



environment NEWSLETTER

Climate Change Conference Presents Global and Regional Challenges

The Role of the National Meterological Services in the 21st century 4

Director of SPREP addresses key stakeholders in Pacific Meteorology.......5

The Key to Sustainable Development in the Pacific 6

Regular Features
From the Director's desk.................... 3

The existence of more than ten thousand small islands rests on the world's ability to live up to its promise of cutting greenhouse gas emissions. At the conclusion of the Buenos Aires climate conference different challenges were thrown to developed countries and to Pacific island countries.

r Tamari'í Tutangata, Director of the South Pacific Regional Environment Programme (SPREP), said "It is heartening to know that the conference has agreed to do the detailed planning needed to help regions like the Pacific survive the present and accelerating change, but what is most needed now is actual emission reductions. The science tells us the longer the world delays reductions, the worse the resulting climate change will be. The Intergovernmental Panel on Climate Change has said that reductions of 60-80 percent would be necessary to stop the process of global warming and climate change, and repeated that opinion in its latest comprehensive review. There is an urgent need for the developed world to start doing what it has been promising for so long, if the tens of thousands of small islands in the Pacific and other oceans are to survive."

A range of controversial issues discussed, included whether developed countries are doing enough to combat climate change, whether all parties would agree to specific emission cuts and also to assist developing countries in ways to cope with the impacts of climate change and sea level rise. Identification of vulnerable countries, transfer of technology, adequacy of developed country commitments and flexible mechanisms of the Kyoto Protocol were amongst some of the leading issues discussed.

Dealing with articles 4.8 and 4.9 concerning identification of the most vulnerable and least developed countries caused considerable debate within G77 (Group of 77 and China). Whereas the Small Island Countries claim vulnerability to the impacts of climate change based

continued on backpage



Training Targets Skills to Combat Marine Pollution Accidents

A small oil spill in the Pacific could have a disproportionately large impact because of the dependence of local communities on coastal and ocean resources for survival. To date, there are glaring deficiencies in the Pacific island region's capacity to deal with this sort of disaster.



n opportunity to make a start in dealing with marine disasters such as spills came in the Regional Workshop on Marine Spill Response held in Fiji from 30 November to 4 December 1998. The workshop, an initiative under the Pacific Ocean Pollution Prevention Programme (PACPOL) of SPREP; aimed to work out the details of a regional contingency plan, and to provide specialised training in technical aspects of dealing with marine spills.

The workshop was funded by the International Maritime Organisation (IMO) and drew support from international or-

Participants also heard that the largest number of oil spills occur during routine ship-to-shore transfer operations in port, and discussed improved procedures to prevent these numerous small spills.

In addition to agreeing to move forward with a regional contingency plan, the workshop also agreed that:

- each country will develop a national marine pollution contingency plan.
- each country will establish a national marine pollution committee.



Photo by Michael von Reich





ganisations such as the International Tanker Owners Pollution Federation, the regional oil industry and maritime and environmental authorities from Australia, France, New Zealand and the United States.

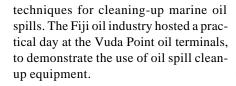
Steve Raaymakers, the Marine Pollution Adviser for SPREP said that in order to avoid duplication of effort, the workshop also identified who does what and where the gaps are, in the hope of getting rid of the overlaps and to plug the gaps.

The workshop reviewed a proposed draft of a regional contingency plan, and agreed to finalise it by June 1999. In addition, government and oil industry representatives from Australia, France, New Zealand and the United States outlined assistance that could be provided by their countries.



- each country will develop national marine pollution laws and regulations.
- governments and the oil industry will work closely together to develop these initiatives.

During the workshop, participants attended a number of training sessions to learn about the latest, state-of-the-art



Participants agreed the week-long workshop should become an annual event, and that the venue should be rotated around the region.



From the Director's Desk

ooperation is a skill which Pacific island countries know well and one which was sorely needed, in November this year, as more than 160 countries met in Buenos Aires in Argentina to put flesh on the bones of the Climate Convention.

They had agreed under the Climate Convention and its Kyoto Protocol to reduce their greenhouse gas emissions, but for most of the fortnight-long conference, cooperation in living up to those commitments seemed the last thing on most countries' minds. Parties were deadlocked; intransigent position-taking ruled; and for much of the fortnight it seemed that the only agreement to come out of proceedings would be a "Mañana Mandate", with all hard decisions put off for later meetings to settle.

The statistics made grim reading. Although developed countries agreed six years ago to reduce their greenhouse gas emissions, to date virtually every country has continued to increase emissions. Meanwhile, in the Pacific, sea levels are already rising, the weather is changing and there is already an urgent need for assistance to cope with accelerating change. Yet from the first day of the Buenos Aires conference, vested interests seemed to rule.

Developed countries wanted a fast-track procedure that would let them meet some or most of their emission reduction commitments by helping developing countries install new climate friendly technologies—allowing industrialised countries to claim credit for the resulting

emission reductions. Developing countries saw this approach as an attempt by richer countries to avoid making any emission reductions at home.

Suspicion and intransigence ruled the day and there seemed little way around the roadblocks. Within its own grouping of the G77 and China, the developing world was also locked in disagreement. Pacific island countries argued forcefully for agreement on a detailed work programme that would allow them to start adapting to climate change and sea-level rise. The oil producing and exporting countries (OPEC), who are also included in the developing world grouping, refused to agree to this unless they were included in the definition of "most vulnerable countries". They said that if the world started using less oil, their economies would suffer and they would need international assistance to cope with that impact. Not unnaturally, small island states found this point of view hard to swallow.

Under the United Nations system, any international agreement must be reached by consensus, which means that if even one party objects, all deals are off. Given the number of countries and the range of opposing views at Buenos Aires, consensus seemed an impossible dream.

The last three days saw endless negotiation in a range of small groups representing all the various points of view, to try to reach agreement on at least some of the difficult issues. By the last night, any agreement still seemed unlikely. In the halls and corridors of the conference centre, there was an almost surreal



hat sinking feeling: Terry Coe, manister of agriculture and fisheries of Niue in the aboth hadfile, displays a gaster at the UN Convention on Climate Change in Duence Aires yeserfay to publicize the plight of small and largely first letand nations which feer that rising rates, due to global warming, will who them off the from of the farth.



Mr Tutangata, Director of SPREP

atmosphere of exhaustion. Delegates had hardly slept from the previous two nights, as negotiations dragged on. The full meeting of all countries, to consider the details that hopefully had been hammered out by the smaller groups, was due to start at 6pm on the Friday night. But by midnight there was no indication that the smaller groups negotiating behind closed doors might have some proposal for the full conference to consider.

Some delegates went back to their hotels to grab a couple of hours' sleep. But many stayed, moving slowly down the long corridors like sleepwalkers. In one section of the computer cubicles, some of the brightest legal brains had connected up four or five computers and were playing hunt-and-destroy war games against each other. In an otherwise deserted cafeteria area, environmental activists chatted amiably with nuclear power industry representatives, all focused on only one thing: staying awake until it was time for the conference to reconvene.

It was with somewhat blurred astonishment that all countries finally met, at 6am on Saturday morning, to discover that the varying factions had agreed on a deal, and one which, from Pacific island countries' perspective, met most of their demands.

There is a timetable for working out how vulnerable countries can adapt to climate change, and a detailed work programme. Any new emission reduction regime must address extra reductions that would otherwise not have been possible. The agreement makes specific reference to the vulnerability of small island states, and the need for equity in any programme.

During all the climate change discussions, the Pacific has consistently showed its skills in cooperation. Over the next two years, that capacity to cooperate will be much needed. Given the detail of the workplan agreed at Buenos Aires, the only way the region can hope to cover all the issues to be discussed in the many workshops will be to share the workload. Fortunately, cooperation and sharing are skills which the Pacific has in abundance.

Reaffirming the important role and contribution of Pacific island countries (PICs) National Meteorological Service (NMS) to the protection of life and property, sustainable development and safeguarding the environment of the Pacific in the 21st century; this was the focus of discussions at the Fifth SPREP Meeting of Regional Meteorological Service Directors (5RMSD) held in Honolulu, Hawaii from the 11 to 13 November 1998.

o meet their obligations and missions of observing and understanding weather and climate; and in providing meteorological and related services in support of their governments' needs, the participants of the 5RMSD unanimously agreed to the importance of long-term strategic planning for the development of meteorology in the Pacific region.

Mr Pene Lefale, Climatologist and Meteorology Officer for SPREP, hailed the endorsement by the Honolulu meeting of the need to develop a Strategic Action Plan for the Development of Meteorology in the Pacific region (SDMP) for the first decade of the twenty first century; and the expansion of the scope of SPREP's work to include meteorology and climate issues, in addition to its climate change programmes as major step forward in Pacific island countries efforts to strengthen the capacity of their NMSs.

"This is an historical meeting. It is the first time Pacific Island Countries' (PICs) have agreed to develop a regional strategy to further enhance meteorology development in the region", he said.

Mr Lefale noted the success of PICs improved understanding of climate change issues as they are now developing appropriate and cost effective responses. An important realisation is that understanding of the continuum from weather to climate variability and change in all countries depends on a unique and integrated international system for observation, data collection, processing and dissemination of meteorological and related data and products, collected by NMSs.

"Weather and climate systems do not recognise political borders and are constantly interacting. Hence, no one country can be fully self-reliant in meeting all of its requirements for meteorological services. All countries need to work together in a spirit of mutual assistance and cooperation", he said. "The call for the development of the SDMP by all 26 Directors of NMSs in the Pacific is a direct recognition of this need to work together".

Even though weather, climate variability and change are inter-linked, i.e. a continuum process, most people often use weather, climate variability and change as having interchangeable meanings, which has caused confusion. The expansion of the scope of SPREP's work to include meteorology, and climate matters in addition to its climate change programmes will assist PICs understand these inter-related components of the weather and climate system. The SDMP contains the framework that addresses the entire continuum process.

The 5RMSD identified the following issues that will influence the further development of meteorology in the Pacific in the 21st century:

- Provide an integrated programme of forecast and information services which address the continuum from weather to climate and climate change, including issues related to hydrology and water.
- Recognise the significant role that the SPREP Secretariat play in complementing WMO, and

national efforts in the area of weather and climate and the clear mandate for SPREP to broaden the scope of its work to cover meteorology and climate issues, in addition to climate change programmes.

- Develop a long term Strategic plan for the Pacific Region taking into account the WMO Fifth Long Term Plan and the priority areas agreed to at the WMO Regional Association V meeting in Bali, Indonesia on September 1998.
- SPREP to continue to provide a forum for National Meteorological Services in the Pacific island countries to:
 - Identify critical issues relating to meteorology development
 - Promote collaboration in the development of shared solutions to common problems
 - Enhance awareness of weather and climate issues and programmes at appropriate levels of government in the region such as the ministerial level
 - Identify opportunities to improve regional capacity to forecast, understand and address the impacts of weather and climate
 - Pursue appropriate mechanisms to establish a special purpose fund to supplement existing sources of support from national governments, donor nations and others to meet the growing needs for weather and climate monitoring, forecasting, assessment and applications

Director of SPREP addresses key stakeholders in Pacific Meteorology

It is with a sense of privilege and pleasure that I join Honourable Terry Nui Yoshinaga, in extending a warm aloha, kia orana and welcome to you all to the Fifth SPREP Regional Meeting of Meteorological Service Directors. Special welcome to those who are attending this meeting for the first time.

To the Honorable Representative Yoshinaga and through you, to his Excellency the Governor, the Government and people of Hawaii, to the Government of the United States, please accept my deep appreciation and that of the Secretariat of the South Pacific Regional Environment Programme and SPREP member countries for your reaffirmation of being one with the Pacific island countries through generously hosting this meeting in exciting Hawaii. I am told that this is the first time that a SPREP-organised meeting has been held here in Hawaii and I sincerely hope that there will be more to come, Your Excellency, so that we can learn more from the experiences of your islands, especially in relation to the environment as it relates to sustainable development. Your Excellency's opening message will serve to inspire us during our meeting.

It is pleasing to note that General Jack Kelly, Head of the US NOAA National Weather Service in Washington DC will be joining us tomorrow. I am confident that General Kelly's presence will lead to further strengthening of the cooperative efforts between US NOAA NWS and the National Meteorological Services of Pacific island countries in particular.

I should also like to pay special tribute to Mr Hagemeyer and to Mr Edward Young, Chief, Technical Division as well as the staff of the US NOAA NWS, Honolulu for the excellent arrangements made for this meeting as well as the Y2K Workshop which concluded yesterday. Thank you for your assistance and the warm

reception and hospitality accorded to all of us.

Allow me also to acknowledge the presence of Dr Zillman, in his capacities as Permanent Representative of Australia to WMO and President of WMO's Executive Council. Dr Zillman's commitment to strengthening the capacity of national meteorological services in the Pacific region and globally through his twin responsibilities in the Australian Government and WMO has been extremely valuable. We greatly appreciate your efforts Dr Zillman and look forward to your continued support and guidance and that of your government towards the NMSs of the PICs.

I should also like to acknowledge the presence of Dr John Lumsden, Chief Executive Officer, Meteorological Service of New Zealand Ltd.

Six years ago, in October 1993, the Honourable Edward Tabisari, then Minister for Health and Acting Minister responsible for Meteorological Services of the Government of Vanuatu, in officially opening the First SPREP Meeting of Regional Meteorological Service Directors, spoke of the strategic importance of the role and responsibilities of meterological services in protecting life and property from weather and climate events. In doing so, Hon. Tabisari also laid down a challenge to the NMSs in the Pacific and to the SPREP Secretariat. The "Tabisari Challenge", as we have now coined it, called for "continuing improvements in all the weather services of the Pacific for the

betterment of mankind". The Tabisari Challenge continues to form the backbone or rationale for SPREP's approach towards strengthening the capacity of NMSs in the PICs.

Most of you here today participated at that Vanuatu meeting and we, in the SPREP Secretariat, consider it appropriate as we, collectively, go through the various agenda items for this meeting that we also take the time to look back and take stock of how far we have come since our first meeting six years ago. We should take time to reflect upon where we are today as a meteorological community and to consider the challenges that lie ahead of us if we are to adequately serve the urgent requirements not just of our respective national communities, but also of the regional and global communities. Are our weather services now providing more effective and accurate products than in 1993? Are the users of our products and services satisfied with their quality and timeliness? Do we, in your Secretariat, fulfil your expectations?

These are only examples of questions that we need to ask ourselves and openly discuss because only then will we be in a better position to target our efforts towards our respective shortcomings in the future. It is our hope that you will be able to identify key areas of priority concern for our collective attention, drawing on our experiences over the past six years. At last year's meeting, we took our initial step towards longer term planning by accepting time lines for climate-related projects that are in line within the Pacific islands region. We should continue to build on that initiative, including devel-

continued on page 7



The Key to Sustainable Development in the Pacific

Coordination at regional, and international levels and the cooperation through developing partnerships amongst the local community, the private sector, non governmental organisations, government departments and the international community make up the key to protecting the Pacific's fragile environment.



An earlier meeting in November of government representatives, regional and international organisations, the private sector and non governmental organisations (NGOs) in Apia, Samoa drafted the recommendations presented at the Auckland meeting.

According to Gerald Miles, Head of the Environmental Management and Planning Division at SPREP, an important achievement of the Apia meeting was in opening up avenues of discussion involving the private sector and non governmental organisations. The meeting decided that effective partnerships among all stakeholders and in particular local communities, NGOs and the private sector were critical if countries in the region could improve living standards and economies while conserving the natural environment.

The Pacific's systems of land tenure and resource ownership meant local communities have to actively support and participate in attempts to protect and manage natural areas.

The Pacific called for improved coordination between the United Nations (UN) agencies and the regional organisations. International, regional and global agreements and conventions were only partly implemented in the Pacific. This was partly because UN agencies did not always consider these conventions when designing development projects in the region.

Skills training is still needed and the active involvement of the community was highly



Hon. Simon
Upton. NZ
Minister of
Environment
and Chair of
CSD7 visiting
SPREP.



Environment needs to be integrated as a core aspect of any planning or policy decision.

recommended. There is still a growing need for environment and development in the Pacific to be integrated as a core aspect of any planning or policy decision. This integration would continue to promote a holistic approach to island development to make the most effective use of the capacity within countries of the Pacific region.

Sustainable development in the region must make the explicit links between health, population and the environment. Marine resources and freshwater supplies were critical to survival of people and environment alike and urgently needed attention.

Specifically, the Pacific requested the international community to focus on coastal resources through community-based conservation and management including research into development options like aquaculture or ecotourism. It also requested audits to be done to determine the carrying capacity of natural resources, and human resource development at all levels to boost countries national skills and business enterprise base.

oping a mechanism for effectively evaluating and monitoring the progress that Pacific island countries are making in the implementation of activities that fall under the purview of this body in a manner that is sustainable both in terms of technology and resource capacity.

In this regard, we are fortunate in that the majority of representatives here have already had the opportunity to review the Fifth Long-Term Plan of WMO, especially in relation to WMO's Regional Association V (RA V). We consider this document to be the principal mechanism through which we will work together with WMO to identify common objectives, formulate overall policies and coordinate plans and to develop relevant projects to support NMSs in the Pacific island countries. In this context, I should like to commend WMO for initiating the process of prioritisation of activities for the region. We note that most of the priority activities already identified by WMO for RA V under its Fifth Long-Term Plan are in line with our own activities and goals.

In fact, SPREP has, over the past year, actively pursued the objective of merging our activities with those of other regional and international agencies in order to better utilise the limited resources available to our region and to avoid possible duplication of activities. In relation to WMO, this process will be greatly facilitated through the establishment of the WMO subregional office for the South-West Pacific within SPREP's offices. As part of this process, we intend, with the cooperation of all the region's development partners to draw up and maintain an inventory of active and proposed projects in the climate area. In this way, we will be better able to identify gaps that might exist and seek your guidance and that of the development partners in filling such gaps.

Recent experiences of extreme climate conditions in our region, including droughts and cyclones, have resulted in governments recognising the urgent need for more accurate and effective early warning systems as a means of mitigating the impact of natural disasters. Hopefully, this will translate into your respective governments making more resources available towards this end. There is an obvious need for each one of us to persuade our respective governments of the need for more resources to be made avail-

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able towards effective warning systems and the application of forecasts to water resources management, agriculture and other key socioeconomic sectors. In recognising the need for governments to apply scarce resources towards key economic sectors, we have put together a draft proposal on fresh water for your consideration.

As I stated to you last year, your Secretariat has already recognised its own shortcomings in seeking to effectively implement your requirements as you have identified them over the past six years. You are probably aware that in his first year, 1997, with SPREP as our Climatology and Meteorological Officer, Mr Penehuro Lefale was only able to accord barely 50 per cent of his time to concentrate on work emanating from you. You may recall that at the time of your last meeting, we had just recruited the Project Manager and Scientific Officer for the Pacific Islands Climate Change Assistance Programme or PICCAP. We have also recruited an International Negotiations Officer who will concentrate on climate change negotiations in relation to the UNFCCC. These developments have enabled us to relieve the pressure on Mr Lefale in terms of this global negotiations process and allow him to apply himself more fully to the task of implementing your requirements, including the preparations for this meeting and the Y2K Workshop. This has resulted in the majority of activities identified by your previous meetings having been implemented satisfactorily, as you will have learnt from the meeting documents. Indeed, with the greater technical capacity that now exists within the SPREP Secretariat in the climate change area, your Secretariat is now in a better position to service the requirements of this meeting more effectively and in a more timely fashion.

I should now like to extend the SPREP Secretariat's sincere appreciation to the donor/partner agencies that have enabled us to move more confidently towards longer term planning of climate activities generally and to weather/meterological activities in particular. WMO continues to be prominent in its assistance towards building and strengthening the capacities of National Meterological Services. We acknowledge the ongoing and increasing assistance of the United States Department of Energy's Atmospheric Measurement Programme in funding Mr Lefale's post and other major aspects of the climate programme. I also acknowledge the contributions of AusAID through funding the South Pacific Sea Level and Climate Monitoring Project over the last seven years, including funding Dr Chalapan Kaluwin's post at SPREP as Climate Change Officer. Japan has contributed significantly through the provision of the new Regional Centre in Nadi, Fiji. New Zealand Official Development Assistance (NZODA) continues to provide much needed support as well as the Global Environment Facility through the United Nations Development Programme. The European Union funded Cyclone Upgrade Project deserves special mention as well in this context. A relative newcomer in supporting the Pacific islands climate activities is the Government of Denmark.

I should also like to thank the sponsors of this meeting and the Y2K Workshop: the US NOAA NWS, the US DOE ARM program, the Bureau of Meterology of Australia, AusAID, Meteorological Service of New Zealand Ltd, Meteo France and WMO. Let me also thank the Management and staff of the Double Tree Alana Waikiki Hotel for the excellent facilities and services.

on their vulnerability assessments, the Oil Producing and Exporting Countries (OPEC) insisted they too should be included in the list for vulnerable countries due to the economic impact on their countries should the world use less oil. No concrete evidence was presented on this. The Pacific countries and AOSIS want the issue of vulnerability due to impacts of climate change, separated from compensation for economic impacts of responding to climate change.

The need for better coordination of information on available and appropriate technologies which could benefit small island developing states was discussed. G77 countries agreed that technology transfer processes should first be enhanced under the Climate Change Convention and later the Kyoto Protocol. Developing countries also agreed that any technology transfer system that does evolve must include a transparent, rigorous system of auditing and verification.



Dr Graham Sem (foremost) in one of the meetings to discuss the Pacific islands progress on implementing the UNFCCC.

Six years ago, 169 countries agreed that climate change was a real threat, and that they would have to reduce greenhouse gas emissions. Last year, at Kyoto, developed countries agreed to specific reduction targets. Yet their emissions still continue to increase.

According to Dr Graham Sem, the Scientific Adviser for the Pacific Island Climate Change Adaptation Programme (PICCAP) another matter of concern that arose out of the discussion was the increasing emissions of the rising developing countries such as China, Brazil and other Newly Industrialised Countries. The Alliance of Small Island States (AOSIS) supported the G77 view but remains concerned that emissions



The Buenos Aires Plan of Action provided an important road map for negotiations. However, the key lies in demonstrable reductions in GHG concentrations, the strengthening of the Climate Change Convention (UNFCCC) and its underlying principles of dealing with issues of climate change.

from developing countries will continue if nothing is done to reduce those emissions. At some point in the future, the gross potential emissions from all countries will have to be considered.

With regards to the outcome of the conference for the Pacific, Dr Sem said that from a small island perspective, the Buenos Aires Plan of Action provided an important road map for negotiations. However, the key lies in demonstrable reductions in GHG concentrations, the strengthening of the Climate Change Convention (UNFCCC) and its underlying principles of dealing with issues of climate change.

The Pacific's plea at the conference of the parties detailed an account of the consequences of Climate Change already seen. Eroding coastlines, salty soils that poison crops, threatened burial sites near the coast, changes in weather patterns and fisheries and devastating droughts are some of the effects presented to the parties of the conference. These were some of the reasons why the Pacific Islands, urged the countries to make the reductions they have committed themselves to.

Tamari'i Tutangata, Director of SPREP expressed that the conference has agreed to do the detailed planning needed to help regions like the Pacific survive the present and accelerating change, but what is needed most is the actual emissions reductions. In 1992, 169 countries agreed that climate change was a real threat and that they would have to reduce greenhouse gas emissions. In 1997, developed countries agreed to specific reduction targets in Kyoto. Yet their emissions continue to increase.

The Intergovernmental Panel on Climate Change (IPCC) reminded the conference in their latest comprehensive review that reductions of 60–80 percent would be necessary in order to stop the process of global warming and climate change.