

Fiji Climate Change Newsletter

ISSUE 10 | MARCH 2015

Foreign Affairs Acting Permanent Secretary sets priorities for Climate Change Division

Acting Permanent Secretary, Mr. Esala Nayasi recognises 2015 as a critical year for the Climate Change Division and the Ministry of Foriegn Affairs.

Assuming the responsibilities of Acting Permanent Secretary for Foreign Affairs in January 2015, Mr. Nayasi shares his thoughts on the priority areas Fiji's Climate Change Division will be focusing on.

"The completion of the Vulnerability and Adaptation (V&A) assessment for the whole Fiji early in 2015 is of paramount importance," Acting PS Nayasi said. "Once this is completed, the Division will be in a position to better prioritize the needs of climate affected communities and sectors needing appropriate adaptation options and funds to be directed at."

Nayasi believes in both an integrated multistakeholder approach and a concerted effort that impresses the importance of relationship building across all different sectors. "Genuine works that engages a broad cross-section of community often guarantees the sustainability and durability of projects through the generation of ownership," he said.

Mr. Navasi says the Climate Division had started to explore and identify sources of funding with several partners, who have agreed to collaborate on activities which have been identified as priority for Fiji.

"We are placing emphasis on both climate change adaptation and mitigation to building the resilience of our communities and reduce our greenhouse gas emissions. These two distinct yet complementing activities remain key priorities for the Division and for Fiji," he said.

These critical elements are reflected in Fiji's National Climate Change Policy and the Division is positioning to deliver on some of these outputs.

The policy, which was launched in 2012 continues to guide the work of the Division, informs all sectors and partners of their roles in addressing climate change which recognises the need for gainful cooperation among all sector stakeholders.

"This year, the Division will also focus work on the finalization and cabinet endorsement of the: i) National Climate Change Coordination Guideline, ii) Climate Finance Guideline and, iii) the Relocation Guideline.

"These guidelines will support the Division better coordinate, monitor and report on the progress of the various climate change related activities carried out by partners, Acting PS Nayasi said.

Recognising the all-important role of climate financing to addressing climate impacts at all levels in Fiji, Nayasi hopes that the climate finance Guideline will be made available in time to assist Fiji's coordination between public and private

"In addition to the finance guideline, the Division is also working to establish various local implementing entities to help with direct access of global climate funds. We are presently exploring ways that we can best assist our local and national institutions to be properly informed about the processes involved in becoming NIEs for the various global funds being set up to assist with the implementation of mediumto-large climate change projects," he said.

The Division will continue to work on increasing climate change awareness at all levels in the international fora. Mr Nayasi says 2015 is critical for Fiji, the Pacific and other Small Island Developing States as we progress towards the upcoming 21st UN climate meeting to be held in Paris at the end of the year.



"We continue to hope, in work, for a new legally binding instrument that will address the urgent need for ambitious reductions in greenhouse gas emission (GHGs)."

He added Fiji will continue to call for scaled up financing commitments by developed countries to enable small island states like Fiji to make urgent adaptation projects to help us better cope with impacts of climate change. Importantly too, Fiji will call on all countries to commit to deep reductions in

"Should the 2015 Paris climate talks fail, the future of all climate talks will be weakened as states will lose hope in this important multi-lateral process. That said, Fiji will continue to play an active role to ensure that the global community of states remain the course to providing durable and lasting solutions the critical challenges posed by climate change," Acting PS Nayasi said.

Contents

Fiji Climate Outlook

Approach Used For Vulnerability and Adaptation Assessment Climate Change and Health Adaptation Symposium Relocation Guideline Workshop Paving the way to Paris Planning for relocation - Narikoso Village, Kadavu Climate change Impacts on the Agriculture Sector

Contact us

5

2 Climate Change Division 3 Ministry of Foreign Affairs

Phone: (+679) 3309 645 Fax: (+679) 309 644 Email: peter.emberson@foreignaffairs.gov.fj

6 Website: www.climate-change-fiji.gov.fj





Approach for vulnerability and adaptation assessment

Vulnerability and adaptation (V&A) assessments in Fiji provide the basis to support the implementation of ongoing and future adaptation activities as well as to embody climate smart considerations in any sustainable development policy agenda. A standard V&A tool was jointly developed by the iTaukei Affairs Board, Climate Change Division and the Pacific Centre for Environment & Sustainable Development (PACE-SD) and trainings were conducted on the use of the tool. During the last Roko Tui Workshop in December 2014, the Deputy Chief Executive Officer of the I Taukei Affairs Board emphasized the need to conduct

V&As, subject to funding for all the remaining villages that have not been assessed by the end of the first quarter of 2015. Considering that there are 1,171 iTaukei village communities, it would be impossible to accomplish the assessments by the end of the first guarter. One of the effective strategies that was identified by the Naitasiri Provincial Council to achieve this was to train their youths who are tertiary graduates on how to use the V&A tool to conduct V&A assessments in the 16 Tikinas in the Province of Naitasiri. The training was conducted in Navatukia village, Serea on the 27th of January, 2015. The objective of conducting the

training was to train youths who are tertiary graduates from the province of Naitasiri on how to use the Vulnerability & Adaptation tool to conduct V&A assessments in their respective Tikinas. The whole day event was committed to the training of 15 participants on the actual V&A Tool and how to conduct V&A assessments, carrying out a mock exercise, using Navatukia village as the Pilot site of the V&A assessment. It is anticipated that under the Ministry of iTaukei Affairs work programme, the trained participants would be dispatched to the 16 Tikinas to support local V&A assessments.

Climate Change and Health Adaptation Symposium

Informing stakeholders of climate change and health was the main focus of the symposium this year. The Climate Change and Health Adaptation Symposium was held in Suva on the 9th of February, 2015. Dr Mecuisela Tuicakau in his opening speech emphasized the importance of health adaptations to climate change in Fiji. He added that climatic conditions and increases in weather variability affect human wellbeing, safety, health and survival in many ways. "A warmer climate is expected to both increase the risk of heat-related illnesses and death and worsen conditions for air quality," Dr Tuicakau said. He said adaptation made limit to the negative effects of climate change and added that we have to include taking advantage of opportunities that a changing climate provides. Examples of adaptation in health include implementing early warning systems and emergency response plans, planting trees and expanding green spaces in urban settings to moderate heat increase and improve water use efficiency and build additional water storage capacity," he said.



The outcomes of this symposium will include the incorporation of climate change strategies in the Ministry of Health Strategic Plan 2014 – 2019. The need for multi-sector inclusion for effective and efficient use of resources, to raise public awareness about climate change and its effect on health and significantly to climate proof health infrastructure to maintain delivery of services at all times.

The one day symposium was a successful event, as there were interesting deliberations and discussions from health practitioners, policy advisors and project managers. There was an awareness corner provided during the symposium, CCD & MOH were able to display posters/ charts and distribute awareness materials to increase awareness on climate change.



Relocation Guideline workshop

Relocation is probably the most drastic step one can take as rarely do people want to move from places where they have grown up and which provide them with sustenance. However, if the risks are too great and will impact not just on the livelihoods but on the very existence of communities, relocation is a sensible option. This needs to be done in a manner that ensures long term survival, options for economic activity and with due regard to the support and services for the relocated communities. The National Relocation Guideline workshop was held at Holiday Inn from the 19th-20th February, 2015 made possible by the support of the GIZ's Coping with Climate Change in the Pacific Region (CCCCPIR) Programme. More than 50 participants attended the workshop from various organisations

including the 20 Roko Tuis and Assistant Roko Tuis, Ministry of I Taukei Affairs, Department of Lands and Mineral Resources, NDMO, Department of Environment, Department of Agriculture, SPC, PACE-SD, WCS, WWF and the Pacific Conference of Churches. The consultation, provided an opportunity to interact, debate and identify the best process and approach to take to ensure the long term survival of impacted communities and how best to address the relocation of our communities as the only option to building their resilience. In opening the workshop, The Acting Permanent Secretary of Foreign Affairs, Mr Nayasi highlighted that the Climate Change Division under the Ministry of Foreign Affairs with the assistance of the Ministry of iTaukei Affairs, National Disaster Management

Office and civil society partners have conducted a mapping and profiling of climate change and disaster impacted communities in Fiji. From this exercise, around 800 communities have been identified to have been impacted.. So far, 3 community relocation projects at Vunidogoloa in Vanua Levu, Narikoso in Kadavu and Denimanu village on Yadua Island in Bua have been supported by government. The next state sponsored project will be Waciwaci District School in Lakeba, Lau. These relocation sites are being used as bench mark for any future village or community relocations. The experiences and lessons learnt from the relocation of these relocated communities have been used as case studies in the development of the Relocation Guideline.

Renewable energy shipping in the Pacific

In 2013 The University of the South Pacific and the International Union for Conservation and Nature - Oceania Regional Office established the Oceania Centre for Sustainable Transport (OCST) as a catalyst for applied research in this critical field. OCST is able to draw on the findings from a range of innovative sustainable energy sea transport projects conducted in the region during the last oil crisis in the 1980s.

The primary target of these projects was at village and island level, mainly for cargo and passenger transport and artisanal or small-scale commercial fishing. Designs and trials included retrofits of sails on passenger/cargo ferries, designs of energy-efficient freighters for inter-island work, and sail-assisted village or island

scale catamarans for transport and fishing. These pilot projects proved that significant savings (30% plus) were achievable at favourable rates of investment (ADB, 1985; Clayton, 1987; Satchwell, 1985). These results, together with the results of more recent research initiatives, have led to the following preliminary findings:

- Past trials have left a portfolio of analyses and vessel designs which demonstrate that in times of high fuel cost, use of renewable energy technologies achieved significant results for modest investment. There have since been enormous advances in low carbon technologies for shipping.
- Biofuels, particularly from coconut oil and biomethanes, have potential,

especially for isolated communities with high biomass availability.

- Low carbon shipping offers multiple economic, environmental, social, and cultural benefits. It offers a future where fleets of smaller but sustainable new ships could replace single, aged, large vessel operations currently used.
- Policy and financing have been identified in both Pacific and international studies as the primary barriers to practical implementation. These issues are complex and require a re-evaluation of previous approaches and long-term strategies (Rojon, 2014; Nuttall et al, 2014b).

cont'd on page 4





Paving the way to Paris

The 20th Conference of the Parties (COP 20) to the United Nation Framework Convention to Climate Change was held in Lima Peru in December, 1st-12th last year. Fiji's delegation was led by the former Permanent Secretary for Foreign Affairs, Mr Amena Yauvoli. The delegation comprised of senior officers from the Climate Change Division and other government departments such as Energy, Fisheries, Forestry, Meteorology and nongovernmental organisations. This annual event which is the biggest in the climate change calendar was intended to pave the way for a successful COP 21. Paris is expected to herald the adoption of a new

ambitious agreement. In a show of support and endorsement for his leadership in 2014 as chair of the UNFCCC Subsidiary Body of Implementation (SBI), Mr Yauvoli, Fiji's former Permanent Secretary for Foreign Affairs, was re-elected as chair for another year. The SBI is one of the two bodies of the United Nations Framework Convention for Climate Change, the other one being Subsidiary Body for Science and Technological Advice (SBSTA). The SBI is charged with implementation of work under the UNFCCC.

It supports the work of the COP and the CMP through the assessment and review of the effective implementation of the

Convention and its Kyoto Protocol. The SBI also advises the COP on budgetary and administrative matters. Fiji's contribution towards addressing global climate change challenges was given recognition when the United Nations climate body endorsed the election of three Fijians into its specialised bodies. Amena Yauvoli, Luke Daunivalu and Samuela Lagataki were supported by the Alliance of Small Island States to represent the interests of Small Island Developing States (SIDS) in the various bodies established under the UN Framework Convention on Climate Change (UNFCCC).

from page 3

- The field is emergent with increasing numbers of organisations and individuals developing designs for small sail and solar freight carriers, with strong potential application in local transport and tourism sectors.
- Revitalising pride in the Pacific's seafaring heritage as master voyagers, innovators and naval designers is a key vector for encouraging uptake.

The research to date has established a strong theoretical case that a shift from fossil fuel-powered sea transport to energy-efficient designs and renewable energy technologies will result in a range of positive development initiatives. There is demonstrated potential to significantly reduce fossil fuel dependency and cost effectively increase connectivity. The agenda needs to be viewed ultimately from its potential to revitalise all aspects of the domestic Pacific industry, from ship

construction and transport operations to maintenance and end recycling — a cradle to cradle approach. Achieving this requires commitment by donors, agencies, governments and industry to prioritise research and development of 'proof of concept' examples and to provide an enabling regulatory and policy environment.

For more information please contact Dr. Peter Nuttall: peter.nuttall@usp.ac.fj

VILLAGE PROFILE



Planning for relocation - Narikoso Village, Kadavu

For the coastal village of Narikoso in the Kadavu group, the impacts brought about by sea level rise are no longer a future threat but an alarming reality. Village elders report that their coastline has been receding since the 1960s and aerial photos confirm this. Since the late 1960's waves were washing into the village and the coastline eroding. The villagers were then forced to construct a seawall from rocks around the site but the sea kept encroaching and the villagers kept building on to their seawall and constructing barriers in desperate attempts to keep the sea at bay. By the early 1990s, the water level at high tide was beyond the sea wall and the sea was literally at the doorstep of the homes closest to the foreshore. The constant inundation of the village ground and homes were soon a "normal" situation during every high tide. This situation was aggravated during king tide and storm surge events where more homes are flooded, grounds inundated for days, and nearby crop plantations affected.

The villagers soon realised that the entire village may eventually become uninhabitable and saw relocation as their best option. In 2011, the villagers requested the Government i to prepare an alternative village site. In 2012, earthwork on the new site began and a small mountain behind the village was flattened and cleared. In early 2013, the Narikoso Village Council requested for assistance with their relocation plans.

From the outset, it was recognised that there was need to develop a land use plan to ensure sustainability of relocation of Narikoso Village to the new village site and to increase their resiliency against the impacts of climate change

APPROACH

An integrated, multi-disciplinary and participatory approach was undertaken as follow:

- 1. Work from a national framework
 .prior to beginning the Narikoso
 work, a National Relocation Taskforce
 was established to support the
 planning and implementation of
 activities in Narikoso and for other
 relocation activities. 15 stakeholders
 including the Narikoso Village
 representatives officially became
 members of the taskforce. This step
 ensured that official channels were
 taken and that the approach and
 process undertaken in Narikoso was
 institutionalised.
- Development of official workplan this
 was carried out with all stakeholders
 and included an assessment of the
 role of stakeholders. The workplan
 defines the main expected results,
 the activities and the responsible
 agencies for ensuring the
 implementation of the activities.
- Information collection and analysis

 as this covers a broad range of sectors and issues, a multidisciplinary team focusing on their areas of expertise and local villagers as the local experts undertook this exercise. These included forest assessments, land use technologies, coastal hazard mapping, hydrological and geological survey, social and cultural mapping, vulnerability and adaptation (V&A) assessment, and disaster risk assessment.
- 4. Participatory decision-making while in the field, the various disciplines teams were expected to consult with each other and the villagers to draft

their land use recommendations. Participatory tools were applied for this. Awareness and training by the multi-disciplinary team were regularly undertaken for the villages to ensure informed decision-making. The various agencies of the taskforce ensured a good balance of sound technical advice whilst ensuring social and cultural integrity. The team upon return from the field report back to a wider forum to discuss on the next steps.

- 5. On the ground work to mitigate the immediate coastal and soil erosion - mangrove rehabilitation, soil stabilization and reforestation work in the field began in April 2013 and continuing. Re-vegetation work included useful trees such as fruit trees and commercial timber species
- Coastal vulnerability mapping the map identified the more vulnerable coastal ones to aid in planning for relocation. A coastline stabilisation plan was drafted.
- 7. Strengthening food security components crop nurseries were established and site appropriate crop varieties and livestock introduced. Specific training for women on specific crop and livestock production were carried out. Villagers have now diversified their crop production and are also proving very popular among neighbouring villages who travel to the Narikoso to buy their vegetables.

LESSONS LEARNT

 It is essential that the work is carried out within an official framework to ensure that work is aligned to

cont'd on page 6

Climate change impacts on the agriculture sector

The agriculture sector stands to be the backbone of many Pacific Island countries. In Fiji, agriculture is organised more along commercial lines, although the subsistence sector remains important. The whole agriculture sector remains a key conduit for the socio- economic empowerment of Fiji's population, in particular those residing in the rural areas. However, due to the continuous climatic changes and its impacts, the sector is struggling to cope. Climate effects impacting the agricultural sector include:

- Seasonal changes in rainfall and temperature influencing agro- climatic conditions, altering growing seasons, planting and harvesting calendars, water availability, pest management, weed and disease populations. The projected impacts of climate change for agriculture include extended periods of drought and loss of soil fertility.
- Evapotranspiration, photosynthesis and biomass production is altered



- Alteration of land conditions, suitability, due to salt water intrusion, coastal and riverbank erosion and exposure to salt water sprays and heat stress on soils
- Increased CO2 level may lead to a positive growth response in a number of staples under controlled conditions
- Reduced food security in terms of food production, food quality, nutritional availability, affordability and access.

Agricultural and land management practices in rural areas can also determine the

rate and level of damage that will be exacerbated by detrimental effects of climate change. Changes in natural landscape for agricultural development cause a decline in regulatory ecosystem services, including those responsible for reducing community's exposure to floods. Sustainable land management is recognised to be an important coping mechanism to the adverse effects of climate change. For e.g.; integrated farming system, contour farming and agroforestry.

from page 5

government priorities and support is provided from the relevant government agencies

- A multidisciplinary team and a participatory approach are necessary when assessing and planning for potential relocation – from the technical specialists to the social scientists to the local experts in village.
- Relocation should be a last resort and there is a strong need for thorough technical assessments and climate data to ensure that the move is indeed driven by changing climatic

- conditions. If otherwise, these other factors prompting the relocation should be identified and addressed.
- The sense of urgency for Narikoso to move has subsided with the technical findings and now that the more necessary adaptation technologies and livelihood support are being provided to the villagers. Narikoso villagers will eventually need to move but now they have more time to plan properly and in an informed manner.
- The need for early detection of threats that will lead to relocation to allow for conscientious planning (as opposed to a hastily and ill prepared plan).

Mandatory V & A assessments of villages can lead to early identification of slow onset/future threats.

Implementing agencies: Ministry of Foreign Affairs (Climate Change Division); Ministry of iTaukei Affairs, Department of Agriculture, Forestry Department, Mineral Resources Department, Department of Environment, National Disaster and Management Office

Supporting Agencies: SPC/GIZ Coping with Climate Change in the Pacific Island Region; SPC/USAID Project - Enhanced Climate Change Resilience of Food Production Systems in Pacific Island Countries & Territories

Fiji Climate Outlook February to April 2015 & May to July 2015 Volume 9: Issue 02, Fiji Meteorological Service

Highlights

- The tropical Pacific Ocean has eased away from the border line El Niño observed during late 2014 and is currently in a ENSO neutral state;
- Climate models favour persistence of warm sea surface temperatures (SSTs) in the equatorial Pacific Ocean over the coming months;
- Blow average rainfall favoured for the country through both the February to April and May to July 2015 periods;
- Average or above average air temperatures is predicted for February to April period, while the model offers mixed guidance for the March to May period, as the chances of above and below normal temperatures are similar;
- SSTs are likely to be near normal in the Fiji region through the February to April 2015 period;
- One to two tropical cyclones is anticipated to affect Fiji during the 2014/15 Tropical Cyclone Season, of which one may reach or exceed Category 3. January to March is the peak period for tropical cyclone activity in the region.

Detailed Outlook report available at: www.met.gov.fj

Contact
Fiji Meteorological Service
Private Mail Bag (NAP 0351)
Nadi, Airport, Fiji

Tel: 6724 888 Email: climate@met.gov.fj Web: www.met.gov.fj







