



NEWSLETTER - APRIL

Ministry of Natural Resources & Environment

2007

PACIFIC REGIONAL CONSULTATION MEETING ON THE IMPLEMENTATION OF THE UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION (UNCCD)

16 – 17 April 2007.

SPREP Headquarters, Vailima

The UNCCD Secretariat in collaboration with the Government of Samoa hosted a Consultation Meeting on the Implementation of the UNCCD in the Pacific Region from the 16 – 17 April 2007 at SPREP Headquarters, Vailima. The purpose of this meeting was to discuss the current status of UNCCD implementation in member countries as well as to discuss the process and modalities of projects to be submitted under a Grant by the Government of Venezuela.

The Grant from the Government of Venezuela amounts to two million dollars and is an initiative to support the implementation of the Convention in the Pacific Region. This planned project proposes to assist 15 South Pacific Island States (including East Timor) in rehabilitation of land degradation and drought preparedness. There is also an understanding that the funding would be

used to support on ground activities, particularly at the community level as land degradation and drought have posed serious threats to our living environment, natural resources and ecosystems, as well as on people's livelihood and socio-economic development. Proposed activities must address one or more of the following issues; Land Degradation Rehabilitation, Drought Mitigation, Alternative Energy, Runoff Harvesting and Drinking Water Shortage, and Cash Crops Cultivation on eroding sites. In addition, all participating countries will receive equal entitlements from the fund with an expected project timeframe of two years.

Participants from 15 South Pacific Island Nations (including East Timor), representatives from the UNCCD Secretariat and United Nations, and a representative of the Government of Venezuela convened at SPREP Headquarters from 16 – 17 April 2007. Also invited to attend were

observers from Government Ministries, Non-Governmental Organizations, Regional Organizations as well as Academic Institutions.

During the two-day consultation individual countries presented to the forum proposed activities to be carried out on the ground to address land degradation and drought under the Venezuela Grant. Intense discussions followed amongst participants regarding proposed activities, management arrangements and budgets for the project.

A highlight of the consultation meeting was a cocktail function hosted by the Ministry of Natural Resources and Environment after the first day of proceedings held at the Faleata Golf Course. Participants, invited dignitaries and guests experienced the warmth of Samoan hospitality during a relaxing night of entertainment and fun.



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Summary of Hydrological survey - April

HYDROLOGY SECTION
OF THE WATER
RESOURCES DIVISION

A summary of the rainfall collected and measured for the month of April 2007 is listed in Table 1. A total of 5 stations collect rainfall each month using a manly operated octapent rain gauge. The sites are located inland at Lanoto'o, Afulilo, Mt. Sigaele, Tanumalala and Faleaseela. Two hydrological stations namely Alaoa East (one of the branches of Vaisigano Basin) and Faleaseela still exist for monitoring purposes; data collected is recorded by a mechanically operated Leupold & Stevens Type A stream flow recorder.

From the 30 years average of the measured rainfall, all stations produced rainfall *below average* and a reference of this is the visibility of the EPC operated Afulilo Dam and the drop of the Faleaseela stage as well.

The discharge calculated or the measurement of the total volume of water passing a point in a given period of time for the Alaoa East branch was 1.06m³/s (or 1060L/s) and by mid month, it dropped to 0.770m³/s (or 770L/s).

The results of these monitoring are of great use to water managers, water users, water engineers, researchers, students and members of the public, particularly for mitigating the devastating nature of water related disasters.

Table 1: Rainfall measured for the month of April 2007 and 30 years monthly average

Station	Rainfall (mm)	30 Years monthly average (mm)
Lanoto'o	118.5	340.9
Afulilo	239.5	383.5
Mt.Sigaele	143.0	331.3
Tanumalala	136.0	382.8
Faleaseela	127.5	331.8 (29 yrs)



Summary of Earthquake Events in Samoa - April

Geophysics Section, Samoa Meteorology Division

Table 1: Summary of earthquake events for the month of April

Total number of earthquake events recorded:	21
Highest magnitude event recorded	8.0 (Solomon Islands Region)
Lowest magnitude event recorded	4.8 (Tongan Region)
Average magnitude of events recorded	5.8
Major region (s) of events' occurrence	Approximately 40% of the events recorded occurred in the Tonga Islands region; the remaining 60% occurred in other parts of the Pacific Rim as well as adjacent regions.

Listed in Table 1 is a summary of earthquake events recorded at the Afiamalu seismic station (AFI AS095) for the month of April 2007. A total of twenty one earthquake events were recorded. The most significant of these events with respect to the Tonga Islands was a magnitude **4.8** earthquake (on the Richter scale) which occurred in the Tongan region on April 12 2007. It is assumed that most if not all people in Samoa felt the event, although ground-shaking in some areas may have been more severe than in other areas. It is not known whether the earthquake caused any major property or utilities damage, based on the absence of reported effects from the general public.

Significant Events

Tsunamigenic Earthquake:

The **2007 Solomon Islands earthquake** took place on April 1st near the island of Gizo, in the Solomon Island. Its magnitude was calculated by the USGS as being at 8.1 on the moment magnitude scale.

According to the USGS, the earthquake was recorded around 7:39:56 a.m. local time (UTC+1). The focus was 10 km (6 miles) deep and 40 km (25 miles) South South-East of Gizo township on New Georgia in Western Province. Since the first earthquake there have been numerous aftershocks, the worst of which measured 6.2 on the moment magnitude scale.

Effects:

At least fifty-two people are reported to have

been killed and sixty reported missing when a tsunami triggered by the earthquake struck the Solomon Islands, wiping out thirteen or more villages. Thousands were left homeless, and damages are estimated in millions. Rescuers are trying to reach other islands, and the reported death toll is thus expected to rise. In South Chisel, waves 10 meters high swept away villages, gardens and a hospital. About 900 homes were destroyed and 5000 people left homeless. The tsunami reached Papua New Guinea, with a family of five reportedly missing from a remote island in Milne Bay Province, which was in the tsunami's path.

Samoa Islands:

Earthquake: The most significant earthquake event this month for the Tonga Islands occurred on Thursday April 12 at **09:06:16 (pm)** Samoan time. A magnitude **4.8 earthquake** occurred in the Tonga Islands region, approximately

255 kilometers South West of Apia, at a depth of approximately **64.1** kilometers below the seabed. The event had a Modified Mercalli Intensity (MMI) **2-3**, meaning that the earthquake was felt by most if not all people both indoors and outdoors. No tsunami had formed as a result of the earthquake. If anyone noted any damages to their homes or property in general as a result of this event, please notify the National Disaster Management Office at phone number 23702 or 23701 for documentation.

Applications of the information:

The information provided may be useful for all members of society in the context of disaster and risk planning as well as management, and also for engineering purposes. In particular, the information provided reminds us of the devastating nature of tsunamis, and the importance of undertaking necessary preparation measures to minimize and mitigate the impacts of this hazard at all levels of society in Samoa, should a disaster of this type occur.

Table 2 given below outlines the details of individual earthquake events that were recorded at the Afiamalu seismic station (AFI AS095) for this month.

Table 2: Summary of individual earthquake events recorded at AFI AS095 April 2007

DATE	MAG	DATE/ TIME (SAMOAN TIME)	LATITUDE / LONGITUDE	DEPTH (km)	REGION
01/04/2007	8.0	09:39:56 (am)	8.453 deg S 156.957 deg E	10	Solomon Island
01/04/2007	6.7	09:47:31 (am)	7.133 deg S 155.661 deg E	10	Solomon Island
01/04/2007	6.4	10:11:33 (am)	7.44 deg S 155.774 deg E	10	Solomon Island
01/04/2007	6.0	10:55:33 (am)	7.336 deg S 155.658 deg E	10	Solomon Island
01/04/2007	5.6	10:26:27 (am)	7.317 deg S 155.401 deg E	10	Solomon Island
01/04/2007	5.9	10:30:27 (am)	6.299 deg S 156.016 deg E	10	Solomon Island
01/04/2007	5.5	10:43:16 (am)	7.705 deg S 155.608 deg E	10	Solomon Island
01/04/2007	5.7	10:45:38 (am)	7.432 deg S 155.581 deg E	10	Solomon Island
01/04/2007	5.3	10:45:38 (am)	7.250 deg S 155.323 deg E	10	Solomon Island
01/04/2007	5.4	01:41:42 (am)	15.014 deg S, 173.488 deg W	35	Solomon Island
12/04/2007	4.8	09:06:16 (pm)	15.325 deg S 173.573 deg W	64.1	Tonga (Felt)
16/04/2007	5.2	04:50:07 (am)	21.162 deg S 174.601 deg W	10	Tonga
19/04/2007	6.0	01:26:45 (pm)	25.664 deg S 125.103 deg E	50.4	Southern Ryukyu Is Japan
19/04/2007	6.1	02:45:56 (pm)	25.739 deg N 125.222 deg E	10	Southern Ryukyu Is Japan
20/04/2007	5.8	08:37:59 (am)	27.494 deg N 128.426 deg E	48.4	Southern Ryukyu Is Japan
20/04/2007	4.8	02:04:40 (pm)	17.734 deg S 171.743 deg W	35	Tonga
20/04/2007	6.1	8:12:47 (pm)	3.554 deg S 151.322 deg E	401.7	New Ireland (PNG)
23/04/2007	4.8	08:02:58 (pm)	21.242 deg S 174.460 deg W	35	Tonga
25/04/2007	6.3	02:34:16 (am)	14.287 deg S 166.819 deg E	69.3	Vanuatu
28/04/2007	4.8	04:40:05 (pm)	18.969 deg S 172.889 deg W	36.1	Tonga
29/04/2007	6.2	01:41:58 (am)	52.079 deg N 179.979 deg W	123.3	Andrena of Is (Alaska)

Ministry of Natural Resources & Environment

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New Recruits:

Faatamalii Meredith

Capacity Building Officer

Ferila Brown

Sustainable Development Officer

Lilian Penaia

Marine & Conservation Officer

Resignation:

Reima Leleimalefaga

Principal Climate Services Officer

***A WORD FROM THE
MINISTRY***

Protect, Preserve,
Conserve, Care and Love -
what priceless gifts to give
to
OUR ENVIRONMENT

DISASTER ADVISORY COMMITTEE MEMBER AGENCIES AWARENESS WORKSHOPS

The Disaster Advisory Committee in its meeting held on the agreed to conduct awareness workshops for each member agency of the Disaster Advisory Committee to raise their awareness on the new National Disaster Management Framework. These workshops are part of the activities in the Implementation plan (Activity AP3) for the National disaster management plan.

The main objectives of the workshops are:

- 1.1 To raise the awareness of senior officials and key personnel within the member agencies of the Disaster Advisory Committee;
- 1.2 To ensure DAC member agencies understands their roles and responsibilities under the new National disaster management framework.

The expected outcomes of the workshops included:

- 1.3 Strengthened capacity of DAC member agencies
- 1.4 Understanding of what each DAC member agency is responsible for;
- 1.5 Understanding of the process and systems in place under the new National disaster management framework.

The participants for each workshop included senior management level as well as other key personnel within each DAC member agency in particular those who will be or likely to be involved in preparedness for and response to any disaster or emergency event.

The method used to deliver the workshops was presentations-based. The DMO presented on the Disaster and Emergency Management Act 2007, National Disaster Management Plan including

the National Tsunami and Cyclone Plans and participants were given an opportunity to ask questions to clarify any issues.

The following are summaries of some of the key points raised by the participants.

1.6 Key Learnings

- A better knowledge of the roles and responsibilities under the National disaster management plan and Act
- A better knowledge of procedures including the government hierarchy and authorities structure including the National Disaster Council.

1.7 Key Issues

- Need to incorporate new legislation such as Fire and Emergency Services Authority Act, National Health Services and Ministry of Health legislations into the NDM
- More awareness for the villages and schools or general public
- Strengthen early warning as radios and televisions are slow in transmitting information.

1.8 Next Steps

- Primarily, the next step is for DAC to consider issues raised, explore possible solutions to address them and how to implement them.