

United Nations - The Nippon Foundation of Japan Fellowship Programme

2013 Alumni Meeting – Pacific Islands Region

Meeting Report

Pacific Island States Alumni Meeting

14-18 October 2013 Suva, the Republic of Fiji

Hosted by the Pacific Island Forum Secretariat



Theme: Ocean Governance in the Pacific Islands Region

Acknowledgments

We acknowledge the participants, presenters and organisers of the United Nations-Nippon Foundation (UNNF) Pacific Alumni Meeting, held in Suva, Fiji from 14-18 October 2013.

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Ms Anama Solofa, the Pacific Regional Representative of the UNNF Alumni, for facilitating and organising the event on behalf of the Alumni.

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The Nippon Foundation of Japan for supporting the Pacific meeting of the UNNF Alumni.

Executive Summary

The first United Nations—Nippon Foundation (UNNF) Pacific Alumni Meeting, hosted by the Pacific Island Forum Secretariat (PIFS), was held from 14 – 18 October in Suva, Fiji. The Division for Ocean Affairs and the Law of the Sea, of the Office of Legal Affairs of the United Nations (DOALOS) organised the meeting in collaboration with the Alumni and the PIFS. Nine Pacific Islands Region Alumni from Samoa, Tonga, Kiribati, Solomon Islands, Papua New Guinea and Fiji attended the meeting.

The objective of the meeting was to provide an opportunity for personal and professional development of the participants, foster a more cohesive and networked Alumni, and, more specifically, the opportunity to:

- Analyse and discuss national and regional ocean governance frameworks with the aim to gain a mutual understanding and exchange views;
- Strategic identification of specific key policy and regulatory approaches, as well as any capacity gaps which may be critical impediments to their implementation;
- Exchange information and experience on current capacity development initiatives, and the identification of opportunities to rationalize and/or reinforce these through synergies and/or new partnerships; and
- Foster South-South cooperation and reinforce this network of professionals and experts across the region and beyond.

The structured meeting comprised ten sessions focusing on themes such as – the current state of ocean affairs in the Pacific Islands Region, delimitation and delineation of maritime boundaries and management of non-living resources, climate change and fisheries, marine biodiversity, media, communication and outreach, indigenous and community based management. A key focus of the meeting also comprised capacity needs and opportunities at national, regional and international levels. The meeting also allowed for the Alumni Network to plan and organize future outreach and networking in the region.

Outcomes of discussions reiterated:

- The need to incorporate integrated management of oceans and their resources as well as coastal communities into sustainable development strategies;
- The need for capacity building in a range of matters;
- The significance of this meeting in providing a forum to exchange knowledge on ocean-specific issues with the objective of sharing information and building the network of the Alumni.

The meeting was attended by 35 participants. Together with the Pacific Alumni, the Secretary general and staff of the PIFS and the DOALOS' Director and staff, participants were invited from universities, relevant agencies from the Council of Regional Organisations of the Pacific (CROP),¹ civil society, and associated networks.

¹ CROP refers to nine inter-governmental organizations in the Pacific. Apart from the PIFS, other CROP agencies present at the meeting were from the Secretariat of the Pacific Community (SPC), Secretariat of the Regional Environmental Programme (SPREP) and The University of the South Pacific (USP).

Acronyms

BBNJ	Biodiversity Beyond National Jurisdictions
CBD	Convention on the Conservation of Biological Diversity
CROP	Council of regional Organisation of the Pacific
DOALOS	Division for Ocean Affairs and the Law of the Sea
DWFN	Distance Water Fishing Nation
EBM	Ecosystem-based Management
ECS	Extended Continental Shelf
EEZ	Exclusive Economic Zone
FFA	Forum Fisheries Agency
GA	General Assembly
GDP	Gross Domestic Product
GLISPA	Global Islands Partnership
IMO	International Maritime Organization
IPCC	Inter-governmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature
IUU fishing	Illegal, Unregulated and Unreported fishing
KBA	Key Biodiversity Area
LMMA	Locally Managed Marine Areas
MCS	Monitoring, control and surveillance
MDG	Millennium Development Goals
MPA	Marine Protected Area
MSWG	Melanesia Spearhead Working Group
NGO	Non-governmental organisation
PICT	Pacific Islands Countries and Territories
PIFS	Pacific Island Forum Secretariat
PIPA	Phoenix Island Protected Area
PIROP	Pacific Islands Regional Oceans Policy
SDG	Sustainable Development Goals
SDWG	Sustainable Development Working Group
SIDS	Small Island Developing States
SOPAC	Pacific Islands Applied GeoScience Commission
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Program
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNITAR	United Nations Institute for Training and Research
UNNF	United Nations - The Nippon Foundation of Japan
USP	University of the South Pacific
WCPFC	Western Central Pacific Fisheries Commission
WCPO	Western Central Pacific Ocean
WSSD	World Summit on Sustainable Development

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1. Welcome and Introductory Remarks

The Pacific Island States Alumni Meeting, hosted by the Pacific Island Forum Secretariat (PIFS),² was officially opened through welcome and introductory speeches by the PIFS Secretary General, H.E Mr. Tuiloma Neroni Slade (Pacific Oceans Commissioner), the Director of the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs of the United Nations (DOALOS) Ms Gabriele Goettsche-Wanli, and the United Nations-Nippon Foundation of Japan (UNNF) Pacific Alumni Representative, Ms. Anama Solofa.

PIFS Natural Resource Advisor, Dr. Willy Morrell, welcomed the Alumni and ocean governance experts, and introduced the distinguished guest speakers. Introductory remarks were also made by DOALOS Senior Legal Officer Mr. Francois Bilet and the UNNF Fellowship Programme Advisor, Ms. Valentina Germani.

The Meeting Agenda is attached in Appendix A.



Figure 1. Welcoming Remarks by the PIFS Secretary General, H.E Mr. Tuiloma Neroni Slade (middle), The Director of the Division for Ocean Affairs and the Law of the Sea (DOALOS), Ms. Gabriele Goettsche-Wanli (right), and Pacific Alumni Representative, Ms. Anama Solofa (left).

All statements reiterated the significance of this meeting in bringing together the Alumni of the region and other experts to exchange knowledge on ocean-specific issues with the objective of sharing information and building the network of the Alumni.

² PIFS is an inter-government organization consisting of 16 States in the Pacific. It is one of the nine Council of Regional Organisations of the Pacific. PIFS is a regional premier political and economic policy organization.

Opening remarks by the PIFS Secretary General H.E. Mr Tuiloma Neroni Slade

Secretary General H.E. Mr Tuiloma Neroni Slade welcomed the meeting participants, emphasising their presence as distinguished experts from many agencies including the Council of Regional Organisations in the Pacific (CROP),³ the United Nations (UN) and non-governmental organizations. The Secretary General also commended the Pacific Islands States Alumni for distinguishing themselves as torch bearers for leadership and ocean development in the region, and by being awarded the fellowship by UN DOALOS (Appendix B for full statement). Highlights of the speech:



Figure 2. PIFS Secretary General and Pacific Ocean Commissioner H.E. Mr Tuiloma Neroni Slade.

- DOALOS operates the United Nations – The Nippon Foundation of Japan Fellowship (UNNF) Programme as a capacity development mechanism, which aims at the strategic development of skills and understanding on a wide range of issues in ocean science and development.
- This meeting represents an opportunity for Pacific Islanders to build and expand on home-grown ocean expertise, now seen in greater abundance in the region.
- Small Island Developing States (SIDS) can claim much credit for the greater recognition and unprecedented appreciation of oceans in development, and the substantiation of the role of oceans for sustainable development in the RIO+20 process and outcome document.
- Pacific Islands' delegations became involved very early on in the negotiations of international law of the sea and fisheries, including informing processes at the UN Seabed Committee and the development of what is today the United Nations Convention on the Law of the Sea (UNLOSC).

Opening remarks by DOALOS Director Gabriele Goettsche-Wanli

The DOALOS Director, Ms. Gabrielle Goettsche-Wanli, together with Dr Francois Baillet and Ms Valentina Germani from the UNNF programme, welcomed all participants to the Pacific Alumni meeting.

She expressed her gratitude to Secretary General H.E. Mr Tuiloma Neroni Slade for hosting the Alumni meeting, and to Dr. Morrell and other PIFS staff for the organization and hospitality. In expressing sincere thanks to the invited speakers, the Director emphasized that the Alumni were going to have an opportunity to take centre stage and interact with experts on ocean governance issues.



Figure 3. DOALOS Director Gabrielle Goettsche-Wanli

She noted that the Alumni Network consisted of 90 members from 56 States. The Alumni Network was launched in 2009 to provide a global and dynamic platform that serves the evolving

³ CROP refers to nine inter-governmental organizations in the Pacific. Apart from PIFS, other CROP agencies participating in this meeting include the Forum Fisheries Agency (FFA), Secretariat of the Pacific Community (SPC), Secretariat of the Regional Environmental Programme (SPREP) and University of the South Pacific (USP).

needs of the Alumni as they progress through their careers. Previous Alumni Meetings were held in Tokyo in 2009, Barbados in 2010 and Nairobi in 2011. A meeting of the representatives of the 7 alumni Sub-regions was held in New York in 2012, to mark the 30th anniversary of the opening for signature of UNCLOS.

The Director viewed the meeting as an opportunity:

- To encourage personal and professional development of the participants and networking;
- To analyse and discuss national and regional ocean frameworks with the aim to gain a mutual understanding and exchange views;
- To identify key policies and regulatory approaches, as well as any capacity gaps which may be critical impediments to their implementation;
- To exchange information and experience on current capacity development initiatives, and the identification of opportunities to rationalize and/or reinforce these through synergies and/or new partnerships;
- To foster cooperation; and
- To reinforce networking in the region and beyond.

She underlined that it was important to identify individual and common contributions towards the future of oceans. Oceans provide goods and services that human must understand, use and conserve in a sustainable manner. This represented a challenge for many States due to capacity and technology gaps, as well as threats to the health and functioning of ecosystems. Hence, it was important to recognize that this is not an individual undertaking but one to be achieved through regional, bilateral and global cooperation.

Opening remarks by UNNF Pacific Alumni Representative, Ms. Anama Solofa

Ms. Anama Solofa expressed her gratitude to The Nippon Foundation of Japan and DOALOS for the opportunity to have the Alumni Meeting in the Pacific region, and to the PIFS for hosting the event. In particular, Secretary General, H.E. Mr. Neroni Slade and DOALOS Director, Ms. Goettsche-Wanli, were acknowledged for facilitating the organization of the meeting.

She noted that the UNNF Fellowship Programme for Human Resources Development and Advancement of the Legal Order of the World's Oceans presents a unique opportunity to carry out research that focus on oceans governance, with the aim of improving the awareness and understanding of key issues in ocean affairs at the international level, and how these are applied to oceans management.



Figure 4. Anama Solofa, Pacific Alumni.

She highlighted that:

- At an individual level, the Fellowship programme provides an opportunity to promote in-depth appreciation of the challenges, opportunities, and complexities of oceans and marine resource management in the Pacific.
- The meeting was attended by 8 Alumni and 1 current Fellow from six Pacific Island countries. Their Fellowship research ranged from proposals for national ocean policies and plans, to an analysis of UNCLOS provisions, and the analysis of regional policies and agreements for ocean resource management.
- Building on the foundations of the Fellowship Programme, the Global Alumni Network was established as a tool to facilitate discussions and knowledge sharing for those who

had completed the programme. The Global Alumni Network will have one hundred members in 2014.

- The Global Alumni Network was represented at the meeting by Dr. Joytishna Jit, the Deputy Global Alumni Representative, also a Pacific Islands Alumnus. The Global Alumni Representative, Mr. Abbas Daher Djama, wished the Pacific Alumni all the best for the meeting.
- At the Regional Alumni Representatives meeting in New York in December 2013, there were several discussions surrounding the need to further develop the Global Alumni Network, both through strengthening collaborative efforts within each regional group, as well as between regions.
- It was hoped that the discussions, experiences, and partnerships forged during the meeting, will continue to assist the Pacific Alumni in their respective work and efforts in oceans management.
- A special welcome was extended to representatives of Wantok Moana, the marine students association of the University of the South Pacific, whose views were important in the context of the generation of Pacific oceans professionals.



Figure 5. Participants and guests on Day 1 of the UNNF Pacific Alumni Meeting. From left to right: Professor Craig Forrest (Chair of Session 1), Mr. Rudolf Dorah (Pacific Alumni), PIFS Secretary General H.E. Mr Tuiloma Neroni Slade and Dr. Francois Baillet (DOALOS).

2. Summary of Meeting

The meeting was organized along a comprehensive agenda of nine sessions addressing a number of topical issues, including:

- 20 presentations on key ocean governance themes by experts and representatives of CROP and other agencies. Discussions by the participants followed each presentation and, in some cases, each session.
- Country presentations by Pacific Alumni from Solomon Islands, Samoa, Tonga, Fiji, Papua New Guinea and Kiribati.
- A field trip to experience and better understand indigenous and community-based management; and
- A number of roundtable sessions on key topics.

This section of the report summarizes the presentations and discussions arising from the meeting.

Session 1: Current state of ocean affairs in the Pacific Islands region

Chair: Deputy Secretary General, Mr. Feleti Teo, PIFS

Pacific Plan Review

Ms. Seini O'Conner from the PIFS provided an overview of how ocean issues have featured in the Pacific Plan for Regional Cooperation and Integration over the past 8 years, and how that might change following the current Pacific Plan Review.

In its first iteration in 2005, the Pacific Plan set out 44 key initiatives for Pacific Islands to pursue, grouped under four pillars: economic growth, sustainable development, governance, and security.

In 2009, Pacific Leaders endorsed a new medium-term set of priorities, grouped under 5 themes. The themes broadly matched the four the pillars of the Pacific Plan ie Economic growth, sustainable development, good governance and security, but identified two key aspects of sustainable development: Responding to Climate Change, and Improving Livelihoods and Well-being. Three of the 37 priorities identified in that context related to important work in the Pacific Ocean:

- Under the theme '*Fostering economic development and promoting opportunities for broad-based growth*', one priority is '*building on existing marine protected areas [MPAs] and initiatives*'
- One theme is '*developing regional and national frameworks to enable the development of the economic potential of marine mineral resources*'.
- Under the theme '*Addressing the impacts of climate change*', a further priority is '*building support, with the assistance of regional and international partners, for the Coral Triangle Initiative on Coral Reefs, Fisheries and Food security*'.

During the Pacific Plan Review process, some commentators suggested that most of the above priorities can be best addressed at the national level, and don't require regional integration or harmonization. Accordingly, the Pacific Plan Review will recommend how best to identify and update regional priorities in the future.

Key points of the Pacific Plan review:

- Strong support for regionalism;

- The future Pacific Plan should not be seen as a 'regional development plan', and should not be oriented towards donor funding (or be a prerequisite to funding);
- The Plan should be seen as a framework for advancing the process of regional integration, and regionalism more generally, through informed political choice and strategic change;
- It seems likely that work in areas where there is a regional public good involved – such as oceans conservation – will continue to be prioritized for collective action.

Discussion points:

- Issues are sometimes overlapping and/or there is fragmented coverage of issues. For example, balancing economic and community /traditional values versus livelihoods;
- Need to progress from frameworks to more tangible outcomes or results;
- Need for focus to include not only leaders, but also integrate other important stakeholders to ensure practitioner and expert inputs especially in areas where political will is not evident;
- Regional directions need to be more strongly aligned and balanced with the needs of each country rather than few active participants. To ensure better reflection of ground level priorities, community driven ocean and coastal projects to be supported through regionalism;
- There is slow but gradual inclusion on non-state actors in regional processes.
- PIFS as gatekeeper of the Pacific Plan: there was intense discussion of the terminology of 'gate keeper' with an emphasis on the need to evaluate all sectors using acceptable and transparent tests and criteria, and reinforce capacity building to strengthen regional processes;
- It was indicated that national development plans are not directly linked to the Pacific Plan. There was some concern that this could cause deviations in terms of bottom up and top down management;
- Since all states have national development plans, the national priorities of the region can be determined by assessing and strengthening such plans. These plans would have commonalities in terms of priority in relation to ocean and coastal concerns, and this could be mirrored in regional processes.

Setting an ocean policy within the Pacific Islands region in the post Rio+20 context

Dr. Willy Morrell, PIFS, provided an overview of the PIF in the context of ocean governance in the region, and highlighted key regional instruments and processes in the context of Rio+20 and other international forums.

The PIF was founded in 1971 and comprises 16 independent and self-governing states in the Pacific. It is the regional premier political and economic policy organization.⁴ The mission of PIF is to ensure the effective implementation of the Leaders' decisions for the benefit of the people of the Pacific.

Forum Leaders (of Pacific States) meet annually to develop collective responses to regional issues, guided by the Pacific Plan. The central theme of the Cook Islands hosted Forum Leaders meeting in 2012 was 'Large Ocean Island States – the Pacific Challenge'. This theme

⁴ PIFS is one of nine CROP agencies, which are all inter-governmental organizations.

was built on the outcomes of Rio+20 and the need to strike a balance between developing and conserving marine resources. Forum Communiqués from 2012 and 2013 make reference to deep sea minerals; fisheries; monitoring, control and surveillance (MCS) challenges; market access; food security; maritime boundaries; marine spatial planning; marine governance; and climate change - which was also the central theme of the 2013 Forum in Majuro (available at: <http://www.forumsec.org/pages.cfm/political-governance-security/forum-leaders-meeting/>).

The high level recognition of such issues through the Communiqué is expected to drive policy but is seldom accompanied by specific resourcing allocated to deal with the issues.

The following facts and figures explain the high level recognition dedicated to these issues in the Communiqué:

- Fishing is a \$90 billion dollar industry;
- The fishing industry employs 43 million people;
- Fish provides 40% of the protein for two thirds of the planet's population;
- Oceans generate > 50% of our oxygen;
- Oceans have absorbed about 30% of anthropogenic CO₂, 90% of the heat;
- Oceans harbour untold species, ecosystems, potential pharmaceutical constituents, oil, gas and mineral resources that continue to be discovered on a daily basis;
- 2.6 million tons of tuna captured (~50% Pacific Island Exclusive Economic Zone, EEZ) valued at >USD 4.3 billion;
- License fees provide 3-40% of government revenue for 7 Pacific Island States;
- Fish provides 50-90% of protein of most coastal communities where consumption is typically 3 to 4 times the global average;
- 47% of households in coastal communities (in 17 PICTs) derive their first or second income from catching and selling fish;
- Industrial fishing and processing provides more than 12,000 jobs; and
- Aquaculture employs a further 6,000 in pearl and shrimp farming.

Following Rio+20, Pacific Island Countries and Territories are using the SIDS 2014 preparatory process to formulate priorities on oceans and sustainable development in the Pacific region.⁵ These will also contribute to the post-2015 development agenda and new Sustainable Development Goals (SDG).⁶ Some key messages that the Pacific Countries are likely to take forward to SIDS 2014 in Samoa include:

- The important ocean stewardship role of Pacific Island States;
- The need for marine habitat protection both within and beyond EEZs, particularly for critical ecosystems vulnerable to climate change impacts;
- The need for a dedicated ocean-focused SDG;
- The need to finalize the delimitation of maritime boundaries, given their implications for resource extraction and MCS.

Important considerations also include:

⁵ Conference will be held in Samoa in September 2014.

⁶ For more information, see <http://www.un.org/en/ecosoc/about/mdg.shtml>

- Opportunities to utilize large scale marine spatial planning to facilitate informed decision making;
- Ocean acidification – reef degradation has dire implications for fisheries, food security and the very existence of low lying atolls;
- Impacts of sedimentation and land based pollution including agricultural fertilizers, pesticides and herbicides;
- Determining rates of coastal habitat destruction;
- Marine Invasive species management.

Dr. Morrell also outlined the Pacific Oceanscape framework, Pacific Islands Regional Oceans Policy (PIROP) and the Global Partnerships for Oceans (GPO) as key frameworks for ocean governance and development.

Discussion points:

- A key concern for the region is blue carbon and the associated threat of coastal degradation. Marine Protected Areas (MPAs) are addressed under PIROP/Pacific Oceanscape and could provide a mechanism to address blue carbon, provided there is political will. Coordination of funding could be a way around it;
- Coastal degradation is a regional issue because of its commonality;
- The inclusion of non-State actors in coastal management and in regional processes is important. There is a need for more thought as to how that will be managed;
- States need to agree at the political level to cooperate. Lack of political will has previously been an impediment to in-country implementation of PIROP.

Post 2015 Agenda / SDGs Development and 2014 SIDS Conference

Mr. Iosefa Maiava, Head of UN ESCAP Pacific Office, provided a comprehensive review of the Pacific Perspectives on the 2014 SIDS Conference and Post-2015 Development Agenda.

He emphasized that, as scientists warn about another phase of mass extinction on Earth, we are already experiencing increased disturbance due to violent climate-related hurricanes, droughts, warming, fire, heat and flooding etc. Three key things were highlighted:

- First is a value-proposition of the Pacific as an important, indeed critical part of the earth. For the Small Island Developing States (SIDS), tourism most of which is concentrated in coastal areas, can account for over 25% of GDP. For the Pacific States fisheries catch, valued at \$4 billion a year, is a largely unrealised value, as underscored by the fact that they currently only receive 5-6% of that amount. Indeed, for the foreseeable future, the oceans have far more potential for the rest of the world — through investments and jobs in emerging sectors, such as offshore renewable energy, as well as in transitioning to more sustainable shipping, fishing and marine aquaculture operations, deep sea mining and the management of submarine cables', which link the World Wide Web that is vital to the global economy and national security of all States.
- The above point does not mean the Pacific should not try to get a fairer share of the ocean resources. It certainly does not mean the Pacific should not do all it can to influence the extra-regional and global processes. In particular, climate change is the Pacific islands' biggest challenge, threatening entire islands and communities - this is an issue that will not be escaped by the rest of the world's billions of people and assets located in coastal and other vulnerable areas. The second proposition then is that of shared risks or common fate.

- And thirdly, it was emphasized that humans have the means and the tools to avoid such a common and dangerous fate. But time is running out more quickly than previously realized and there is a duty to urgently find and apply solutions which balance our development ledger. Rio+20 agreed on one of the important tools for doing this, namely the green economy proposition, which could be applied to, and used to help save, our Blue World.

Changes in the carbon cycle, which according to world scientists led to the previous five mass extinctions on Earth, are again threatening our planet, and are mostly due to human actions and behaviour. Ocean acidification is also a major concern.

It is important to understand that cross-border 'investment' including financial aid and returns from the sale of resources often have negative impact on environment and on societies (externalities), which can be minimized if the returns or gains are proportionate to the losses caused to others (including to the environment and the poor). The tendency to treat such losses as free assets to be used and exploited to maximize profits needs to be altered. Arrangements, such as 'polluter pays' and 'beneficiary pays', may work.

Discussion points:

- Emphasis on the need to bridge gaps between communities and regional leaders in decision-making;
- Need to identify the types of capacities needed to better adopt value proposition of oceans in the Pacific;
- Presently, there is no sustainable development goal on oceans, and much push back has been noted on the concept of the green economy in international forums;
- It is increasingly important to manage the relationship between SIDs and rest of world on the basis of the Barbados Plan of Action for Small Island Developing States;
- It is important not to interchange the concepts of green economy and blue economy.⁷ This concept of 'blue economy' did not originate in the Pacific and is a business concept to conduct business in an environmentally friendly manner;
- An interesting application of the green economy might lie with deep sea minerals, which inter alia provide a resource that can be used for environmentally friendly technologies, such as solar panels. The notion of deep sea mining as 'an incentive for green economy' is complex and may be controversial;
- The idea of a resource tax is to tax the rate at which resources are extracted rather than applying an income tax. This approach may have a bearing on the actual rate of extraction. There is no relationship between rate of profit and extraction rate;
- In fisheries low fossil fuel price may lower the cost of harvesting of fish but it will encourage overcapacity. The same principle could be applied to mining;
- In Rio+20 there was emphasis by Pacific Island States on the precautionary approach to be applied to mining activities and fisheries. Marine Protected Areas could be used as a tool;
- There was a general discussion about the appropriate vehicle for auctioning green economy. Marine spatial planning was considered in terms of the use of space to minimize impact for activities and look for synergies e.g. MPAs to protect coastal fish habitats and replenish stocks. The need to develop practical ways of valuing resources

⁷ 'Blue economy' is described as 'where the best for health and the environment is cheapest and the necessities for life are free thanks to a local system of production and consumption that works with what you have'. Available at: <<http://www.theblueeconomy.org/blue/Home.html>>

– oceans, women, and communities alike was highlighted. It was crucial to look beyond GDP as a measure for development;

- Initial pilot work in some places to value to community participation and access to resources, was noted, e.g. in Vanuatu.

Strategic partnerships and coordination

Mr. Alfred Schuster from the PIFS provided an overview of strategic partnership and coordination in the context of development cooperation. He emphasized the importance of stewardship responsibility for effective oceans governance. International and regional instruments (e.g. PIROP, Pacific Plan and Pacific Oceanscape) are a key component of the governance regime comprising fisheries management, non-living resource management, marine environmental protection.

Key points included:

- Importance of directing development partners towards greater alignment with national priorities to ensure budgetary support. Policies in the region are focussed on economic, public sector, State-owned enterprise and public financial management reforms.
- Countries and their development partners continue to demonstrate strong commitment to strengthening public financial management systems at the country level.
- Forum leaders have begun to acknowledge the need to improve links between national development plans and budgets, as well as monitoring results. Budget processes in some countries still miss the opportunity to focus resources on a selection of priority strategies in national or sectoral plans and to promote simple systems of accountability for results.
- Development partners need to work with Forum Island Countries to improve risk sharing with regards to using country systems to deliver Official Development Assistance and other external resources.
- Remodeling aid and development relationships to suit national capacity:
 - Stronger agreements between countries and the development partners on transparent and predictable aid;
 - Development partners should intensify efforts to ensure that aid appears accurately on national budgets through information on aid flow and improve aid forecasting.
- Monitoring and Evaluation Frameworks are often missing from national development plans;
 - This should be a strong incentive for governments to produce their own standard reporting & monitoring template;
 - For some smaller countries the monitoring effort reflected in the national plan has been beyond their capacity and as a result there has been little systematic monitoring of outcomes.
- There is a need to mutually agree on a minimum set of indicators to monitor progress.

The above needs to integrate ocean governance through regional framework implementation and capacity building and supplementation through:

- Clear guidelines through national oceans/fisheries policy;

- Sector plans and robust monitoring & evaluation frameworks;
- South-south & triangular cooperation; and
- Knowledge sharing & transfer.

The presentation was concluded with a listing of the principles for effective development cooperation, as shown in the box below.

Principles for effective development cooperation

'Partnerships for development can only succeed if they are led by developing countries, implementing approaches that are tailored to country-specific situations and needs.

Our investments and efforts must have a lasting impact on eradicating poverty and reducing inequality, on sustainable development, and on enhancing developing countries' capacities, aligned with the priorities and policies set out by developing countries themselves

Openness, trust, and mutual respect and learning lie at the core of effective partnerships in support of development goals, recognising the different and complementary roles of all actors.

Mutual accountability and accountability to the intended beneficiaries of our co-operation, as well as to our respective citizens, organizations, constituents and shareholders, is critical to delivering results. Transparent practices form the basis for enhanced accountability.'

Discussion points:

- Further clarity on partnerships and coordination would assist in implementing the principles of effective development coordination.
- Need to consider widening of relationships and better management to include all stakeholders in ocean governance – civil society, private sector, non-governmental etc.
- Paris Declaration on Aid Effectiveness was the first opportunity for States, as opposed to donors, to dictate where resources should be allocated. Development actors are involved in developing and translating achievements of the Millennium Development Goals (MDGs) at national level.
- There is usually of number of donors making it important to have a more inclusive and holistic approach to allocating aid, and recognize strengths and weaknesses of all forms of aid.

Leadership for Micronesia and the world

Ms. Kate Brown from the Global Island Partnership (GLISPA) provided an insight into her experience with successful marine protected area projects in Pacific and Caribbean regions. In particular, she underlined the following activities:

- Strengthening and establishment of 190 protected and managed areas over more than 680,000 hectares;
- Mentoring of over 25 young marine conservation champions as leaders of tomorrow;

- Finalizing and initializing monitoring of four regional marine indicators and in the process of testing 6 regional terrestrial indicators and 10 regional socio-economic indicators;
- Adopting a Marine Protected Area Management Effectiveness (MPAME) tool for assessing management effectiveness;
- Approved marine conservation Regional Database procedures;
- United States Defense supports Micronesia Biosecurity Plan, as a mitigation effort from the Military Buildup in Guam;
- Sustainable financing mechanisms, regional sustainable finance plan and fundraising strategy endorsed by Chief Executives;
- Micronesia Conservation Trust is now regional; and
- Micronesia Challenge Business Plan:
 - Raised \$12 million of the \$18 million needed for Phase I; and
 - Phase II needs \$55 million.

Commitment by leading figures and/agencies was a key ingredient of success. In 2006, at an international meeting on biodiversity conservation, leaders committed to establish 20% of terrestrial and 30% marine areas as protected areas by 2020. Examples include Fiji declaring 30% of inshore and offshore marine areas network by 2020, and Palau's commitment to the Micronesian Challenge. One of the key challenges in establishing protected area was that increased resources are required to meet the commitments in terms of the area of oceans to be protected.

Discussion points:

- It is important to work with every State that has islands, including developed States. Build on existing work, and also work together in a cooperative environment to achieve goals.
- Sustainable financing such as a trust fund for the whole region could be considered. Ongoing projects can be used to fund one person in each state to work in developing a protected area. Knowing how much money is needed in order to source funding and utilize it; all levels should be involved in such a commitment and plan.
- Results should focus on implementation. From experience, it took GLISPA seven years to assess how to measure results, i.e. the increase in area of effective conservation. More resources often need to be allocated to the work of the program.
- Young Champions were a successful initiative.
- Considerations for raising domestic funding could include joining fee, and departure tax (tourism).
- Corporate champions can also help raise funds.
- There is a need for more coordinated, public financial reform, and a change in government behaviour in terms of acknowledgement of the practical capability and capacity to deliver.
- Plans and policy should be measureable.
- Effective leadership, in GLISPA's experience, can bring transformation rapidly. A revised sustainability plan may be developed.

- If all stakeholders are involved in marine conservation, the responsibility and accountability is also shared.
- Some lessons learnt from GLISPA projects were that sectors need to communicate well with each other, and complement each other. This can also facilitate capacity-building, and influence political leadership.



Figure 6. Meeting in progress at the PIFS.

DOALOS technical cooperation, Trust Funds and capacity building

Dr Francois Baillet provided an overview of the role and opportunities within DOALOS in the context of capacity-building for ocean governance.

DOALOS manages two nine-month Fellowships, namely the Hamilton Shirley Amerasinghe Memorial Fellowship Programme and the United Nations – The Nippon Foundation Fellowship programme (UN-NF), which focus on ocean affairs and the law of the sea.

The UN-NF Alumni Network was established to support the Alumni of the Programme is supported in their evolving capacity and networking needs of the Alumni as they progress through their careers and in recognition of the continuing and rapid developments in ocean affairs and the law of the sea. Activities of the Network include:

- Annual Meetings: Asia-Pacific (2009 w/Nippon), Latin America and the Caribbean (2010 w/UWI), and Africa (2011), Regional Reps for UNCLOS 30 (2012), Pacific Islands (2013 w/PIFS)
- Exchange of information and outreach through a website, newsletters, and a Facebook page.

The objective of these activities is to:

- Foster greater understanding among individuals and facilitate lasting global interpersonal relationships both at the personal and professional level; and
- Reinforce a broader and more consistent application of ocean governance frameworks.

DOALOS also manages a number of trust funds as shown in Table 1.

Table 1. Funding that may be available at DOALOS for ocean governance.

Fund	Objective
Voluntary trust fund for the purpose of assisting developing countries, in particular least developed countries, small island developing States and landlocked developing States, in attending meetings of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (Fund Code: KEA)	The Trust Fund assists developing States, in particular least developed countries, small island developing States and landlocked developing States, to attend the meetings of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea, which are held annually in New York.
Voluntary trust fund for the purpose of defraying the cost of participation of the members of the Commission on the Limits of the Continental Shelf from developing States in the meetings of the Commission (Fund Code: KJA)	The Trust Fund was set up in order to defray the cost of participation of the members of the Commission on the Limits of the Continental Shelf (CLCS) from developing States in the CLCS meetings by providing travel and daily subsistence allowance
Voluntary trust fund to assist States in the settlement of disputes through the International Tribunal for the Law of the Sea (Fund Code: KFA)	The Trust Fund assists States to settle disputes through the International Tribunal for the Law of the Sea by providing financial assistance for expenses incurred in respect of cases which are submitted to the Tribunal.

DOALOS Technical Cooperation, Trust Funds and Capacity-Building

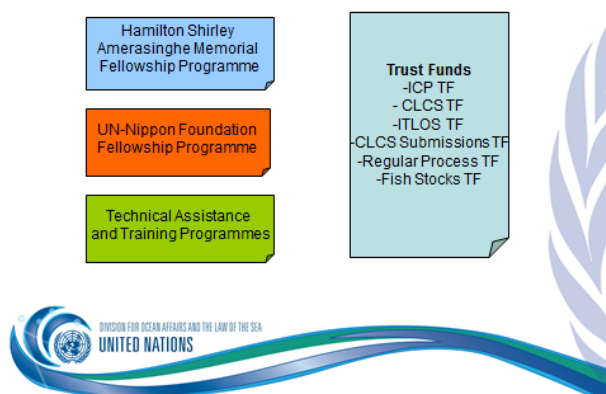


Figure 7. Fellowship and technical assistance provided through trust funds at DOALOS.

Voluntary trust fund for the purpose of facilitating the preparation of submissions to the Commission on the Limits of the Continental Shelf for developing States, in particular the least developed countries and small island developing States, and compliance with article 76 of the United Nations Convention on the Law of the Sea (Fund Code: KUA)	To provide developing States, in particular the least developed countries and Small Island developing States, with financial assistance for the training of technical and administrative staff, the acquisition of hardware, software and consultancy services, and certain activities necessary to make a submission to the Commission on the Limits of the Continental Shelf.
Voluntary trust fund for the regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects (Fund Code: TME)	<p>(a) support the operations of the regular process;</p> <p>(b) to provide assistance to the experts from developing countries, in particular least developed countries, small island developing States and landlocked developing States, to attend the meeting of the Ad hoc Working Group of the Whole; and</p> <p>(c) for the special scholarship fund to support training programmes for developing countries.</p>
UN-FAO Assistance Fund under Part VII of the UN Fish Stocks Agreement	<p>To assist developing States Parties in the implementation of the Agreement, in particular, through, inter alia:</p> <p>(a) Participation in relevant meetings and activities of relevant regional and sub-regional fisheries management organizations and arrangements</p> <p>(b) Human resources development, technical training, and technical assistance in relation to conservation and management of straddling and highly migratory fish stocks and development of fisheries for such stocks.</p> <p>The Fund is administered jointly by the Division and FAO.</p>

In terms of technical assistance and training programmes, DOALOS offers:

- A UNITAR/DOALOS training seminar on selected recent developments in ocean affairs and the law of the sea; advice and assistance to States in the implementation of UNCLOS pursuant to its mandate (resolution 52/26 and 67/78).
- Training workshops on the legal and technical aspects of the implementation of UNCLOS (e.g. A76).

Session 2: Delimitation and delineation of maritime boundaries and management of non-living marine resources

Chair: Prof Craig Forrest

The starting point: Maritime zones

Dr Francois Baillet, UN DOALOS provided the overview of maritime zones under UNCLOS. The territorial seas (article 3), contiguous zone (article 33), exclusive economic zone (article 57), and continental shelf (article 76) are defined in UNCLOS. Dr Baillet highlighted the obligations of states to deposit, with the UN Secretary General, charts showing:

‘straight baselines and archipelagic baselines as well as the outer limits of the territorial sea, the exclusive economic zone and the continental shelf; alternatively, the lists of geographical coordinates of points, specifying the geodetic datum, may be substituted (UNCLOS article 16, paragraph 2; article 47, paragraph 9, article 75, paragraph 2, and article 84, paragraph 2).’

States are also required to give due publicity to these charts. Coastal states are also required under article 76, paragraph 9, to deposit charts describing the outer limits of the continental shelf extending beyond 200nm.

Maritime boundaries can be advantageous for political, legal and economic reasons, such as through clear and recognised definition of the maritime zones over which states have sovereignty, or where they exercise sovereign rights or jurisdiction. Further, through stable frameworks for exploitation of resources and benefits from other uses of the sea. There are also potential limitations to these benefits arising from overlapping boundary claims.

A number of articles under UNCLOS provide clarity with regard to delimitation of maritime boundaries among states ie articles 15, 74 and 83. Some methods applicable to maritime boundary delimitation include equidistance, perpendicular lines, meridians and parallels and encclaving.

The Commission on the Limits of Continental Shelf (CLCS) considers submission by states and makes recommendations in accordance with article 76 and the Statement of Understanding adopted on 29 August 1980 by UNCLOS III. Recommendations include final and binding decisions on the establishment of outer limits of continental shelves. Nations that have made submissions pursuant to article 76(8) in the Pacific include Australia, New Zealand, France (New Caledonia), Cook Islands (Manihiki Plateau), Fiji, Papua New Guinea (jointly with Solomon islands and Federated States of Micronesia concerning Ontong Java Plateau), Palau, Tonga, Tuvalu (with France and New Zealand/Tokelau in respect of Robbie Ridge), Kiribati and Federated States of Micronesia (Eauripik Rise).

Technical assistance offered by DOALOS includes trust fund, training programs, research assistance, output from databases and illustrative mapping. For example, upon request by all States involved in a particular negotiation and with a view to facilitating it, DOALOS can assist in designing a geographic information database in order to create illustrative maps showing baselines, the limits of maritime zones, existing maritime boundaries and possible delimitation lines.

Maritime boundary project

Mr. Arthur Webb, SPC, outlined the Maritime Boundaries Project, which falls under SPC’s Ocean and Islands Programme (OIP). This AusAID funded (since 2001) project is primarily concerned with:

- Establishment of maritime zones and boundaries (EEZ) in the Pacific Islands Region in accordance with the provisions of UNCLOS and development of extended continental shelf (ECS) claims.
- Establishment of maritime boundaries between overlapping EEZs or shared boundary arrangements developed in accordance with the provisions of UNCLOS. Since 2011, Forum Fisheries Agency (FFA) has been a partner in finalising shared boundary arrangements.
- Extended continental shelves under article 76 of UNCLOS.
- Provision of updated maps and products that can provide best estimate of boundaries for states.
 - Issue: Existing marine spaces legislation in many cases actually prevents the use of the newer, better and highly accurate OIP data – this is why OIP and our partners are working to secure specialist legal/drafting capacity to assist PICs to update such legislation and facilitate the use of this excellent digital data.
- There are approximately 48 shared boundaries in the Pacific Islands Region.
- Boundaries project has led to the conclusion of 10 boundaries over the last two years leaving approximately 17 to be negotiated and finalized.
- Since 2007 maritime boundaries development workshops have provided a sustained approach in building capacity in the country technical and legal teams. The resultant 'bottom-up' approach to regional boundaries development has been fundamental to the success seen in submissions to the Commission on the Limits of the Continental Shelf and treaty signing.
- This recent treaty work has brought regional and international attention the success of the regional approaches being implemented.

Deep sea minerals project – roundtable of regional experience

This session was a roundtable discussion of the region's experience with deep sea mining. Dr Morrell introduced the topic of the roundtable acknowledging that this was a very topical concern. A challenge for Pacific States was the limited resource streams in terms of seeking and gaining revenue. Deep sea minerals are viewed by some States as another potential opportunity to fisheries, tourism, etc.

Three deposits have been identified in

the region. The need is driven also because wind energy generation or solar panels which may require deep-sea minerals. For example, sulphide deposit can be found at depths of 1000-3000m. In the Pacific, exploration studies showed that these minerals were deposited close to hydrothermal vents, for e.g. in PNG. Manganese nodules could be found in deeper areas at 5000m depth. These minerals are high in value but less economically viable to extract. Consequently, the focus is currently on sulphide deposits.

In terms of the regional governance there is a European funded 2.5million euro project (with the CROP agency SOPAC) to develop a regional framework to provide countries with information related to exploitation of these resources.

Deep sea mineral mining is a sensitive matter in the region. For example, distributing knowledge on sea bed mining could easily be viewed as encouraging seabed mining. On the other hand, knowledge can be viewed as power and therefore a tool for empowerment. There are also maritime boundaries issues, and the interplay with the work of the International Seabed Authority (ISA).

A framework for sea-bed mining developed by SOPAC is developing in-country capacity for exploitation. There has been funding for three regional workshops which were well attended.

It is possible to draw analogies between terrestrial and deep sea mining in relation to a number of components, including environmental impacts, regulatory requirements and social impacts of mining:

- A key concern with regards to environmental impacts of mining is the usage of unproven technology, such as site-specific technology or specific technology to partially refine or concentrate the ore.
- Issue of assessing considerations at the political/strategic level. It is important to identify what infrastructure needs to be in place.
- Marine spatial planning is a useful tool to compare and analyse the different uses of seabed resources.
- From a national development perspective, governments' capacity to integrate and develop deep sea mining with other pressing industries, for example, is limited.
- SOPAC can assist Governments to get the broader planning in place. SOPAC was setup for seabed mining and similar activities, showing that there was always a desire to proceed with this sort of work at the regional level. However, there is a need for more discussion within States to work out sustainable development plans. The more



Figure 8. Prof Craig Forrest, Chairing the session on management of non-living marine resources.

immediate area of work is environmental impact assessments (EIA). While project level impacts of deep sea mining need to be analysed, in most Pacific Island States, environmental offices don't have the capacity to do this work properly. In order to address that gap, the following should be developed:

- Draft terms of reference (TOR);
- Guidelines;
- Standards;
- A regional advisory panel, which may assist states with:
 - Scoping, review of documents from assessments;
 - Ongoing monitoring and reporting, etc.
- Tools for management remain the same.

It is also important to manage some of the high expectations around deep sea minerals, such as mining generating an economic boom in five to ten years. The reality of mining is that a lot of the operations will be ocean and ship-based – quite different as compared to terrestrial mining. hence there is a potential for external operators to undertake most activities, unless shore-based processing occurs. The potential of the industry to produce job opportunities within States is also unclear.

In general, although mining may not be as lucrative as land-based mining, it may be worth considering whether deep seabed mining could provide a viable means to complement economies. Another point to note is that although costs of extraction may be higher in the beginning, experience shows that this can change. In the 1970s cost of extraction was so high that deep seabed mining was not viable.

For small island States deep seabed minerals may provide an additional resource base to the tuna industry (declining), an opportunity that cannot be easily bypassed. In such cases, it makes it even more important to ensure that there are good arrangements in place to ensure equitable and ecological sustainable deep seabed mining. In terms of regulation, the Cook Islands have proposed a Seabed Minerals Act. Kiribati is looking at something similar but it is still work in progress.

The legislative framework developed by SOPAC can be used as a basis/tool in developing national regulations and should address environment and social issues.

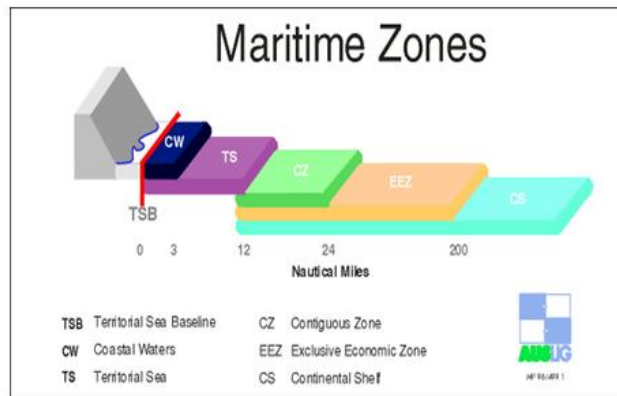
For example, it is essential to take into consideration the legal and environmental consequences if sediments are stirred up affecting the EEZ of another State. These issues require knowledge development before proceeding. In the context of site specific proposals, things such as clipping off vent residues also causes valid causes for concern.

Raising awareness and information sharing on sea-bed mining is essential. Youth debate on deep sea mining is one of the ways to do this.

Sea level rise and maritime zones: Preserving the maritime entitlements of 'disappearing states'

Prof Rosemary Rayfuse, University of New South Wales, presented a comprehensive presentation theorising on the impacts of sea level rise in Pacific Island States. Key considerations for States are:

- Permanent inundation of low-tide elevations and fringing reefs used as basepoints will move the outer limits
- Island which will become 'rocks which cannot sustain human habitation or economic life of their own' are not entitled to an EEZ or continental shelf
- Islands that disappear may cease to generate any maritime zones



- From a legal perspective, **Figure 9. Maritime jurisdictions under UNLOSC.** the above events could challenge the criteria for statehood, which requires permanency of population, defined territory, government, and capacity to enter into relations with other States.
- Statehood dilemma may be resolved if disappearing State acquires new territory by cession, merges into some form of federation with another State, or if there is recognition of a new category of State – the de-territorialized State. The latter has been already recognized in international law with reference to Knights of Malta and Papal See.
- In terms of solving the baseline dilemma, UNCLOS article 5 was emphasized ie.

'Except where otherwise provided in this Convention, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.'
- Marking of zones was encouraged, especially:
 - Use of straight baselines
 - Establishment of outer limits of continental shelves, where appropriate
 - Bilateral maritime boundary delimitation agreements
 - UNCLOS Article 5 & Article 16(1): declare baselines by recourse to geographical coordinates - may require amendment of domestic legislation especially in the Pacific

New international approaches for resolving the baseline dilemma was also proposed, and included the notion of freezing baselines or outer limits through a number of procedural mechanisms:

- Development of customary international law
- Protocol to UNFCCC
- Modify UNCLOS.

Overall, it was important to preserve maritime entitlements in the event of sea level rise.

Discussion points:

- Baselines scenario is limited to straight baselines and unstable coast lines.
- Deposit of baselines is by States for publicity .In the case of rocks, the issue of State status is hard to ignore. If an island degenerated to a rock, it could have historic use as an island and have traditional rights associated with it.
- Given the historical basis for baselines and the presumption of continuity of States, vanishing historical claim needs to be noted in law.
- In Pacific States having coral reefs may be seen as advantageous and should be defined by coordinates.
- Resources could be under joint management, rather than diverting efforts to continue a process of demarcation. The region needs to collaborate and lead the world on co-management and coral reef management.
- There were some comments exchanged on the existence of mechanisms to protect Pacific Island and the liability of developed States for causing sea level rise.
- It was important to also consider that there was a lot more to the concept of state continuity than might have been noted through the presentation and earlier discussion. There is greater permanence in the idea of sovereignty and statehood than physical disappearance of islands. Disappearance of islands is a fact. Sovereignty takes the acceptance of a country in its broadest sense and is associated with culture, identity, association. Sea level rise will challenge the physical presence of a State but there is no law that could remove the recognition of a State in its whole significance.
- Existence of a State carries with it enormous resource rights. The disappearance of territory should not extinguish these rights. It is equally important to do something to prevent loss of coastlines and one must be focused on creative solutions. It is important to discuss these issues because sea level rise is happening and will get worse. Pacific Islands are affected by sea level rise and there is more that can be done, especially in terms of deposits of baselines. If sea level rise is unstoppable, then people should install markers that continue to mark the physical islands that were there. It may be useful to also develop legal instruments to address compensation.
- There was wide consensus that there is more to State than physical territory.
- There was no rule under law to consider the issue of vanishing States. The only thing that might happen with the effusion of time is a change of identity and that is not a quest of law only. It is important to ensure that the position of Pacific Islands is maintained as strongly and cooperatively as possible, without necessarily changing rules at international level at this stage.
- The need for a proactive approach was widely confirmed given that there is flooding in the region.
- Engineering of walls 3 meters high along the coast may prolong existence, e.g. Maldives is creating/improving land to prevent flooding.
- The question of costs in terms of rebuilding islands remains.
- Straight baselines also consider lighthouses and permanent installations above sea level.

- Boundary delimitation is discussed regularly in regional meetings at the Westerns Central pacific Fisheries Commission (WCPFC). Distance Water Fishing Nations (DWFNs) are often enquiring regarding state boundaries especially where countries have not deposited baselines. Monitoring Control and Surveillance is a substantial issue central to boundary delimitation. In Tonga the reason for unmarked boundaries is plain - lack of capacity in-country. There is heavy reliance on SPC, SOPAC and FFA.



Figure 10. Prof Rosemary Rayfuse (UNSW) speaking on legal challenges of boundary delimitation due to sea level rise.

Session 3: Climate change and fisheries

Chair: Prof Rosemary Rayfuse and Dr Francois Bailet

This session focussed on climate change in terms of global developments, food security and fisheries. All discussions took place at the end of the session.

Climate change - Global developments

Ms. Valentina Germani, DOALOS, provided an overview of global developments in climate change, including the Inter-government Panel on Climate Change (IPCC), the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol and negotiations on a future regime. The IPCC fifth assessment report noted that it is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20th century.

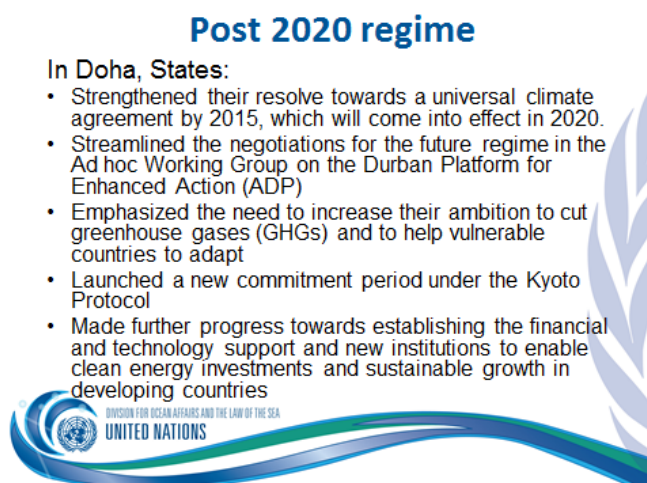


Figure 11. Post 2020 regime on climate change.

Key international instruments are:

- United Nations Framework Convention on Climate Change
 - General principles and infrastructures based on common but differentiated responsibilities.
- Kyoto Protocol (KP)
 - Legally binds developed countries to emission reduction targets;
 - New commitments in 2012 for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020;
 - A revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period;
 - Market mechanisms and Kyoto Protocol architecture will continue.
- Future regime under negotiation
 - Kyoto Protocol amendments (second commitment period) and development of future climate change instrument.

The role of oceans in adaptation/ mitigation/ etc in increasingly being considered and Pacific Islands States may consider further what role oceans should play in climate change policy.

Impacts on climate change on food security

Mr Gibson Susumu, Food Security Technical Officer, SPC, provided an overview of climate change and food security in terms of:

- Key Challenges and Vulnerability to Food Insecurity in Pacific Islands Countries (PICs): These include limited food availability, food access (linked to poverty), food utilization and climate change impacts.
- Climate Change Impacts on Agriculture and Food Security in PICs: Climate change effects on food are due to changes in rainfall, carbon dioxide levels and raising temperature, soil quality, livestock, sea level rise and extreme events which will change food production environment. These effects are exacerbated by high dependence on imported food (50-80%), the prices of which will also increase due to climate change
- Vulnerability assessments in the Pacific:
 - *'Vulnerability is a function of character, magnitude and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity'* (IPCC, 2001)
 - Studies in Pacific States indicate a significant vulnerability to climate change (Figure 13). In terms of food security, there is a very high reliance on imported food.

To mitigate climate effects on food security, there is a need for investment in agriculture to increase supply of local food, increased support for community-based adaptation, improved governance and institutional development for climate change adaptation, and enhanced income opportunities in rural societies.

Communities' Vulnerability to CC

Countries	Village	Exposure	Sensitivity	Adaptive Capacity	Vulnerability
SI	Loimuni	3.21	2.04	1.5	4.37
	Sepa	3.0	2.98	1.55	5.77
Vanuatu	Divers Village	3.08	3.55	1.60	6.84
Fiji	Korobebe	3.18	2.47	2.03	3.87
	Nagado	3.18	2.43	2.06	3.75
	Naboutini	2.96	2.9	1.97	4.35
	Sabeto	3.12	2.78	2.23	3.98
Tonga	Houma, Eua	3.11	2.64	1.9	3.77
	Tefisi	3.2	3.06	2.15	3.98
	Kolonga	3.04	2.81	2.5	3.63
AVERAGE VULNERABILITY		H - V High	M - VH	L - M	4.43 (VH)

1= Low 3=High
2=Medium 4= Very High

Figure 12. Pacific states vulnerability to climate change.

Vulnerability of tropical Pacific fisheries and aquaculture to climate change

Mr. Johann Bell, SPC, made a presentation on the vulnerability of tropical fisheries and aquaculture to climate change. The presentation was based on the comprehensive study titled *Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change*, which was published in 2011 and is available from SPC.

Different regions of the oceans, such as reefs and open oceans, are vulnerable in unique ways as described below:

Tropical Pacific Ocean

- The tropical ocean represents a vast area of fish habitats which dwarfs the total area of land and coastal fish habitats. The ocean supports some of the largest tuna fisheries in the world. Changes in ocean nutrients cycle through physical, biological and chemical processes are expected to affect phytoplankton, zooplankton and nekton.
- There are five ecological provinces in the oceans, which provide different habitats for organisms that are important in the food webs of tuna. There are a number of ways that these regions are expected to be affected through changing distribution, abundance and diversity of species (Figure 14):
 - Sea temperatures, upwelling, changes in mixed layer depth, solar radiation, dissolved oxygen and ocean chemistry.
 - Highest vulnerabilities in the Western Pacific Warm Pool and Pacific Equatorial Divergence regions.

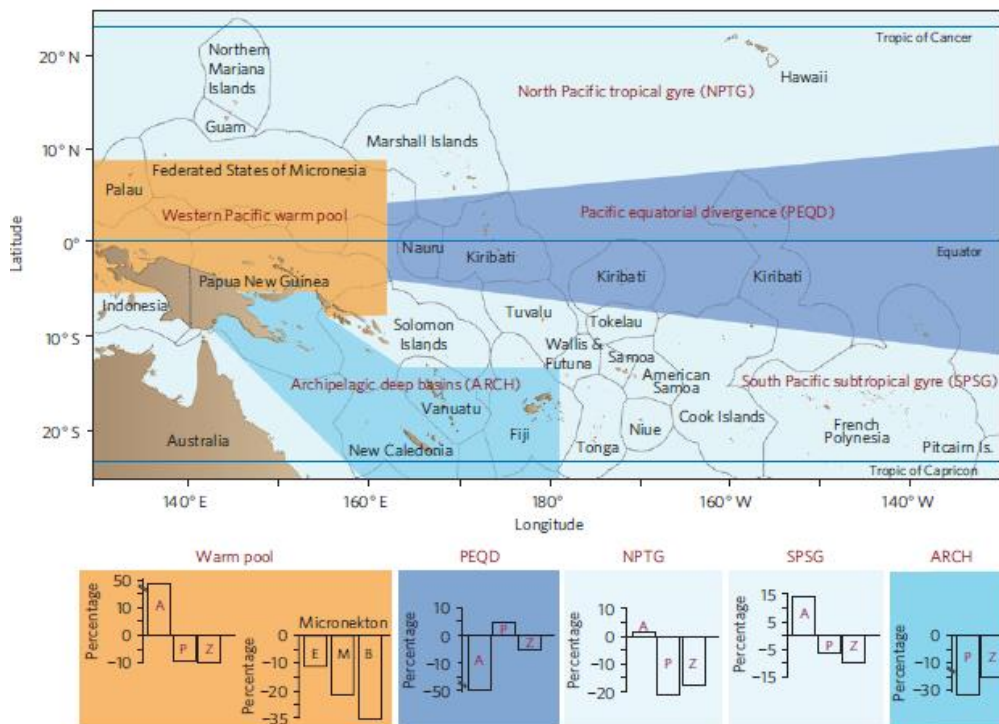


Figure 13. Change in Pacific Ocean Provinces as a result of climate change.

- Small Pacific Island Countries and Territories in the east with greatest dependency on tuna should receive additional benefits. Losses of revenue and GDP occur mainly in large PICTs in the west where tuna makes a relatively low contribution to economic development (due to size of economies).

Coral Reef Fish

- Expect 20 to 50 per cent decrease in coral reef fish by 2100 due to:
 - Increased sea surface temperature and more frequent bleaching;
 - Ocean acidification;
 - Greater runoff of nutrients due to higher rainfall

Coastal Aquaculture Commodities

- Significant decline in productivity of pearl, shrimp, seaweed and marine ornamentals due to:
 - Increased sea surface temperature
 - Ocean acidification
 - Greater runoff of nutrients
 - Sea-level rise
 - More-intense cyclones
- Increase in tilapia productivity due to:
 - Increased surface air temperature (faster growth rates in ponds)
 - Higher rainfall (more places to build ponds)

The decision-making framework for adaptation in the region is being challenged to address present term drivers (short term losses and gains) with climate change (long-term losses and gains). The study indicates that the way forward could target the following scenarios:

- Short term gains and long terms gains for a win-win, or at the very least,
- Short term losses but long term gains for a lose-win situation.⁸

For example, a win-win could involve the use of 'vessel day scheme' to manage effort of industrial tuna fleets. This is because such a scheme has the potential to be modified to accommodate movement of tuna from West to East.

Other recommendations include:

- Reduce access of distant water fishing nations to the EEZ to provide more fish for national vessels;
- Require distant water fishing nations operating with their EEZ to land some of the catch for use by local canneries;
- Enhance existing arrangements for the national fleet to fish in other EEZs;
- Maintain traditional fish consumption per day at >35Kg/year, and increase rural fish consumption to 35Kg/year. Fish-based food security at national scales would need to be maintained by utilizing more tuna at national levels as a result of climate change effects and population growth. In this regard it was suggested:
 - To increase access to tuna for subsistence fishers with low-cost inshore fish aggregating devices (FADs);

⁸ Lose-win adaptation needs to be implemented urgently for coastal fisheries to reduce impacts of short-term drivers and build resilience to climate change.

- To store and distribute tuna and bycatch from industrial fleets to urban areas;
- To develop pond aquaculture.

Discussion points:

- Among tuna species, much of the analysis on vulnerability of fish stocks were based on skipjack tuna. There was limited data for Bigeye tuna and some preliminary modelling on this species;
- Vulnerability assessments in this study were dependent on the modelling system used. There was some discussion of uncertainties in stock assessments, and impacts on/of modelling. Also, capturing all effects in terms of modelling, especially in terms of food webs, would entail uncertainties. There was a need to diversify modelling to reduce uncertainties given that it only reincorporates biogeochemical models;
- It is expensive to build data on food webs. For example, there are costs in validating acoustic data to know what is identified acoustically. There is a need for a better understanding of changing food chains in response to changing oceanic conditions;
- There was some elaboration of vessel day scheme. It was noted that effort will be closely tied to best areas for fishing and that would mean that the scheme is actually promoting harvest of concentrated stocks. This would also have implications for health of stock;
- There was some debate on whether there should be concern regarding where fishing occurs if the number of fishing days remain the main input control. It was generally agreed that the focus should be not to exceed total amount of fishing (reduce cost of operations). In practice, vessel day scheme had taken off on a bumpy start;
- For States like Solomon Islands and PNG (see full publication), the continuity of fish for coastal communities by 2035 to meet fish demand for food security means that 5% of ocean stocks would need to be reallocated to eating back home;
- There are eight states that are parties to the Nauru Agreement. Vessel Day Scheme is a management tool to manage skipjack fisheries. Under this scheme tuna can be traded amongst parties. This is an issue coming up in next meeting of parties in Cairns. Bigeye is certainly overfished. Catch rates are declining. Climate change is present among other factors, such as overcapacity, all of which need to be taken into account together;
- The vulnerability assessment was run with and without fishing effort. Purse seine catch has doubled since modelling so model needs to rerun with current catch rates. Skipjack was found to be more resilient;
- The modelling did not sufficiently take into account bycatch species like turtles and shark species, which are in more vulnerable status than some tuna species like skipjack at this stage;
- Hunger may become an issue due to the reliance on tuna by local communities.

Session 4: Marine biodiversity

Chair: Dr Francois Baillet, DOALOS

International legal regime and current trends at the global level

Ms. Valentina Germani, DOALOS, provided an overview of marine biodiversity conservation in international law. Marine biodiversity is defined in the Convention of Biological Diversity Conservation (CBD) as 'the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems' (article 2).⁹

In particular, Ms Germani emphasized that marine scientific research is continuously expanding our knowledge of ocean ecosystems and thus improving our ability to understand issues relating to their conservation and sustainable use. Research also provides opportunities to discover valuable biological resources and their potential applications. For example more research is needed to better understand the distribution in diversity of both the pelagic and benthic realm and to explore unsampled regions of the oceans. To this end, in order to ensure the participation of all interested States, capacity building is needed to improve the existing oceanographic capabilities, institutional framework, human resources, and technologies available in many countries, in particular developing countries.



Figure 14. Valentina Germani, DOALOS.

Marine biodiversity is affected by destructive fishing practices such as Illegal, Unregulated and Unreported (IUU) fishing, over-fishing, bycatch, and the use of destructive gear; climate change; pollution from all sources, including from shipping, the introduction of invasive alien species and anthropogenic under water noise; mineral exploitation; marine scientific research and bioprospecting.

UNCLOS provides the legal framework for all activities in the oceans and seas. This includes the conservation and sustainable use of marine biodiversity. It creates a balance between the need to conserve the living resources and protect the marine environment and the need to use the oceans and their resources.

Although UNCLOS does not specifically refer to marine biological diversity and biological resources, as those concepts were not yet in use at the time of its negotiations, the jurisdictional framework set forth in the Convention and the general principles and provisions therein apply to them. Therefore, within areas under national jurisdiction the coastal State has jurisdiction over the natural resources and for the protection and preservation of the marine environment. Beyond national jurisdiction, the regime of freedoms of the high sea and the regime for the deep sea, also referred to as the Area, apply.

The presentation outlined in some detail the principle of 'Biodiversity Beyond National Jurisdictions' (BBNJ) being considered by the United Nations. Nearly 2/3 of the oceans are beyond any State's sovereignty or jurisdiction. In BBNJs:

- Freedom of the high seas (water column) or common heritage of mankind (seabed) apply;

⁹ A different concept is that of 'biological resources', which are the tangible biotic components of ecosystems and species, which altogether make up what is known as biodiversity. The CBD definition of 'biological resources' includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.

- Several sectoral organizations have competence;
- There is no overall cross-sectoral coordinating mechanism to address user conflicts.

By resolution 59/24 of 17 November 2004, paragraph 73, the General Assembly decided to establish an Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. The Working Group has met 6 times since 2006 – in 2006, 2008, 2010, 2011, 2012 and 2013.

Rio+20 specified that a decision needs to be taken on the launching of negotiations for a, implementing agreement under UNCLOS before end of 69th session of General Assembly (2014-2015). Other points raised included:

- Opportunity to strengthen cross-sectoral coordination and apply integrated and ecosystem-based approaches
- Opportunity to strengthen the science-policy and industry-policy interface
- UNCLOS promotes global and regional cooperation
- Inherent legal and policy limitations of a regional model for areas beyond national jurisdictions.

Biodiversity conservation in the Pacific

Mr. Sefanaia Nawadra, SPREP, presented on the work of the South Pacific Regional Environmental Program and his own insights.

- Particular highlights on SPREP include:
 - Ecosystem based Adaptation projects implemented in Fiji, Solomon Islands, Samoa, Vanuatu and Kiribati;
 - Kiribati endorsed joining the Ramsar Convention for wetlands;
 - Biological assessment of Samoa's Savaii uplands implemented;
 - Convention of Biological Diversity MoU renewed.
- The vision of SPREP's Strategic Plan 2011-15 is 'The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures'. Its key programs include climate change, biodiversity and ecosystems, environmental monitoring, waste and pollution, and corporate services. Some key focus areas have included:
 - Islands and oceanic ecosystems (legislation, policy, baseline studies, international engagement, national biodiversity and sustainability action plans etc);
 - Threatened migratory species action plans, better implementation of international treaties, monitoring and capacity building; and,
 - Invasive species management (biosecurity and biosafety etc).



Figure 15. Sefanaia Nawadra, SPREP.

- Mr Nawadra indicated that the Pacific Islands Conservation Round table is an important and unique approach to biodiversity conservation in the region.
- An integrated solution to land-sea interface issues was required to meet the challenges of unsustainable land development, coastal development, pollution and waste, invasive species, climate change and emerging issues.
- In the Pacific:
 - Conservation needs to also address livelihoods;
 - Need for integrated conservation and management;
 - Equitable sharing of benefits;
 - With our resource ownership/use structures community engagement is a must.

Discussion points:

- There was strong agreement that it is not possible to conserve biodiversity without addressing livelihoods.
- Important features of effective marine biodiversity conservation would involve working in an integrated way (such as with the Melanesian Spearhead Working Group (MSWG) and Sustainable Development Working Group (SDWG) to strengthen existing groups and their commitment. Integrated management pools together individuals and agencies to contribute depending on their areas of expertise.
- Currently, Pacific States have not fully utilized several categories of protected areas defined by IUCN. There is a need for legislation and policy to apply the full range of IUCN protected area categories.
- The experience of setting up the first Locally Managed Marine Area (LMMA) in Fiji provides some practical understanding of issues and know-how in terms of community-based marine protected areas. Often there is a need to balance community, government and non-governmental organisation conflicts of values. A way to address issues is to balance all needs.
- Generally, experience shows that it is important to undertake conservation to provide food security. An example is the ecological-based management in Taveuni, Fiji for over 23 years in which the community set aside the whole catchment as a community-based protected area (without legislation). The community were able to meet livelihoods by promoting tourism through a whole range of pristine ecosystems.
- A series of protected areas could hypothetically be assisted by district based management plans under the Agriculture Department.
- Principles reflected in Pacific Oceanscape can be implemented on a wider scale, not just through marine protected areas, for example, promoting sustainable livelihoods etc.
- It was also important to consider that sustainable financing is also important for long term projects (sustainable livelihoods, agriculture, tourism, etc.) which are required for marine biodiversity conservation.
- There was a suggestion that governments could benefit by participating in informal exchanges organised to generate discussions of challenges and solutions. Governments could utilize bodies such as the Alumni Network in such forums.

- There is also an issue of invasive species drawn in ballast water of fishing vessels being discharged in Pacific States. The Ballast Water Convention has not come into force, and does not apply to fishing vessels.
- At international meetings significant time is taken to agree on common wordings of treaties. It is a challenge for practitioners to articulate what kind of work is required at local levels. In the Pacific, it is critical that owners of the resource have this capacity through national and local processes and translations, if required, as their lives depend on the resources.

Conservation partnerships in the Pacific

Mr. Alan Saunders, IUCN Oceania Regional Office, provided examples of common threats, challenges and opportunities in Pacific state projects to emphasize the importance of conservation partnerships. Some examples of successful partnerships in Pacific conservation included projects like Vatuira rat eradication (Birdlife International - Pacific), Phoenix Islands Protected Area (PIPA) and Mangrove Ecosystems for Climate Change Adaptation and Livelihoods (MESCAL).

Partnerships commonly demonstrate that capacity is developed with a focus on implementing agencies, 'learn-by-doing' approaches, on-the-ground specialist inputs, and skills sharing and exchange. Important lessons included:

- Knowing that conservation is about people;
- Building on success;
- Learning process;
- Cooperation (key).

Discussion points:

- Conservation partnerships not only require regional but also national and local cooperation.
- Cooperation is driven by necessity. Looking at partnerships around the globe: coral reefs an obvious ecosystem type. Mangroves are important for increasing resilience to climate change and rising sea levels. Seamounts are to be included. Extinction hotspots are on islands. Transboundary parks require partnership to manage very large areas.
- Important to build capacity in implementing biodiversity projects.
- Conservation is about people. It is important that they cooperate to utilize techniques.
- There was some clarification regarding PIPA – whether it extends beyond EEZ of the coastal state. PIPA is within national jurisdiction.
- Invasive species proliferation and climate change may be synergistic with species lying dormant and waiting for right conditions. Islands are laboratories so this is a worry.
- Invasive species in one area may be endangered in another. For example, Brushed tailed possums. These are hard decisions and conservation is an ethical (political and social) paradigm.
- There is a distinction between invasive and introduced species. Some introduced species are now an important resource or food e.g. trochus.
- There is a need for some clear guidance for distinguishing beneficial and non-beneficial invasive species. Invasive species is an issue on which there has been substantial focus – the Invasive species specialist group criteria are incredibly important.
- Some introduced species, such as tilapia, are almost impossible to control.
- There was some elaboration on capacity development. Capacity development includes skills and trainers, knowledge, research, learning, education.
- Reasons for conservation projects failing are lack of consistent institutional support, and cutting budget. A fundamental area to focus on is institutional support, which is most consistently universally important. In some success stories, political support is led by

politicians e.g. like Kiribati and Palau. There is insufficient political support in some failed projects.

- Social dimensions such as stakeholder support are critical in securing funding and support from donors. Communication is significant in modifying projects to suit stakeholders.

Natural resource management driven by communities

Dr Hugh Govan, Adviser, LMMA Network, provided an overview of lessons from the locally managed marine areas (LMMA) network and the role of the government in Melanesia. Key points included:

- Government per capita expenditure on coastlines in most Pacific Islands States is very low (less than 10% of neighbouring developed states) demonstrating the need for 'cash less management regimes for coastal management.
- Government effectiveness also ranks significantly lower for most Pacific Island States (i.e. poorly) compared to the developed neighbouring states.
- 80 – 98% of land rights in Melanesian and Polynesian States are customary, with relatively empowered communities and weak to extremely weak central governments.
- Community-based approaches are now widely recognized in sectors like resource management, conservation, disaster risk reduction and climate change and adaptation etc.
- The re-emergence of local management in the Pacific from 1990s to present with greater recognition of the need to support local management to meet externally promoted objectives such as marine biological diversity conservation.
- By 2012 there was a network of seven countries networks across Indo-Pacific region aimed at improving community based adaptive management through shared learning, policy advocacy and local capacity and national institutional development. Pacific – Philippines, Palau, PNG, FSM, Solomon Islands, Vanuatu Fiji. Also, globally – Kenya, Tanzania, Comoros, Madagascar, Mozambique.
- Fiji could provide a pilot for sustainable LMMA networking with government. The issue is that the number of community sites varies from a few hundred in some countries to over 6000 in others. Fiji and Samoa are relatively cheaper as pilot countries also because of strong support by NGOs. So far, there is little recognition of the challenge to national scaling up. There are NGO-led and project approaches which are short term
- Sustainable LMMA networking can benefit from:
 - Decentralized approaches
 - e.g. Yaubula Management Support Teams at provincial level in Fiji or GERUSA in Solomon Islands
 - Integrated and inter-sectoral approaches
 - e.g. community based resource management in Solomon Islands (Fisheries, Environment, etc.)
- Government role needs to be more prominent and clear:
 - Government departments are underfunded and under-staffed but the main constraint is they have not determined priority roles or strategies to support

community approaches;

- Agricultural information (a major sector) does not reach 50% of respondents and in only 10% of cases is it through government extension;
 - There is a need to move away from 'preaching' (e.g. conservation) to self-diagnosis and local solutions;
 - Strategic use of media to reach the entire population.
- Community based approaches need to move from the current focus on 'elite' or favored communities towards provision of support to all communities that need it.
 - Research and NGO work should focus on determining the minimum inputs required to achieve the maximum impacts with a view to informing national and provincial service delivery.
 - Prioritize and rationalize: Small island state governments need to focus on integrating and rationalizing service delivery to all in order to achieve affordable and sustainable impacts that maximize the potential of communities
 - The role of NGOs needs to be defined. They were to fund many projects and also serve as intermediaries for governments and communities.

Discussion points:

- Government aid effectiveness or governance is weak compared to community level engagement and ownership.
- More population is rural, therefore empowered communities are the way forward
- There was strong support for integrated marine and land management
- There was some discussion on what makes some communities self-motivated without external influence. From experience and insight, reasons sometimes included leadership driven by the whole community. Leadership was also an issue in some communities. The highest factor was need. Community often needs projects to make a living. There are often beneficial spin offs from projects which not relate directly to project goals.
- Funds to conduct baseline surveys may be a mistake since community having some knowledge base is a valid presumption. It is important not to rely only on community knowledge but improve ability to incorporate additional knowledge.
- The use of mobile phones by government to send important messages is also a good medium of communication in many communities. It is already used as a safety net by disaster management agencies.

World Ocean Assessment

Ms. Gabriele Goettsche-Wanli, Director DOALOS, reflected on the world ocean assessment and provided insight into how the Pacific can participate. A world ocean assessment was needed to provide a global picture of the state of marine environment including socio-economic aspects.

At Rio +10 the World Summit on Sustainable Development (WSSD) made the recommendation to establish by 2004 a regular assessment process, which was endorsed by the United Nations General Assembly. The relevant workshop for the South-West Pacific was held in Brisbane, Australia in February 2013 (Summary of Workshop A/67/885).

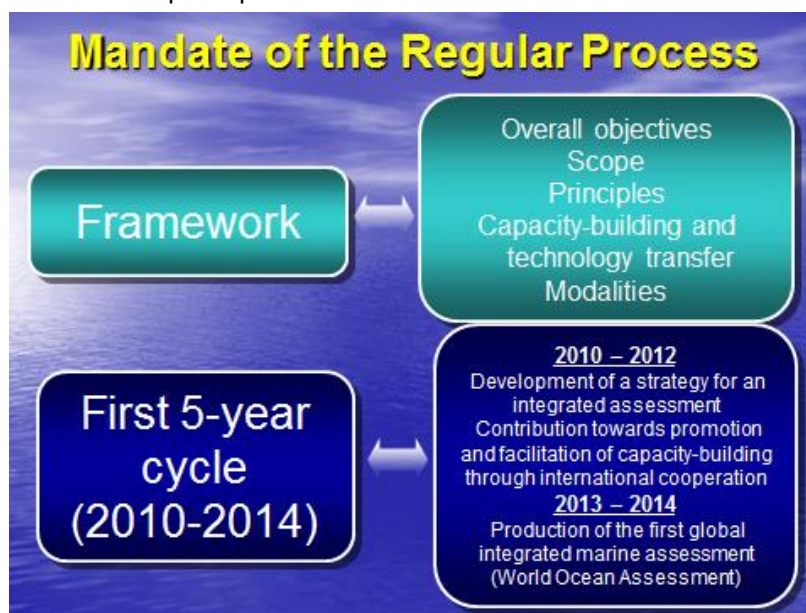


Figure 16. The Regular Process for reviewing state of marine environment.

The objectives of the Regular Process include:

- The establishment of a global mechanism for reviewing the state of the marine environment, including socio-economic aspects, on a continual and systematic basis;
- Support informed decision-making;
- Facilitate the identification of trends;
- Promote and facilitate the full participation of developing countries;
- Ecosystem approaches useful framework for conducting fully integrated assessments.

Capacity building is an integral part of the Regular Process and a voluntary trust fund is available to provide assistance. Funds comprise provisions of assistance to the members of the Group of Experts from developing countries, and scholarships fund to support training programs for developing countries.

Discussion points:

- There is a need for information to link global, national and community strategies/synergies.
- No expert from Pacific SIDS has been nominated in the pool of experts, and nominations have to be made through the States themselves.

Session 5: Media, communication and outreach

Chair: Dr Willy Morrell, PIFS

Discussion on the development of a communication strategy for oceans

Ms. Diane Abad-Vergara presented a proposal for the development of a communication strategy for oceans. Integrated oceans management is challenging and communication via external channels such as media coverage and internal channels, such as forums and newsletters, have significance in promoting coordinated governance.

First, there was a brief discussion on the need for such a strategy. A purpose for the strategy would be to:

- Increase regional understanding of the ocean as a vital resource;
- Greater awareness of strategies to promote sustainable use of marine resources;
- More coordinated governance and effective partnerships on oceans strategies.



Figure 17. Ms. Diana Abad-Vergara, PIFS

Second, the Alumni were invited to provide comments and feedback on the proposed communications strategy.

Discussion points:

- Ensure that any new strategy is based on existing strategies, and will ensue on-the-ground actions;
- Highlight all key coastal and ocean issues;
- UNNF website, linkedin and facebook pages provide additional communication sources.
- There are existing communication mechanisms in sectoral marine and/ocean programs. Ensure strategy has the scope to identify common but differentiated goals of agencies/stakeholders;
- Important to pre-plan how the communication strategy will remain effective and sustainable considering Infrastructure and communication costs and accessibility issues.

Youth involvement: Wantok Moana

Ms. Moana Waqa, Wantok Moana Association, provided an outline of the activities the Student Association of Marine Studies at the University of the South Pacific (USP). Wantok Moana, which refers to 'Tribe of the Ocean', was formed in March 2011 by the group of USP's marine students. The University of the South Pacific is the melting pot of students from across the region. Wantok Moana provides the avenue for regional students to discuss relevant marine and maritime issues of concern.

Its purpose is to increase marine awareness, conservation and management issues amongst its members, which include students, staff and Alumni of the School of Marine Studies. It is a forum enabling members to assist each other academically as well as bridging the usual gap between students and lecturers in terms of understanding of marine issues being taught.



Figure 18. Ms Moana Waqa from Wantok Moana.

Previous and ongoing collaborations of the Wantok Moana include(d) Save Our Seas Foundation, Captain Cook Cruises (Fiji) Ltd, Coral Reef Alliance, Korean Maritime Institute, and post graduate researchers.

The Wantok Moana has been involved in:

- Awareness raising activities in schools and communities.
- Marine survey to characterize the understanding of the role of marine studies and issues among students and practitioners.
- Based on a \$5000 grants from Save Our Souls (SOS) to fund student projects, shark studies included short-term field research projects on sharks eg
 - Shark conservation and awareness for students
 - Legislative review (undergraduate students)
 - Markey surveys in two main islands of Fiji
 - Scientific shark density survey in the Namena Marine Reserve, Bua, Fiji.
- Biannual coral reef surveys which lay a foundation for cruise operators and land owners to create an MPA.
- Organising and mobilising more people to participate in foreshore and beach clean-up events.
- Providing research assistance to post graduate marine researchers to build experience.
- A survey to assess youth perspectives in areas of marine science and conservation. The findings based on 65 respondents are summarised in Table 2. The respondents also indicated that youth can effectively be involved in marine conservation in the future through awareness, active participation, volunteer programs, proactive initiatives, international training, community-based management programs, capacity building among leaders involved in conservation, being led by example, and incentives. Overall, the survey identified the importance of marine science and conservation with regard to capacity building, education, awareness and management.

Table 2. Responses of a survey on youth perspectives in areas of marine science and conservation.

Theme	Agree		Disagree	
	Percentage	Reason	Percentage	Reason
Science plays an important role in conservation	100%	<ul style="list-style-type: none"> ▪ Understanding and awareness of marine species and the marine environment ▪ Provides information for ocean & resource management ▪ Provides information for conservation policies 	0	-
Young people are active in marine conservation	62%	<ul style="list-style-type: none"> ▪ Public awareness is greater on these issues ▪ Awareness from main stream media ▪ Involvement of youth in community-based management (e.g. FLMMA) ▪ Existence of environmental youth groups engaged in these issues 	35% (3% did not provide a response)	<ul style="list-style-type: none"> ▪ Lack of awareness programs resulting in lack of knowledge ▪ No dissemination of traditional knowledge from elders ▪ Lack of practicality ▪ Westernization influencing lives of young youths ▪ Lack of regional capacity building
States, international institutions and NGOs are doing enough to build your knowledge, skills and provide opportunities in marine conservation	66%	<ul style="list-style-type: none"> ▪ Encourage awareness and participation ▪ Provision of community projects ▪ Provision of financial aid for projects and research ▪ Capacity building ▪ Provision of educational opportunities ▪ Provision of technical support ▪ Being physically present 	29% (5% did not provide a response or responded as 'unsure')	<ul style="list-style-type: none"> ▪ Not enough awareness ▪ Not enough capacity building ▪ Lack of provision of attachment/internship opportunities ▪ Hardly any student participation ▪ Lack of provision of marine-related scholarships ▪ Little provision opportunities for marine needed for non-science students

Session 6: Alumni country status reports

Chair: Dr Francois Bailet DOALOS, Ms Anama Solofa, Regional Representative – Pacific, UNNF Alumni

The country reports were based on in-country ocean governance regimes and particular capacity-building or other issues from the expertise and perspectives of the alumni.

Solomon Islands

Ms Fiona Indu and Mr Rudolf Dorah provided the Solomon Islands report.

- Ocean governance is a component of National Development Strategy (NDS). NDS aims to ' Build Better lives for all Solomon Islanders by focusing on poverty alleviation and achievement of MDGs, providing access to health care and education'
- % MPAs in territorial waters is an indicator of MDGs.
- There are nine provinces of widely differing size and population as well as a capital city administration. Each province and the capital administration are elected through area elections.
- There is very little devolution of power, little capacity and limited resourcing of these territorial governance bodies. A matrix of customary authority, church based institutions and locale-specific community bodies forms the main context for local level governance, the exact nature and makeup of which varies considerably across the territory of the country.
- Governance in Solomon Islands is distributed between formal state institutions and informal but influential traditional and community institutions which reflect the makeup of national society.

The presentation was particularly focused on tuna fisheries, and maritime boundary status. The Tuna fishery of Solomon Islands consists of the commercial (domestic and foreign fleets) sector and the artisanal and subsistence sector:

- In 2012 a total of 434 fishing vessels (including US Treaty and FSMA) were licensed to fish in Solomon Islands EEZ.
- The total export, mainly from the tuna products for 2011 was over SBD222 million, which is 7% of the total export earnings for that year.
- The government revenue for access fees and VDS fees, which collected by MFMR for 2011, is about SBD110 million.
- SIG emphasis as one of its objectives to ensure maximum economic benefits derived from the tuna fisheries to the people of Solomon Islands, at the same time ensure the health of the tuna stocks are maintain at a sustainable level.
- The Ministry of Fisheries and Marine Resources (MFMR) responsible for management.
 - Development aspirations: Increase the amount of fish landed and processed in Solomon Islands – Tuna Investment Strategy platform that seeks encouraging investors to invest in onshore processing plants.¹⁰

¹⁰ In 2012, MFMR started implementing the Government tuna investment policy, by encouraging investors to invest in onshore processing. Three new plants were constructed last year, which one was opened and started exporting fresh bigeye tuna for sashimi markets in Japan.

Current maritime boundary status:

- Shared maritime boundary with PNG, Fiji, Vanuatu
- A number of domestic agencies involved and SOPAC.
- Legislative drivers – Delimitation Marine Waters Act and UNCLOS.
- Concluded its Maritime Boundary Delimitation Treaty with PNG – others remain outstanding. In terms of ongoing work:
- Solomon Islands claim over four regions of ECS:
 - Ontong Java Plateau – joint submission with PNG and Federated States of Micronesia.
 - Charlotte Banks – joint submission with Fiji
 - North Fiji Basin – joint submission with Fiji and Vanuatu
 - Rennel Ridge – possible joint submission with Australia
 - Progressing work to finalize gazette of baselines for submission to UNCLOS
 - Joint Cooperation MOU's between governments of Fiji and Vanuatu on ECS
 - Next round of negotiations on Maritime Delimitation Boundary is with Vanuatu.

Key challenges in ocean governance in Solomon Islands:

- Lack of capacity:
 - Understaffing
 - Lack technical expertise
 - Ministry of Fisheries Management & development focus needs to move towards maximizing economic returns
- High turnover of officials
 - Unpredictable shifting of Politically appointed Heads of Ministries and heads of departments which often disrupts program implementations
- Inter-agency coordination (National level)
 - There is an urgent need to move away from the current sectorial management approach towards a more integrated approach.

The Soltuna Company Ltd expanded the Noro plant to introduce a new shift to process albacore for loining and export to US markets.

The Government plans to develop the other 3 sites (Suafa Bay on Malaita, and Tenaru and Doma on Guadalcanal) for processing plants are still the priority projects.



Figure 19. Rudolf Dorak and Fiona Indu.

Discussion points:

- A sustainable development platform is important for government. Conservation and management needs to be integrated into this framework. Currently, government is mainly focussed on tuna fisheries. Capability that needs improving is qualified economists working in government's natural resources.
- There was interest in identifying source of funding when making joint submissions on maritime boundary. In the case of Solomon Islands and PNG, PNG funded the whole joint submission. SOPAC provides technical assistance on data.
- There could be merit in exploring domestic business opportunities based around tuna. Also, consider utilising bycatch and tuna ashore to make better food available locally.
- An area less explored is flexibility of nations to explore other resources, especially where one resource may not remain viable (economically, ecologically, etc).

Tonga

Ms Ana Taholo presented on ocean governance in Tonga focused on fisheries. Tonga participates in the typical fisheries management instruments formed in compliance with UNCLOS and related fisheries instruments. In the Pacific, these include South Pacific Forum Fisheries Agency Convention of 1979 (FFA Convention), and the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPO). Tonga's challenges with regard to the WCPF Convention and its implementing WCPF Commission were the focus of the presentation.



Figure 20. Ana Taholo, Pacific Alumni (2011/12)

The objective of Convention¹¹ is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the Western and Central Pacific Ocean (WCPO) in accordance with the UNCLOS and the United Nations Fish Stock Agreement'.

There are 25 Members, seven Participating Territories, and 11 Cooperating Non-members to this convention. It is the key convention managing tuna and bycatch fisheries in the WCPO.¹²

Some of the key challenges in implementing this convention in Tonga are:

- Lack of capacity and resources in terms of number of staff available, lack of expertise/skills, finance, technical assistance and assets. It is also challenging to find suitable candidates in the country to fill key roles.
- Participation at meeting generated via the convention and other meetings together exacerbates staffing issues, but participation is important effectively advance Tonga's interest. A whole of government approach could also provide better representation at regional and international forums.
- Country contribution to WCPFC is gradually increasing over the years to fund the work of the Commission, but not all work is utilized directly by the state (e.g. Tonga does not operate a fleet in the high seas).
- Historically SIDS have struggled to meet reporting and data obligations. Streamlined process could be more suitable for small administrations.

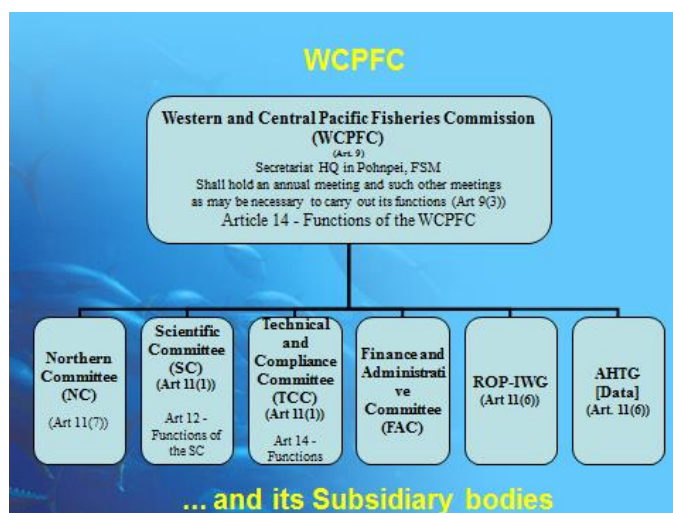


Figure 21. The WCPF Commission and its subsidiary bodies.

¹¹ For more information, visit: <<http://www.wcpfc.int/>>

¹² Tonga's primary fisheries resources include offshore resources (tuna and deepwater snapper), inshore resources (aquarium, bechdemer, seaweed, subsistence & small scale fisheries), and aquaculture.

Samoa

Ms Anama Solofa presented on oceans issues in Samoa. Issues cut across themes from earlier presentations. There is no national ocean policy in Samoa and Figure 23 summarizes the ocean governance responsibilities and agencies involved.

Samoa effectively redefined its protected area network following collaborative work between its environmental agency, Conservation International (CI) and several international conservation organizations that reassessed Samoa's entire biodiversity based on conservation planning criteria of vulnerability and irreplaceability in 2009. The result is a network of eight terrestrial and seven marine Key Biodiversity Areas (KBAs) that incorporates the essential components of the existing parks and reserves network.



Figure 22. Anama Solofa, Pacific Alumni

The marine KBAs cover approximately 173km² or 23% of Samoa's total inshore reef area. Currently, six of the eight terrestrial KBAs and 3 of the 7 marine KBAs have been completely or partially established as conservation areas by the Government of Samoa or by local villages.

Aspects of ocean governance implemented at the national level in Samoa									
Key:		Ministry of Natural Resources and Environment (MNRE)		Ministry of Agriculture and Fisheries (MAF)		Ministry of Works, Transport and Infrastructure (MWTI)		Ministry of Foreign Affairs and Trade (MFAT)	
Living Resources									
Living Resources	Fisheries Management								
	Fisheries Development								
	Aquaculture								
Non-living Resources									
Non-living Resources	Maritime Boundary Delimitation								
	Energy								
	Natural Resources								
Environment Protection									
Environment Protection	Ecosystem Protection								
	Biosecurity								
Science and Technology									
Science and Technology	Ocean Processes								
Shipping									
Shipping	Maritime Transport								
	Marine Pollution								
	Maritime Safety and Security								

Figure 23. Ocean governance responsibilities in Samoa.

Key challenges include:

- High staff turnover, limited personal and capacity (financial, technical) e.g. to meet obligations under international treaties, such as WCPF Convention;
- Operational budget limitations and increased dependency on external funding which are seldom focussed on long term development;
- Fragmented or sectoral approaches and the need for coordination between agencies and sectors;
- Limited resources and limited awareness.

Fiji

Dr Joytishna Jit presented Fiji's country report. There is no national policy for ocean governance. Key national policies relevant to ocean governance are Fiji's National Sustainable Development Strategy and National Environmental Strategy (old). Ocean issues are not adequately addressed in national overarching policies. Reasons for this include deficiencies in natural resource data, lack of an integrated focus on habitats, and community-based resource management conflicts with existing law despite major enforcement issues.

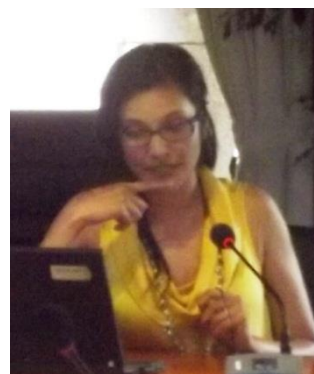


Figure 24. Joytishna Jit, Pacific Alumni 2012/13.

A closer look at international law also shows the existence of many general obligations but few specific provisions (obligation or support) directly related to problematic areas of national oceans governance. Fiji is a party to many of the common multilateral environmental agreements (MEAs), except the Convention on the Conservation of Migratory Species of Wild Animals, CMS (Figure 26).

National deficiencies sometimes mirror resource management limitations in international (and regional) law e.g. inshore species, turtles, sharks etc. In some of the other cases, deficiencies also reflect ineffective implementation of existing obligations domestically.

There is a lack of legal and/or policy tools to bridge gaps between top down and bottom up approaches:

- National policies should aim to address oceans issues such as through guiding principles;
- Feasible and enforceable laws designed at national level, reflecting policies that states are likely to comply with;
- Lack of baseline data for environmental impact assessments, EIAs, or precautionary approach. In such cases, design data less management approaches, and build research capacity and funding in this area.

At the regional levels, political will is a reflection of insufficient participation of the appropriate decision-makers, lack of commitment demonstrated through resource allocation, sometime lack of common understanding of problem and agreement to act, and the lack of commonly perceived potentially effective solutions.

Overall, key priorities based on capacity needed to:

- Integrate of oceans issues and opportunities into national policies
- Increase knowledge of effective policy processes (such as EIAs in oceans context)
- Focus heavily on implementation in the areas of oceans, especially capacity issues (skills):
 - Economics/business in ALL resource areas;
 - Special case for shark and tuna-like bycatch;
 - Seagrass and pharmaceuticals industry;
 - Value proposition of ecological services go hand in hand with economic feasibility of proposed development activities;
 - Social scientists;
 - Policy analysts.

Parties in the Pacific						
	UNCLOS	FA	CMS	CITES	CRD	Total
<i>Developed States:</i>						
Australia	Y	Y	Y	Y	Y	5
New Zealand	Y	Y	Y	Y	Y	5
<i>Developing States:</i>						
Cook Islands	Y	Y	Y		Y	4
Federated States of Micronesia	Y	Y		Y		3
Fiji	Y	Y			Y	3
Kiribati	Y	Y			Y	3
Marshall Islands	Y	Y			Y	3
Nauru	Y	Y			Y	3
Niue	Y	Y			Y	3
Palau	Y	Y	Y	Y	Y	5
Papua New Guinea	Y	Y		Y	Y	4
Samoa	Y	Y	Y	Y	Y	5
Solomon Islands	Y	Y		Y	Y	4
Tonga	Y	Y			Y	3
Tuvalu	Y	Y			Y	3
Vanuatu	Y	Y		Y	Y	4
Total	16	16	5	8	15	

Figure 25. Parties to UNCLOS and MEAs in the Pacific.

Papua New Guinea

Mr Joseph Pyawan provided an overview of ocean governance in Papua New Guinea. There is no national oceans policy in PNG. Different agencies are responsible. This presentation focused on maritime safety and pollution control by the National Maritime Safety Authority (NMSA).

Responsibilities of this agency include:

- Maritime safety by ensuring that navigational aids are functioning and effective, navigational charts are high quality and updated, and that vessels meet safety standards required under national (and international) law.
- Maritime pollution control.

Key challenges included:

- Costs associated with maintaining navigation aids and charts;
- Operating an open registry;
- Debris washing ashore from ships navigating through straits in PNG waters;
- Deep-sea bed mining (explained earlier);
- Weaknesses in laws and regulation eg
 - Dumping of Wastes at Sea Act 1979 and Prevention of Pollution at Sea Act 1979 are poorly drafted, outdated and inconsistent with MARPOL and other International Maritime Organization environment treaties.
 - PNG's legal system is based on British model, there is therefore a dualistic approach to implementation on international laws ie national laws need to be enacted to give effect to the international laws domestically.



Figure 26. Joseph Pyawan, Pacific Alumni

- The Pacific Islands Maritime Lawyers Association (PIMLA) is formed by Pacific lawyers to assist Pacific States improve maritime legislation and regulation.

Kiribati

Mr Tearinaki Tanielu and Ms Ruria Iteraera presented on ocean governance in Kiribati.

There is no national oceans policy in Kiribati. Oceans issues are included in the Kiribati Development Plan 2012-2014. Key ocean-related activities involve maritime boundaries, extension of continental shelf, ocean governance legislation and deep sea minerals.

Highlights:

- Active participant in appealing for global leadership on the management of High Seas.
- Declared large-scale MPAs in the first such initiative of the Pacific, with strong support of the President Anote Tong. The Phoenix Island Protected Area (PIPA) covers 408,250 sq km (11% of Kiribati EEZ).
- Capacity building in relation to maritime boundary delimitation needs to focus on knowledge and skills, and legislation.
- A preliminary submission for ECS has been submitted to the UN Commission on the Limits of Continental Shelf (CLCS).
- Exploring potential of deep sea minerals to optimise the benefit of the large size and extent of the Kiribati EEZ, and to alleviate economic vulnerability due to its limited land resource base. Capacity development to focus on:
 - knowledge gaps and inexperience in the protection of seabed environment given that this environment is complex and not yet fully understood. Expertise needed to conduct and communicate effectively the risk assessments, baseline data etc.
 - the design and implementation of environment management frameworks and regulations for the protection seabed, pelagic and benthic environments, protection and integrity of biodiversity and ecosystems, and meet obligations related to environmental best practices and precautionary approach. Current legislation fails to fully/specifically address issue in regard to exploration and exploitation of mineral resources.
 - Examples of best practices already adopted included deep sea mineral workshops and community consultations. Community concerns with regard to sea bed mining are:
 - Environmental impacts
 - Fish and marine life
 - Waste disposal management



Figure 27. Tearinaki Tanielu and Ruria Iteraera.

- Institutional development in areas such as marine geology, oceanography, environment impact assessments, marine environmental science and mining engineering
 - Participation of locals in observer schemes
 - Delimitation of fishing rights boundary from exploratory/exploitation areas
- Overall, there is a need to:
 - Improve coordination between responsible ministries dealing with oceans.
 - Improve human resource development plans, particularly the consultative process
 - Improve incentives within the workforce to retain capacity/skills
 - Harmonise the fragmented legislation that apply to the oceans sector.

Discussion points:

- For small island states with large oceanic regions, further development and economic progress lies with the oceans.
- There is growing realization of the importance of ocean and coastal issues to be included in national development plans and strategies.
- Kiribati has widely spread out island groups with disjointed EEZs, which are large. Fisheries are the mainstay of the state.
- Exploring deep-sea bed mining to increase the limited resource base of the state.
- Key challenges include:
 - Capacity to assess environmental and social effects of deep seabed mining in the context of Kiribati;
 - Technical and financial resources for boundary delimitation;
 - Capability for MCS in the large (disjointed) EEZ.

End of Country Reports:

The Director of DOALOS commended the high quality of country reports and noted the talented and highly skilled calibre of the Pacific Alumni. There was particular approbation for the open, supportive and concerted interactions among the participants. There were many problems highlighted through presentations that were symptomatic of the region.

Session 7: Indigenous and community based management

The community field visit consisted of a site visit to an indigenous community-led conservation and management project to Moon Reef, Tailevu, Fiji Islands. Moon Reef is the only known Fijian site visited regularly by the same pod of about 50 spinner dolphins. The field trip began with an introduction on the reef management and conservation by a community member Mr Jay Bau, a USP Masters student, Ms. Samanunu Simpson, and it was supported by on-site researchers from Global Vision International (GVI). A boat trip to Moon Reef was then organized, during which the group saw a large pod of dolphins.

During the visit, the group learned that the villagers from neighbouring village, in collaboration with non-governmental organisations and volunteer researchers (local and overseas), have agreed and declared the Moon Reef a community-based marine protected area for mammals (dolphins). Eco-tourism style villas, host services and trips to the reef provide a form of alternative livelihood to community members.

This site visit reinforced the ongoing discussions and debates about merging bottom-up and top down approaches in marine management policy and supporting legislation.

The site also was an example of the importance of ridge to reef management projects which integrate the management of oceans and coasts into broader environmental models.



Figure 30. Introductory presentation about Moon Reef conservation by Mr Jay Bau.



Figure 28. Ridge-reef conservation. Moon reef is located near horizon.



Figure 29. Moon Reef, Dawasamu District, Tailevu.

3. The Way Forward

Session 8: Pacific regional development and cooperation in ocean affairs

Chair: Anama Solofa, Regional Representative – Pacific, UNNF Alumni

This session comprised presentations from additional resources invited to the Alumni meeting, and comprised information on Pacific regional development and cooperation.

Marine Studies at the University of the South Pacific

Mr. Kiniviliame Keteca provided an outline of the instrumental role of The University of the South Pacific in enhancing the sustainable development of coasts and oceans in the Pacific region. This presentation was prepared in collaboration with Prof Joeli Veitayaki, Head of Marine Studies, USP.

An important aspect of this presentation was that it tied up the need for a significantly greater focus on coastal development and innovation, as also identified by the Alumni country presentations.



Figure 31. Working with communities to deliver tailored solutions for sustainable development.

Key points included:

- USP is instrumental because it is a premier tertiary and research institution in the region, and it is owned by 12 States. USP is often the “solution provider” of the Pacific in global issues.
- Useful areas of expertise that can be tapped into include:
 - Promote, develop and transfer sustainable technologies appropriate for region;
 - Conduct research and training activities at all levels;
 - Promote care of environment as a strategy to save money and alleviate poverty –Pacific Centre for Environment and Sustainable Development;
 - Identify and develop new resources;
 - Support regional Strategies and Action Plans for sustainable development;
 - Formulate and implement appropriate national and local policies, plans and practices;
 - Educate people and promote good environmental practices.
- USP’s School of Marine Studies is a multidisciplinary program offering science and social science qualifications emphasising biodiversity, ecology, oceanography, marine geology and geomorphology, marine pollution, post-harvest processing, aquaculture, ocean law and policy, economics, community management and development. New additions and emphasis are placed on: maritime transport, shipping and ports, tuna fisheries, planning, economics, statistics.

- USP has delivered on-the-ground solutions to sustainable development challenges through tailored projects:
 - Low technological food processing methods encouraging local food production (Figure 32); smokeless stoves; composting toilets, rehabilitation of mangroves in Gau (allow accumulation of sand and support fisheries); coastal rehabilitation in Naovuka; surface or submerged fish aggregating devices; and, self-help community initiatives like:
 - Nawaikama Nursing Station, village shops, tourism, mat weaving, dalo farms, sandalwood planting, restoring Giant Clams in marine managed areas, seaweed farming etc.

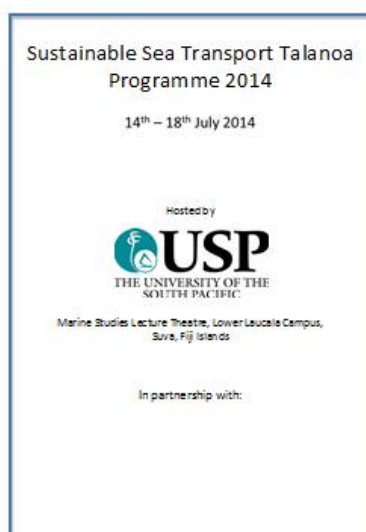
The way forward suggested for the Alumni and others working in oceans development was to:

- Promote environment management as part of development
- Engage with member countries and communities
- Emphasize the needs of SIDS in Pacific context
- Identify new resources for changing world
- Implement regulations to manage resources
- Seek collaboration and partnership
- Involve all stakeholders and strengthen institutions
- Secure more government support

Sustainable Sea Transport Programme

Ms Amelia Bola provided an insight into the Sustainable Sea-Transport Research Programme of the University of the South Pacific. This presentation was timely for the announcement of an event to generate further discussion on the topic at USP in July 2014.

USP is leading the development of its long term programme of research, training and practical trials on sustainable sea transport with the collaboration of key stakeholders and partners from within the region and internationally.



There is a need for safe, reliable and affordable sea transportation at the domestic scale in the region. Lack of adequate transportation is an effective barrier for significant sustainable development in a geographically homogenous manner. Fossil fuel powered boats currently used are becoming increasingly unaffordable and unsustainable. 'Fiji, like much of the Pacific Islands, is trapped in a cycle of replacing old ships with old ships'. Princess Ashika was

Figure 32. A Sustainable Sea Transport session scheduled on 14-18 July 2014.

the most recent example of the tragic fate of older ships in the region.

Events of fishermen or villagers lost at sea, often due to mechanical breakdowns or insufficient fuel, are a regular occurrence in the region. Ferries getting stranded, beached, waiting on engine parts or unable to pass surveys are also frequent.

Innovative solutions may include motors and hull design using technologies such as solar, wind, biofuels and bio-gases. The challenge is that Pacific Islands would only be able to afford them. Exceptions include Greenheart, and village scale passenger/cargo catamarans. Together, the Fijian, Tongan and Japanese experience in ship building provide valuable lessons that could guide progress in sustainable sea transportation:

- Examples include retrofitting of sails on *Na Mataisau* in Fiji and on a range of tankers in Japan, and a comprehensive needs assessment and vessel designs for Tonga. Designs and analysis hold similar relevance in today's high price environment.
- UN agencies played a critical role in getting this research underway.

Discussion points:

- Safe, affordable and reliable transportation is critical for the region to fully implement sustainable development principles.
- SPC currently runs a regional maritime program, which has facilitated discussions on sustainable sea transportation, in particular the widespread issue of substandard shipping in the Pacific. This might be an opportunity to collaborate.

Session 9: The UNNF Alumni network's contribution to Pacific regional development and cooperation in ocean affairs

The Alumni reviewed their own communications strategies and opportunities in the Pacific context. Central to the Alumni discussion on communication was the introduction of the new UNNF Alumni website www.unfalumni.org and associated tutorials.



Figure 33. Home page of the UNNF Programme website at www.unfalumni.org

Session 10: Roundtable discussions: The way forward – Networking and outreach

Chair: Dr Joytishna Jit, Deputy Representative – Global, UNNF Alumni

The Pacific Alumni unanimously agreed that their group was a gateway for sharing information and expertise, and helped raise the profile of oceans management from their viewpoint, as custodians of the Pacific Ocean. In particular:

- i. The Alumni aimed to increase partnership with Pacific regional institutions and Leaders to foster and encourage collaboration on issues of common interest.
- ii. The Alumni is a platform through which the Alumni, DOALOS and other institutional partners share their work, important developments in ocean and coastal management, and views on current oceans issues, with the general public. This included sharing news on websites and networking sites, as relevant. News sharing also occurred through the Pacific Alumni meeting.
- iii. The Pacific Alumni focused on Pacific-based networking and sharing of knowledge and mentoring especially with Wantok Moana. Wantok Moana is the marine student association of the University of the South Pacific and contains a pool of highly motivated undergraduate and postgraduate students with research projects rooted in grassroots in-country coast and oceans research. The UNNF Alumni and Wantok Moana have pledged to continue networking and engagement to improve capacity development opportunities in-country and regionally.
- iv. There were renewed commitments from the Alumni group towards further developing the Pacific Alumni.
 - a. Improved communications through Skype sessions and emails
 - b. Contribution to articles for the UNNF program website
 - c. The Pacific Alumni considered that a newsletter would permit a different style of original writing that was also important in complementing the website.
- v. The SIDS Conference to be held in Samoa, March 2014: The Pacific Alumni group is well-placed to continue collaborating directly or indirectly through relevant networks, as appropriate, on oceans and coastal matters.

The Pacific Alumni are working together to achieve sustainable and healthy oceans in Pacific Islands States. The Alumni acknowledged with appreciation the achievements and ongoing efforts of regional institutions and national governments in all oceans issues to date. The Pacific Alumni are interested in furthering discussions and networking to promote existing initiatives in the region. a further purpose of the group is to raise the profile of oceans at all levels of government and beyond.

4. Closing Remarks

Closing comments from participants

Dr. Willy Morrell, PIFS, expressed his gratitude to DOALOS and the Pacific Alumni for the opportunity to meet together to focus specifically on the oceans aspect of sustainable development. He underlined that there is a need for a greater profile for oceans in sustainable development and the work of the Pacific Alumni was anticipated to strengthen intellectual discussions on oceans matters in the region. In particular, there is much value in generating discussions in a frank manner, such as was experienced during the meeting.



Figure 34. Dr Willy Morrell from the PIFS provided continued support during the meeting.

All participants provided positive feedback on the Pacific Alumni Meeting. Prof Rosemary Rayfuse expressed her continued support to the Alumni. Ms Kate Brown commended on the availability of highly capable resource people provided by the Alumni, many who hold key positions in national and regional agencies.

Closing comments from DOALOS and Deputy Global Alumni Representative

Nine Pacific Islanders have participated in the prestigious United Nations Nippon Foundation of Japan Fellowship program, and this subsequent Pacific Alumni meeting provided an opportunity to continue to network and collaborate on oceans issues in the region in a formal capacity. Each Alumni representative was hosted as part of a developing state capacity building program within the DOALOS, United Nations, and addressed a key aspect of ocean management. Diverse topics had been addressed in their thesis, including key issues such as BBNJs, maritime boundary delimitation, fisheries treaty negotiations, shark conservation and management, and regional oceans governance.

The Pacific Alumni meeting was symbolic of the ongoing capacity development occurring in the region through the UNNF Fellowship Programme, including its integration back into the region through the support given to this functional and highly enthusiastic group of oceans experts. An achievement on its own was to have the meeting hosted in the Pacific region for the first time, allowing the Pacific Alumni to participate in valuable discussions on ocean governance and networking in the region.

A shared passion for the oceans brought the Pacific Alumni together through the training and capacity building opportunity offered by the competitive United Nations – the Nippon Foundation of Japan Fellowship programme. The meeting demonstrated that the Pacific Alumni are highly qualified professionals from different areas of expertise working in ocean and coastal management.

The conclusion of the UNNF Pacific Alumni meeting saw a renewed commitment of nine the Pacific counterparts of the Global Alumni Network (90 members) to bridge capacity development gaps in the region. The meeting hosted by the PIFS was possible thanks to the support by The Nippon Foundation of Japan and DOALOS.



Figure 35. Dr Francois Bailet and Ms Valentina Germani, DOALOS.

APPENDIX A

Meeting Agenda (original)

13th October 2013- Arrival Day

Time	Topic	Presenter (s)	Notes
Day 1: Monday, 14th October 2013			
09:00 – 09:45	OPENING CEREMONY Introductions by Mr. William Morrell Opening Remarks by: <ul style="list-style-type: none"> a. H.E. Mr Tuiloma Neroni Slade, Pacific Islands Forum Secretariat (PIFS) b. Ms. Gabriele Goettsche-Wanli, Director, Division for Ocean Affairs and the Law of the Sea, United Nations (DOALOS) c. Ms. Anama Solofa, Regional Alumni Representative Overview of Meeting Agenda Mr. Francois Baillet, DOALOS Ms Valentina Germani, DOALOS		
09:45 – 10:15	Break		
10:15 – 13:00	Session 1: Background - Current State of Ocean Affairs in the Pacific Islands Region <i>Pacific Plan Review</i> - Ms. Seini O'Conner, PIFS <i>Regional Ocean Initiatives - Setting an ocean policy within the Pacific Islands region in the post Rio+20 context</i> - Mr. Willy Morrell, PIFS <i>Post 2015 Agenda / SDGs Development and 2014 SIDS Conference</i> - Mr. Iosefa Maiava, ESCAP FIJI - Mr. Resina Katafono, PIFS <i>Strategic Partnerships and Coordination</i>	Chair: Deputy SECRETARY GENERAL Mr Feleti Teo, Deputy Secretary General PIFS	

	<p>- Mr. Alfred Schuster, PIFS</p> <p><i>Micronesia Challenge - Leadership for Micronesia and the World</i></p> <p>- Ms. Kate Brown, GLISPA</p>		
13:00 – 14:00	Lunch		
14:00 – 15:00	<p>Session 2: Delimitation and Delineation of Maritime Boundaries and Management of Non-living Resources</p> <p><i>Overview of Maritime Spaces and Current Status Extended Continental Shelf,</i> - Mr. Francois Bilet, DOALOS</p> <p><i>Deep Sea Minerals Project</i></p> <p>- Ms. Annie Kwan Sing-Siose, (SPC)</p>	Chair: Prof. Craig Forrest	
15:00 – 15:30	Break		
15:30 – 16:30	<i>Roundtable discussions: Vanishing States, Vanishing Maritime Jurisdiction?</i>	Lecture and Discussion: Prof. Rosemary Rafuse	
17:00	Welcome Reception (Hosted by the PIFS)		
Day 2: Tuesday, 15th October 2013			
09:00 – 10:15	<p>Session 3: Climate Change and Fisheries</p> <p><i>Climate Change - Global developments</i></p> <p>- Ms. Valentina Germani, DOALOS</p> <p><i>Climate change - focus on food</i></p>	Chair: Prof. Rosemary Rafuse	

	<p><i>security impacts for the Pacific region</i></p> <ul style="list-style-type: none"> - Mr. Gibson Susumu, Food Security Officer and - Mr. Dean Solofa, Climate Change Officer, SPC <p><i>Vulnerability of tropical Pacific fisheries and aquaculture to Climate Change</i></p> <ul style="list-style-type: none"> - Mr. Johann Bell, SPC 		
10:15 – 10:30	Break		
10:30 – 12:00	<p>Session 4: Marine biodiversity</p> <p><i>International Legal Regime and Current Trends at the Global Level</i></p> <ul style="list-style-type: none"> - Ms. Valentina Germani, DOALOS <p><i>Biodiversity Conservation in the Pacific</i></p> <ul style="list-style-type: none"> - Mr. Sefanaia Nawadra, SPREP 	Chair: DOALOS	
12:00 – 13:30	Lunch		
13:30 – 15:00	<p>Session 4: Biodiversity (continued)</p> <p><i>Regional Cooperation on Biodiversity Conservation - Conservation Partnerships in the Pacific</i></p> <ul style="list-style-type: none"> - Mr. Alan Saunders, IUCN <p><i>Natural Resource Management driven by communities</i></p> <p>Mr. Hugh Govan, Adviser, LMMA Network</p>	Chair: DOALOS	
15:00 – 15:30	Break		
15:30 – 16:00	<p><i>World Ocean Assessment</i></p> <ul style="list-style-type: none"> - Gabriele Goettsche-Wanli, Director DOALOS <p><i>Maritime Boundary Project</i></p>	Chair: DOALOS	

16:00 – 17:00	- Mr. Arthur Webb, Secretariat of the Pacific Community (SPC)		
Day 3: Wednesday, 16th October 2013			
09:00 – 10:30	Session 5: Media, communication and outreach <i>Discussion on the development of a communication strategy for oceans</i> - Ms. Diane Abad-Vergara <i>Youth involvement</i> - Ms. Moana Waqa, Wantok Moana Association	Chair: PIFS	
10:30 – 10:45	Break		
10:45 – 12:00	Session 6: Alumni Country Status Reports on Above Themes Solomon Ms. Fiona Indu and, Mr. Rudolph Dorah	Co-Chairs: DOALOS and Regional Alumni Representative	
12:00 – 13:30	Lunch		
13:30 – 15:00	Session 6: Alumni Country Status Reports on Above Themes (continued) Samoa Ms. Anama Solofa Tonga Ms. Ana Taholo Fiji Ms. Joytishna.Jit Papua New Guinea Mr. Joseph Pywan and Robert Sine	Co-Chairs: DOALOS and Regional Alumni Representative	
15:00 – 15:30	Break		

15:30 – 17:00	Session 6: Alumni Country Status Reports on Above Themes (<i>continued</i>) Kiribati Ms. Ruria Itiraera Mr. Tearinaki Tanielu Roundtable Discussions: The Capacity Gap	Co-Chairs: DOALOS and Regional Alumni Representative Chair: DOALOS	
Day 4: Thursday, 17th October 2013			
09:00 – 12:00	Session 7: Indigenous and Community Based Management		Site visit and discussion with community
12:00 – 13:00	Lunch		
13:00 – 17:00	Session 7: Indigenous and Community Based Management (Continued)		

Day 5: Friday, 18 th October 2013			
09:00 – 10:30	Session 8: Pacific Regional Development and Cooperation in Ocean Affairs <i>National and Regional Policy and Implementation Linkages</i> <i>Post 2015 Development Agenda (SDGs)</i>	Co-Chairs: DOALOS and Regional Alumni Representative Alumni	
10:30 – 11:00	Break		
11:00 – 12:30	Session 9: The UNNF Alumni Network's Contribution to Pacific Regional Development and Cooperation in Ocean Affairs <i>The Future we want in the Pacific for Oceans</i>	Co-Chairs: DOALOS and Global Alumni Representative Alumni	
12:30 – 14:00	Lunch		
14:00 – 17:00	Session 10: Roundtable Discussions: The Way Forward – Networking and Outreach <i>Regional Alumni Organization</i> <i>Global Alumni Organization</i> <i>Report of the Meeting</i>	Co-Chairs: DOALOS and Global Alumni Representative	
EVENING	Closing Ceremony - Dinner	PIFS Global Alumni Representative United Nations	

APPENDIX B.

The Participants

Participant	Organisation
Pacific Island Forum Secretariat	Secretary General, H.E. Tuiloma Neroni Slade (Pacific Oceans Commissioner)
	Feleti Teo
	William Morrell
	Seini O'Conner
	Alfred Schuster
	Diane Abad-Vergara
Division for Ocean Affairs and the Law of the Sea	Gabriele Goettsche-Wanli (Director)
	Francois Bailet
	Valentina Germani
ESCAP	Iosefa Maiava
GLISPA	Kate Brown
SPC	Gibson Susumu
	Johann Bell
SPC/SOPAC	Arthur Webb
SPREP	Sefanaia Nawadra
IUCN	Alan Saunders
LMMA Network	Hugh Govan
Wantok Moana	Moana Waqa
	Amelia Bola
	Alifereti Koroilavesau
University of New South Wales	Prof Rosemary Rayfuse (Law)
University of Queensland	Prof Craig Forrest (Maritime Law)
University of the South Pacific	Prof Joeli Veitayaki
	Kiniviliame Keteca

Pacific Alumni, next page.

Pacific Alumni

Name	Position
Mr. Rudolf Henry DORAH	Consultant *Formerly: Assistant Secretary, Regional Economic Cooperation Branch
Ms. Ruria ITERAERA	Legal Advisor, Ministry of Fisheries and Marine Resources Development
Mr. Anama SOLOFA	Assistant Manager, WCPFC *Formerly Senior Fisheries Officer, Ministry of Fisheries
Mr. Robert SINE	Senior Programme Officer, Department of Environment and Conservation
Mr. Joseph PYAWAN	Legal Officer, National Maritime Safety Authority
Ms. Joytisha JIT	Research Associate, University of South Australia *Formerly Researcher, SPC
Ms. Fiona INDU	Foreign Affairs Officer, Ministry of Foreign Affairs
Mr. Tearinaki	UNNF Program fellow *Formerly Minerals Officer, Ministry of Fisheries and Marine Resources Development

APPENDIX C.

Statement for the Secretary General H.E. Mr Tuiloma Neroni Slade Secretary General of the Pacific Islands Forum, Pacific Oceanscape Commissioner

Address by H.E. Mr Tuiloma Neroni Slade and Pacific Oceanscape Commissioner at United Nations-Nippon Foundation of Japan, Pacific Islands States Alumni Meeting

Acknowledgements:

Ms Gabriele Goettsche-Wanli (Director Division for the Ocean Affairs and the Law of the Sea (UNDOALOS); Mr Iosefa Maiava (UNESCAP); Guest Speaker Professor Rosemary Rafuse (University of New South Wales); Guest Speaker Professor Craig Forrest (University of Queensland);

Mr Francois Bilet (Coordinator of the UN-Nippon Foundation Fellowship Programme – Office of Legal Affairs UNDOALOS); Other representatives from DOALOS including Valentina Germani;

Ms Kate Brown (GLISPA, Washington); Alan Saunders (IUCN, Suva); Hugh Govan (LMMA);

Representatives from our sister CROP Agencies (Including Mr Sefanaia Nawadra (SPREP); Prof Joeli Veitayaki (USP); and Mr Arthur Webb, Mr Johann Bell, Ms Annie Kwan Sing-Siose and Mr Dean Solofa (SPC);

My own colleagues from the PIFS including Deputy Secretary General Mr Feleti Teo;

Last and certainly not least, the nine Alumni from the UN-Nippon Foundation Fellowship Programme.

Good morning and a very warm welcome to you all for what I understand to be the first meeting of the Pacific Alumni of the UN-Nippon Foundation Fellowship programme. It is very pleasing for the Forum Secretariat to be hosting the nine (9) Alumni from our region, and now rightly the torch-bearers for the Fellowship programme. It is a particular pleasure to welcome Director Ms Gabriele Goettsche-Wanli and her team from the DOALOS office in New York. Without the partnership and close support of your office, Madame Director, we would not be here today celebrating the success of this very important programme. I know you and others have travelled from afar to be here, so I sincerely hope that you will have an enjoyable and productive week of discussions.

Your meeting agenda has attracted the attention and attendance of distinguished friends and visitors from abroad and from the region, and I acknowledge the presence of representatives from the United Nations system, from the Pacific regional organisations, academia, and from NGOs. Most warmly I welcome you all. As many of you will know, DOALOS as the Division for the Ocean Affairs and the Law of the Sea runs the UN-Nippon Fellowship Programme as the capacity development mechanism of the United Nations. The Programme aims to foster and network a new generation of ocean leaders and managers through the strategic development of skills and understanding across a wide range of issues, including ocean science for governance.

Knowing that, I want to stress that this workshop represents an important opportunity for Pacific countries to continue to build and to tap into the expanding pool of home-grown oceans expertise that we now find in our region. It is important that we foster and effectively utilize this expertise as we work to tackle the challenge of effectively managing and conserving our Pacific part of the ocean. Over the past few years we have seen unprecedented recognition of the important role that the ocean and seas play as key determinants for development. I believe that small island developing States (SIDS) can claim some significant credit for this recognition, for

they have tirelessly and effectively championed the ocean issue in all manner of international fora. Perhaps the most substantive 'recognition' in recent times can be found in the Rio+20 outcomes document (The Future We Want) which contains 20 distinct paragraphs on the role of the ocean and seas in sustainable development. These paragraphs form the global acknowledgment, not sufficiently proclaimed, of the all-encompassing vitality and importance of the ocean, not only to SIDS and coastal states but to all nations across the planet. It is the ocean which exerts critical forcing influence on the global climate system and biodiversity and the economic factors impacting on world food security, transportation, tourism and so much else.

In that larger context, the ocean requires global governance and understanding to ensure its long-term health and wellbeing and prosperity for all. In these remarks, I would also reflect on the fact that at their very first meeting in 1971 Pacific Forum Leaders laid emphasis on the unique dependence of Pacific countries on marine resources which, in their view, merited special consideration in the recognition of territorial claims. Leaders were also concerned that Pacific countries be properly informed of the ongoing work at that time of the UN Seabed Committee and the development of what is today the UN Convention on the Law of the Sea (UNCLOS). With those early directives from Forum Leaders, Pacific delegations became directly involved in the negotiations of international norms and standards pertaining to the ocean and fisheries. For many Pacific countries it was their first real experience of key international negotiations. It was also a first opportunity for the Pacific countries to contribute to the development of key and substantive international law principles. Over the years Forum Leaders were to return to voice similar concerns and reconfirm these earlier positions on the ocean and fisheries resources and, more critically, to call for effective management and conservation measures.

While there are rights to resources, there are also concomitant obligations and responsibilities for precautionary approaches and to conserve – obligations that must play out as we look to intensify fishing practices and explore the ocean depths for precious mineral deposits. At their meeting in the Cook Islands last year and again this year in the Marshall Islands, Leaders reaffirmed once more the importance of maintaining regional solidarity for the effective management and conservation of highly migratory fish stocks for the benefit of the region. So, interestingly, over the span of 40 years, we see the region transitioning from territorial claims and the assertion of rights to focusing on modern day economic realities and the demands for food and security for our Pacific communities, now and for the future.

As we in this region prepare for next year's International Conference on SIDS to be held in Samoa, and as we more broadly map out our future approach to ocean management, I believe it imperative that we keep in mind the errors of the past, and so that we can learn from the experience. We cannot allow the tragedy which has blighted the ocean-commons – of illegal and unsustainable exploitation of resources, of pollution and degradation and all other manner of abuse and mismanagement – to persist and go unchecked. For all of these issues there are many common sense solutions: not necessarily about finding the answers, but rather about using the answers we have found – and this requires collective global and regional action, practical collaboration and drawing on existing knowledge and best practices. With the ocean now rightly sharing the developmental 'lime light' we must capitalize on this focus and turn the rhetoric of the numerous global agreements and programmes into tangible outcomes that make a difference for the international system as a whole and for our Pacific communities. In the face of climate change, growing populations and intensifying globalisation this will be no mean feat, but it is surely where we must identify and look to the next generation of ocean leaders that are being forged by programmes such as the UN-Nippon Foundation, one that draws us together this week

With these words, let me thank you all for your kind attention and wish the meeting well in its deliberations.