



**Convention on  
Biological Diversity**

Distr.  
GENERAL

UNEP/CBD/WS-PA/PAC/2/2  
18 June 2012

ORIGINAL: ENGLISH

**SUBREGIONAL WORKSHOP FOR THE PACIFIC ON  
CAPACITY-BUILDING FOR THE IMPLEMENTATION  
OF THE PROGRAMME OF WORK ON PROTECTED  
AREAS UNDER THE CONVENTION ON BIOLOGICAL  
DIVERSITY**

Nadi, Fiji, 3-7 October 2011

**REPORT OF THE SUBREGIONAL WORKSHOP FOR THE PACIFIC ON  
CAPACITY-BUILDING FOR THE IMPLEMENTATION OF THE PROGRAMME OF WORK  
ON PROTECTED AREAS UNDER THE CONVENTION ON BIOLOGICAL DIVERSITY**

**INTRODUCTION**

1. Both the Parties to the Convention on Biological Diversity and the international protected area community have hailed the programme of work on protected areas (PoWPA)<sup>1</sup> as the most implemented of the programmes of the Convention on Biological Diversity and a successful initiative. The initiation of regional capacity-building workshops, the designation of PoWPA focal points, the creation of a Global Environment Facility (GEF) early-action granting window for PoWPA implementation, programming a major portion of the biodiversity portfolio of the fifth replenishment period of the GEF (GEF 5) for PoWPA, and the establishment of the LifeWeb Initiative are all important ingredients of the success of PoWPA.

2. In decision X/2, the Conference of the Parties to the Convention on Biological Diversity adopted the Strategic Plan for Biodiversity 2011-2020, in which twenty headline Aichi Biodiversity Targets for 2015 or 2020 are organized under five strategic goals. In the same decision, the Conference of the Parties urged Parties to develop national and regional targets, using the Strategic Plan as a flexible framework. Under target 11, the Parties agreed that:

“By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.”

3. As the elements of target 11 incorporate the tenets of the programme of work on protected areas, its further effective implementation holds the key for achieving target 11. Implementation of PoWPA also helps toward achieving other targets 1, 2, 5, 10, 12, 14, 15 and 18.

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<sup>1</sup> Decision VII/28, annex.

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4. In paragraph 12 of decision IX/18 on protected areas, the Conference of the Parties encouraged Parties, other Governments, relevant intergovernmental organizations, and indigenous and local communities to enhance activities and resources, towards organizing and forming regional technical support networks to assist countries in implementing PoWPA. In paragraph 3 of decision X/31, the Conference of the Parties invited Parties to foster the formation of regional initiatives and formulate regional action plans, through regional technical support networks, to coordinate funding, technical support, exchange of experiences and capacity-building for implementing PoWPA. In paragraph 7 of the same decision, the Conference of the Parties requested the Executive Secretary to continue to hold regional and subregional capacity-building workshops, with special attention to element 2 of PoWPA, and other identified priorities in collaboration with relevant partners.

5. Accordingly, the Executive Secretary, with the generous financial assistance of the European Union and the Government of the Netherlands, and in collaboration with the Government of Fiji, the Secretariat of the Pacific Regional Environment Programme (SPREP) and the PoWPA Friends Consortium organized a workshop for the Pacific region from 3 to 7 October 2012 in Nadi, Fiji.

6. The objectives of the workshop were to:

(a) Provide an overview and conduct assessments of requirements for capacity-building, tools and approaches needed for the implementation of PoWPA and decision X/31 on protected areas, and to achieve target 11 and other targets of the Strategic Plan for Biodiversity 2011-2020;

(b) Strengthen the skills and knowledge of protected area functionaries and others who implement PoWPA, through an exchange of experiences, sharing of tools and available resources, and capacity-building in (i) protected areas and climate change adaptation and mitigation, including integration of protected areas into wider landscapes and seascapes; (ii) developing or revising national action plans for the implementation of PoWPA; (iii) marine protected areas; (iv) governance; (v) valuing protected area costs and benefits including their ecosystem services;

(c) Developing/updating action plans for implementing PoWPA; and

(d) Creating awareness about funding opportunities available under the GEF 5 biodiversity portfolio, including funding for enabling activities for revising the national biodiversity strategies and action plans (NBSAPs).

7. The workshop was attended by 13 government-nominated experts from the following countries in the Pacific: the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. It was also attended by two representatives of indigenous and local communities, one representative each from the European Union, and from New Zealand.

8. The workshop was also attended by one representative each from the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme, Rare Conservation, Conservation International, the Wildlife Conservation Society, and the World Wide Fund for Nature South Pacific Programme.

9. The Secretariat of the Pacific Regional Environment Programme (SPREP), the International Union for Conservation of Nature (IUCN)-Oceania, the IUCN World Commission on Protected Areas (IUCN-WCPA), and the United Nations Development Programme provided resource persons.

10. The list of participants is presented in annex I below.

#### **ITEM 1. OPENING OF THE MEETING AND ORGANIZATIONAL MATTERS**

11. As a formal opening was planned for Monday evening, the workshop was opened informally at 8.30 a.m. on Monday, 3 October 2011, jointly with the regional workshop for the Pacific on updating national biodiversity strategies and action plans (NBSAPs). Participants introduced themselves and took part in an ice-breaker activity.

12. Representatives of the Secretariat of the Convention on Biological Diversity welcomed the participants. Ms. Sakhile Koketso of the Secretariat presented an overview of the NBSAP workshop aims and process. Mr. Atsuhiko Yoshinaka of the Secretariat presented the outcomes of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity including the Strategic Plan for Biodiversity, the United Nations Decade on Biological Diversity, the strategy for resource mobilization, and relevant decisions of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity. Mr. Sarat Gidda of the Secretariat presented the aims and processes of the PoWPA workshop and decision X/31 on protected areas and other relevant decisions of the Conference of the Parties.

13. The presentations under this item can be found in PDF format at <http://www.cbd.int/doc/?meeting=WSCBPA-PAC-02>.

14. In a separate session during the morning of Monday, 3 October 2011, the PoWPA workshop unanimously elected Ms. Elizabeth Erasito, Director of the Fiji National Trust, as Chair and adopted the provisional and annotated agendas prepared by the Executive Secretary (UNEP/CBD/WS-PA/PAC/2/1 and UNEP/CBD/WS-PA/PAC/2/1/Add.1), including the organization of work.

15. The formal opening of both workshops included a celebration of the United Nations Decade on Biodiversity (UNDB) and was held on Monday, 3 October in the evening. It was hosted by the Government of Fiji, SPREP and the Secretariat of the Convention on Biological Diversity. The celebration was chaired by Ms. Taina Tagicakibau, Permanent Secretary for Local Government, Housing, Urban Development and Environment of Fiji.

16. On behalf of the President of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity, H.E. Mr. Yutaka Yoshizawa, Ambassador of Japan to Fiji, reiterated Japan's support to developing country Parties to the Convention, especially in implementing the Strategic Plan for Biodiversity 2011-2020. He also emphasized the importance of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

17. Mr. Atsuhiko Yoshinaka, of the Secretariat of the Convention on Biological Diversity, delivered a statement on behalf of Mr. Ahmed Djoghlaif, Executive Secretary of the Convention, saying that the Secretariat was committed to continuous efforts to assist Parties to ensure the timely delivery of the Strategic Plan for Biodiversity 2011-2020 at the national and regional levels.

18. Mr. Stuart Chape, Programme Manager of SPREP, Mr. Bernard O'Callaghan, Regional Programme Coordinator of the IUCN Regional Office for Oceania, and Mr. Joeli Cawaki, Commissioner of the Western Division of Fiji, delivered statements, all emphasizing the importance of biodiversity and public awareness-raising efforts through the United Nations Decade on Biodiversity.

**ITEM 2. OVERVIEW AND NEEDS ASSESSMENT OF CURRENT CAPACITY-BUILDING TOOLS AND APPROACHES TO IMPLEMENT THE PROGRAMME OF WORK ON PROTECTED AREAS AND DECISIONS ON PROTECTED AREAS ADOPTED AT THE TENTH MEETING OF THE CONFERENCE OF THE PARTIES**

19. During the morning of Monday, 3 October 2011, Ms. Easter Galuvao of the Secretariat of the Pacific Regional Environment Programme (SPREP) presented on the European Union-funded project for capacity-building related to multilateral environmental agreements (MEAs) in Africa, Caribbean and Pacific (ACP) countries (EU-ACP MEA) which was being implemented by SPREP in the Pacific region. She highlighted a suite of capacity-building activities being delivered under the EU-ACP MEA project that were relevant to the Convention on Biological Diversity. These included (i) multilateral environmental agreements (MEA) negotiations training being delivered at the national and regional levels; (ii) preparatory meetings for the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity and the tenth meeting of the Conference of the Parties to the United Nations

Convention to Combat Desertification (UNCCD); (iii) support to the One Pacific Voice approach under the Pacific Voyage campaign which was successfully delivered at the Convention on Biological Diversity's tenth meeting of the Conference of the Parties and would be replicated for other MEAs; (iv) training on integrated environmental assessment (IEA) which had been implemented as part of national mainstreaming policy processes in a number of Pacific Island Countries; and (v) SPREP's ongoing support to country NBSAPs.

20. On the morning of Friday, 7 October, Ms. Lisa Janishevski of the Secretariat presented the PoWPA webpage, e-learning modules and tools that were included on the USB key given to all participants.

### **ITEM 3. STRENGTHENING CAPACITIES**

21. Sub-items of this item include (a) adapting and mitigating climate change, including integration of protected areas into wider land- and seascapes; (b) developing national action plans for the implementation of the programme of work on protected areas; (c) marine protected areas; (d) governance; (e) valuation of the costs and benefits of protected areas, including ecosystem services; and (f) funding opportunities under GEF 5.

22. Under each of these sub-items a resource person or Secretariat staff introduced the topic and exercise by reviewing the critical steps and associated tools. Topics were also introduced prior to the workshop in the form of online e-learning modules on the goals of PoWPA and an online course room on protected areas and climate change. To work on interactive exercises, the participants organized themselves into break-out groups consisting of country representatives and resource persons who served as facilitators. A rapporteur from each group made a presentation on the outcome of each interactive session to the plenary.

23. In the break-out groups, participants were given key framing questions to guide their discussions on the state of each activity under consideration, for example, opportunities and challenges and needs. Discussions in the break-out groups allowed the participants to enhance their knowledge and exchange their views and practical experiences. The break-out group sessions were also an opportunity for each country to consider these issues in the creation of PoWPA national action plans that contribute toward creation or revision of their NBSAPs.

24. The presentations under these sub-items can be found in PDF format at <http://www.cbd.int/doc/?meeting=WSCBPA-PAC-02>.

#### ***A. Adapting and mitigating climate change, including integration of protected areas into wider land- and seascapes***

25. On the morning of Tuesday, 4 October, Ms. Jamison Ervin presented an overview of how site-level management of protected areas contributed to climate change adaptation and mitigation, thereby promoting resilience and directly contributing toward achieving Aichi Biodiversity Targets 2, 11 and 15.

26. Thereafter, participants worked on an exercise on methods to build resilience at site level. Participants split into groups according to interest (site-level planning, sectoral mainstreaming, or spatial integration), and in these groups identified the 1-3 most important strategies for building resilience. The results of the group discussion are presented in annex II.

27. On the morning of Wednesday, 5 October, Ms. Jamison Ervin presented climate change adaptation and resilience through protected area integration and mainstreaming. Ms. Ervin explained how climate resilience could be incorporated through spatial integration, such as the ridge-to-reef approach, transboundary areas, regional network and improved gap assessment. She also discussed climate change adaptation through protected area sectoral integration, such as mainstreaming, protected areas valuation, and integration into national adaptation programmes of action (NAPAs).

28. Ms. Ervin then facilitated an exercise on system-level climate change resilience and adaptation through protected areas. Participants were asked (i) to what extent were climate issues included in their national biodiversity and protected area threat assessments? and (ii) what were some practical steps they could take to incorporate climate issues into national threat assessments? The result of this work is presented in annex III.

***B. Developing national action plans for implementation of the programme of work on protected areas***

29. On the morning of Thursday, 6 October, Mr. Sarat Gidda presented on the relevance of the programme of work on protected areas to many of the targets of the Strategic Plan for Biodiversity, in particular defining the qualitative and quantitative elements of Aichi Biodiversity Target 11. He also presented the status of terrestrial and marine areas in the Pacific region.

30. Participants engaged in an interactive exercise to identify their national targets corresponding to the qualitative and quantitative aspects of Target 11. The results of this exercise are presented in annex IV.

31. Participants worked on a long-term action plan or updated existing plans for the implementation of PoWPA, incorporating requirements emanating from decision X/31 and target 11, suggesting timelines, indicative budget, responsibilities, etc., which should later be formally submitted to the Secretariat. Draft action plans and in some cases also reporting frameworks were received from the Cook Islands, Fiji, Kiribati, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The worksheets that participants used to develop draft action plans are presented in annex V.

***C. Marine protected areas***

32. Although the terrestrial protected areas coverage exceeds 12 per cent of the world's terrestrial surface, marine protected areas (MPAs) cover only 6.3 per cent of the world's territorial waters, growing at a mean rate of 4.6 per cent per annum. Taking this into account, the Conference of the Parties, in paragraph 22 of decision X/31, emphasized the need to enhance efforts towards achieving the 2012 marine protected areas target. In 2006, at the eighth meeting of the Conference of the Parties, the states of Micronesia announced the Micronesia Challenge, under which they pledged to protect 30 per cent of their near-shore waters by 2020. The e-learning module on marine protected areas provides a step-by-step approach for establishing, managing, good governance and other aspects of MPAs. The summary of results from this exercise is presented in annex VI.

***D. Governance***

33. On the afternoon of Thursday, 6 October, Mr. Hugh Govan, WCPA-Marine Regional Coordinator for the North and South Pacific, Melanesia subregion, IUCN Regional Office for Oceania, presented the topic of governance of protected areas, including ensuring participation of indigenous and local communities and other stakeholders, initiating measures for equity in benefit-sharing, respecting rights and recognizing responsibilities of indigenous and local communities and promoting a broad set of governance types and providing examples of community based approach to natural resource management (CBNRM). Mr. Govan also presented the challenges involved in promoting diversification of protected areas governance, and the re-emergence of local management in the Pacific, including community based adaptive management.

34. Participants then engaged in an exercise on governance in three subregional groups. Each group was asked to identify, by subregion, 2-3 key protected area approaches developed for the national context and 2-3 key challenges for establishing and supporting marine and terrestrial protected areas; then they were asked to identify key needs and solutions, for (a) protected areas, and (b) resource management in general.

35. The results of this group work are presented in annex VII.

***E. Valuation of the costs and benefits of protected areas, including ecosystem services***

36. On the morning of Tuesday, 4 October, Mr. Andrew Seidl, Head of the IUCN Global Economics and Environment Programme, presented on the valuation of biodiversity and associated ecosystems, focusing on Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020. He reviewed key conceptual issues and approaches to valuation, with an emphasis on economic valuation, including the Total Economic Value (TEV) approach. He provided a brief overview of economic valuation tools, including their strengths and limitations, and concluded by presenting a pragmatic stepwise approach to valuation.

37. Mr. Seidl then explained the exercise on implementing Aichi Biodiversity Target 2. Participants identified biodiversity and ecosystem services in their countries and how trade-offs between these services might be addressed. The results of this exercise are provided in annex VIII.

38. Under this sub-item, Ms. Ervin made a presentation outlining the benefits of valuing biodiversity in order to reduce impacts on biodiversity thereby promoting a virtuous cycle of development and protection. Examples of undervaluation resulting in the loss of critical ecosystem services were presented and the role of protected areas was emphasized as a societal investment, with a step-by-step approach to valuation as the tool to understand the true value of this investment. The steps to assess protected areas values were described as follows: (i) clearly define the situation, audience and decision; (ii) choose which benefits and services are included; (iii) choose valuation method for each benefit; (iv) develop measurable indicators; (v) analyze the economic and social value of benefits; and (vi) communicate the results to key decision makers.

39. Ms. Ervin then facilitated an exercise on protected area valuation. Participants identified a situation in their country where protected area valuation was needed and the possible steps involved. The results of this exercise are provided in annex IX.

***F. Funding opportunities under GEF 5***

40. On the afternoon of Friday, 6 October, Mr. Seidl presented a global perspective on resource mobilization. He covered Aichi Biodiversity Target 20, presenting means, activities, and possible indicators.

41. Following this, Mr. Gidda made a presentation on GEF funding under the System for Transparent Allocation of Resources (STAR) and enabling activities. He explained how funding had been provided according to eligibility criteria for the biodiversity focal area under GEF. Mr. Gidda discussed the application of GEF funds for the next steps to be taken in the updating process of the NBSAPs and he explained that funds from enabling activities could be provided for the revision of NBSAPs in line with the new Strategic Plan 2011-2020.

42. Mr. Seidl then facilitated an exercise on resource mobilization. Participants worked in groups to identify funding gaps against their tentative targets as well as potential ways and means to find additional resources. Participants reported that targets could not be achieved with the existing resources but there was a need for a sustainable finance plan where beneficiaries could contribute. Participants identified funding opportunities, including the GEF fund, innovative financial mechanisms, capacity-building initiatives, trust funds and public revenue.

**ITEM 4. OTHER MATTERS**

43. On Friday afternoon, Mr. Stephen Peedell of the European Commission presented the upcoming BIOPAMA (Biodiversity and Protected Areas Management) project and the work of the Joint Research Centre.

**ITEM 5. ADOPTION OF THE REPORT AND CLOSURE OF THE MEETING**

44. Closing remarks were delivered by Ms. Tania Tawaka of Department of Environment, Fiji, who thanked the Government of Japan, SPREP, the Secretariat of the Convention on Biological Diversity and participants for their active participation and for the ideas shared throughout the past five days. On behalf of SPREP, Mr. Stuart Chape thanked the representatives of the Secretariat for their partnership with SPREP and thanked the Government of Fiji for hosting this capacity-building workshop in Nadi. On behalf of participants, Ms. Tania Temeta of the Cook Islands expressed deep gratitude for the Secretariat of the Convention on Biological Diversity, SPREP, resource persons and the Government of Fiji. Finally, Mr. Atsuhiko Yoshinaka gave a closing statement, and thanked the Government of Fiji for hosting the workshop, SPREP and all countries for their contribution to the success of the workshop and wished for successful implementation of Nagoya outcomes.

45. The workshop was closed at 5 p.m. on Friday, 7 October 2011.

*Annex I*

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*Annex II***SITE-LEVEL CLIMATE CHANGE ADAPTATION AND RESILIENCE MEASURES****Group 1 – Vanuatu, Solomon Islands, Fiji, Palau, Federated States of Micronesia (FSM)****Building climate resilience through protected area site-level management**

Vanuatu – Forestry Management Plan with communities; CEPA (communication, education and public awareness) activities

Solomon Islands – Food Security context with vulnerable communities (atolls); CEPA activities

Fiji – Assisting communities identifying resilient and vulnerable areas; tailoring management strategies to these factors; revising existing and developing new management plans incorporating climate change resiliency & adaptation; major challenge is the translation barrier

Palau – Nation plans are fragmented/uncoordinated, need to be nationally/agencies resilient; with protected area development this is taken into account with community consultation and their local interventions; witnessing impacts but difficulties of technical translation

FSM – Climate change second national communication's vulnerable & adaptive assessment spurring sectoral integration strategies in response to climate change adaptation and mitigation

**Threat assessment**

Fiji – Sovi Basin (600 meters above sea level); convert into a dam which would change the whole microclimate, which can be exacerbated by climate change causing species to shift to different habitats; nutrition loads in the marine areas from land-based activities and frequencies of floods exacerbating system

FSM –

Solomon Islands –

Vanuatu – Watershed clearings (human-induced) and climate change can exacerbate by increasing sediment loads; impacting forestry and marine area; invasive species (e.g., merremia) can flourish under climate change conditions

USA/Madagascar – vulnerability and adaptive assessment; shifting of agriculture which would contribute to forest change and coastal degradation which is magnified by climate change

**Restoration/capacity**

Fiji – Mangrove intervention (planting) but indiscriminate planting; restoration of riparian areas are priority in terms of water purification, food security and flood mitigation; holistic planning; better inter-sectoral planning mechanism; build up on the integrated coastal resource management committee needs more resources to assist local communities

Samoa – Restoration work of eradication of top 5 invasive species in 1 protected area; plan to replicate process; public participation to enhance their adaptive capacity, e.g., coastal infrastructure management plan; unwillingness to change

Solomon Islands – Similar to Fiji's riparian issues and coral planting in protected areas; management plan for climate change resilience and adaptation with awareness raising activities but challenge is the information transfer in the rural areas; after activities no progress

USA/Madagascar – Restoration of marine and terrestrial areas allowing for corridors with respect vulnerable patches

FSM – Depends on sub-national conditions where watershed restoration is a priority for the most western state and the 3 eastern states are in line with restoration of forest ecosystems which have a downstream effect to adjacent marine sanctuaries with sediment overload impacting the coral ecosystem in turn the coastal fisheries sector; e.g., Pacific Islands Managed and Protected Areas Community

### **Participation / management effectiveness / research and monitoring**

FSM –

Fiji – Vulnerable/squatter communities are those who live in the floodplain areas being impacted by being displaced, vulnerable to water-borne disease

Samoa – in line with the coastal infrastructure management planning process examples; local coastal communities

Solomon Islands – water conservation area, an aquifer source to Honiara (capital), is a priority area which needs more research and monitoring; more vulnerable to climate change impacts

USA/Madagascar –

EC/Italy – supporting global/regional research and monitoring issues; challenge is downscaling the data which is a regional priority

SPREP – healthy systems more resilient even with limited/no data; resilient communities tend be more from the subsistence sector

### **Group 2 – Cook Islands, Palau, Solomon Islands**

#### **Capacity weakness**

1. Cook Islands: Getting biodiversity and climate change to work together.

Palau:

- Mitigation is more politically sexy and sellable
- Coordination to best utilize available capacity and data and avoid duplication of efforts
- Data clearing-house (e.g., GIS Polaris)
- Better collaboration

Solomon Islands:

Lack of political will, has come legislation (protected areas act) that is not being enforced

2. Conservation consortium (Palau). TNC has been supplying technical capacity. C.A.P. Micronesia challenge tool. Prioritize threats, helps to target available capacity.

#### **Participation and benefits**

1. Cook Islands, Solomon Islands, Palau: less populated islands (more pressure to translocate due to climate change)

- Women (more reliant on natural resources and water collection etc.)

2. Practitioners/farmers (traditional knowledge)

- Crop agencies

3. Two levels

A: Local net office

B: CSIRO/NOAA modelling

**Management effectiveness** (didn't address this question)

### **Monitoring and research**

Should be subject to broader NBSAP process, follow through in isolation

-Appropriate scales of climate change prediction and vulnerable areas.

-Base upon "focal conservation targets"

-Coordinate national climate change efforts

Research needs – impact of climate change on spp, religious and cultural explanations for change – e.g., from Solomon Islands, uninhabited island shrinking attributed to breaking of a taboo.

### **Climate change adaptation in management plans**

Cook Islands: not yet – explicitly

-Many protected areas under traditional management; however, they do focus on ecosystem sustainability and ecosystem health so does include greater resilience.

Solomon Islands: marine MPA mainly

Cook Islands: also more focus on marine MPAs terrestrial more challenging due to land tenure.

FSM has some terrestrial protected areas, more marine

Food is major motivator: so Cook Islands example of protected area.

FSM: not explicitly adaptation in management plans.

Minimal terrestrial protected areas in Solomon Islands and Cook Islands.

Solomon Islands thought to remove east Reno Island from world heritage list due to logging activity

Establish areas, write plans

### **Summary of protected areas**

Solomon Islands - no terr – few marine

Cook Islands - few terr – more marine\FSM – few terr – marine

Palau – terr – marine

### **Threats with climate change**

Threats exacerbated

1. \*Eutrophication (Cook Islands) in lagoons, agr, inappropriate septic tanks, increasing temperature may exacerbate
  - \*-Drought and fire (Cook Islands)
    - Impacted threatened bird species
  - \*-Increased rain (Palau, FSM)
    - Increased invasive virus and species
    - Increased sediment/nutrient delivery to reef areas
    - Fragmentation of forests (Cook Islands) as people migrate inland from the coast.

### **Group 3 – Tonga, Fiji, New Zealand, Papua New Guinea**

Tonga – just est management plan for MMAs and incl climate change; also action plan has climate change resilience – adaptation and disaster risk management identifies MPAs as part of resilience. climate change policy

Fiji

Some protected areas have management plans, some aspects of climate change are included. Protected area policy also has some aspect of climate change currently dev. Have protected area management plans for ALL, which will be included. climate change policy

NZ – is included in national guidance for CMSs have ID'd areas of significance.

CI and SPREP have produced a document & toolkit, incl poster resources. TNC has produced a planning guide.

PNG

Office of climate change leads. National criteria dev for protected area system – CARR approach – resilience. ID high cons priority areas. 10% for CBD and 10% for climate change - country dev strategy trying to incorporate this.

#### **Threats assessment**

Sea-level rise – affects freshwater, causes loss of land, salt water inundation. Species migration and distribution, changes in invasive alien species situation affecting reefs if more rainfall.

Sea temp – coral bleaching

Oceanic currents if they change can affect the tuna.

Acidification – threaten the food chain

\*Regime – coastal currents change affects migration routes, food chain, change in spp distribution & ranges. Food security, invasive alien species.

Rainfall – droughts and floods

Mangroves impacted by sea level rise

-Provide resilience, some can withstand

Changing currents - regime shift

Salt inundation in low lying areas

Resource – climate wizard, precipitation and temperature rise predictions

Protected area restoration

#### **Capacity-building**

Fiji – Building resilience project with WWF MOU 2-year agreement. PAC mapping project of two deltas (big islands). Give info on existing protected areas. Focus on connectivity issues, ensure not impacted by downstream development. Includes data collected and incorp into project. Fiji capacity to work with NGOs.

Restoration project on mangroves – resilience to climate change.

CI – Reforestation of grasslands with native and exotics for carbon project (REDD plus project) and also local harvest.

Tonga – Water restoration project due to saltwater intrusion – altering course of waterways and desalination. Mangrove restoration.

Micronesia – Communities with mangrove planting in areas where cut down. For climate change and coastal sedimentation.

Nauru – Rehab corporation for mining land comprehensive plan. Not sure climate change such a focus. Mining makes env progress, e.g., env bill stopped by mining.

Mangrove restoration imp for Fiji and Tonga

Forest for Nauru

Wetlands in NZ

### **Stakeholder participation**

1. Everyone will be affected  
People in low lying areas, people who depend on primary resources for their livelihoods, coastal dwellers, coastal land owners.
2. SPREP: traditional knowledge. Holders and storytellers? People with long history.  
Government officials & NGOs with databases, commercial and other farmers. / work with the land in the env. / universities/research/ institutes. Local communities/ people on the ground.
3. Those operating in the env.  
Those whose livelihoods depend on the env's being affected, see #2 example.
4. Building capacity at local level so can detect climate change impacts. Build relationships with those listed in 2&3.

### **Assessing management effectiveness**

1. Very very very
2. Depends on particular purpose, e.g., area of land in protection, % of coast with healthy mangrove forest, connectivity/corridors.
3. Taking a holistic approach, understanding external drivers.

### **Emerging priorities**

1. Ensuring good quality data baseline studies. Finding out what it was like in the past. Invasive species monitoring – presence/ranges.
2. NZ  
Universities / research institutes / United Nations agencies/ regional partners/ bilateral collaboration with neighbouring countries.

Annex III

**SYSTEM-LEVEL CLIMATE RESILIENCE AND ADAPTATION**

| Spatial integration  |  | Sectoral Integration   |   |
|--|--|--|---|
| <p><b><u>Ridge to Reef Approach</u></b></p> <p>The Ridge to Reef Approach is reported in Samoa, Cook Islands, Fiji, Solomon Islands, and Kiribati. This approach might be especially helpful in strengthening climate resilience (e.g., watershed and reef protection).</p>            | <p><b><u>Trans boundary Marine PAs</u></b></p> <p>Exist within and outside the countries. Many opportunities increase trans boundary collaboration between countries such as Tonga corridor, Tri-Nation Agreements of wetlands.</p> <p>These areas are pathways for migratory species especially tuna, whales.</p>   | <p><b><u>Incorporate Climate into PA valuation studies</u></b></p> <p>For most countries, climate change is not specifically considered in the existing protected area valuations studies or national resource inventory.</p>  | <p><b><u>Integrate and mainstream PAs into sectoral policies</u></b></p> <p>The sectors that have the greatest impact on protected areas are forestry, agriculture, fisheries, mining, energy, tourism, health, and urbanisation. Some examples were provided by participants such as tourist user or green fees as opportunities for sectoral mainstreaming and integration.</p> |
| <p><b><u>Regional MPA Networks</u></b></p> <p>MPAs networks mostly exist at national levels and in some cases designed for climate resilience. The protected areas network buffers human communities from impacts of climate change, for example, through providing food security.</p> | <p><b><u>Climate-Ready Gap Assessment</u></b></p> <p>Gap assessments incorporate issues related to climate change resilience and adaptation. For example, keeping coral reefs and mangroves ecosystems intact.</p> <p>Further actions could be done such as incorporating most vulnerable ecosystems, environmental impact assessment (EIA) and developing corridors focusing on climate sensitive habitats.</p> | <p><b><u>Integrate PAs into NAPAs</u></b></p> <p>In some countries the NAPAs include protected areas and an ecosystem based approach. The GEF allocation for climate change will be used for strengthening some practical steps such as existing marine protected areas and media advocacy programmes.</p> | <p><b><u>Include climate threats in PA and biodiversity assessment</u></b></p> <p>Some practical steps could be taken to incorporate climate issues into national threat assessments such as the assessment of ecosystem services vulnerable to climate change and community based adaptation.</p>  |

*Annex IV*

**SETTING NATIONAL TARGETS FOR REACHING AICHI BIODIVERSITY TARGET 11**

| Country             | Terrestrial and marine targets, %  | Representativeness and connectivity   | Effective management   | Governance  | Sustainable finance  | Sectoral integration   |
|---------------------|--|---|--|---|--|--|
| <b>Cook Islands</b> | 2% of marine reef and lagoon areas and 3% of terrestrial areas to be protected by 2020 | Gap analysis under way  | By 2015, all islands have at least one effectively managed area                              | All governance types including community based land owning tribes, island council management types etc. to be recognized by 2015  |  |  |
| <b>Fiji</b>         | 20% terrestrial and 30% near shore   | Gap analysis completed. 20% of endemic plant localities to be protected by 2020; 100% endemic marine and estuarine fish localities have some form of management by 2020, Higher representation targets for sensitive habitats: lowland forests 60% managed and 40% protected; upland rainforests 100% protected; 100% remaining pandans, coastal strand, mud flats important for wades, ref channels known to support SPAGES, highest quality feeding grounds for turtles and 40% small island vegetation | By 2020, all PAs have management plans consistent with new PA legislation                    | By 2020 Fiji has defined categories of PAs and governance types to be recognized under new PA legislation. By 2015 there will be clear mechanisms to provide for legal recognition of multiple types of PAs and legislative frameworks to enable good governance and management | By 2020 Fiji has implemented a tax-benefit system for PA management<br><br>By 2015, PA legislation approved with regulations documenting process for tax-benefit system.<br><br>By 2014, sustainable financing mechanisms in place to continue PA work through PAC | By 2015 each province has an ICM plan, which also considers upland corridors |
| <b>Kiribati</b>     | 10% terrestrial and marine by 2020   | By 2015 PPA would ecologically linked to other ecosystems and Gilbert by 5% per island group  | By 2020 patrol boats and staff to increase by 20% and PIPA and other PAs effectively managed |   | By 2020 PIPA have endowment trust fund set up and operational  | By 2015 PAs integrated into national climate change framework                |

| Country                 | Terrestrial and marine targets, %        | Representativeness and connectivity               | Effective management  | Governance   | Sustainable finance  | Sectoral integration   |
|-------------------------|--|---|---|--|--|--|
| <b>Marshall Islands</b> | 20% terrestrial and 30% near shore       | Gap analysis completed; results to be implemented | As identified in the Micronesia Challenge<br>Terrestrial being developed<br>Marine developed<br>Socioeconomic – yet to be developed | Acknowledged throughout MC jurisdictions in line with PA governance categories                                     | Under development to be completed by 2014                                      |  |
| <b>FSM</b>              | 20% terrestrial and 30% near shore       | Gap analysis completed results to be implemented  | As identified in the Micronesia Challenge<br>Terrestrial being developed<br>Marine developed<br>Socioeconomic – yet to be developed | Acknowledged throughout MC jurisdictions in line with PA governance categories                                     | Under development to be completed by 2014                                      | Implemented through sustainable development plan environmental sector 5 year strategic action plan |
| <b>Nauru</b>            | 6.67% terrestrial and 22% marine by 2020 | Gap analysis to be undertaken immediately         | All PAs should have effective management by 2020.   | All governance types to be recognized and effective partnership between government, communities to be strengthened | Introduction of surcharge for polluting industries for raising funding for PAs | All PAs to be connected through corridors  |
| <b>Niue</b>             | 20% terrestrial and 10% marine by 2020   |   | All PAs should have effective management by 2020.   | All governance types to be recognized and ICCAs to be recognized   | Trust fund to be set up for PAs  | Sectoral integration (DAFF, water and health sectors) to be achieved                               |

| Country                | Terrestrial and marine targets, %      | Representativeness and connectivity   | Effective management  | Governance  | Sustainable finance                                  | Sectoral integration  |
|------------------------|--|---|---|---|--|---|
| <b>Palau</b>           | 20% terrestrial and 30% near shore     | Gap analysis completed<br>results to be implemented   | As identified in the Micronesia Challenge. Terrestrial being developed. Marine developed<br><br>Socioeconomic – yet to be developed | Acknowledged throughout MC jurisdictions in line with PA governance categories  | SF completed   | Plan being developed, to be completed by 2015   |
| <b>PNG</b>             | 6% terrestrial and 2% marine by 2012.  | Gap analysis completed<br><br>Results to be implemented to increase coverage by 1% every year till 2014 | 1% increase in effective management of PAs every year till 2015   | Recognition of ICCAs by 2015. Devolution of appropriate conservation functions to provincial and local level governments by 2013-14                                       | Establishment of PNG biodiversity trust fund by 2014 | Provincial plans by 2013-2014; national sectoral plans by 2012; national development plans/strategies already integrated in DSP 2010-2030; MTDP 2011-2015 |
| <b>Samoa</b>           | 18% terrestrial and 14% marine by 2020 | Gap analysis completed. Central rain forest 72,699 ha to be fully protected by 2020                     | By 2020 30% both marine and terrestrial protected areas should be effectively managed   | Governance types to be recognized and implemented by 2020   | MPA trust fund to be established                     | PAs to be integrated into costal infrastructure plan and disaster risk management plans by 2015   |
| <b>Solomon Islands</b> |  | By 2015 conclude the gap analysis and implement the results   | By 2015, fifty per cent of existing PAs are effectively managed   | By 2015 all existing protected areas have in place practical and effective management plans that incorporate traditional management measures with community participation | Establish and implement a trust fund for PAs by 2015 | Sectoral integration to be achieved at least 40% by 2015  |

| Country        | Terrestrial and marine targets, %  | Representativeness and connectivity  | Effective management                                | Governance   | Sustainable finance   | Sectoral integration  |
|----------------|--|--|---|--|---|---|
| <b>Tonga</b>   | 5% terrestrial and 20% marine by 2015  |  | All PAs must have a management plan and implanted   | CCAs to be promoted and recognized   | Financial mechanism to be established to cover 100% annual costs  | All protected areas fully integrated into climate change adaptation and disaster risk management action plans |
| <b>Tuvalu</b>  |  | Corridors to be developed between sites with similar species   | Develop management plans for every MPA              | Government to assist ICCAs to develop by-laws for MPAs                                   | 40% fishing license revenue to strengthen existing PAs  |   |
| <b>Vanuatu</b> | 5% of mangrove and sea grass and wetland ecosystems by 2015<br>10% coral reefs by 2013<br>20% of forests and important habitats for specific species by 2020 | To cover mangrove areas, sea grass areas, wetlands, forests and habitats for critically endangered species | At least one ranger for each registered CCA by 2014 | All CCAs have recognized and endorsed management plans that recognize governance by 2020 | Create environmental trust fund by collecting environment fee from different revenue sources to provide sustainable finance to CCA projects by 2013 | By 2015, 2% of wetland areas integrated   |

Annex V

**WORKSHEET FOR PROGRAMME OF WORK ON PROTECTED AREAS (POWPA) ACTION  
PLANNING AND IMPLEMENTATION**

For each element of the PoWPA, identify the status, the priority, timeline.  
Be sure to include marine and terrestrial in your deliberations.

| Status of key actions of the Programme of Work on Protected Areas   | FSM    |          |          | Cook Islands |          |              | Kiribati |          |                      | Niue   |          |          |
|---|--------|----------|----------|--------------|----------|--------------|----------|----------|----------------------|--------|----------|----------|
|   | Status | Priority | Timeline | Status       | Priority | Timeline     | Status   | Priority | Timeline             | Status | Priority | Timeline |
| Has a multi-stakeholder advisory committee been formed?   | 4      | VH       | --       | 3            | H        | 2011         | 4        | M        |                      | 0      | H        | 2012     |
| What is the progress on assessing gaps in the protected area network? (1.1)   | 4      | VH       | --       | 0            | H        | 2013         | 1        | L        | Dec 2011             | 0      | H        | 2013     |
| What is the progress in assessing protected area integration? (1.2)   | 4      | VH       | --       | 3            | M        | 2012         | 1        | H        |                      | 0      | L        | 2015     |
| What is the progress in establishing transboundary protected areas and regional networks? (1.3)   | 4      | VH       | --       | 0            | L        |              | 1        | L        |                      | 0      | L        |          |
| What is the progress in developing site-level management plans? (1.4)   | 4      | VH       | --       |              |          |              | 4        | VH       | 2010                 | 1      | M        | 2013     |
| What is the progress in assessing threats and opportunities for restoration? (1.5)  | 4      | VH       | --       | 4            | H        |              | 3        | VH       | Dec 2011             | 0      | M        | 2013     |
| What is the progress in assessing equitable sharing of benefits? (2.1)<br>What is the progress in assessing protected area governance? (2.1)  | 4      | H        | --       | 0            | H        |              | 2<br>2   | H<br>H   | 2012                 | 0<br>2 | M        | 2012-13  |
| What is the progress in assessing the participation of indigenous and local communities in key protected area decisions? (2.2)  | 4      | VH       | --       | 4            | L        |              | 3        | VH       |                      | 2      | H        | 2012-13  |
| What is the progress in assessing the policy environment for establishing and managing protected areas? (3.1)<br>What is the progress in assessing the values of protected areas? (3.1) | 3      | H        | 2012-13  | 1<br>0       | H<br>H   | 2012<br>2012 | 2<br>2   | H<br>H   | Dec 2011<br>Dec 2011 | 0      | H<br>H   | 2013     |
| What is the progress in assessing protected area capacity needs? (3.2)  | 3      | VH       | 2012     | 4            | L        |              | 2        | H        | Dec 2011             | 1      | H        | 2015     |
| What is the progress in assessing the appropriate technology needs? (3.3)   | 3      | VH       | 2012     | 0            |          |              | 3        | M        |                      | 0      | M        |          |
| What is the progress in assessing protected area sustainable finance needs? (3.4)   | 4      | VH       | --       | 0            | H        |              | 3        | VH       |                      | 0      | H        | Ongoing  |
| What is the progress in conducting public awareness campaigns? (3.5)  | 4      | H        | --       | 2            | H        |              | 3        | H        | Dec 2011             | 1      | H        | Ongoing  |
| What is the progress in developing best practices and minimum standards? (4.1)  | 3      | H        | 2012     |              |          |              | 2        |          |                      | 0      | M        |          |
| What is the progress in assessing management effectiveness? (4.2)   | 3      | H        | 2012     | 0            | M        |              | 2        | VH       | Dec 2011             | 0      | H        |          |
| What is the progress in establishing an effective PA monitoring system? (4.3)   | 3      | H        | 2012     | 2            |          |              | 1        | H        |                      | 0      | H        |          |
| What is the status of developing a research program for protected areas? (4.4)  | 3      | H        | 2011-13  | 0            | L        |              | 2        | VH       |                      | 1      | M        |          |
| What is the status of assessing opportunities for marine protection?  | 4      | H        | --       | 2            | H        | 2013 ?       | 2        | H        |                      | 1      | M        |          |
| What is the status of incorporating climate change aspects into protected areas?  | 4      | H        | --       |              |          |              | 1        | M        |                      | 1      | H        |          |

Status: 0 = no work, 1 = just started, 2 = partially complete, 3 = nearly complete, 4 = complete  
Priority: VH (very high); H (high); M (medium); L (low); Timeline: (e.g., 2012, 2013, 2014)

| Status of key actions of the Programme of Work on Protected Areas  | Palau  |          |                            | Samoa  |          |          | Solomon Islands |          |          |
|--|--------|----------|----------------------------|--------|----------|----------|-----------------|----------|----------|
|  | Status | Priority | Timeline                   | Status | Priority | Timeline | Status          | Priority | Timeline |
| Has a multi-stakeholder advisory committee been formed?  | 4      |          |                            | 4      | VH       | Ongoing  | 0               | VH       | 2013     |
| What is the progress on assessing gaps in the protected area network? (1.1)  | 4      |          |                            | 3      | VH       | 2013     | 1               | H        | 2015     |
| What is the progress in assessing protected area integration? (1.2)  | 0      | L        | 2014                       | 3      | VH       | 2013     | 3               | VH       | Ongoing  |
| What is the progress in establishing transboundary protected areas and regional networks? (1.3)                                | 4      |          |                            | 1      | M        | 2014     | 3               | H        | Ongoing  |
| What is the progress in developing site-level management plans? (1.4)  |        |          |                            | 2      | H        | 2014     | 1               | VH       | 2015     |
| What is the progress in assessing threats and opportunities for restoration? (1.5)   | 3      | H        | 2013                       | 4      | VH       | Ongoing  | 2               | H        | 2015     |
| What is the progress in assessing equitable sharing of benefits? (2.1)   |        |          |                            | 1      | H        | 2014     | 0               | VH       | 2013     |
| What is the progress in assessing protected area governance? (2.1)   |        |          |                            | 1      | H        |          |                 |          |          |
| What is the progress in assessing the participation of indigenous and local communities in key protected area decisions? (2.2) | 4      | VH       |                            | 4      | VH       | Ongoing  | 4               | VH       | Ongoing  |
| What is the progress in assessing the policy environment for establishing and managing protected areas? (3.1)                  | 4      | VH       | Ongoing                    | 3      | H        | 2012     | 4               | VH       | 2013     |
| What is the progress in assessing the values of protected areas? (3.1)   |        |          |                            | 2      | H        |          | 0               | VH       | 2014     |
| What is the progress in assessing protected area capacity needs? (3.2)   | 3      | VH       | Addressed in PA management | 2      | H        | 2012     | 1               | VH       | 2014     |
| What is the progress in assessing the appropriate technology needs? (3.3)  | 0      | VH       |                            | 0      | M        | 2012     | 0               | VH       | 2014     |
| What is the progress in assessing protected area sustainable finance needs? (3.4)  | 4      |          |                            | 1      | H        | 2012     | 0               | VH       | 2012     |
| What is the progress in conducting public awareness campaigns? (3.5)   | 4      |          | Ongoing                    | 3      | H        | 2014     | 3               | VH       | Ongoing  |
| What is the progress in developing best practices and minimum standards? (4.1)   | 0      | VH       | 2014                       | 3      | H        | 2014     | 1               | VH       | 2012     |
| What is the progress in assessing management effectiveness? (4.2)  | 3      | VH       | 2014                       | 3      | H        | 2013     | 2               | VH       | 2015     |
| What is the progress in establishing an effective PA monitoring system? (4.3)  | 3      | VH       | 2014                       | 1      | L        | 2014     | 1               | VH       | 2015     |
| What is the status of developing a research program for protected areas? (4.4)   | 0      | VH       | 2014                       | 1      | M        | 2014     | 2               | VH       | 2015     |
| What is the status of assessing opportunities for marine protection?   | 4      |          |                            | 3      | H        | 2013     | 1               | VH       | 2015     |
| What is the status of incorporating climate change aspects into protected areas?   | 0      | VH       | 2014                       | 3      | VH       | 2013     | 2               | VH       | 2015     |

Status: 0 = no work, 1 = just started, 2 = partially complete, 3 = nearly complete, 4 = complete

Priority: VH (very high); H (high); M (medium); L (low); Timeline: (e.g., 2012, 2013, 2014)

| Status of key actions of the Programme of Work on Protected Areas   | Tuvalu |          |           | Vanuatu |          |          | Tonga  |          |          |
|---|--------|----------|-----------|---------|----------|----------|--------|----------|----------|
|   | Status | Priority | Timeline  | Status  | Priority | Timeline | Status | Priority | Timeline |
| Has a multi-stakeholder advisory committee been formed?   | 0      | VH       | 2012      | 3       | H        | 2010     | 4      | L        |          |
| What is the progress on assessing gaps in the protected area network? (1.1)   | 2      | H        |           | 1       | VH       | 2015     | 3      | H        |          |
| What is the progress in assessing protected area integration? (1.2)   | 2      | H        |           | 0       | H        | 2015     | 4      | L        |          |
| What is the progress in establishing transboundary protected areas and regional networks? (1.3)   | 3      | VH       |           | 0       | H        | 2015     | 1      | VH       |          |
| What is the progress in developing site-level management plans? (1.4)   | 2      | VH       |           | 1       | VH       | 2015     | 3      | M        |          |
| What is the progress in assessing threats and opportunities for restoration? (1.5)  | 3      | VH       |           | 1       | VH       | 2015     | 3      | M        |          |
| What is the progress in assessing equitable sharing of benefits? (2.1)<br>What is the progress in assessing protected area governance? (2.1)  | 1      | M        |           | 0<br>1  | VH<br>VH | 2015     | 3      | M        |          |
| What is the progress in assessing the participation of indigenous and local communities in key protected area decisions? (2.2)  | 4      | VH       | Ongoing   | 1       | VH       | 2015     | 3      | M        |          |
| What is the progress in assessing the policy environment for establishing and managing protected areas? (3.1)<br>What is the progress in assessing the values of protected areas? (3.1) | 2      | H        |           | 2<br>0  | VH<br>VH | 2015     | 4<br>2 | L<br>VH  |          |
| What is the progress in assessing protected area capacity needs? (3.2)  | 3      | VH       | Ongoing   | 1       | VH       | 2015     | 3      | M        |          |
| What is the progress in assessing the appropriate technology needs? (3.3)   | 2      | VH       |           | 0       | VH       | 2015     | 3      | M        |          |
| What is the progress in assessing protected area sustainable finance needs? (3.4)   | 2      | VH       | 2010-2012 | 1       | VH       | 2015     | 1      | VH       |          |
| What is the progress in conducting public awareness campaigns? (3.5)  | 3      | VH       |           | 2       | VH       | 2015     | 3      | M        |          |
| What is the progress in developing best practices and minimum standards? (4.1)  | 2      | M        | 2012      | 1       | VH       | 2015     | 3      | M        |          |
| What is the progress in assessing management effectiveness? (4.2)   | 2      | VH       | 2014      | 1       | VH       | 2015     | 2      | H        |          |
| What is the progress in establishing an effective PA monitoring system? (4.3)   | 0      | VH       |           | 1       | VH       | 2015     | 2      | H        |          |
| What is the status of developing a research program for protected areas? (4.4)  | 0      | L        |           | 1       | VH       | 2015     | 2      | H        |          |
| What is the status of assessing opportunities for marine protection?  | 2      | H        |           | 1       | VH       | 2015     | 3      | M        |          |
| What is the status of incorporating climate change aspects into protected areas?  | 2      | H        |           | 0       | VH       | 2015     | 3      | M        |          |

Status: 0 = no work, 1 = just started, 2 = partially complete, 3 = nearly complete, 4 = complete

Priority: VH (very high); H (high); M (medium); L (low); Timeline: (e.g., 2012, 2013, 2014)

## Annex VI

**MARINE PROTECTED AREAS. SUMMARY OF ATTAINMENT OF POWPA GOALS AND NEEDS**

| <b>PoWPA Goal</b> | <b>Status</b><br>1 (worst)<br>to 5 (best) | <b>Example of success</b>   | <b>Capacity</b>                | <b>Example of Challenge</b>   | <b>Needed capacity</b>  |
|-------------------|---|---|--------------------------------|---|---|
| Goal 1.1          | 3.2                                       | Many sites established  | Good information dissemination |   | Staff, community awareness, scientific knowledge, strengthened committee              |
| Goal 1.2          | 2.8                                       | Ridge to reef and island scale management                             |                                | Governance units don't map directly to ecosystem boundaries, disputes and lack of community awareness     |   |
| Goal 1.3          | 1.9                                       | Micronesia Challenge, Torres Strait Treaty and Tonga Whale Sanctuary  |                                | Data acquisition, government prioritization, trans national governance                                    | Information and networking  |
| Goal 1.4          | 2.9                                       | Range of management plans for protected areas                         |                                | Legislative weaknesses, need for enforcement, monitoring, patrolling to fully implement management plans. | Funds (where plans in place), information (where protected areas not yet established) |
| Goal 2.1          | 2.4                                       | Consultation, and rat eradication PIPA                                |                                | Lack of capacity to carry out   | Funding and information   |
| Goal 2.2          | 3.9                                       | Community engagement, linking traditional management with MPA process |                                | Awareness, development  | Resources to reach communities for consultation                                       |
| Goal 3.1          | 2.8                                       | A series of regulations in place                                      |                                | Implementation, enforcement and communication   |   |
| Goal 3.2          | 2.6                                       | Training at multiple levels   |                                | Need to expand  | Funding and staff   |
| Goal 3.3          | 2.6                                       | Range of successful programmes  |                                | Capacity of community conservation managers   | funding   |
| Goal 3.4          | 2.6                                       | Large and small processes   |                                | Education, funding, disputes  |   |
| Goal 3.5          | 3.1                                       | Awareness campaigns, education and training                           |                                | Continuing awareness after end of projects, getting to all islands  | Funding constraints   |
| Goal 4.1          | 2.7                                       | Programmatic and project based  |                                | Lack of implementation and need to continue developing standards  |   |
| Goal 4.2          | 2.0                                       | Diverse mechanisms  |                                | Time for travel, targets  | Technical input required  |

|          |     |   |  |  |                                 |
|----------|-----|---|--|--|---------------------------------|
| Goal 4.3 | 2.1 | Some baseline data through to long term monitoring, utilizing traditional enforcement |  | Remote sites, lack of resources and political will             |                                 |
| Goal 4.4 | 2.4 | Various levels accomplished   |  | Science communication to community, data sharing, lack of data | Expertise to carry out analysis |

*Annex VII***KEY APPROACHES AND IMPROVING PROTECTED AREAS GOVERNANCE:  
APPROACHES, CHALLENGES, NEEDS AND SOLUTIONS**

Each group was asked to identify, by subregion:

- 2-3 key protected area approaches developed for the national context
- 2-3 key challenges for establishing and supporting marine and terrestrial protected areas

Each group to identify, by subregion, for (a) protected areas and (b) resource management in general:

Needs

- Key legal support needed if any (laws, judicial systems, policing)
- Key institutional needs for supporting community / local protected areas (specifics of manpower, budget etc.)

Each group to identify, by subregion, for (a) protected areas and (b) resource management in general:

Solutions

- Opportunities for collaboration or sharing the burden with other national institutions or organizations
- Additional capacity-building or institutional strengthening needs: What and who could provide?

**Group results:****Group A – Micronesia**

**Key protected area approaches** developed from national context:

- 1) Community consultations including high level officials from key ministries, top down approach. This involves consultation at community levels and then proposing people's view to the government for their approval.
- 2) NGO perspective is community consultations and then bottom up approach (FSM)
- 3) NFMRA/CIE perspective is consult with communities, develop each community's CEAFM (NR)

**Key challenges** for establishing and supporting marine and terrestrial protected areas:

- 1) Geographical distances of islands within the Kiribati - costly exercise, lack of enforcement, poaching in protected areas.
- 2) Land tenure system, Pohnpei & Kosrae Govt owns the water sheds and the shorelines and in Chuuk and Yap everything is locally owned. Geographical distances of islands within FSM – costly exercise, lack of enforcement.
- 3) Landownership problems, expertise problems, lack of response from FAO.
- 4) Creating alternative livelihood and sources of food.

Each group to identify by subregion, for protected areas as a part of national resource management:

**Needs**

- Key legal support needed if any (laws, judicial systems, policing)
  - National policy needs to be developed
  - Palau – PANAC has sustainable financing requirements/Regulations has all the policies on criteria, i.e., management plans, recognizes ownerships.
  - Kiribati – PIPA has a management plan & sustainable financing thru the form of endowment
  - Gilbert & Line Groups have Environment Bill/Act 1999 and under this draft PAs Regs & Species Regs. Kiribati environ policy workshop seeks to get inputs from outer islands on environ policy. No sustainable finance.

- FSM – Like Palau
- Nauru – None. In the mind and heart and still in development. Dev national CEAFM plan, seek Cabinet endorsement to use and dev marine/terrestrial environ regulations/legislation.
- Key institutional needs for supporting community/local protected areas (specifics of manpower, budgets etc.)
  - Palau - Sustainable financing is the key to supporting protected areas, clear defined partnerships with the communities
  - Kiribati – PIPA, Govt, communities
  - FSM –Govt, stronger enforcement, traditional systems of reprimand
  - Nauru – we like the idea of sustainable financing and alternative livelihoods so will work towards this as it comes

## **Solutions**

- Opportunities for collaboration or sharing the burden with other national institutions or organizations
  - NTSAs, cooperation with US/FR/NZ/AU
  - Kiribati – signed an agreement with US (Hawaii) to share patrol of MPAs
  - FSM and Palau – Micronesian challenge, PIMPAC network
- Additional capacity-building or institutional strengthening needs: What and who (inter/national) could provide?
  - Kiribati – PIPA need to strengthen the monitoring of the scattered islands of PIPA.
  - Micro challenge – id & coord support to communities, why? Benefits, regional, national, State & community networks that meet consistently.

## **Group B – Melanesia**

### **Approaches**

#### **PNG**

- NCP
- Integrated into the country's national development plan and strategies
- 10% targets from the existing terrestrial vegetation
- LMMA

#### **Fiji**

- Protected Area Committee chaired by National Trust
- Gap analysis results presented to provincial administrators to help guide proposals for new conservation and management zones

#### **Solomon Islands**

- Bottom-up approach
  1. Community consultation and engagement - resource managers
  2. International and regional NGOs follow up - implementers
  3. The national and provincial govts are assisting the NGOs-policymakers and supporting leading agency.

E.g., Arnavons and Tetepare Decendants' Association
- World heritage listing - e.g., East Rennell
- Locally managed marine areas (LMMAs)

#### **Vanuatu**

- LMMA – mostly bottom-up approach
- Marine reserves (top down) few

## Challenges

- Financial and legal challenges
- Often not a gov priority
- Commercial and industrial forces that are working against conservation
- Approaching landowners is often challenging
  - o Conservation vs. economic for PA

Protected areas as a part of national resource management:

## Needs

### Solomon Islands

- Has PA legislation provides for advisory board, trust funds.
- Need for implementation.

Solution:

- Additional capacity, from NGOs etc.

### PNG

- Never had protected area policy.
- Develop national Conservation Area Plan to guide policy.

Needs:

- Have money from GEF PAs 4, engagement of consultant and developing TOR.

### Vanuatu

- EMC Act & regulations endorsed by Govt.

Needs:

- Enforcement strengthening

### Fiji

- Cabinet paper approved, working on policy for PA.

Needs:

- Have funding through GEF Small Grants
- Consolidate TOR for consultant to carry out consultation for development of PA.
- “Issue” with mining Act, because it can supercede.

### Australia

- Indigenous PA
- State-run Nat. Park
- Commonwealth Parks
- EPBC Act; management plans
- Nat. representative system (PAs) challenge: how to manage this system. E.g., farmers and managing systems

## Solutions

- Need community rangers and facilitators, e.g., Fiji; give train young persons from communities,
- Development or a co-management plan, to address the manpower needs in institution. The community are trained to carry out day to day management.
- E.g., PNG Kokoda Initiative, demonstration project.
- TNC, national collaborations. Capacity-building, institutional strengthening.
- Capacity-building within the region, countries assisting each other where relevant (also NGOs)

## Group C – Polynesia (Cook Islands, New Zealand, Samoa, Tonga, Tuvalu) and Palau

### Cook Islands

- 1) Protected area approach –
  - a. Cook Islands – An exercise was undertaken to consider a National Programme of Protected Areas, through consultation the exercise recommended that a national approach may not be feasible for the Cook Islands but to retain the existing traditional systems and have communities take leadership of protected areas, however the exercise also highlighted that for Rarotonga, the largest, most populous island, that government led marine protected areas was more feasible. Resultantly the Outer Islands continued their community approach and on Rarotonga a centralized chief's approach was taken. Enforcement of traditional systems in the Outer Islands is very successful; however on Rarotonga it has been much difficult.

### New Zealand

- 1) Marine Reserves
  - a. Open to anyone to apply resulting in various forms of governance
  - b. “No take area”
  - c. Long term
- 2) Customary methods
  - a. Only Maori
  - b. Fisheries management
    - i. By-laws dictate the fishery
    - ii. By-laws are reviewable
- 3) Challenge
  - a. Boundaries between tribes are fluid, but by-laws require set boundaries which are debated by tribes and has resulted in less implementation in areas with more tribes
  - b. Much more limited in the level of protection that can be achieved
- 4) Rahui
  - a. A much more traditional practice however in a cosmopolitan society, the understanding of the custom may be lacking, leading to lower levels of compliance

### Palau

- 1) Protected area management has always been traditional; with the introduction of science, this has confused the communities and the roles of stakeholders, i.e., communities establish the PA but feel government is responsible for the collection of data; however, the government is of the opinion that the community is responsible for the monitoring as it is their resources. Communities often lack the capacity to monitor, hence the request for government to step in.
  - i. The Palau government designed some ways community can help
- 2) Micronesia Challenge – was tool for elevating the profile of protected areas and generates funding via the Trust.

### Samoa

- 1) Fisheries
- 2) By-laws have been established for PA and in that are clauses for the removal of land from customary owners for protection purposes; this is applied in the cases of securing IBA and KBA. The Land Compensation Act was also established to complement ceded land
  - i. Communities are critical for leadership in PA management
- 3) Challenges
  - b. Land tenure – 80% customary, i.e., most PA are on government lands

## Tuvalu

## Approach

- Eleven marine protected areas; one is regulated under formal legislation and the others through traditional management system.
- The only legal marine protected area is on the mainland (Funafuti Conservation Area (FCA))
- The others are stretched among the 8 islands (LMMA – whole islands ecosystem approach)

## Challenges

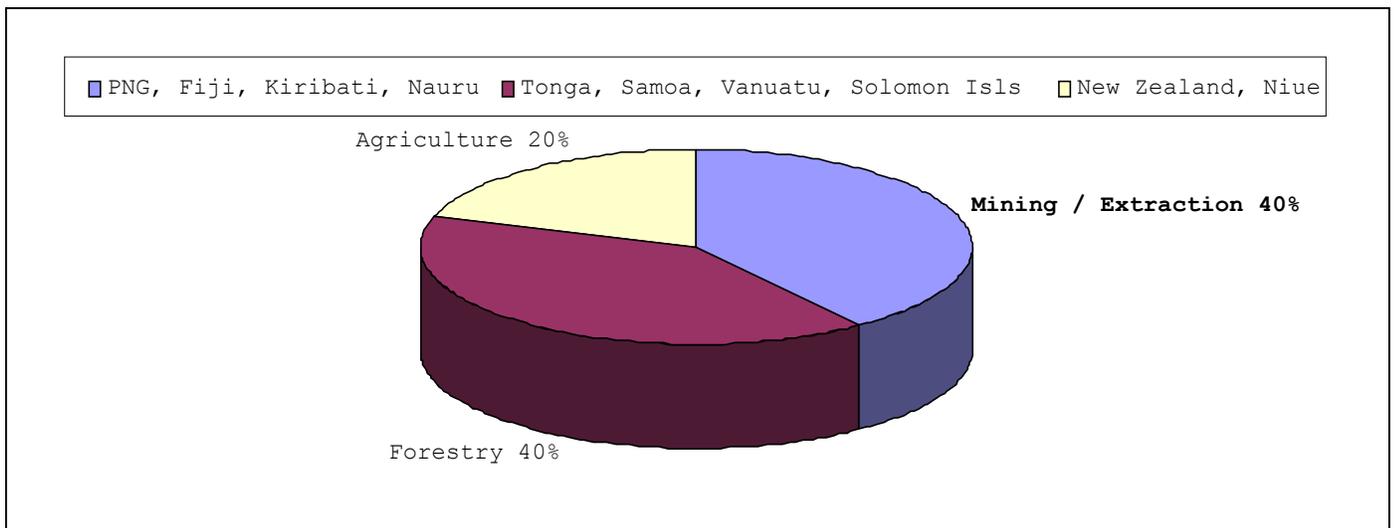
- Poaching is an everyday issue for the FCA;
- Simply due to the overpopulation on the mainland
- Patrolling/policing the FCA is too costly (fuel) – too far out from the mainland
- Marine resources stocktaking/monitoring needed for the outer islands MPAs
- Waste management/plastic waste

**Key legal support needed if any (laws, judicial systems and policies)**

- 1) Capacity to consult and write policy and legislation – Niue and Tonga
  - i. Cook Islands undertook an institutional review and legislative capacity- building exercise to develop legislative capacity with the Environment sector
- 2) Capacity-building of communities to carry out monitoring and enforcement instead of government
  - i. Cook Islands and Samoa have an understanding where Samoan patrol vessels monitor Cook Island waters due to the Cook Islands only having one patrol boat; this has resulted in more instances of illegal fishing being addressed
  - ii. New Zealand and Australian defense helps Pacific Island Countries to monitor marine resources
- 3) Management plans are often absent for protected areas – Cook Islands and Tuvalu
- 4) Judicial systems
  - i. Using Court/Crown system to punish tradition protected areas offenders is perceived as taking traditional *mana* and vesting it in the Court/Crown system – Cook Islands
- 5) Policing
  - i. Compliance with management plans is very difficult because of limited human and financial resources
  - ii. Enforcement is difficult in small communities because of the closeness and family ties between people
  - iii. It is difficult to have people fish out of newly established protected areas especially if they have been fishing/harvesting there for generations – Niue
  - iv. Monitoring and enforcement is a concern – Samoa
- 6) Baseline data studies are lacking and capacity-building is required for identifying key species, services, detail and scope, this is especially important for GIS/Remote sensing and other technical skills
- 7) Cooperation between departments in-country is limited and insufficient; departments offer services to other departments but expensive fees are charged - Niue
  - i. Assistance could be sourced from regional bodies to develop a “State of the Region” report from which countries can further develop to suit their needs
  - ii. Technical knowledge is required for reporting and monitoring; coupled with this is the need to merge traditional and scientific knowledge
    - Cook Islands has a database of all described species; however, this required many many years to complete and the process is still continuing as we discover more
- 8) The ability to develop protected areas is limited by the understanding of what biodiversity a country has, capacity-building is required here.

Annex VIII

**A. IDENTIFY AN IMPORTANT BIODIVERSITY AND ECOSYSTEM SERVICE BASED INDUSTRY IN YOUR COUNTRY**



**B. IDENTIFY THE MOST IMPORTANT ECOSYSTEM SERVICES THAT ARE AFFECTED BY THIS INDUSTRY AND IDENTIFY APPROPRIATE MEASURES AND INDICATORS OF THE STATUS OF THESE ECOSYSTEM SERVICES**

| <i>Industry</i>   | <i>Ecosystem Services</i>   | <i>Measures</i>  | <i>Indicators</i>   |
|-------------------|---|--|---|
| Forestry          | (1) Cultural values;<br>(2) Carbon sequestration;<br>(3) Watershed;<br>(4) Habitat;<br>(5) Wood production;<br>(6) Genetic resources. | (1) Reforestation;<br>(2) Local-community engagement;<br>(3) Hydrology monitoring;<br>(4) Assessment process;<br>(5) Tax for forest activities | (1) Water (quality and quantity);<br>(2) Increase of tourism;<br>(3) Livelihood and health;<br>(4) Climate change   |
| Agriculture       | (1) Water Resources;<br>(2) Coastal fish production;<br>(3) Recreation;<br>(4) Habitat;<br>(5) Vegetation                             | (1) Health measure;<br>(2) Scientific research application (e.g., soil analysis);<br>(3) Financial support                                     | (1) Water (quality and quantity);<br>(3) Food production;<br>(4) Livelihood and health                              |
| Mining Extraction | (1) Water Resources;<br>(2) Forest habitat;<br>(3) Air;<br>(4) Food security;<br>(5) Traditional medicine;<br>(6) Fauna & Flora.      | (1) Assessment process;<br>(2) Polluter pays principles  | (1) Water (quality and quantity);<br>(2) Area and habitat loss;<br>(4) Livelihood and health;<br>(5) Climate change |

*Annex IX*

**STEPS TOWARDS INTEGRATING PROTECTED AREA VALUATION INTO ECONOMY**

|   |  |
|---|--|
| <b>STEP 1:</b> Clarify the context                | (1) Weak law enforcement in protected areas and watershed forests  |
| <b>STEP 2:</b> Identify the benefits and services | (2) Improve water quality; (2) Improve fisheries services; (3) Livelihoods; (4) Ensure habitats  |
| <b>STEP 3:</b> Choose the methodology             | (1) Market price; (2) Replacement cost; (3) Linking to community values; (4) Consultation with stakeholders  |
| <b>STEP 4:</b> Identify indicators                | (1) Declination of the site; (2) Number of clearings; (3) Sediment monitoring of riparian systems; (4) Invasive species monitoring results; (5) Water-quality testing; (6) Fish catch per year |
| <b>STEP 5:</b> Assess the protected area values   | (1) Policy objective; (2) Enforcement and compliance; (3) Co-management with communities; (4) Human resources; (5) Budget  |
| <b>STEP 6:</b> Communicate the results            | (1) Stakeholders; (2) Donors; (3) Government officials   |

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