able to revive discussions on NAP priorities with the incumbent in November 2011. The new Director has considered the priorities developed by the NAP Task Force in February and as the Chair of the Task Force requested support from SOPAC for the following activities to be implemented between January and June 2012:

- Establish a proper National Emergency Operations Centre with appropriate equipment
- Conduct Pacific Disaster Net training and awareness and progress consultations on Desinventar and a website for the NDMO
- Exchange visit for NDMO staff to the State Coordination Centre in Melbourne, Victoria

In addition to the above SOPAC and GIZ are providing advice to the NDMO and the Vanuatu Meteorological and Geohazards Department (as the focal points for DRM and Climate Change Adaptation respectively) on the revision of DRM and CCA governance arrangements to facilitate the joint implementation of the DRM NAP, NAPA and Climate Change Policy. Work on this is ongoing in 2012 and a decision has been taken by Vanuatu to develop a Joint NAP. In connection with the Joint NAP Vanuatu has decided to establish a National Advisory Board for Climate Change and DRM (NAB). The NAB is intended to be the apex body dealing with DRM and Climate Change and its establishment will require the review of existing institutional arrangements e.g. for DRM. The National DRM Council currently carries the overall mandate for DRM.

#### Vanuatu NAP Priority Activity Implementation

Following discussions with the NDMO Director and identification of priority activities for implementation in November 2011 the following progress has been achieved:

1. Visit to Melbourne Country Fire Authority, Victoria State Coordination Centre involving two representatives from the Vanuatu NDMO undertaken in February 2012 supported by SOPAC
2. Vanuatu National Emergency Operations Centre outfitted with appropriate equipment and redesigned layout

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### **Annex 3 – Draft Joint Outcomes Statement: 2012 Pacific Platform for Disaster Risk Management and Regional Water & Sanitation Consultations**

The 4th session of the Pacific Platform for Disaster Risk Management (Platform) and the Pacific Regional Water & Sanitation Consultations (RWSC) was convened in Nouméa, New Caledonia on 17th to 21st September 2012. The objectives were to:

- Facilitate improved learning by sharing experiences of Pacific island countries and territories (PICTs), donors and development partners through discussions on a range of topics including; early warning, training and capacity building; community-based DRM; DRM governance and the implementation status of the Hyogo Framework for Action (HFA) and the Pacific Disaster Risk Reduction and Disaster Management Framework for Action (commonly referred to as Regional Framework for Action or RFA);
- Enable interaction between the disaster and water & sanitation communities in the Pacific to identify and discuss common issues and strategies at a regional level;
- Provide opportunity for participants to contribute to a renewed regional framework to guide the sustainable management of water resources in the Pacific and the formulation of the integrated regional strategy for DRM and Climate Change 2015 including the Post-2015 Global Framework for Disaster Risk Reduction.

In attendance were representatives of PICTs, members of the Pacific Disaster Risk Management Partnership Network (PDRMPN), RWSC and representatives from other international, regional and national organisations, representatives from the Caribbean and Indian Ocean.

The Platform was officially opened by Mr. Hon. Jean-Claude Briault, Minister of Youth, Sport, Education, Francophonie and Relations with the Municipalities, and Mr. Thierry Suquet, Deputy High Commissioner of the Republic of France. Opening statements on behalf of the co-convenors of the Platform and RWSC, Dr. Jimmie Rodgers, Director-General of the Secretariat of the Pacific Community and Ms Margareta Wahlström Special Representative of the UN Secretary General for Disaster Risk Reduction.

#### ***Noted:***

##### **Opening of Platform & RWSC**

1. it's appreciation to the Government of New Caledonia and the Republic of France for hosting this meeting;
2. the commendation by Ms Margareta Wahlström on the work done by the Platform on strengthening end-to-end early warning systems, building capacity at national level, integrating disaster risk reduction/ climate change adaptation within the educational system and improving collaboration and coordination at regional and international level;
3. that this is the first time that the Pacific water and sanitation community has met with the disaster risk management community on a regional basis, and this has provided the opportunity to commence productive dialogue on common issues and challenges, as well as opportunities for collaboration;

4. the need to include other sectors and interest groups in our collective effort to bring about change and improvement in Disaster Risk Management (DRM);
5. the continuing support of many partner organisations in the Pacific Disaster Risk Management Partnership Network and Water Partnership;
6. the importance of this forum as a strategic opportunity for dialogue and the sharing of experience and best practice in Disaster Risk Management, Climate Change and the Water and Sanitation sector;
7. that PICTs remain vulnerable to a wide range of natural hazards, which are now coupled with the added pressures of climate change;
8. the role of Cabinet in embedding risk considerations in national policy;
9. the importance of the Platform in informing the Global Platform for Disaster Risk Reduction in 2013;
10. the presentation from New Caledonia regarding the delegation of authority from the Republic of France to New Caledonia with respect to DRM and the full transition of authority will become effective in January 2014;

#### **Pacific DRM Partnership Network Coordinating Committee**

11. the objectives of PDRMPN, its role in regional policy development and its achievements;
12. the progress and achievements across the region and by individual countries as measured by the HFA 2011-2013 progress review and this year's linkages to the EDF 10 ACP-EU Natural Disaster Facility country implementation plan development process;
13. the importance of partnership and coordination to integrate efforts in DRM and to avoid duplication and ensure efficient mobilisation of resources the need to strengthen institutional and governance arrangements in-country in monitoring and reporting of activities;
14. the outreach made by SPC-SOPAC and UNISDR to include the climate change community to integrate efforts in DRM and CC and the recognition of progress at the national and regional level that these communities have made with their coordinated approach was applauded by GIZ ;

#### **Rethinking DRM Governance Arrangements**

15. the need to secure strong political support when developing, planning and managing strategic change in DRM by identifying champions and showcasing the value of the alignment of DRM and CCA actions;
16. and reconfirmed the interoperability and/or integration required for managing incident control between the local, national and international levels, which requires clear articulation of control and command responsibilities to reduce any gaps and duplication of efforts and the adequate resource allocation to such control systems;
17. the challenge to attract and retain talented NDMO staff and the opportunity to create incentives such as training, professional development and travel opportunities to assist in the development of attractive remuneration packages;

18. the variety of options available to countries to improve DRM governance and the coordination between DRM agencies and emergency services, to promote and support community empowerment to manage their risks and strengthen resilience;
19. the challenge faced by NDMOs to be an active/implementing agency in the wide spectrum of DRM, recognizing that their comparative advantage remains in disaster preparedness, mitigation and response;

### **Progress and trends in DRM**

20. the progress in the region against the HFA and the RFA with national progress reports from the Disaster Managers by several countries and the use of the report to support of national planning, institutional strengthening and implementation efforts;
21. and discussed the progress, challenges and recommendations contained in the regional synthesis report, including the preparations for local level assessment of progress on DRM;
22. the positive steps by countries and the region in achieving the outcomes articulated in the HFA and RFA and expressed the need to continue these efforts;
23. the ongoing need to build capacity in many areas, in particular information management and data sharing, GIS and cost benefit analyses to support the coordination role of NDMOs;
24. Confirmed the need for a more strategic and organized approach to DRM planning and programming at a regional level to ensure that agencies target national priorities and do not work in silos;

### **Community Based Disaster Risk Management (CDBRM)**

25. the need to identify community priorities and integrate into, and/or align with national DRM plans to support and implement National Action Plans for DRM and CC mainstreaming for example by working with 'Champions';
26. the continued challenge of coordination of CBDRM in country, and therefore the need for locally developed institutional arrangements/frameworks so that roles and responsibilities of communities, local and national authorities are clearly defined, linked, strengthened and resourced. These frameworks should also specify procedures that partners must comply with as well as consideration/ inclusion of vulnerable groups (women, children, people with disabilities, and other groups);
27. that climate change and climate variability science products need to be integrated in to CBDRM so that actors can understand the risks and forecasts, and improve implementation, creating incentives for local ownership;

### **Training and Capacity Building**

28. the need to ensure any training of trainers in DRM takes an inclusive approach, in particular, addressing the needs of those with disabilities or other special needs;



29. the improved collaboration, coordination and cooperation among DRM Training and Capacity Building (TCB) providers to ensure countries receive the best support possible from all partners working to improve country capacity;
30. the need for TCB to incorporate and adapt new technologies where feasible ensuring programmes remain relevant and build on successes across the region;
31. the example of New Caledonia to integrate DRM into school curricula, reaffirming the need to do so across the region;
32. that the current TCB offerings be reviewed to inform the design, development and direction of future TCB programmes and/or initiatives;

### **Early Warning Systems**

33. the significant progress made by a number of Pacific Island Countries and Territories in strengthening their national hazard monitoring and warning systems;
34. several PICTs are in the early stages of developing their Early Warning Systems (EWS) and in some cases, had little or no national EWS capabilities and were therefore reliant on regional warnings and/or advisories, especially for hazards such as tsunamis and droughts;
35. the developments to the Intergovernmental Oceanographic Commission (IOC) Pacific Tsunami Warning & Mitigation System (PTWS) and proposed new products from the Pacific Tsunami Warning Centre (PTWC) and the opportunity to validate them during next Pacific Wave Exercise in 2013 as well as test national warning systems and processes;

### **Joint DRM and Water and Sanitation Meeting**

36. the strengths and weaknesses in the Water and Sanitation (WATSAN) sector and the opportunities for the DRM community to support WATSAN to embed DRM in their work;
37. the importance of the legal and regulatory framework for WATSAN identifying key agencies/actors and their roles;
38. and discussed the potential strategies available to develop a regional policy framework to ensure the sustainable management of water resources;
39. the importance of strengthening relationships between the DRM and WATSAN community to improve dialogue between the WATSAN and the DRM communities;
40. the acknowledgement by the DRM community of the multi-faceted nature of issues of the policy and operational challenges facing the WATSAN community;

### **Pacific Islands Fire Services Association meeting**

41. the commendation by PIFSA of SPC-SOPACs initiative on the Strategic Alliance Proposal and recommended the proposal move forward and be further developed;
42. the progress achieved by member fire and rescue authorities and services in the region including the development of fire and emergency legislation and expansion of mandate areas;

43. and acknowledged with gratitude the value of partnerships between fire and rescue authorities across the region and with those in New Zealand and Australia;
44. the challenges facing member fire and rescue authorities, including ongoing resourcing issues including access to funding, vehicles and training;

#### **Contemporary Issues in DRM (Session 10)**

45. the need to strengthen the role of women in DRM decision making including the commitment from partners to use the gender checklist as a DRM course material and that partners find ways to use and distribute the gender checklist;
46. the use of science in decision making and reaffirmed that DRR and CCA must be considered in an integrated manner within the context of adaptive capacity for sustainable development and support countries' efforts to operationalise their NAPs, NAPAs and /or JNAPS, into action and in addition the need to prepare a Pacific summary for policy makers, bringing together the findings of the SREX report, PCCSP and other recent published material on the Pacific;
47. The research efforts investigating elements of adaptive capacity in the context of disaster response, given the frequency and intensity of disasters is likely to change with climate change.
48. the remarkable and comprehensive volume of data and information available to the Pacific islands region through the PacRIS and how the data contained in PacRIS can be used to inform a range of other disaster risk management activities in particular the various strategies and instruments available to countries to support disaster risk financing and the application of the data by ADB and UN-Habitat to understand climate risks and their future impacts to inform urban planning processes;
49. the opportunities to improve the hazard and risk models to address local level DRM and CC interventions, implement disaster financing mechanisms to improve liquidity post disaster for example through the development and strengthening of trust funds;

#### **18th Regional Disaster Managers Meeting (RDM)<sup>2</sup>**

50. progress towards the implementation of the outcomes of the 17th Regional Disaster Managers Meeting;
51. progress of preparations for the EDF10 ACP-EU Natural Disaster Facility (NDF) and in this connection recommended that the RDM be used as an opportunity for the EDF10 steering committee to hold its annual discussions;
52. that a proposal to build regional capacity in Damage, Loss and Needs Assessments is under development and is at Phase II of application process to receive funds from the Global Facility for Disaster Reduction and Recovery and has been endorsed and will be championed by the Cook Islands, Samoa and Vanuatu;
53. the update on the proposed Roadmap to integrate DRM and CC in the region, noting the timeframe for this over 2012-2015 and the intent to recruit a specialist adviser;

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<sup>2</sup> For further information please refer to The 18<sup>th</sup> Regional Disaster Managers Meeting Summary of Decisions

54. the recent developments in Pacific Disaster Net (PDN) and its useful contribution to the implementation of the HFA and RFA and commended PDN for collating and housing data and information on DRM and the opportunity to expand to include climate change data and information and support the development of national disaster portals;
55. the role of the RDM meeting to facilitate peer-to-peer learning and sharing of experience in DRM and in this regard numerous countries (Palau, Cook Islands, New Zealand and French Polynesia) gave presentations on their recent developments in DRM;
56. the opportunity to visit the Firefighting training facility to observe first-hand the training and capacity building for Firefighters to learn about local emergency response coordination and expressed their gratitude to the New Caledonia for this opportunity;

### **Integrated Regional Strategy for DRM & Climate Change**

57. and recognised that countries have achieved different levels of progress in addressing DRM and CC priorities as such the Integrated Regional Strategy (IRS) should have the flexibility to be adapted to country needs;
58. that the IRS needs to be a high level strategic plan that is sector focussed and therefore needs strong inter-sectoral cooperation with robust monitoring and evaluation procedures;
59. the importance of the process in developing the Roadmap is as significant as its content an inclusive, participatory approach should be developed to inform the strategy that is sensitive to the needs of gender, those with disabilities and other vulnerable groups;
60. the strong interest of the Pacific OCTs to participate in the development and implementation of an integrated regional strategy for DRM and CC noting the opportunity to leverage support from their partners in particular France and Europe;
61. that disaster risk management and climate change science, technical and research networks in the region are utilised to guide interventions;

### **Agreed:**

1. the outcomes of the 3rd session of the Platform remain relevant and encouraged all partners to continue activities to ensure these outcomes are achieved
2. that countries, and the region generally, are making positive steps in generating outcomes articulated in the HFA and RFA and expressed the need to continue these efforts;
3. that PICTs will actively participate in the PTWS developmental process including in the 2013 Pacific Wave Exercise 13 to validate their national tsunami response plans and processes from monitoring to community response;
4. that PICTs consider models such as Oceania Regional Seismic Network (ORSNET) to strengthen national warning and mitigation capacities through enhancement of regional cooperation between countries and partners to address needs such as the sharing of scientific data;
5. PICs realise the opportunities of the EDF 10 ACP-EU Natural Disaster Facility and at the same time pursue with other donors and partners to address gaps and challenges in strengthening national and community based early warning systems;

6. that people focused end to end early warning systems remain a priority in the post 2015 integrated DRM and CC Strategy and reiterated the need to investigate slow onset hazards and non natural hazards;
7. that locally developed institutional arrangements/frameworks are needed to guide CBDRM initiatives articulating the roles and responsibilities of communities, local and national authorities, a code of conduct for partners and consideration/ inclusion of vulnerable groups;
8. that SPC-SOPAC continue to develop and strengthen the Pacific DRM (Training) Program supported by The Asia Foundation (TAF) and the USAID Office of US Foreign Disaster Assistance (OFDA) for the past eighteen years. SPC-SOPAC should engage in discussions with OFDA and other partners to continue a new programme upon its transfer to SPC-SOPAC in July 2013 and the opportunity for Overseas Countries and Territories to benefit from the training programme;
9. that Pacific ACP member states continue to work closely together with SPC-SOPAC and other partners to finalise Country Implementation Plans for the respective national allocations under the EDF 10 ACP-EU Natural Disaster Facility in early 2013;
10. that the annual Regional Disaster Managers meeting serves as the Regional Steering Committee for EDF 10 ACP-EU Natural Disaster Facility and that this Committee meet in conjunction with the annual Regional Disaster Managers meeting;
11. in principle to the establishment of a strategic alliance between NDMOs, PIFSA and AFAC and that SPC-SOPAC table the initiative for the further endorsement at the 2012 SOPAC Division Meeting and SPC Committee of Representatives of Governments and Administrations in November 2012;
12. in principle with the proposed programme to develop a regional pool of expertise for conducting damage, loss and needs assessments;
13. to use existing mechanisms to secure and sustain political commitment and leadership as part of the process in developing the regional strategy utilising the opportunity to engage in the review of the Pacific Plan, relevant sector ministerial meetings and the Forum Economic Ministers Meeting as well as the Pacific Islands Forum and the SIS meetings at the higher political level in addition to the planned joint meetings in July 2013;
14. to have the summary statement of this 2012 Pacific Platform presented to the Asian Ministerial Conference on DRR in Yogyakarta in October this year and that a PIC Minister attending this meeting be designated to present the Statement;
15. to encourage those inter-governmental organisations (IGOs) with DRR expertise representing small island states; the Indian Ocean Commission, Caribbean Disaster Emergency Management Agency and the SPC who were present at the meeting to continue their dialogue to establish and IGOs arrangement to promote the future interests of SIDS through South-South cooperation, particularly recognizing the Global Platform for DRR 2013 and 2015 and the third international meeting of SIDS in 2014.

#### **Joint DRM and Water and Sanitation Meeting**

16. that an integrated approach to the management of disaster risk, climate change and water and sanitation is far more effective than individual sector approaches, and Integrated Water Resources

Management (IWRM) provides an important mechanism to bring the components of disaster, climate change and water management together

17. that the water and sanitation sector has a key role in disaster risk management, as demonstrated by case studies of the 2010 earthquake in Samoa, the 2011 drought in Tuvalu, and the 2012 flooding in Fiji, particularly in the areas of:
  - a. Provision and maintenance of safe drinking water and sanitation;
  - b. Technical advice, monitoring and assessment;
  - c. Planning for resilience;
  - d. Supporting resilient communities;
  - e. Early warning systems;
  - f. Developing innovative approaches and technologies; and
  - g. Participation in disaster response.
18. that the capacity of the water and sanitation sector to adequately fulfil these roles varies across PICTs, however there is a clear need for this capacity to be significantly strengthened through targeted resourcing and collaboration with the broader disaster management and climate change communities, including through existing multi-sector coordination mechanisms
19. that there is also a need to harmonize efforts with the disaster management and climate change communities in order to more effectively address issues and resource solutions, particularly in regard to the above key roles
20. that the value of recent productive dialogue with DRM and CCA justifies an ongoing effort to maintain and develop this evolving partnership and continue the dialogue on the development of both the integrated regional strategy for DRM and Climate Change and the regional framework to guide the sustainable management of water resources, including potentially through participation in the 2013 Pacific Disaster Platform process

### **Regional Water & Sanitation Consultations**

21. that significantly increased efforts are required by all to secure the fundamental human right to access to safe drinking water and sanitation for the people of the Pacific
22. that despite good progress on the provision of safe drinking water and sanitation services, in general these efforts have been offset by mounting pressures affecting the region, including population growth, urbanization and economic development, compounded by the impacts of climate variability and natural hazards, and further exacerbated by the emerging impacts of climate change
23. that there is much to learn from the experiences of member countries and the outcomes of initiatives and demonstration projects, including those developed in atoll islands and in the Overseas Countries and Territories, and there is particular value in consolidating the various approaches to enable effective knowledge sharing and potential replication
24. that many sanitation systems currently used in the region consume potable water supplies and discharge significant pollutants to groundwater and ultimately to streams and coastal waters

leading to significant remediation requirements, and these impacts should be fully considered by decision makers and users when planning and designing water and sanitation services

25. that community ownership and engagement are crucial to the success of water and sanitation improvement efforts, and the design and implementation of water and sanitation solutions should include measures to enable the effective participation of communities at all stages
26. that the need to improve data gathering, management and communication is critical, as a lack of useful data is limiting the ability to provide effective advice on risks and their management, and a greater commitment is required to improving this function
27. that reporting on MDG water and sanitation indicators and the post-2015 sustainable development indicators are important to countries in the region and stakeholders, however there is a need for more support to countries on how to better report on these indicators and how this may be achieved through the national and regional indicator frameworks
28. that the development of national water and sanitation indicators would provide greater transparency and important support to higher political and inter-sectoral awareness, with presentation summarised at a regional level reflecting national priorities
29. that there is a need for continued collaborative and adequately resourced efforts to update the Pacific Regional Action Plan for Sustainable Water Management (Pacific RAP) in accordance with the country directive given through the SOPAC Governing Council in 2010
30. that there is a need for the updated RAP to identify practical strategies that address the most critical water and sanitation issues in the light of evolving global frameworks (such as Rio+20) and emerging pressures identified in national and regional outlook assessments

The representatives of PICTs and partners expressed their deep gratitude to the Government of New Caledonia for hosting the Platform and RWSC.