

**Advanced Training in
Vulnerability and Adaptation Assessments**

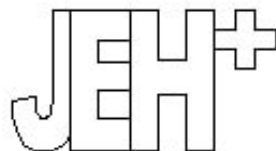
Final Report

Submitted to

***The Chief Executive Officer
Ministry of
Natural Resources, Environment & Meteorology
Government of Samoa***

by

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New Zealand**



April, 2007

Background

To ensure Samoa's Second National Communication under the United Nations Framework Convention on Climate Change (UNFCCC) meets national requirements and international best practice, vulnerability and adaptation (V&A) assessments of key sectors will be undertaken. The assessments will be conducted using methods and tools that are consistent with the relevant guidelines of the UNFCCC and the Intergovernmental Panel on Climate Change (IPCC).

The Ministry of Natural Resources, Environment and Meteorology (MNREM) is responsible for coordinating the preparation of the V&A assessments. The assessments for a specific sector are undertaken by stakeholders (government, private sector and non-governmental) who have experience in that sector. The National Adaptation Working Group (NAWG) for Samoa includes these stakeholders as well as MNREM staff with oversight of, and overall responsibility for, the assessment and for preparing the Second National Communication.

MNREM proposed advanced training that would ensure all members of the NAWG have the knowledge and skills required to complete the V&A assessments to the appropriate standard. This includes providing reports that can form the basis of relevant parts of the Second National Communication. The advanced training built on earlier training related to preparing and interpreting a climate risk profile (CRP) for Samoa and on other relevant training that has built the basic capabilities of members of the NAWG.

Aim and Objectives

The advanced training addressed the overall aim of ensuring that NAWG members have the skills and knowledge required to carry out V&A assessments in their respective sectors, and the ability to report their findings in an appropriate manner.

The specific objectives of the advanced training were to:

- ensure that NAWG members are fully aware of the activities that will be undertaken in the V&A study and the outcomes to be achieved;
- transfer and build relevant knowledge and skills by providing hands on technical training on sectoral V&A assessment methodologies and tools; and
- provide technical assistance to NAWG members to assist with completing the V&A assessments and reporting the findings.

Activities

The above objectives were achieved by undertaking the following:

1. Advanced Training of Meteorological Division Staff

Provided advanced training of selected Meteorological Division staff in order to strengthen the existing CRP for Samoa. This included the ability to undertake analyses for additional parameters, extend data records, incorporate other locations and to undertake analyses of relevance to specific sector groups.

2. Generic V&A Training for NAWG Members

Generic training V&A training was provided to all NAWG members, building on the CRP training and other basic capabilities – the entire focus of the training was to equip all NAWG members with the general knowledge and skills required to prepare a high quality V&A report. The training programme is provided in Annex 1.

3. Sector Specific V&A Training

Sector specific, advanced V&A training was undertaken on a rotation basis.

4. General Oversight of V&A Assessments, Review Progress and Reporting

General oversight of the V&A studies by the sector and CRP teams was provided. This included a review of their proposed report outlines and an assessment of progress. All sector groups presented their findings at a one day session, at which time the remaining work to be completed was identified, along with any issues that needed resolving. This one day session concluded with a formal evaluation of the training.

A wrap up review session was held with the leaders of the NAWG.

5. Post In-country Activities

Through the principal leader of the NAWG, technical advice will be provided while the V&A sector reports are being finalised. This advice will be provided by email, or by telephone in exceptional circumstances. The final drafts of the V&A sector reports will be reviewed as they become available, and expert opinion and advice will be provided. The final draft V&A report will also be reviewed, with expert opinion and advice being provided in order to ensure the report meets UNFCCC, IPCC and national requirements.

6. Outputs

The following outputs have been delivered:

- a strengthened CRP for Samoa, following advanced CRP training of Meteorology Division staff;
- climate risk information of relevance to specific sectors;
- generic V&A training for all members of the NAWG;
- sector specific, advanced V&A training for each sector team;
- general oversight of the V&A studies by the sector and CRP teams, and additional 1/2 day targeted training sessions as required;
- half day review and advanced training sessions for each of the sector teams; and
- one day session at which each of the sector groups presented their findings.

The following outputs have yet to be delivered:

- technical advice while the V&A sector reports are being finalised;
- review final drafts of the V&A sector reports and provide feedback; and
- review the final draft V&A report and provide feedback.

Overall Assessment of the Advanced Training

1. Success Stories

The advanced training followed an integrated, sector-based approach, which was multi-ministry and multi-agency. All key sectors, except tourism, were represented. There was recognition of interactions between the sectors. The advanced training recognized the diverse talents of individuals and groups, and benefited from a high level of commitment from individuals, teams and Ministries/agencies. Preliminary drafts of sector reports were completed within three weeks, at which time the sector teams made oral presentations. As a result, individually and collectively the teams were well placed to deliver a comprehensive

V&A assessment for Samoa. This can contribute to the Second National Communication as well as providing inputs to Sector Plans and to Corporate Plans.

2. Best Practices

The advanced training followed IPCC, UNFCCC and Pacific community-based V&A methodologies, adapted to Samoa. It used a risk-based approach, where appropriate, since this facilitates a strong link between characterization of impacts and identification of adaptation measures. The assessments were grounded on up-to-date, factual, and often quantitative information. The sector teams were made up of individuals who are experts in their sectors. Their work built on the considerable body of existing information (e.g. NAPA, CRP), rather than starting from scratch.

3. Lessons Learned

An essential requirement for success of the training is a good vision, planning and preparation. This requires strong and effective leadership, both overall, and in sector teams. Importantly, the advanced training showed the benefit of these requirements having been met, totally. Continuity of participation in the activities is also important. This requires commitment and cooperation by team members. The support of employing organisations and supervisors is thus essential. Other critical requirements include: (i) sector and climate experts with relevant knowledge; (ii) timely access to relevant and reliable information; and (iii), flexible and adaptable procedures.

Further lessons learned included: (i) not all sectors will be willing to engage; and (ii), information management needs strengthening.

4. Gaps and Uncertainties

At least one key sector was not included in assessment. There was no direct involvement of NGOs or the private sector, while communities were involved only indirectly. There was insufficient information to describe the baseline (i.e. current) conditions adequately, and incomplete information on: (i) the future climate of Samoa, especially for specific locations and for some relevant variables; (ii) future economic, social, cultural and environmental changes; (iii) future impacts of climate change; and (iv), adaptation measures that will reduce adverse impacts.

5. Key Messages

Key messages identified during the advanced training included:

- Climate change is already happening, with adverse consequences for Samoa;
- Despite international efforts to prevent further changes, the climate will continue to change, and at an increased rate in at least the present century;
- Adaptation is therefore essential;
- Proactive adaptation is preferable; and
- There are limits to adaptation – not all adverse impacts can be avoided through adaptation.

Evaluation

An evaluation was conducted at the end of the three weeks of advanced training. The evaluation form is presented in Annex 2. The evaluation covered the following:

- Generic training (Days 1 and 2);

- Sector training and assistance; and
- Overall training, assistance and reporting.

Nineteen evaluations were completed. Detailed results of the evaluation are presented in Annex 3. These indicate a very high level of satisfaction with all aspects of the advanced training, including relevance to needs, ease of understanding, work load, organisation and overall quality of the training.

Recommendations

The following recommendations arise from an overall assessment of the advanced training:

1. With respect to adaptation measures, there is a need to build on traditional knowledge and practices, including existing coping mechanisms;
2. Make greater use of existing information to identify the consequences of current climate variability and extremes;
3. Develop and apply simple models to illustrate the impacts of climate change on key sector components and to assess the effectiveness of adaptation measures;
4. Fill gaps (e.g. no participation by the tourism sector) and reduce uncertainties (e.g. improve information access);
5. Improve engagement of NGOs, private sector and community stakeholders;
6. Institutionalise the technical level of the climate change country team – based on leaders of the sector teams and other key players; and
7. Review the results of the evaluation, and take the success stories and lessons learned into consideration when designing and implementing future training activities.

Annex 1

Programme for Generic V&A Training of NAWG Members

**Apia, Samoa
February 20 and 21, 2007**

Tuesday, February 20

0900 Semi-formal Opening; Self Introductions
0915 Climate Change, the Convention and National V&A Activities
0945 V&A Assessments – Guidelines and Overview of Procedures
1015 Break
1030 Assessment Methods and Tools
1100 Step 1. Scoping the Assessment
1200 Lunch
1300 Group Work on Scoping
1345 Reporting by Working Groups
1415 Break
1430 Step 2. Developing Baselines
1500 Group Work on Baselines
1545 Reporting by Working Groups
1615 Review
1630 End of Day 1

Wednesday, February 21

0900 Review and Preview
0915 Step 3. Scenarios
0945 Group Work on Scenarios
1010 Break
1020 Reports by Working Groups
1045 Step 4. Assessing Impacts and Vulnerability
1115 Group Work on Assessing Impacts and Vulnerability
1200 Reports by Working Groups
1230 Lunch
1330 Step 5. Identifying and Assessing Adaptation Options
1400 Group Work on Adaptation Assessment
1445 Break
1500 Reports by Working Groups
1530 Step 6. Synthesis of Vulnerability and Adaptation Assessment
1545 Group Work on Preparation of Synthesis Reports
1615 Reports by Working Groups
1645 Review and Close

Annex 2

Evaluation Form

V&A Training for, and Reporting by, NAWG Members

Evaluation Form

Please enter your name below.

Before you hand in your response, please separate this page from the remainder of the form.

When you have completed the evaluation, hand this page and the other pages to Ann or Will.

This page and the other pages will be stored separately.

This procedure will preserve the confidentiality of your responses.

But the procedure will also allow us to determine who has not completed the evaluation. They will be encouraged to do so.

Thank you for your cooperation and assistance.

Name

C. Overall V&A Training, Assistance and Reporting

Please circle the relevant number.

<ul style="list-style-type: none"> overall, were the training, assistance and reporting activities interesting? 	<p style="text-align: center;">1 2 3 4 5</p> <p><i>uninteresting</i> <i>very interesting</i></p>
<ul style="list-style-type: none"> overall, were the training, assistance and reporting activities responsive to your needs? 	<p style="text-align: center;">1 2 3 4 5</p> <p><i>not responsive</i> <i>very responsive</i></p>
<ul style="list-style-type: none"> overall, were the training, assistance and reporting activities responsive to the needs of your sector? 	<p style="text-align: center;">1 2 3 4 5</p> <p><i>not responsive</i> <i>very responsive</i></p>
<ul style="list-style-type: none"> overall, how heavy was the workload? 	<p style="text-align: center;">1 2 3 4 5</p> <p>too little too much</p>
<ul style="list-style-type: none"> overall, were the training, assistance and reporting activities well organised? 	<p style="text-align: center;">1 2 3 4 5</p> <p>poorly organised very well organised</p>
<ul style="list-style-type: none"> overall, how would you rate the quality of the training, assistance and reporting activities? 	<p style="text-align: center;">1 2 3 4 5</p> <p>poor excellent</p>

Regarding the overall V&A training, assistance and reporting, do you have any comments or suggestions that you would like to add?

Please separate the name and response pages, and hand them to Ann or Will.

Fa'afitai

Annex 3

Evaluation Results¹

A. Generic Training (Days 1 and 2)

• was the training interesting?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;"><i>uninteresting</i></td> <td></td> <td></td> <td></td> <td style="text-align: center;"><i>very interesting</i></td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">13</td> </tr> </table>	1	2	3	4	5	<i>uninteresting</i>				<i>very interesting</i>	0	0	2	3	13
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• was the training relevant to your needs?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;"><i>not relevant</i></td> <td></td> <td></td> <td></td> <td style="text-align: center;"><i>very relevant</i></td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">6</td> <td style="text-align: center;">10</td> </tr> </table>	1	2	3	4	5	<i>not relevant</i>				<i>very relevant</i>	0	1	1	6	10
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• overall, how would you rate the quality of the training?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;"><i>poor</i></td> <td></td> <td></td> <td></td> <td style="text-align: center;"><i>excellent</i></td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">3</td> <td style="text-align: center;">5</td> <td style="text-align: center;">10</td> </tr> </table>	1	2	3	4	5	<i>poor</i>				<i>excellent</i>	0	0	3	5	10
1	2	3	4	5												
<i>poor</i>				<i>excellent</i>												
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Are there topics/activities you would have liked covered in the generic training?

The syllabus covered was comprehensive with respect to V&A.

Pretty good, though I would have liked to see more suggestions on adaptation (e.g. examples of adaptation in similar areas).

Risks associated with adaptation options.

None at all.

Revisit on every topic, but mainly on adaptation options.

None.

Yes.

It covered all.

No.

No.

¹ Number of responses shown in red.

Regarding the generic training, do you have any comments or suggestions that you would like to make?

Timing of training sessions – it's difficult for our supervisors to let us attend whole day trainings. Half day trainings would suit us best.

The training was OK except for the time frame It would have been nice if the two day training was scheduled for a week. That way more understanding of concepts of vulnerability and adaptation is absorbed. This would also help with the report by each sector, in terms of working through procedures etc. as the training progresses.

Given that the training has covered so many relevant issues that related to climate change, therefore there is urgent need to extend the time period of this training – for instance, one month instead of three weeks.

Possible more explanation of return factors (e.g. 100 year event). The charts showed great change, but did not explain what the statistics mean.

It is very nice to encourage the participation of other related ministries. There is a need to let their respective CEOs know of their contributions.

It was very interesting and essential to my own understanding/capacity building. However, the two days were too short and there should have been more time for the training so we all understand.

Should give the NGO the chance to present Powerpoint presentation on climate change and global warming.

An adaptation assessment should have been done on each sector to identify how well each sector could cope with the load, data needs and assistance needed to produce a good V&A assessment report.

I wish the Red Cross was involved from the beginning of the workshop.

None.

No.

Inter-related agencies to work together – its happening to some areas, but not all.

B. Sector Training and Assistance

<ul style="list-style-type: none"> was the sector training interesting? 	<p>1 2 3 4 5</p> <p><i>uninteresting</i> <i>very interesting</i></p> <p>0 0 2 7 8</p>
<ul style="list-style-type: none"> was the sector training and assistance responsive to your needs? 	<p>1 2 3 4 5</p> <p><i>not responsive</i> <i>very responsive</i></p> <p>0 0 0 7 10</p>
<ul style="list-style-type: none"> were the procedures difficult to understand? 	<p>1 2 3 4 5</p> <p><i>too easy</i> <i>too hard</i></p> <p>1 3 9 4 0</p>
<ul style="list-style-type: none"> how heavy was the workload? 	<p>1 2 3 4 5</p> <p><i>too little</i> <i>too much</i></p> <p>0 2 6 5 4</p>
<ul style="list-style-type: none"> was the sector training and assistance well organised? 	<p>1 2 3 4 5</p> <p><i>poorly organised</i> <i>very well organised</i></p> <p>0 0 5 5 7</p>

No.

No.

No....well presented....some problems within sector in regards to time management.

C. Overall V&A Training, Assistance and Reporting

• overall, were the training, assistance and reporting activities interesting?	1 2 3 4 5 <i>uninteresting</i> <i>very interesting</i> 0 0 3 5 10
• overall, were the training, assistance and reporting activities responsive to your needs?	1 2 3 4 5 <i>not responsive</i> <i>very responsive</i> 0 0 1 7 8
• overall, were the training, assistance and reporting activities responsive to the needs of your sector?	1 2 3 4 5 <i>not responsive</i> <i>very responsive</i> 0 0 2 4 10
• overall, how heavy was the workload?	1 2 3 4 5 too little too much 0 1 6 6 3
• overall, were the training, assistance and reporting activities well organised?	1 2 3 4 5 poorly organised very well organised 0 0 1 7 8
• overall, how would you rate the quality of the training, assistance and reporting activities?	1 2 3 4 5 poor excellent 0 0 1 6 9

Regarding the overall V&A training, assistance and reporting, do you have any comments or suggestions that you would like to add?

Very interesting training and it's a step forward in getting all sectors working together to counter impacts and learn to live with climate changes. The short training time however may delay the completion of reports due to other work commitments. Best if an extra week was given in notification letters, so we are allowed to keep working on the report.

More emphasis on the overall effects.

May be next time will touch on datasets relevant to your issues. Provide allowances. Amen.

Time management.

No!

No.

I just wish I was in from the start.

None. Well done with the training.

Need for training on this issue.

Perhaps workshop on media awareness on climate change – how to get the message across to people by actually doing hands on practicals (e.g. creative advertisement on sustainable development).

It was OK. Overall training was well prepared and entertaining.

Don't know if climate change conferences can have more interaction, but scenarios make more sense when case studies, examples and even role plays are done.

1) Due to lots of work commitments, it is important that each sector should have sufficient time to prepare the report; 2) The climate change project should hire a consultant to write reports for each sector, based on the information each sector has been provided during the training.

Thanks for inviting SPREP to participate and listen to the valuable exchange of ideas and sector findings.