



**CBD**



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SUSTAINABLE OCEAN INITIATIVE  
TRAINING OF TRAINERS WORKSHOP  
Yeosu, Republic of Korea, 11-15 September 2015

### **REPORT OF THE SUSTAINABLE OCEAN INITIATIVE TRAINING OF TRAINERS WORKSHOP**

#### **INTRODUCTION**

1. The Conference of the Parties to the Convention on Biological Diversity, at its tenth meeting, adopted the Strategic Plan for Biodiversity 2011-2020, with its Aichi Biodiversity Targets (see decision X/2). The mission of the Strategic Plan is to take effective and urgent action to halt the loss of biodiversity in order to ensure that, by 2020, ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being and poverty eradication.
2. In the same decision, the Conference of the Parties urged Parties and other Governments (a) to achieve long-term conservation, management and sustainable use of marine resources and coastal habitats; (b) to establish and effectively manage marine protected areas, in order to safeguard marine and coastal biodiversity, marine ecosystem services, and sustainable livelihoods; and (c) to adapt to climate change, through appropriate application of the precautionary approach and the use of integrated marine and coastal area management, marine spatial planning, impact assessment, and other available tools. The Conference of the Parties likewise emphasized the need for training and capacity-building for developing country Parties through regional workshops that contribute to sharing experiences and knowledge related to the conservation and sustainable use of marine and coastal biodiversity.
3. Recognizing this urgent need, the Sustainable Ocean Initiative (SOI) was born in the margins of the tenth meeting of the Conference of the Parties, with the support of Japan, and in collaboration with various partners that were willing to provide the necessary expertise, technical and financial resources. The SOI concept was further developed in subsequent meetings, such as the SOI Programme Development Meeting (Kanazawa, Japan, 2-4 August 2011), SOI High-level Meeting (Yeosu, Republic of Korea, 5 June 2012,) and a high-level side event on SOI held during the eleventh meeting of the Conference of the Parties to the Convention (Hyderabad, India, 17 October 2012). The execution of SOI activities is coordinated by the Secretariat of the Convention on Biological Diversity.
4. SOI focuses on achieving a balance between conservation and sustainable use of marine and coastal biodiversity by applying an action-oriented, holistic and integrated capacity-building framework. SOI is committed to building bridges between biodiversity conservation and resource management sectors.

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5. SOI has evolved as a global platform to build partnerships and enhance capacity to achieve the Aichi Biodiversity Targets related to marine and coastal biodiversity in a holistic manner (in particular Targets 6, 10 and 11)<sup>1</sup> by:

- (a) Achieving a balance between conservation and sustainable use and the promotion of flexible and diverse approaches;
- (b) Identifying best practices, facilitating information sharing, and learning from experiences;
- (c) Creating partnerships that can provide for targeted capacity-building, training, technical assistance and learning exchange;
- (d) Providing for two-way communication among policymakers, scientific communities and local stakeholders;
- (e) Facilitating monitoring of progress towards achieving the Aichi Biodiversity Targets on marine and coastal biodiversity;
- (f) Facilitating the provision of guidance and guidelines that will help their achievement;
- (g) Improving the scientific basis for implementation.

6. Requests from the Conference of the Parties related to training and capacity development for marine activities emanating from its tenth and eleventh meetings, and the imperative to enhance progress towards the Aichi Biodiversity Targets, outlined the need to scale up SOI activities. In this regard, the SOI Global Partnership Meeting was held in Seoul on 6 and 7 October 2014, to develop a comprehensive action plan for the Sustainable Ocean Initiative. The output of this meeting, the SOI Action Plan 2015-2020, was subsequently welcomed by the SOI High-level Meeting held on 16 October 2014 during the high-level segment of the twelfth meeting of the Conference of the Parties, in Pyeongchang, Republic of Korea.

7. The SOI Action Plan 2015-2020 outlines activities in the following areas:

- (a) Global partnership meetings;
- (b) Regional workshops and learning exchange programme;
- (c) Facilitating on-the-ground implementation through national training and exchange;
- (d) Local leaders forum;
- (e) Training of trainers;
- (f) Web-based information sharing and coordination.

8. Building upon the experiences described above and in line with the SOI Action Plan 2015-2020, the Executive Secretary convened the Sustainable Ocean Initiative (SOI) Training of Trainers Workshop, with financial support from the Government of the Republic of Korea (through the EXPO 2012 Yeosu Korea Foundation and the Korea Maritime Institute), in Yeosu, Republic of Korea, from 11 to 15

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<sup>1</sup> **Target 6:** By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits; **Target 10:** By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning; **Target 11:** 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.

September 2015, and in collaboration with the Ministry of Ocean and Fisheries of the Republic of Korea and various SOI partners.

9. The workshop aimed to support experts from national-level agencies of developing country Parties to contribute to enhanced national implementation towards achieving the Aichi Biodiversity Targets in marine and coastal areas, in particular by strengthening national scientific, technical and managerial capacity on (a) the application of the ecosystem approach and area-based management tools, such as integrated marine and coastal area management and marine spatial planning; (b) enhancing multi-stakeholder and cross-sectoral dialogue and coordination to support planning and management; and (c) the development and implementation of capacity development activities at the national and subnational level.

10. In particular, the workshop focused on providing experts with the tools, guidelines and information needed to develop and implement successful training programmes on a range of issues in their respective countries at national and/or subnational levels. It focused on (a) key elements of integrated cross-sectoral approaches to conservation and sustainable use of marine and coastal biodiversity, including integrated coastal management and marine spatial planning, and (b) approaches to training, capacity development and multi-stakeholder engagement. In this way, the workshop aimed to capacitate the participants with knowledge and information in integrated approaches to management and to enhance their skills and understanding on means to impart this information through capacity development activities within their respective countries.

11. The workshop consisted of a combination of lectures, small group discussions, panel discussion, one-to-one sessions and interactive exercises. Participants consisted largely of individuals from national agencies or organizations tasked with ocean and coastal management who are in a position to develop and implement training programmes at the national and/or subnational level, as appropriate. Each participant was asked to develop a strategy and specific approaches for a training programme at the national and/or subnational level, based on the commitments of their respective government and/or institutions to support the development of national/subnational training activities as indicated in their respective nomination letters.

12. The workshop was attended by experts from Argentina, Bangladesh, Benin, Cameroon, Colombia, Costa Rica, Grenada, Maldives, Nigeria, Oman, Philippines, Tonga, Centre for Sustainable Development and Environment (CENESTA), as well as resource speakers from French Marine Protected Areas Agency, East Asian - Australasian Flyway Partnership, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), Mediterranean Network of Marine Protected Area Managers (MedPan) and Simon Bolivar University. Representatives from Expo 2012 Foundation, Korea Marine Environment Management Corporation, National Marine Biodiversity Institute of Korea, and Korea Maritime Institute also attended as local observers. The full list of workshop participants is attached as annex I.

#### **ITEM 1. OPENING OF THE WORKSHOP**

13. Mr. Pyungshik Shin, Chairman of the Expo 2012 Yeosu Korea Foundation, welcomed the participants to the workshop in the coastal city of Yeosu. He noted that the workshop was a critical opportunity for marine experts from around the world to share experiences in implementing various policies and technologies for ocean conservation and management. He also expressed his hope for the Expo 2012 Yeosu Korea Foundation to become a hub of maritime education through this training programme. He invited the participants to enjoy the natural scenery of Yeosu, and to become promoters of the city of Yeosu and the Expo 2012 Yeosu Korea Foundation.

14. Mr. Sang-Jin Kim, President of the National Marine Biodiversity Institute of Korea, first offered his thanks to the Secretariat of the Convention, the Ministry of Oceans and Fisheries of the Republic of Korea, and Korea Maritime Institute for preparing and arranging this workshop, and expressed his warm welcome to the workshop participants. He recalled the importance of the Yeosu Declaration from 2012 in

which the Republic of Korea and many other countries and organizations emphasized their strong willingness and desire to conserve and sustainable use of marine ecosystems. He noted that the work of SOI contributed to achieving this vision by addressing capacity gaps in developing and small island countries through technical support, learning exchange and training. He stressed that the deteriorating condition of marine ecosystems in many areas due to human activities significantly hindered sustainable development of the ocean. He emphasized that the work of SOI, and especially this workshop, provided an opportunity to share experiences and build capacity to prevent this deterioration and enable countries to address their own unique challenges and priorities.

15. Ms. Jihyun Lee delivered opening remarks on behalf of the Executive Secretary of the Convention on Biological Diversity, Mr. Braulio Ferreira de Souza Dias. Mr. Dias extended his sincere appreciation to the Government of the Republic of Korea for hosting and providing financial resources, through the EXPO 2012 Yeosu Korea Foundation, for the organization of the first Training of Trainers Workshop within the framework of the Sustainable Ocean Initiative. He expressed his special thanks to the Ministry of Ocean and Fisheries for their collaboration and the Korea Maritime Institute for co-organizing this important workshop, and he thanked the representatives of the National Marine Biodiversity Institute of Korea as well as the Korea Marine Environment Management Corporation for joining the workshop to share their valuable experiences and expertise together with many other distinguished participants. He also expressed his sincere appreciation to all the participants, who came from 15 different countries around the world, as well as resource speakers, who brought to this workshop their strong commitment to and common vision of the conservation and sustainable use marine biodiversity. He highlighted many challenges faced in achieving global goals for conservation and sustainable use of biodiversity, which outlined the urgent need for expanded efforts to develop the capacity of Parties and facilitate partnerships among relevant stakeholders to achieve the Aichi Biodiversity Targets. He noted that addressing this need was the key focus of SOI. Mr. Dias noted the importance of capacity development opportunities that corresponded to each country's own course towards implementing the Strategic Plan for Biodiversity 2011-2020 in order to meet both their socioeconomic development needs and biodiversity conservation goals. In this regard, he stressed that progress towards sustainable oceans could happen only by developing a global community of committed leaders with shared vision towards the conservation and sustainable use of marine and coastal biodiversity. He urged the participants in the workshop to demonstrate themselves as potential leaders to further strengthen their countries' existing efforts and help their fellow colleagues through the provision of national capacity-building activities, in order to achieve their ocean development goals, and to communicate what they had learned to their colleagues and stakeholders in their respective countries through national training activities and other means.

## **ITEM 2. WORKSHOP BACKGROUND, APPROACH AND EXPECTED OUTPUTS**

16. Mr. Chua Thia-Eng (resource speaker) was designated as the chair of the workshop, based on the recommendation from the CBD Secretariat considering his extensive expertise and long-term experience in integrated ocean and coastal management, in particular long-term capacity development.

17. In order to give the substantive background and focus of the workshop, Mr. Chua Thia-Eng delivered a presentation characterizing major obstacles and capacity needs for achieving the Aichi Biodiversity Targets and the role of integrated coastal and ocean management (ICM) in addressing the needs. In his presentation, he highlighted the key elements and operational approaches of ICM, building on the recently published CBD Technical Series No. 76: *Integrated Coastal Management for the Achievement of the Aichi Biodiversity Targets*.

18. Then Ms. Jihyun Lee (CBD Secretariat) gave a short presentation providing the CBD context for the workshop, providing an overview of the work on marine and coastal biodiversity under the Convention, including the approach of SOI, and outlining the approach and expected outputs of this workshop. The workshop programme is provided in annex II.

19. Summaries of the above presentations are provided in annex III.

20. This was followed by a group exercise in which participants discussed their needs and expectations for the workshop. Some of the common elements raised by the participants when discussing their needs for the workshop included enhancing skills in coordination among stakeholders, learning from positive experiences in various countries, understanding elements of management effectiveness, building capacity to develop and institutionalize marine and coastal policies, fostering an interdisciplinary perspective of area-based management approaches, sharing tools and techniques to develop and implement marine spatial planning, and building an understanding of means to convey these skills and knowledge within their respective countries. The summary of expectations of workshop participants is provided in annex IV.

**ITEM 3. IDENTIFYING THE NATIONAL/SUBNATIONAL CONTEXT FOR DEVELOPING TRAINING PROGRAMMES TOWARDS ACHIEVING THE AICHI BIODIVERSITY TARGETS IN MARINE AND COASTAL AREAS**

21. Under this agenda item, the workshop focused on sharing experiences regarding national/local implementation. First, participants were invited to provide presentations on their respective national contexts, addressing elements such as the values of marine and coastal biodiversity in each country, key threats to marine and coastal biodiversity, existing policy responses to address key threats and national efforts to achieve Aichi Biodiversity Targets, priority areas for national capacity development to enhance current national efforts for addressing key threats and effectively achieving Aichi Biodiversity Targets, and important stakeholders for collaboration in developing national capacity development programmes.

22. Participants were then split into breakout session groups organized according to geographic regions to discuss the key challenges and barriers to achieving the Aichi Biodiversity Targets in their respective countries, building on the above-mentioned national-level presentations. The common elements of these presentations, in addition to elements discussed during the plenary and breakout group sessions on this topic, are provided in annex V.

*Daily morning sessions*

23. The second, third, and fourth days of the workshop began with a daily morning session, facilitated by Ms. Jihyun Lee (CBD Secretariat), intended to engage selected participants as panel members in an informal and open-ended moderated group discussion regarding key thematic elements related to integrated marine and coastal management. Prior to the workshop, participants had been presented with the themes of each of the three daily morning sessions and were asked to select which of these daily morning sessions they would like to take part in. The topics of the daily morning sessions were (a) integrated marine and coastal area management, marine protected areas and marine spatial planning; (b) mainstreaming biodiversity in fisheries, tourism and other sectors; and (c) science and policy, political support and financing for programme development and sustainable operation. Key discussion points of the daily morning sessions are summarized in annex VI.

**ITEM 4. KEY ELEMENTS AND PROCESSES OF CAPACITY DEVELOPMENT AND TRAINING ACTIVITIES**

24. This agenda item began with a presentation by Mr. Chua Thia-Eng. Speaking from his extensive experience in capacity development, training and education, Mr. Chua addressed key elements for designing, developing and undertaking training activities, including considerations related to objectives, approach, process, and monitoring outcomes. A summary of this presentation is provided in annex III.

25. Following the presentation, participants were organized into a one-to-one sharing session aimed at stimulating short focused discussions among participants on key challenges in addressing capacity needs, sharing experiences and lessons learned, and key factors in the design, development and implementation of successful training programmes. Participants were asked to indicate, through colour-coded stickers placed on their name tags, their general areas of background and expertise (e.g.,

habitat protection and management, fisheries or other economic sector management, ocean and coastal governance, integrated coastal management and multi-stakeholder engagement, scientific research/monitoring/mapping, and species- or taxa-specific conservation and management) as a means to support their discussions during this session. Participants were given five minutes for focused discussion with another participant before rotating to the next participant, so that by the end of the exercise each participant had had a one-to-one discussion with every other participant in the workshop.

#### **ITEM 5. TOOLS, COMMUNICATION AND STAKEHOLDER ENGAGEMENT**

26. Under this item, participants undertook a simulation exercise, led by Mr. Eduardo Klein (resource speaker). In this exercise, participants were presented with a hypothetical scenario in which competing uses and conservation priorities for a given coastal area had to be reconciled using cross-sectoral collaboration for marine spatial planning. The approach and results of the exercise are presented in annex VII.

27. Following the exercise, a presentation was given by Mr. Chua Thia-Eng focused on various approaches to cross-sectoral planning and management and multi-stakeholder engagement, including cross-sectoral planning approaches, approaches for communicating with different stakeholders (including indigenous peoples and local communities), stakeholder involvement and the incorporation of traditional knowledge.

28. A presentation was delivered by Ms. Maria Purificació Canals Ventin (resource speaker) addressing cross-sectoral planning approaches, communication approaches with different stakeholders as well as indigenous peoples and local communities (IPLCs) and facilitating multi-stakeholder involvement in planning and management.

29. Mr. Joseph Appiott (CBD Secretariat) gave a short presentation discussing the key elements, considerations and success factors involved in organizing a capacity development workshop, as a useful and adaptable tool for addressing capacity needs in various contexts.

30. Mr. Christophe Lefebvre (resource speaker) then delivered a thematic presentation on practical experiences in marine protected areas development and management, building on the results of a recently published report by the MPA Agency Partnership.

31. Ms. Judit Szabo (resource speaker) gave a presentation on designing and implementing field-based training activities to enhance conservation and management, using the example of intertidal wetlands to describe different approaches to field-based training.

32. Summaries of the above presentations are provided in annex III.

#### **ITEM 6. DEVELOPING NATIONAL/SUBNATIONAL TRAINING PROGRAMMES TOWARDS ACHIEVING THE AICHI BIODIVERSITY TARGETS IN MARINE AND COASTAL AREAS**

33. A central objective of the workshop was to provide participants with guidance, information and support, both regarding the substantive elements of integrated planning and management and on key elements of capacity development and training, so that they are able to design a strategy to develop and implement a capacity development initiative within their own country. Participants were further supported in doing so through the guidance of specific resource persons, who were designated to support specific participants based on background, areas of expertise and demonstrated need. The participants were given time during the third and fourth days of the workshop to focus on developing their respective strategies, with the inputs of resource speakers and other participants.

34. Their strategies for developing and implementing a national/subnational training programme in their respective countries were then presented to the plenary on the last day of the workshop in order to receive feedback from the participants, Secretariat representatives and resource speakers. Participants were given an additional week to further develop their proposals. In nominating participants to take part

in this workshop, governments also agreed to support the participants, in various ways, to further develop and implement a national or subnational capacity development programme, building on the workshop outcomes. In this context, the participants were encouraged to further develop and implement their proposals with the support of their governments and other organizations, as appropriate, and with the input of the CBD Secretariat.

35. The strategies developed by each of the workshop participants are provided in annex VIII.

#### **ITEM 7. CONCLUSION**

36. Based on the week's discussions, Mr. Chua and the CBD Secretariat prepared a short synthesis of the key messages of the workshop, which was further discussed in the plenary session. Participants highlighted the importance of the following key factors, among others:

(a) Enabling factors for an integrated management approach, including a common vision, long-term perspective, political will at multiple levels, cross-sectoral coordination mechanisms and ownership by local communities;

(b) Stakeholder engagement and support, including the need to understand the political and socioeconomic context, empowering stakeholders to realize tangible benefits, linking management with issues of interest to stakeholders, tailored messages and effective communication, and good personal relationships;

(c) Approaches for capacity development, including setting clear goals and understanding which actors are best placed to take actions, understanding capacity needs and utilizing existing capacity development resources, and incorporating learning by doing;

(d) Optimizing external support and sustainable financing, including having a policy environment to catalyse funding, mainstreaming capacity development activities into budgets, partnering with the private sector, and utilizing approaches such as environmental trust funds and micro-financing.

37. Participants then discussed opportunities for future collaboration, including in the context of SOI activities, building on the workshop discussions and outputs. Primarily, the participants were expected to use what they had learned and their capacity development strategy to enhance implementation in their respective countries, and to collaborate with the CBD Secretariat and other SOI partners in doing so. Participants were also encouraged to play an active role in subsequent SOI activities, as part of a network of SOI trainers, and to continue to share their experiences with other SOI partners.

38. Participants then provided their views on the effectiveness of the workshop itself, to be considered in future SOI capacity development activities.

#### **ITEM 8. CLOSURE OF THE WORKSHOP**

39. The workshop closed at 1 p.m. on Tuesday, 15 September 2015.

40. Following the closure of the workshop, a field trip to nearby Suncheon Bay was organized for the participants by the Korea Maritime Institute.

*Annex I*

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*Annex II*

**WORKSHOP PROGRAMME**

<b>Friday, 11 September (Day 1)</b>	
9 – 9.40 a.m.	<p><b>Agenda item 1. Opening of the workshop</b></p> <ul style="list-style-type: none"> <li>• Chairman of the EXPO 2012 Yeosu Korea Foundation</li> <li>• President of the National Marine Biodiversity Institute of Korea</li> <li>• Representative of the Executive Secretary of the Convention on Biological Diversity</li> </ul>
9.40 – 10 a.m.	<i>Coffee/tea break</i>
10 – 10.45 a.m.	<p><b>Agenda item 2. Workshop background, objectives, approach and expected outputs</b></p> <p>2.1 Marine biodiversity, Aichi Biodiversity Targets and capacity development needs</p> <ul style="list-style-type: none"> <li>• Developing national and local capacity to meet the challenges in achieving Aichi Biodiversity Targets in marine and coastal areas and enhancing ocean and coastal governance</li> <li>• Role of training activities in long-term capacity development</li> </ul> <p><i>Q and A</i></p>
10.45 – 11.15a.m.	<p>2.2 CBD work on marine and coastal biodiversity: Tools to support enhanced conservation and sustainable use towards the Aichi Targets on marine and coastal biodiversity</p> <p>2.3 Workshop approaches and expected outputs</p> <p><i>Q and A</i></p>
11.15 a.m. – 12.10 p.m.	<p>Group exercise: Small group discussion:</p> <p><b><i>How this workshop can help you develop and implement national training programme in order to support achievement of the Aichi Biodiversity Targets?</i></b></p>
12.10 – 12.30 p.m.	<p><b>Agenda item 3. Identifying the national/subnational context for developing training programmes towards achieving the Aichi Biodiversity Targets in marine and coastal areas</b></p> <p>3.1 Identifying national/subnational context</p> <p>Focus:</p> <ul style="list-style-type: none"> <li>• Value of marine and coastal biodiversity in each country</li> <li>• Key threats to marine and coastal biodiversity</li> <li>• Existing policy responses to address key threats and national efforts to achieve Aichi Biodiversity Targets</li> <li>• Priority areas for national capacity development to enhance current national efforts for addressing key threats and effectively achieving Aichi Biodiversity Targets</li> <li>• Important stakeholders to collaborate in developing national capacity development programmes</li> </ul>
12.30 – 2 p.m.	<i>Lunch</i>

2 – 4 p.m.	<b>Agenda item 3 (continued)</b> Agenda item 3.1 (continued)
4 – 4.30 p.m.	<i>Coffee/tea break</i>
4.30 – 5.30 p.m.	<b>Agenda item 3 (continued)</b> 3.2 Breakout group session on identifying key challenges and barriers 3.3 Plenary session <ul style="list-style-type: none"> <li>• Reporting on the results of breakout group session</li> <li>• Priorities for development of future training programmes</li> </ul>
<b>Saturday, 12 September 2015 (Day 2)</b>	
9 – 10.10 a.m.	<b>Daily morning session on sharing experiences: integrated marine and coastal area management, marine protected areas and marine spatial planning</b> <ul style="list-style-type: none"> <li>• Selected participants will be invited for sharing experiences through moderated panel discussion</li> </ul>
10.10 – 10.40 a.m.	<b>Agenda item 4. Key elements and processes of capacity development and training activities</b> 4.1 Key elements of capacity development to support integrated marine and coastal management <i>Theme presentation on:</i> <ul style="list-style-type: none"> <li>• Key elements for designing, developing and undertaking training activities</li> <li>• How to become effective trainers</li> </ul> <i>Q and A; plenary discussion</i>
10.40 – 11 a.m.	<i>Coffee/tea break</i>
11 a.m. – 12.30 p.m.	<b>Agenda item 4 (continued)</b> 4.2 One-to-one sharing session <i>Participants rotate through one-to-one discussion focusing on:</i> <ul style="list-style-type: none"> <li>• Key challenges in addressing capacity needs</li> <li>• Sharing experiences and lessons learned</li> <li>• Key factors to design, develop and implement successful training programmes</li> <li>• Identify priority needs of participants within their respective national/subnational contexts</li> </ul>
12.30 – 2 p.m.	<i>Lunch</i>
2 – 3 p.m.	<b>Agenda item 4 (continued)</b> 4.3 Plenary discussion on the key themes that emerged under item 4.2 4.4 Formulate mentor-mentee group based on discussion under item 4.2 <ul style="list-style-type: none"> <li>• This mentor-mentee group will work as a team in developing a draft plan for national/subnational training programme throughout the week</li> </ul>

3 – 4 p.m.	<p><b>Agenda item 5. Tools, communication and stakeholder engagement</b></p> <p>5.1 Simulation exercise</p> <ul style="list-style-type: none"> <li>- Cross-sectoral collaboration for information gathering and analysis</li> <li>- Cross-sectoral collaboration for area-based planning</li> <li>- Use of GIS tools for marine spatial planning</li> </ul> <p><i>Q and A; plenary discussion</i></p>
4 – 4.30 p.m.	<i>Coffee/tea break</i>
4.30 – 6.30 p.m.	<b>Agenda item 5.1 (continued)</b>
<b>Sunday, 13 September 2015 (Day 3)</b>	
9 – 10 a.m.	<p><b>Daily morning session on sharing experiences: Mainstreaming biodiversity in fisheries, tourism and other sectors</b></p> <ul style="list-style-type: none"> <li>• Selected participants will be invited for sharing experiences through moderated panel discussion</li> </ul>
10 a.m. – 12.30 p.m.	<p><b>Agenda item 5 (continued)</b></p> <p>5.2 Approaches to cross-sectoral planning and management and multi-stakeholder engagement</p> <ul style="list-style-type: none"> <li>• Cross-sectoral planning approaches</li> <li>• Communication approaches with different stakeholders as well as indigenous peoples and local communities (IPLCs)</li> <li>• Stakeholder involvement</li> <li>• Incorporation of traditional knowledge</li> </ul> <p>5.3 Mentoring session on cross-sectoral, multi-stakeholder approaches in the development of training programmes, focusing on the needs of individual participants within their national/subnational contexts</p>
<i>Free coffee/tea break during the session</i>	
1 – 2 p.m.	<i>Lunch</i>
2 – 6 p.m.	<p><b>Agenda item 6. Developing national/subnational training programmes towards achieving the Aichi Biodiversity Targets in marine and coastal areas</b></p> <p>6.1 Mentoring session/individual work</p> <p>Building on previous workshop discussion, small groups or individuals, with the support of the resource persons/mentors, will identify specific strategies and actions to develop and implement a national/subnational training programme in their respective countries and in response to their particular needs</p>
<b>Monday, 14 September 2015 (Day 4)</b>	
9 – 10.30 a.m.	<p><b>Daily morning session on sharing experiences: science and policy, political support and financing for programme development and sustainable operation</b></p> <ul style="list-style-type: none"> <li>• Selected participants will be invited for sharing experiences through moderated panel discussion</li> </ul>
10.30 a.m. – 12.30 p.m.	<b>Agenda item 6.1 (continued)</b>
12.30 – 2 p.m.	<i>Lunch</i>

2 – 6.30 p.m.	<b>Agenda item 6.1 (continued)</b>
<b>Tuesday, 15 September 2015 (Day 5)</b>	
9 a.m. – 12 noon <i>Free-flowing coffee/tea during the session</i>	6.2 Presentation of strategies and actions for developing training programme  Plenary session  Individual participants will be invited to present on their work and receive feedbacks from other participants
12 noon – 1 p.m.	<b>Agenda item 7. Conclusion</b> 7.1 Key conclusions 7.2 Future collaboration 7.3 Evaluation of the workshop; feedback <b>Agenda item 8. Closure of the workshop</b>
1 – 2.30 p.m.	<i>Lunch</i>
2.30 – 6 p.m.	<b>Field trip to Suncheon Bay</b>

*Annex III***SUMMARIES OF THEME PRESENTATIONS****CBD's work on marine and coastal biodiversity**

*(by Ms. Jihyun Lee, Secretariat of the Convention on Biological Diversity)*

Ms. Lee introduced the work of the CBD Secretariat on marine and coastal biodiversity, outlining three thematic areas of focus in this regard: (i) tools and guidelines (including for tools such as MPAs, EIAs and marine spatial planning), (ii) addressing impacts of key pressures and threats (such as ocean acidification, underwater noise and marine debris), and (iii) facilitating an improved understanding of the ecological and biological value of the oceans through work in facilitating the description of ecologically or biologically significant marine areas (EBSAs). She discussed the CBD's focus on marine spatial planning as a useful tool to facilitate the implementation of the ecosystem approach. She discussed how marine spatial planning provides a logical link between the description of EBSAs and planning/management, and how marine spatial planning connects to the three focal areas of the CBD's work on marine and coastal biodiversity by providing a framework by which to understand areas potentially in need of integrated planning/management, understand how areas are affected by human activities and pressures, and select and implement appropriate tools in a coordinated way. She also discussed the CBD's work on EBSAs and how EBSAs are a scientific and technical tool to support States and competent organizations in planning and management. She reviewed the CBD's work in facilitating the description of EBSA through regional workshops, which focus on synthesizing best available scientific information in various ocean regions and supporting scientists from countries and organizations in the region to describe and map areas that meet the EBSA criteria. Ms. Lee also noted the recent publication of CBD Technical Series No. 76, *Integrated Coastal Management for the Achievement of the Aichi Biodiversity Targets: Practical Guidance for Implementation Based on Experience and Lessons Learned from Coastal and Ocean Governance in the Seas of East Asia* (available at <https://www.cbd.int/doc/publications/cbd-ts-76-en.pdf>). She also highlighted the key elements of the Action Plan for the Sustainable Ocean Initiative (2015-2020) and how this workshop is a critical part of the implementation of the Action Plan.

**Capacity needs for achieving the Aichi Biodiversity Targets**

*(by Mr. Chua Thia-Eng, formerly PEMSEA)*

Mr. Chua first reviewed the Aichi Biodiversity Targets and their relevance in marine and coastal areas, and discussed obstacles to the achievement of these Targets, including lack of political will at the national and local levels, inadequate coordination and integration across different government agencies, poor awareness and participation of stakeholders, and lack of financial and human resource capacity. He also discussed how these challenges are exacerbated by large drivers of change such as climate change. He reviewed the key elements of the integrated coastal management (ICM) approach, as outlined in CBD Technical Series No. 76, and the lessons learned from experiences in implementing ICM in South-East Asia. He stressed that the ICM system provides a governance framework (umbrella) that recognizes the interlinkage between ecosystem and human health concerns, and ensures stakeholder consultation and participation throughout the planning and implementation process. He noted that ICM strengthens science-based decision-making by centrally integrating expert input into the planning and management process, and that it enables a systematic approach to monitoring management progress and evaluating performance indicators over time. He also highlighted how ICM should include capacity-building as part of its normal operational practices. He stressed the need to scale up successful ICM practices to broader transboundary large marine ecosystem management. Mr. Chua also touched on the central role of the community in ICM, noting the importance of community awareness and participation in order to build stewardship for the long-term health and sustainability of marine ecosystems and ownership of ICM approaches.



### **Key elements and processes of capacity development and training activities**

*(by Mr. Chua Thia-Eng, formerly PEMSEA)*

In this presentation, Mr. Chua first noted the three key qualities that a good manager must possess: the abilities to (i) think like a scientist, (ii) work like a manager and (iii) speak like a diplomat, and that capacity development activities for managers should aim to build their skills in these areas. In this regard, he outlined the different thematic areas of focus and disciplines that can be incorporated when aiming to capacitate managers, including communication science, economics, natural science, social science and political science. Mr. Chua also stressed the key elements of effective approaches to capacity development activities, namely the importance of having clear objectives and training targets, understanding the needs of each participant and ensuring they participate actively, having a strong understanding of the subject matter, building on experiences that the participants have, and building technical skills, where appropriate.

### **Approaches to cross-sectoral planning and management and multi-stakeholder engagement**

*(by Mr. Chua Thia-Eng, formerly PEMSEA)*

Mr. Chua reviewed the core elements and enabling factors of effective cross-sectoral planning and management, emphasizing the importance of a common vision with clear objectives and target outcomes, a framework for collaboration and programme development, and a platform for inter-agency and multi-stakeholder dialogue and coordination. He especially stressed the importance of coordinating mechanisms for coordination across agencies and stakeholders as a key enabling tool for cross-sectoral planning and management. He focused as well on the importance of local-level stakeholders, including universities, research institutions, communities, non-governmental organizations, media, the private sector, and local government agencies, and the need to build their capacity in this regard. Mr. Chua also highlighted the experiences and approaches of the PEMSEA Network of Local Governments (PNLG), which aims to provide opportunities to government officials, graduate students and national professionals to acquire hands-on working experience on ICM, upgrade project management skills and knowledge on special areas of marine environmental management.

### **Approaches to cross-sectoral planning and management and multi-stakeholder engagement:**

#### ***Lessons from the Mediterranean on MPA management***

*(by Ms. Maria Purificació Canals Ventin, MedPan)*

Ms. Canals first provided an introduction to the context of MPAs in the Mediterranean, citing the 170 designated MPAs, 507 Natura 2000 sites, and 4 Fisheries Restricted Areas (FRAs/GFCM), which together cover 4.56 per cent of the total marine area of the Mediterranean. She also stressed, however, that the management of these MPAs is still widely lacking in efficiency, with only 42 per cent of these MPAs having a clear management structure. She noted the lack of enforcement due to factors such as weak financial resources to cover recurring costs and the lack of socioeconomic analyses. She highlighted the importance of multi-stakeholder dialogues and learning from different perspectives and experiences, noting MedPan's work in facilitating an MPA Forum to enhance dialogue/partnerships among all MPA stakeholders (scientists, decision-makers, private sector, managers, civil society, etc.) in order to contribute to support better-informed decisionmaking and implementation. She discussed the key factors of effective communication, highlighting the vastly different perceptions, expectations and attitudes that different stakeholders have. She discussed the different considerations that come into play when engaging different stakeholders, including the importance of understanding the perceptions and background of different stakeholders as well as being aware of how our message is being conveyed (including factors related to the tone of voice and body language). Ms. Canals stressed the importance of personal relationships that are built through long-term engagement. She wrapped up her messages in "three C's": communication, commitment and continuity.

**Tools, communication and stakeholder engagement for marine spatial planning**

*(by Mr. Eduardo Klein, Simon Bolivar University)*

As an introduction to the interactive simulation exercise, noted in paragraph 26 above and in annex VII, Mr. Klein described marine spatial planning as a practical way to create and establish a more rational organization of the use of marine space and the interactions between its uses, to balance demands for development with the need to protect marine ecosystems, and to achieve social and economic objectives in an open and planned way.<sup>2</sup> He reviewed the following key steps of marine spatial planning:

1. Identifying need and establishing authority;
2. Obtaining financial support;
3. Organizing the process through pre-planning;
4. Organizing stakeholder participation;
5. Defining and analysing existing conditions;
6. Defining and analysing future conditions;
7. Preparing and approving the spatial management plan;
8. Implementing and enforcing the spatial management plan;
9. Monitoring and evaluating performance;
10. Adapting the marine spatial management process.

Mr. Klein stressed that marine spatial planning is based on the ecosystem approach (balancing ecological, economic, and social goals and objectives towards sustainable development), integrated across sectors and among levels of government, place-based or area-based, adaptive and capable of learning from experience, strategic and anticipatory and participatory. He also discussed various tools to support marine spatial planning, including MARXAN, and different sources of information, such as the Ocean Biogeographic Information System (OBIS), Regional Marine Atlases coordinated through the International Oceanographic Data and Information Exchange (IODE), the Ocean Data View website and the CBD work on EBSAs.

**Organizing a capacity development workshop**

*(by Mr. Joseph Appiott, Secretariat of the Convention on Biological Diversity)*

Mr. Appiott discussed the main elements and considerations to consider in organizing a capacity development workshop. He started by stressing the importance of having clear objectives for the workshop, and linking these objectives into an overarching vision, goals that articulate what actions are needed to achieve this vision and how the workshop will provide the capacity development recipients with the skills and tools needed to do these actions. He also discussed the considerations that come into play when selecting a target audience, including the importance of identifying which sectors and stakeholder groups need to be engaged and who is in a position now or in the future to help achieve the goals. He also outlined approaches to encouraging participation in the workshop, such as crafting the goals of the workshop under a common vision relevant across stakeholder groups and articulating how the tools acquired through involvement of the workshop will help them to achieve their goals. Mr. Appiott also discussed the importance of understanding the capacity needs of stakeholders by identifying their skills/strengths, understanding the challenges and barriers they face, identifying the most important areas in need of improvement and understanding which type of strengthened capacity will yield greatest impact. He also highlighted considerations in engaging partners in the workshop and the need to engage the right partners to help address areas in which you may be lacking, to build on existing work/initiatives and to show connectivity with other relevant initiatives. He stressed the need to consider the most effective means by which to convey the skills and tools by understanding how the participants are most likely to

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<sup>2</sup> Department for Environmental, Food and Rural Affairs. 2008. The Marine and Coastal Access Bill. United Kingdom.

retain the information, and the importance of using the workshop as an opportunity for participants to share lessons and positive experiences and build personal relationships.

### **A practical guide for marine protected areas agencies**

*(by Mr. Christophe Lefebvre, French MPA Agency)*

Mr. Lefebvre presented the main points of the recently published Practical Guide for Marine Protected Areas Agencies, produced by the MPA Agencies Partnership (available at <https://www.cbd.int/doc/meetings/mar/soiws-2015-02/other/soiws-2015-02-mpaap-en.pdf>). He noted that the guide aimed to present guidelines and best practices for developing, implementing and effectively managing MPAs, based on the range of experiences from the various agencies involved in the partnership. The guidelines address the whole process of MPA establishment and management, as follows:

- Making the decision: Establishing MPA networks
  1. Science information and tools to support decision-making
  2. Setting conservation goals
  3. Building public and political support
- Governance and financing
  4. Setting up sustainable financing mechanisms
  5. Integrating MPAs within the wider seascape
  6. Implementing MPA governance
  - 7 Cooperating internationally for coherent networks
- Managing the MPAs
  8. Developing and implementing management plans
  9. Monitoring, assessment and evaluation for adaptive management
  10. Training staff

### **Designing field-based training activities**

*(by Ms. Judit Szabo, EAAFP)*

Ms. Szabo presented some aspects of designing field-based training activities based on the experiences of the East Asian - Australasian Flyway Partnership (EAAFP), a network that brings together 34 governmental and non-governmental partners to protect migratory waterbirds and their habitats in the East Asian - Australasian Flyway. Discussing the work of the EAAFP, she emphasized that coastal habitats form a unique interface connecting water and land, provide a variety of ecosystem services and are crucial for a wide variety of plants and animals. She also highlighted how migratory species that use various coastal habitats in different countries make the conservation and management of these habitats an international issue of concern. Citing the EAAFP's work in training activities, she discussed the key factors of field-based training activities, including the importance of selecting partners, engaging key players in local areas, encouraging a participatory approach, utilizing intermediaries to enhance engagement and delegating tasks to those who are at the appropriate place to carry them out. In terms of management, she emphasized the need to keep in mind the long-term sustainability in the area, and to understand biodiversity values and past/present/potential future threats to the site. She also stressed the need to consider the different backgrounds, areas of expertise, languages and cultures of different training recipients and to tailor training in the context of these factors.



*Annex V***KEY POINTS FROM DISCUSSIONS REGARDING PRESSURES ON MARINE BIODIVERSITY, BARRIERS TO PROGRESS AND CAPACITY NEEDS**

Through background presentations, breakout group discussions and moderated plenary discussions, the participants articulated important points related to pressures on marine and coastal biodiversity in their respective countries, challenges faced in conservation and sustainable use and capacity needs to address these threats and challenges. As the participants were from a wide range of countries from around the world, there were a range of experiences discussed with regards to these issues. Despite these contextual differences, however, there were a number of commonalities that emerged in the discussions.

Participants especially highlighted the following pressures on marine and coastal biodiversity:

- Pressures from rapid population growth and urbanization in coastal areas;
- Unsustainable and poorly planned coastal infrastructure development;
- Pollution, including from coastal wastewater discharge and marine activities;
- Unsustainable fishing practices;
- Impacts from oil exploration and exploitation;
- Pressures from increasing levels of maritime traffic in certain areas;
- Alien invasive species, including introduction by ballast water discharge;
- Habitat destruction and degradation, including estuaries, coral reefs and mangroves;
- Impacts from climate change and El Niño Southern Oscillation (ENSO);
- Coastal erosion and sedimentation.

Participants also highlighted the following challenges in improving conservation and sustainable use:

- Inadequate cross-sectoral planning and coordination across various governmental bodies and ministries;
- Inadequate legal and regulatory frameworks and poor harmonization of these frameworks between the local, provincial and national levels;
- Ineffective management of marine protected areas;
- Poor enforcement of legislation and regulations;
- Inadequate stakeholder engagement in planning and management;
- Inadequate mainstreaming of conservation policies and priorities in government programmes;
- Lack of awareness among politicians, the private sector and the general public of how marine biodiversity ties into sustainable development and especially economic growth, poverty reduction, health and food security;
- Lack of sustainable financing;
- Changes in government administrations impacting the sustainability of programmes and policies;
- Lack of baseline studies and indicators to support monitoring.

Participants highlighted the following areas in need of further capacity development, including by building on existing capacity development resources and initiatives, to address the above-mentioned pressures and challenges:

- Integrated approaches to planning and management, especially integrated coastal management and marine spatial planning;
- Multi-stakeholder engagement and consensus-building;
- Mainstreaming marine and coastal biodiversity into development sectors;
- Catalysing and managing sustainable financing;
- Communication skills to enhance awareness and stewardship among various stakeholder groups through tailored outreach;
- Technical skills for research, data collection, monitoring and mapping;
- Building constituencies at the local level and empowering local stakeholders to better understand and sustainably manage marine resources.

*Annex VI***SUMMARY OF KEY DISCUSSION POINTS DURING DAILY MORNING SESSIONS**

- Lack of data should not stop us to develop integrated coastal management (ICM) programme. Data gathering should be an integral part of the ICM process.
- ICM requires a development of appropriate management framework and governance processes, which can allow science-based policymaking and implementation, effective stakeholder involvement, adaptive management, awareness building and capacity-building, and sustainability.
- ICM increases effectiveness of development and implementation of marine protected areas (MPA) and marine spatial planning (MSP) by providing a common vision, strategic approaches, and an enabling mechanism for cross-sectoral, inter-agency, and multi-stakeholder cooperation, collaboration, and coordination.
- ICM can work more effectively at local level. Local-level implementation can be strengthened by national ocean policy through providing overall direction and guidelines towards sustainability. Coordinating mechanism among different sectors can work effectively as led by local leadership, who is sensitive to local needs for sustainable development.
- Sustainability of an ICM programme can be most effectively secured through allocating national/local budget for continuous operation of ICM programme as well as arranging necessary human and other logistical resources, rather than relying on foreign funding sources. Donor funding can be useful only at the initial stage in creating a “seed” programme. As part of this “seed” programme, efforts should be made to convince national or local governments to allocate national/local budget for ICM programme for long-term sustainability.
- Role of national governments is recognized as facilitator and support for locally based management of marine and coastal resources. It should be noted, however, that certain issues (e.g. transboundary issues, migratory species, large-scale ecosystem conservation, upstream-downstream conflicts, etc.) require national-level coordination, management and implementation.
- The creation of an ICM programme through a new institutional arrangement (e.g. ICM programme division or agency) should not be seen as a creation of another sectoral agency, but rather as a complementary mechanism to strengthen existing sectoral efforts for fisheries, tourism, coastal development, pollution control, etc.
- Building common vision that can be shared by different sectors is a critical step for initiating holistic and integrated approaches for planning and managing the use of marine and coastal resources and the protection of marine and coastal biodiversity. Identifying values of marine and coastal ecosystems and resources can facilitate the development of common and shared vision towards sustainable ocean and coastal development.
- Coordination among different sectors should be supported by an appropriate governance mechanism and institutional framework, which are directed by the principles of sustainability encompassing aspects of environment protection, economic prosperity, and social welfare.
- Effective coordination among different sectors heavily relies on the presence of strong political leadership from the top level of the governments at national or local levels.
- The value of biodiversity and its contributions to different economic sectors should be actively communicated.
- Management tools such as strategic environmental assessment (SEA) can provide a useful framework for guiding various stakeholders to identify strategic approaches towards sustainability path.

- Joining enforcement and monitoring in coordination among different sectors can address gaps in capacity, resources and expertise for effective implementation and compliance.
- Scientific and technical support should be recognized as an integral part of management processes to ensure the sustainability of the management programme.
- People oriented communication and empowerment of various stakeholders and general publics are key to successful management outcomes, which requires managers to be equipped with interpersonal skills and listening abilities to understand others' concerns and interests.
- Optimal balance between cost of integration and the need to consult has to be identified. Clear management objectives and expected outputs/outcomes should guide the management and institutional efforts for enhancing coordination among different sectors.
- The value of coordination among different sectors should be demonstrated in terms of sharing resources and expertise and creating synergies to achieve intended management outcomes.

*Annex VII***SUMMARY AND OUTPUTS OF MARINE SPATIAL PLANNING SIMULATION EXERCISE****Objectives**

Under agenda item 5, participants undertook a simulation exercise, led by Mr. Eduardo Klein (Simon Bolivar University), in which participants were presented with a hypothetical scenario of competing uses and conservation priorities for a given coastal area that had to be reconciled using cross-sectoral collaboration for marine spatial planning. The exercise used some of the principles of marine spatial planning in a hands-on approach in order to define a hypothetical marine protected area under several conflicts of use. In particular, we wanted:

1. To demonstrate the usefulness of visualizing geographical information relevant to marine biodiversity, ecosystems, oceanographic features and socioeconomic information to inform planning;
2. To demonstrate approaches to structuring multi-stakeholder discussions to reconcile different uses and priorities regarding marine resources in a spatial context;
3. To encourage participants to make justified trade-offs to maximize achievement of priorities of various stakeholders to the greatest extent possible;
4. To encourage participants to define a set of management actions which will guarantee the long-term sustainability of the proposed MPA.

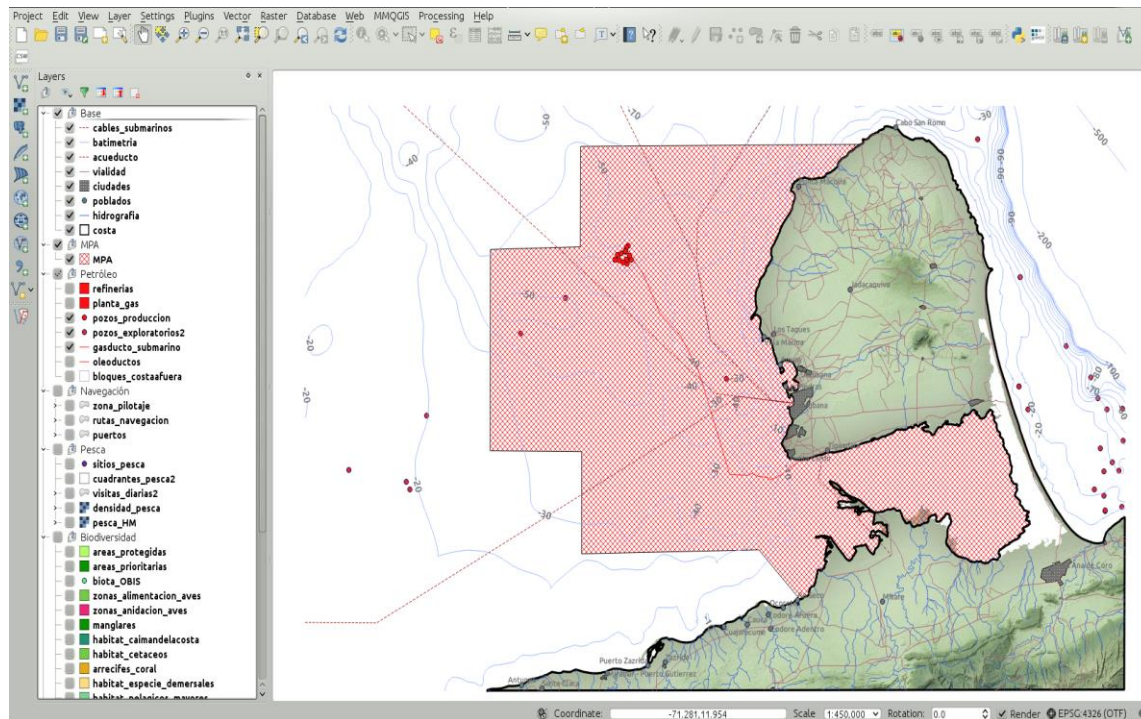
**Methodology**

The scenario of a hypothetical proposed MPA in the southern Caribbean was presented. The exercise was designed with open and free GIS software (<http://qgis.org>) and all of the data layers were made available for the participants in the form of printed maps and overlay transparencies. The following data layers were made available for the exercise:

- Base layers: Coastline, urban areas polygon, roads, small populated sites, submarine cables, hydrology, bathymetry, shaded relief of the terrain;
- Oil industry: Offshore bidding blocks polygons, offshore production wells, offshore exploration wells, underwater pipelines, oil refineries;
- Maritime transport: Main shipping routes, anchoring areas, ports, shipping density;
- Fisheries: 2014 fishing boat locations, summary of daily visits by quadrants, density model of fishing boats presence;
- Biodiversity: Declared protected areas polygons, priority areas for conservation of marine biodiversity, OBIS marine biodiversity records, locations and cover of mangrove forests, coastal lagoons, seagrass meadows, rocky shores, turtle feeding areas, marine crocodile habitat, cetacean habitat, bird nesting and feeding areas, large and small pelagic fish habitat, soft bottom benthic communities, hard bottom benthic communities;
- Oceanography: Seasonal maps of sea surface temperature and chlorophyll A concentration.

A large MPA was initially proposed, inside which many conflicts on the use of marine resources potentially exist (figure 1). The exercise focused on having participants play the roles of different stakeholder groups with different priorities and to negotiate to come to agreement on the size, shape and parameters of the MPA that is amenable to the interests of the various stakeholder groups.





**Figure 1.** GIS projection of the proposed hypothetical MPA.

Participants were assigned randomly to take on the role of one of the following stakeholder groups, with the participants split evenly among these groups:

- Oil industry and maritime transport sector;
- Artisanal fisheries;
- Private tourism industry;
- Non-governmental organization (NGO) for biodiversity conservation.

During the first session, all of the participants in each sector group met to discuss the approach that would be most beneficial for the interest of their sector, in the context of the rules noted below and using the data layers made available. They also considered which possible trade-offs they were willing to accept during the negotiations with the other sectors.

During the second session, the participants were formed into mixed groups (with one or more person from each sector represented in each group) to negotiate within these mixed groups to decide on the ideal configuration of the MPA, using the available data layers and trade-off agreements among the sectors. Each group was tasked with presenting the ideal location of the MPA as well as a set of management actions that will guarantee the sustainability of the proposed MPA in the long term.

## Rules

In negotiating the location and parameters of the MPA, the following rules were in place:

- The MPA should be as large as possible;
- No activity related to the extraction, transport or transformation of oil or gas will be allowed inside the MPA;
- The maritime transit of commercial vessels will be allowed through the MPA, but no anchoring inside the MPA;
- Fishing activities inside the MPA will be allowed but it should be reduced to 25 per cent of the fishing effort related to the actual effort (or 25 per cent of the actual fishing grounds);

- Each of the stakeholders (biodiversity, fisheries, oil industry, maritime transport and ports, tourism) must make decisions that guarantee the continuity of its activities, but at the same time they should be prepared to make some trade-off in order to establish the MPA.

### **Description of the data layers**

The exercise setting is located in the Gulf of Venezuela, Southern Caribbean Sea. The data layers are real and obtained from several sources. The case presented is hypothetical and there are no known proposals to establish an MPA in this area. It is used simply for the purposes of this simulation exercise. However, the data layers used in the exercise are based on real information. The following data layers were used to support the exercise.

### **Base layers and oceanography**

These layers comprise the coastline, rivers, roads and populated centers. The footprints of highly populated areas are also provided. The terrestrial and coastal environment is dry and xerophytic with almost no human development to the north of “Los Taques”. The wind is normally from the north-east with a mean velocity of about 6 m/s with frequent gusts of more than 20 m/s. The rivers are intermittent, with flowing water only during the short rainy season. The annual precipitation is less than 400 mm and the air temperature is between 24 and 35°C.

The bathymetry is very regular with a depth of 70 m in some areas. Major bathymetry lines are shown in the map. A coastal and southward surface current (not shown) is present all year round, transporting sediments and nutrients from the rich upwelling areas. The tidal range is about 30 cm but in several places the intertidal zone could be of tens of meters, as the beach profile is very flat. As a proxy descriptor of the upwelling phenomena, seasonal maps of surface chlorophyll concentration are provided.

### **Urban infrastructure**

Human populated places are generally concentrated near the coast. The main city, “Punto Fijo”, has a population of roughly 300,000. The economy of the area is related to the oil industry, fisheries, tourism and goat farming. The tourism sector is not very well developed, with generally small hotels and few tourist services available, but there is a regional plan for the expansion of the sector in the near future on the north-west coast of the peninsula.

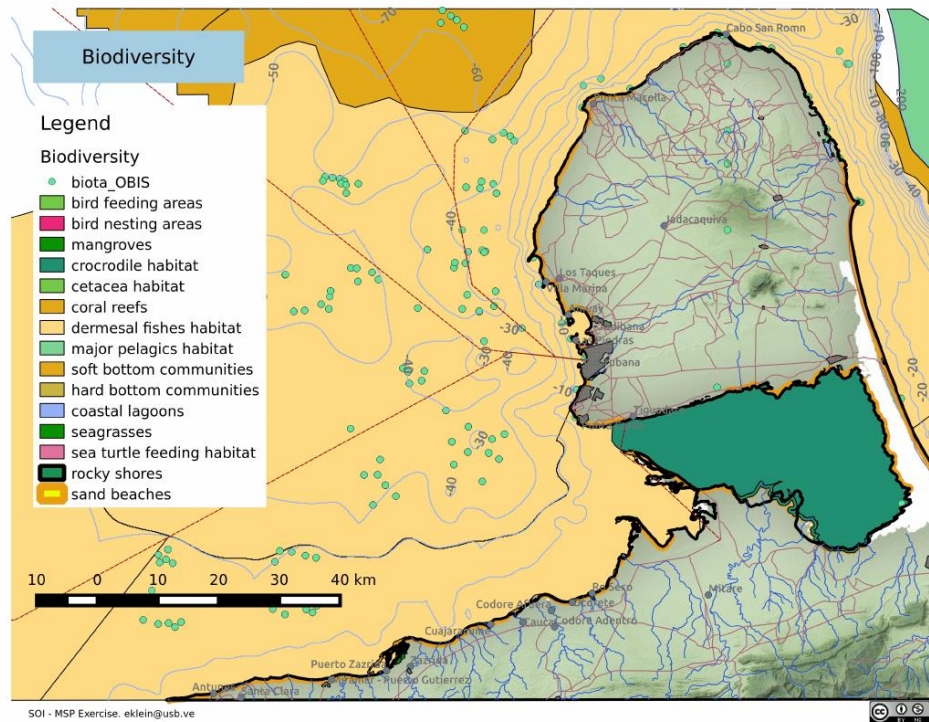
### **Oil and gas**

The area has two large refineries, which together represent the third largest refinery complex in the world. These refineries employ more than 5000 workers during the peak operating season. They receive crude oil from near Maracaibo Lake fields. There is also very active offshore development of gas and oil. The crude oil is transported by tankers and some products are delivered by pipelines. The refineries have a combined processing capacity of 940,000 barrels of oil per day. For the exercise, there is only one gas field developed offshore (“Perla” field), which is also serviced by a submarine pipeline to a nearshore gas plant.

### **Shipping**

Both commercial and oil-related shipping are present in the area. Roughly 350 vessels per month enter and exit the port of Guaraguao and the maritime terminals of Amuay and Cardon refineries. There is also a shipyard at “Los Taques”. The traffic depends greatly on the oil-related activities and in the near future, with the new offshore developments, the frequency and number of ships are expected to rise. The data layers for shipping are shown in figure 2, with the shipping lanes indicated.





**Figure 3.** Data layer showing important habitats in the area.

### Pressures

Previous studies had identified and categorized six main types of pressures on the marine environment and its biodiversity: impacts from the oil and gas industry, aquaculture farms, maritime transport, coastal urban development, inland runoff and ports and marinas. Each of the pressures was mapped according the source and a buffer was also provided to measure the extent of the impact. Each of the pressures was classified as low, medium or high intensity. Also, a map of aggregated threats was provided.

### Results of the simulation exercise

*Please note that this is a hypothetical exercise and the deliberations of the various groups and compromises discussed and agreed to are fictional and do not represent the opinions of the Secretariat or the countries with regards to how this actual area should be managed.*

By the end of the exercise, all of the groups (each group comprised of representatives from each of the sectors) had reached agreement to the location and parameters of the MPA and had made compromises to guarantee the long-term operations of their activities.

All groups had established a corridor or a special managed area inside the proposed MPA in order to allow oil industry activities. The fishers agreed on the reduction of their catch levels in exchange for a compensation for the reduction of income. Also, the fishers made agreements with the tourism industry to migrate towards an eco-tourism fishery related activities. Although a significant reduction of fisheries activities was proposed in the initial set of rules, all groups decided independently that this would not be an ideal solution, as it would have an adverse impact on the fishers' well-being. Therefore, all of the groups decided to incorporate special managed areas for fisheries inside the proposed MPA, including seasonal closures and regulated fishing effort. The oil and gas and the tourism sectors agreed to provide financial support to ameliorate the fishers in terms of housing, equipment and training for the sustainable exploitation of the marine resources. The oil and gas and the tourism sectors also agreed to establish a

conservation trust fund to support research and monitoring inside the MPA for the conservation of marine biodiversity. This monitoring would be supervised by the NGO. The oil industry agreed to shift to north maritime shipping lane outside the area of the MPA, although they expressed concerns about the costs associated with doing this. The tourism sector agreed to develop the north-west coast of the peninsula by building eco-friendly hotels and bird observation sites.

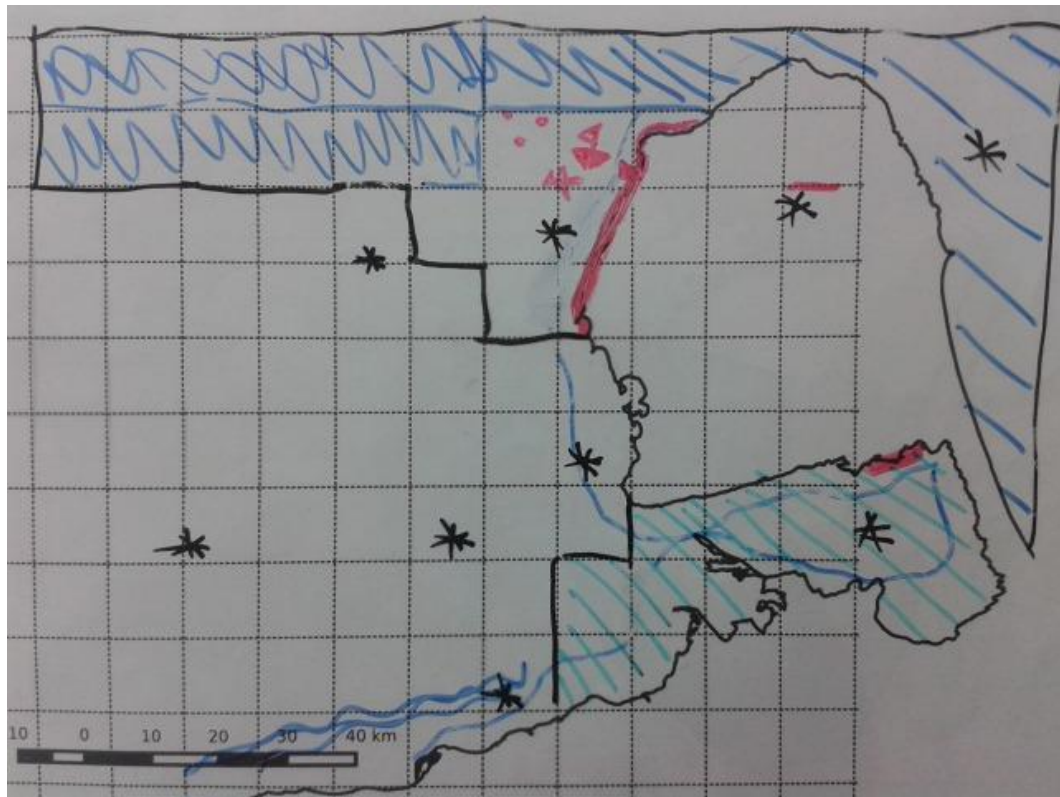
Summarizing, the different sectors had reached the following agreements; most were common among the groups:

- The oil industry agreed to set aside 2-3 per cent of revenues to set up environmental conservation fund to finance conservation programmes in the area;
- The oil industry agreed to finance monitoring of the marine environment in the area;
- The oil industry further agreed to subsidize fuel for fishers, provide fishing gear below the carrying capacity of the fishing grounds, provide training to fishermen and provide supplemental and alternative livelihoods;
- The tourism and the oil industry agreed to help the local communities improve social infrastructure development, including by setting up schools, hospitals and social halls to promote local culture;
- The conservation NGO agreed to lead the monitoring of the marine environment in the area;
- The tourism industry agreed to train the fishers in acting as guides and boat operators for tourists;
- The tourism sector agreed to propose the construction of coastal infrastructure for bird and crocodile observation, as well as environmentally friendly hotels near the coast. The location and size of the developments would be constrained by the result of a study to determine the carrying capacity of the environment.
- All sectors would promote the establishment of a buffer zone of 500 m on the coast free of constructions, in order to help to preserve the biodiversity in the area.

### **Review of the solutions of each group**

#### *Group 1 solution*

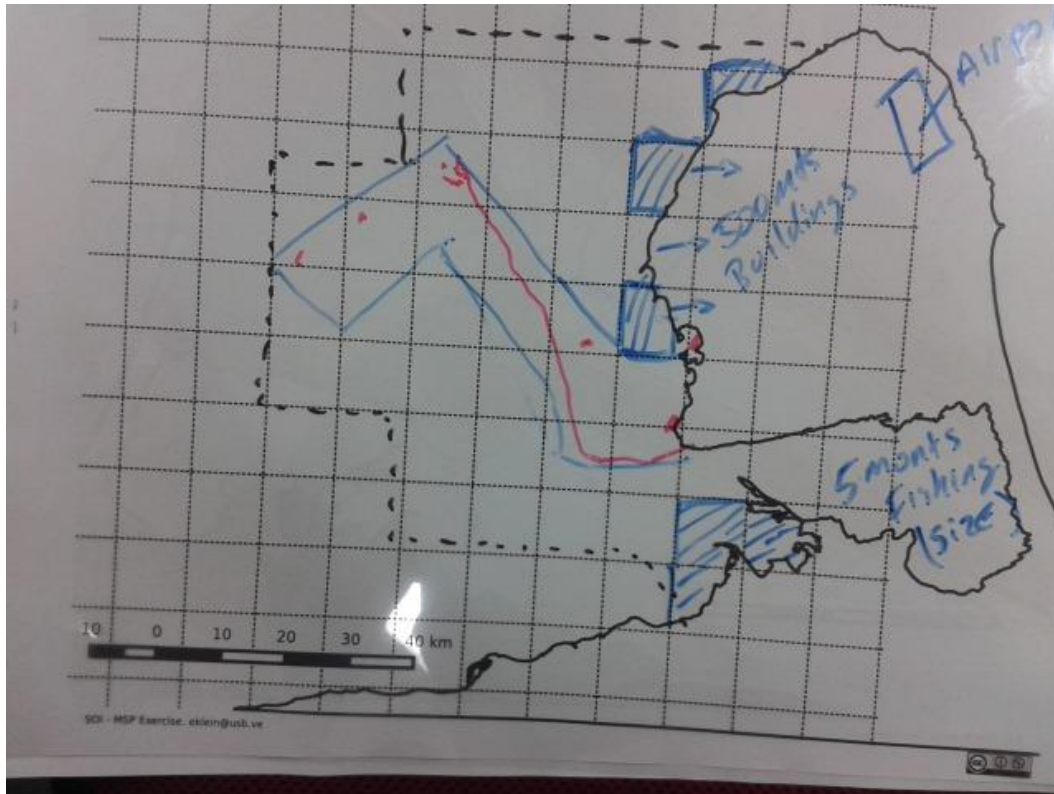
The proposed solution leaves the area of main oil and gas fields open for exploitation in compensation for the expansion of the proposed MPA towards the north and the east. They argue that most of the coral reefs located in the eastern part of the area were left out in the original proposed MPA. They also agreed to establish a special area for tourism related to underwater activities, including sinking old vessels to promote wreck diving. They agreed to develop the area south of the peninsula to promote the observation and conservation of the saltwater crocodile, an endangered species present only in the southern gulf. The southern part of the proposed MPA would be managed for sustainable fisheries. They also proposed a series of monitoring stations to evaluate the quality of the environment, including the biodiversity.



**Figure 4.** Group 1 proposed solution

### Group 2 solution

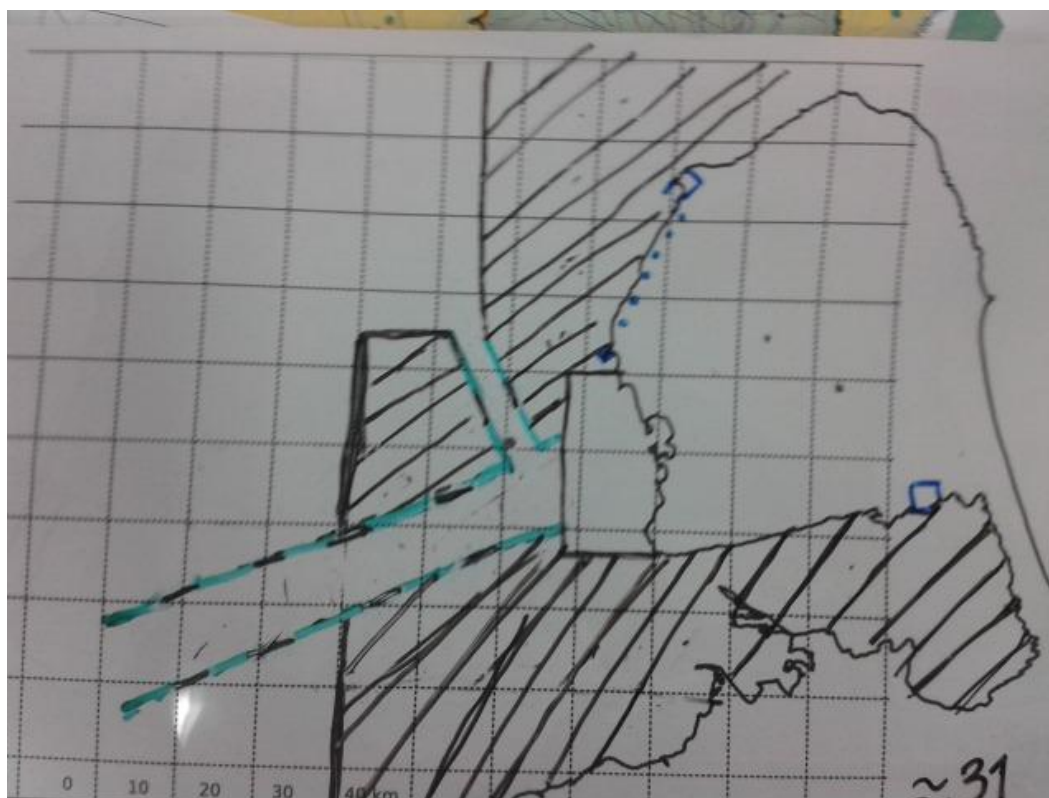
The group decided to keep the original location of the proposed MPA, but to open a corridor in the MPA to allow for oil and gas activities. They agreed to establish four areas for the special management of fisheries in the MPA, according for the most important fishing grounds. Also, they agreed that the shrimp fisheries in the inner gulf would be managed using seasonal closures. In the interest of protecting the unique coastal environments in the area, the group proposed the creation of a 500 m buffer zone on the coastline where no construction would be allowed. The tourism sector also proposed the construction of a local airport near the touristic sites to facilitate the access to the services.



**Figure 5.** Group 2 proposed solution

*Group 3 solution*

Similar to group 2, this group agreed to open a corridor for oil and gas activities and to extend the area of the MPA into the inner gulf. The tourism sector agreed to develop a network of eco-friendly hotels along the north-west coast, as well as a site in the south of the peninsula for birdwatching. The oil and gas industry promoted the reduction of the proposed MPA in order to have an area for the anchoring of tankers.



**Figure 6.** Group 3 proposed solution



*Annex VIII***DRAFT PROPOSED NATIONAL/SUBNATIONAL TRAINING PROGRAMMES TOWARDS ACHIEVING THE AICHI BIODIVERSITY TARGETS IN MARINE AND COASTAL AREAS**

*Please note that these draft proposals were developed by each of the workshop participants during the workshop and were not subjected to further review by their respective governments/agencies/offices*

**Estrategia para la Integración de las Administraciones Locales (Municipales) en la Construcción de Políticas Públicas en Manejo Costero Integrado Mediante la Aplicación de Herramientas de Construcción de Capacidades**

*Ms. Nadia Boscarol  
Secretaria de Ambiente y Desarrollo Sustentable  
Argentina*

**Antecedentes y justificación**

La Secretaría de Ambiente y Desarrollo Sustentable de la Nación de Argentina en conjunto con el Consejo Federal de Medio Ambiente, conformado por las máximas autoridades ambientales de las Provincias, ha llevado a cabo durante 2014, un proceso de Evaluación Ambiental Estratégica sobre una serie de lineamientos propuestos por un equipo de reconocidos investigadores en temas de ordenamiento territorial y ecología del paisaje, para avanzar hacia la definición y aplicación de políticas de Manejo Costero Integrado a nivel Federal.

Como producto de ese proceso se han revisado y discutido los lineamientos propuestos mediante una serie de talleres realizados en cada una de las cinco provincias costeras con la participación de representantes de los principales sectores vinculados a la temática, tanto gubernamentales como de centros de investigación, universidades y organizaciones no gubernamentales ambientalistas locales. El resultado es un extenso documento que recoge todas las experiencias y concluye en una serie de directrices consensuadas por el Consejo Federal de Medio Ambiente, como las bases para el desarrollo de una Estrategia Federal de Manejo Costero Integrado.

El siguiente paso en el proceso corresponde a la generación y redacción de la mencionada estrategia, ampliando el alcance de los mecanismos de participación a los principales municipios costeros (gobiernos y comunidades locales) de las 5 provincias costeras.

**Objetivo principal**

*(Es fundamental comprender el doble objetivo estratégico de la herramienta de creación de capacidad propuesto)*

Como objetivo principal, mediante las actividades propuestas, se espera construir capacidades a nivel de las administraciones locales (municipales) sobre el concepto de Manejo Costero Integrado, su importancia para la planificación a nivel local, provincial y nacional, así como sobre las principales herramientas de gestión disponibles para su implementación.

Como objetivo principal paralelo se espera involucrar en el proceso de desarrollo de la Estrategia Federal de Manejo Costero Integrado a las comunidades y administraciones locales de las poblaciones costeras.

**Objetivos secundarios**

- Identificar los temas estratégicos a ser considerados localmente como objetos del MCI
- Identificar y caracterizar los principales referentes en relación a dichos temas
- Instalar y Catalizar la visión multisectorial necesaria para el Manejo Costero Integrado
- Identificar líderes locales
- Caracterizar el potencial que la localidad presente para el desarrollo de un programa piloto de ordenamiento territorial en orden con las directrices propuestas en la estrategia
- Avanzar en la identificación local de las “Áreas de gestión específica” según las directrices propuestas en la estrategia

**Alcance**

Si bien las actividades serán llevadas a cabo a nivel local, el alcance tendrá resultados a nivel provincial y a nivel nacional, ya que constituye una estrategia para incluir a los gobiernos y comunidades locales en el proceso de desarrollo de la Estrategia Federal de Manejo Costero Integrado.

En cuanto al alcance temporal, el esquema que se planea es la realización de un taller en por lo menos dos municipios de cada provincia durante el próximo año.

**Socios estratégicos**

El proceso se llevará a cabo desde la Secretaría de Ambiente y Desarrollo Sustentable de la Nación, involucrándose personal técnico y profesional del Grupo de Trabajo de Recursos Acuáticos de la Dirección Nacional de Ordenamiento Ambiental del Territorio, y de la Dirección de Recursos Hídricos, de modo de instalar el diálogo y la colaboración interdepartamental desde la raíz del proceso. Esta institución estará a cargo de la Coordinación de las actividades del taller, los facilitadores y los elementos e insumos necesarios para su desarrollo.

Este mecanismo permite que los costos de los capacitadores y facilitadores se puedan cubrir con los fondos para traslados y viáticos con que regularmente cuenta la secretaría de Ambiente de la Nación.

El Consejo Federal de Medioambiente continuará siendo un socio fundamental, ya que sus decisiones, expresadas mediante actos resolutivos, respaldan y legitiman a nivel federal la voluntad de avanzar en la definición de políticas públicas de Manejo Costero Integrado.

La convocatoria mixta y en lo posible tripartita se considera una importante herramienta para el éxito de los procesos de participación ciudadana, ya que evita la polarización de la audiencia, por lo que se procurará que las invitaciones estén patrocinadas por tres instituciones convocantes.

Las autoridades ambientales provinciales serán asimismo socios estratégicos, ya que por un lado han consensado las directrices y por otro lado su conocimiento y vinculación con las autoridades locales, facilitará selección, la convocatoria y la participación de los actores a nivel local.

Se espera contar también como colaboradores y convocantes en la organización de los talleres a las propias autoridades municipales.

De ser conveniente (si mantuvieran un buen vínculo previo con las autoridades locales), también pueden ser patrocinantes y considerarse socios estratégicos a las organizaciones no gubernamentales en temas ambientales con presencia en la localidad.

**La audiencia**

Además de los organismos convocantes se espera contar con la participación de unas 30 personas conformadas por:

- Representantes de los diferentes sectores de los gobiernos locales, (ambiente y recursos naturales, planificación y vivienda, puertos, pesca, turismo, y sectores de provisión de agua potable y tratamiento de residuos).
- Representantes de institutos de investigación y universidades con vinculación a la temática. (No solo sobre temas ambientales y marinos, sino de arquitectura, ingeniería y sociales.)
- Representantes de organizaciones no gubernamentales ambientalistas y de otras organizaciones de la sociedad civil interesados en la temática.
- Representantes del sector privado, principalmente de las cámaras de pesca, turismo y energía, según las producciones que se lleven a cabo en cada localidad.

**Formato de los talleres y metodología**

El Programa de creación de capacidades que se propone llevar a cabo, tendrá una estructura de taller participativo, de dos días consecutivos de duración a ser replicado en distintos municipios de las provincias costeras.

La audiencia esperada es de 30 participantes por taller.

La estructura del taller estará conformada por una apertura institucional dada por las autoridades gubernamentales y secciones de presentaciones teóricas realizadas por un facilitador y secciones de trabajo individual o grupal de los participantes sobre premisas impartidas por el facilitador que serán posteriormente discutidas en secciones de plenario en busca de generar un colectivo con una visión común de la temática presentada.

Una actividad fundamental será demostrar mediante un ejercicio de diseño rápido sobre un mapa de la localidad, como cada individuo o sector posee una visión propia individual y sectorial de cómo deberían ordenarse el territorio y las actividades en la zona costera. Y de esta manera hacer emerger la necesidad de una visión común para la organización del espacio y las actividades para el bien común y el largo plazo.

Otro punto será demostrar que los usuarios y administradores del espacio costero, son en realidad usuarios y administradores de los bienes y servicios que el ecosistema costero les provee, y por lo tanto responsables de su mantenimiento. Siendo el Manejo Costero Integrado un camino que facilita la buena administración de estos bienes y servicios.

Presentado el concepto y utilidad del Manejo Costero Integrado, se explicará la importancia de la participación ciudadana e intersectorial y la necesidad de integrar los procesos que se inician de arriba hacia abajo con los que se desarrollan desde las bases, relatando el proceso participativo que llevó al acuerdo de trabajo entre las cinco provincias, y las directrices acordadas para la construcción de la Estrategia Federal de Manejo Costero Integrado, así como cuáles son las principales herramientas de gestión a tal fin disponibles.

Se propondrá identificar otros actores que no estén presentes y se considere que son de importancia a nivel local, así como los principales temas que deberán ser localmente considerados para un proceso de ordenamiento en el marco conceptual del Manejo Costero Integrado.

Por último se repetirá el ejercicio de zonificación hecho inicialmente en forma individual, en grupos conformados por actores de diferentes profesiones intereses y sectores observando los componentes territoriales de las directrices acordadas para la construcción de la Estrategia Federal de Manejo Costero Integrado, y serán expuestos por cada grupo y discutidos en plenario tratando de alcanzar un consenso, pero a la vez reflejando los posibles conflictos en un primer borrador de zonificación de la localidad utilizando los conceptos del Manejo Costero Integrado.

Se preparará un cuestionario para que los participantes puedan evaluar la actividad y así retroalimentar la propuesta en un proceso de mejora continua.

Se realizará un informe con los resultados del taller que será entregado a las máximas autoridades locales junto con una propuesta que facilite su compromiso para dar continuidad al proceso.

Se enviarán asimismo un resumen del informe a los participantes por correo electrónico agradeciendo su participación y dejando abierto de esta manera un canal de comunicación con los organizadores y promotores del taller y del proceso.

## **Strategy for Capacity-Building Training Programme for Stakeholders in Bangladesh**

*Mr. Syful Asrab*

*Ministry of Environment and Forests*

*Bangladesh*

### **Vision**

- Conserve, and restore the Sonadia Ecologically Critical Area (ECA), including globally threatened migratory species, especially birds and mammals in Sonadia Ecologically Critical Area (ECA), Moheshkhali, Cox's Bazar, Chittagong;
- Maintain and to improve environmental stability for Sonadia Ecologically Critical Area (ECA);
- Biosecurity – prevent the introduction of invasive alien species and genetically modified organisms Coastal and Marine Area.

### **Goal**

- Help secure a clean and healthy environment in the Sonadia Ecologically Critical Area (ECA), Moheshkhali, Cox's Bazar, Chittagong:
  - Through guiding, trainings in the local level, and promoting awareness
  - Through sustainable actions, i.e., spatial planning, national action plan, National Environment Management Action Plan (NEMAP), Integrated Coastal Zone Management Plan, National Adaptation Plan of Action (NAPA), Biodiversity National Assessment and Programme of Action (NAPA), National Conservation Strategy, review the national biodiversity strategy and action plan (NBSAP) on critical environmental problems that demonstrate practical solutions
- Maintaining the richness in diversity is very important as biodiversity and ecosystems support the people with both food supply and livelihoods of the Sonadia Ecologically Critical Area (ECA), Moheshkhali, Cox's Bazar, Chittagong

### **Objectives**

- Raise awareness of locals
- Improve inter-agency coordination between Govt. and Non govt. organization
- Monitoring and evaluation
- Exchanging information and experiences
- Mobilizing necessary funding
- Management of Sonadia Ecologically Critical Area (ECA)

### **Issue(s)**

- Lack of knowledge
- Coordination gap
- Biodiversity restoration/habitat restoration
- Sonadia ECA management
- Importance of biodiversity

### **Tools**

Print and electronic media

### **Target audience**

- Public representatives
- Leader of fishers, indigenous and local communities, VCG (Village Conservation Group)
- ECA/biodiversity managers
- Union/Upazilla ECA coordination committee, Partner NGO personnel
- Researchers/professionals/individuals/volunteers

### **Format for the training**

- Development of training module for various target group on Sonadia ECA
- Training packages designed for 2 training annual programmes with a duration of 8 hours
- Lectures and experience sharing for resources identification and conservation practices

- Workshops for knowledge sharing among VCG, Union/Upazilla ECA Committee.
- Documentary/video showing for ECA/biodiversity restoration, habitat restoration and ECA management
- Talk shows for awareness raising and ECA/habitat restoration among the locals.

#### **Resources person**

- University professors.
- National scientists
- International experts
- National experts

#### **Partners**

- Ministry of Environment and Forests
- Department of Environment, environmental partners
- NGOs/research institutes/universities/public trusts
- Foreign donor

#### **Financing**

- Government contributions
- Donor funding
- Trust funds
- NGOs

#### **Scale**

Subnational/Local level

#### **Government agencies**

- Ministry of Environment and Forests
- District Administration
- Upazilla Administration
- Union Parisad

#### **Public trust**

- BCCTF - Bangladesh Climate Change Trust Fund
- WARPO - Water Resources Planning Organization
- IWM - Institute of Water Modeling
- CEGIS - Centre for Environmental and Geographic Information System

#### **Universities**

**DU** - University of Dhaka

**BUET** - Bangladesh University of Engineering and Technologies

**Institute of Marine Sciences and Fisheries (IMSF)**, University of Chittagong—A premiere academic institute of marine sciences in Bangladesh

**BRMRMU** - Bangabandhu Sheikh Mujibur Rahman Maritime University—The country's first maritime university for higher maritime education

#### **Research institutes**

*Scientific research*

NORI - National Oceanographic Research Institute

*Data collection*

BFRI - Bangladesh Fisheries Research Institute (*Fisheries resource management*)

BNH - Bangladesh National Herbarium (*Plant specimens store*)

BLRI - Bangladesh Livestock Research Institute (*Livestock research*)

**NGOs**

IUCN - Bangladesh (*focused on endangered species*)

EAAFP - East Asian - Australian Flyway Partnership (*focused on migratory birds conservation*)

NACOM - Nature Conservation Management (*focused on coastal ecosystem/wetland conservation and management*)

CNRS - Centre for Natural Resource Studies (*focused on management of the ECAs*)

BCAS - Bangladesh Centre for Advanced Studies (*focused on advocacy*)

**Outcomes**

- Sonadia ECA management / habitat restoration
- Coastal and marine resource management

## **Plan Stratégique pour la Conservation de la Diversité Biologique Marine au Bénin et dans les Pays Voisins comme le Togo et le Ghana: Cas des Cétacés et des Tortues Marines**

*Mr. Zacharie Sohou*

*Centre Béninois de la Recherche Scientifique et Technique*

*Benin*

### **Introduction**

La Stratégie Nationale et le Plan d'Action pour la Conservation de la Diversité Biologique (SPANB) élaboré en 2002 et mise à jour 2013 a marqué l'aboutissement d'un processus de concertation pour établir des consensus sur une vision novatrice de la gestion des ressources biologiques au Bénin. L'objectif global visé dans la SPAN était de contribuer au développement durable du Bénin et à la réduction de la pauvreté à travers une meilleure gestion de la diversité biologique. Plusieurs objectifs spécifiques découlent de cet objectif global et sont déclinées en actions prioritaires qui restent en cohérence avec les objectifs et indicateurs (mondial et national) de la convention. Il s'agit de: (i) Restaurer les ressources biologiques naturelles et leurs supports à un niveau supérieur aux besoins des populations et qui permettent de contribuer significativement au développement économique, (ii) Moderniser de manière écologiquement acceptable l'agriculture d'ici à l'an 2015, (iii) Tenir compte de la diversité biologique dans l'ensemble des actions de développement économique et social, et dans l'éducation, (iv) Valoriser la Diversité Biologique et les ressources génétiques en s'appuyant sur les opportunités du partage juste et équitable des avantages découlant de l'exploitation des ressources génétiques, et (v) Créer un cadre viable de concertation, de suivi, de coordination et d'orientation de toutes les activités nationales de gestion de la Diversité Biologique. Les actions proposées par le Bénin permettront d'atteindre les objectifs d'Aichi 2020 et viennent en complément à celles déjà préconisées dans le quatrième rapport.

Ici on s'intéresse à la conservation des cétacés et des tortues marines qui sont des espèces sous menace.

### **Distribution, migration et populations de cétacés et tortues**

Les cétacés se retrouvent sur le plateau continental béninois à partir de mi-août jusqu'à mi-novembre d'après les travaux de recherches menés par Sohou Z. et al. en 2013. Ces mêmes espèces identifiées se retrouvent aussi dans les pays voisins à savoir le Togo et le Ghana. Ce sont des espèces migratrices dans les différents pays de la sous-région.

Au Bénin plusieurs espèces de tortues viennent pondre sur les plages d'après les travaux de Dossou-Bodjrènou.

### **Goals and objectives**

#### **Objectif global**

Sauvegarder les espèces de cétacés et de tortues marines dans les pays concernés.

#### **Objectifs spécifiques**

- 1- Renforcement des capacités des éco-gardes et des pêcheurs cibles sur la conservation des cétacés et des tortues marines dans les communes littorales du Bénin;
- 2- Renforcement des capacités des éco-gardes et des pêcheurs cibles sur la conservation des cétacés et des tortues marines dans les pays voisins comme le Togo et le Ghana;
- 3- Formation pour le développement de l'écotourisme autour de ces espèces protégées.

Le but et l'objectif consistent à la sauvegarde de ces espèces. Il s'agira d'empêcher les pêcheurs de tuer les tortues marines par la sensibilisation. Le but est de les amener à libérer les tortues d'eux-mêmes sans une quelconque influence de qui que ce soit; le pêcheur devient gardien pour lui-même.

Il faut montrer aux populations riveraines combien il est important de ne pas ramasser les œufs des tortues et de faire des lâchers tortues bébé en mer.

Il libère aussi les cétacés dès qu'il y en a qui tombe accidentellement dans leur filet. Le pêcheur devient le surveillant de lui-même compte tenu de l'importance de ces espèces.

Il s'agira de mettre à profit la collaboration entre les scientifiques et les ONGs des différents pays concernés. Ces partenaires seront associés à toutes les formations au niveau régional. Ensuite les transferts et les relais se feront sous la conduite des acteurs dans leurs pays respectifs.

### Résultats attendus

- Les pêcheurs et la population riveraine commencent par libérer les tortues marines dès leur capture;
- Les pêcheurs et la population riveraine prennent soins des œufs de tortues s'ils arrivent à les ramasser sur la plage jusqu'à l'éclosion et les lâcher des bébés en mer;
- Les agences de tourisme comprennent l'importance des cétacés et tortues marine en développant l'écotourisme autour de ces espèces.

### Issue(s) to be addressed

Le problème est le non-respect des cétacés et des tortues marines par les pêcheurs, la population riveraine et les agences de tourisme

### National/subnational priorities that this will contribute to

La priorité est d'abord nationale. Compte tenu du comportement des espèces à protéger, il faut étendre les actions dans les pays voisins. Ce sont des espèces qui se déplacent dans les eaux marines des différents pays du Golfe de Guinée. Ainsi il faut une action soutenue dans la sous-région.

Le Bénin a adhéré à plusieurs conventions dont celle sur la biodiversité. Le Bénin a signé la Convention sur la Diversité Biologique le 12 juin 1992, l'a ratifiée le 30 juin 1994 et élaboré la première stratégie pour sa mise en œuvre en 2002.

Par ailleurs, le Bénin est signataire de la Convention RAMSAR sur les Zones Humides qui est entrée en vigueur le 24 mai 2000.

Il s'agit de 4 sites dont deux au sud bénin concernant les sites de ponte des tortues marines: (i) 1017 d'une superficie de 47 500 ha (Basse Vallée du Couffo, Lagune Côtière, Chenal Aho, Lac Ahémé), (ii) 1018 d'une superficie de 91 600 ha (Basse Vallée de l'Ouémé, Lagune de Porto-Novo, Lac Nokoué),

Plusieurs autres outils contribuent à la conservation de la diversité biologique:

- La loi-cadre sur la pêche a été votée par le parlement béninois en 2014;
- La loi n° 98-030 du 12 février 1999 portant loi-cadre sur l'environnement;
- La loi n° 2010- 44 du 24 novembre 2010 portant gestion de l'eau en République du Bénin;
- La Loi N° 2002-016 du 18 Octobre 2004 portant régime de la faune en République du Bénin.

Le Gouvernement s'était fixé à travers la Stratégie de Croissance pour la Réduction de la Pauvreté SCRP\_2007-2009, l'objectif de poursuivre les actions qui avaient déjà été entreprises à travers plusieurs projets/programmes en les élargissant à la mise en place d'un cadre juridique plus favorable à la gestion durable des ressources naturelles. Dans le paragraphe 265 de la SCRP 2007-2009, le Gouvernement entendait orienter ses priorités d'intervention entre autres sur (i) la mise en place d'un cadre de partenariat national, sous régional et international en matière de conservation et de gestion durable de la biodiversité.

Pour le Bénin: « *D'ici à 2020, les collectivités territoriales décentralisées, l'Etat et la Société civile s'impliquent davantage dans les actions concrètes et concertées de valorisation, de conservation et de restauration de la diversité biologique pour le développement socio-économique et le bien-être des populations* »

Les principes directeurs de la stratégie retenue par le Bénin lors de la rencontre des experts nationaux sur l'élaboration de la stratégie nationale:

- 1- Adhésion de tous les acteurs à la vision commune de la Diversité biologique Engagement réel et implication de tous les acteurs dans un processus de planification/programmation dynamique et synergique
- 2- Prise en compte systématique de la SPANB comme outil d'intégration de la Biodiversité dans les programmes nationaux et locaux de développement
- 3- Synergie nationale et régionale relative aux Conventions sur la diversité biologique et autres Accords sur l'environnement



- 4- Promotion de partenariat public-privé actif autour des questions de biodiversité
- 5- Prise en compte de l'approche par écosystème dans la mise en œuvre des actions sur la conservation de la diversité biologique.

### **Target audience**

L'audience cible est constituée des populations riveraines des communes littorales des pays concernés. Il s'agit des autorités locales, religieuses et traditionnelles y compris les femmes et les enfants. Les agences de tourisme sont aussi concernées à cause du développement de la filière de l'écotourisme qui doit être promu autour de ces espèces. Pourquoi les agences ? Il faut les former sur les attitudes à tenir face aux cétacés sans leur faire peur et leur faire mal afin de pérenniser leur activité.

### **Details of the training**

Les différentes formations permettront à la population cible d'assimiler les comportements idoines à adopter faces aux différentes espèces afin de les conserver à savoir:

- ✓ Importance des espèces dans l'écosystème;
- ✓ Comment libérer les espèces pêchées accidentellement;
- ✓ Précaution à prendre pour faire éclore les œufs de tortues ramassés sur les plages;
- ✓ Reconnaître les différentes espèces;
- ✓ Conduites à tenir lors de l'observation des cétacés en mer;
- ✓ La valeur de ces espèces dans le développement de l'écotourisme.

### **Format for the training**

- ✓ Des ateliers de formations;
- ✓ Des focus groups;
- ✓ Des formations modulaires;
- ✓ Des activités pratiques en mer et sur les plages;
- ✓ Des communiqués radio et télévisés;
- ✓ Des jeux-concours;
- ✓ Des posters et des projections de film.

### **Partners to be engaged**

- Les chercheurs spécialistes des différentes espèces ciblées;
- Les spécialistes en communication;
- Les autorités politico-administratives à divers niveaux en charge de la biodiversité;
- Les responsables des associations des pêcheurs à divers niveaux;
- Les responsables des agences de tourisme;
- Les chefs religieux, traditionnels et les notables;
- Gestionnaires des ressources vivantes et éco gardes;
- Les ONGs dont une qui sera le leader pour la conduite des activités;
- Les communautés à la base: chefs religieux, chefs traditionnels, notables, les femmes, les pêcheurs et les mareyeuses.

### **Méthodologie**

La méthodologie à adopter est de faire un atelier sous régional, regroupant les éco gardes et les pêcheurs cibles dans les différents pays concernés. Ensuite faire un atelier dans chaque pays. Elaborer des outils de communication tels que les dépliants, des plaquettes, des annonces publicitaires. Faire des réunions de focus groupe. Des émissions radio et télévisées dans les différentes langues locales des différentes communautés des différents pays. Il s'agira d'acheter des téléphones portables aux éco – gardes pour communiquer avec l'ONG leader qui doit prendre contact avec la structure de recherche habileté pour l'identification des différentes espèces rencontrées. Il s'agira de convaincre les populations cibles sur l'importance que revêt la conservation de ces espèces.

Les agences de tourisme doivent suivre aussi la formation afin de connaître l'importance de ces ressources.

Les CD, des posters et autres outils de communication sont disponibles pour la sensibilisation.

La stratégie est de passer ensuite dans chaque localité où vivent des pêcheurs pour une sensibilisation avec des groupes cibles.

Les autorités locales, religieuses et traditionnelles seront associées à la sensibilisation, ce qui facilitera le travail sur le terrain. Les femmes ne seront pas du reste; elles sont associées à tous les processus.

Il s'agira d'organiser des sorties en mer pour l'observation des cétacés en collaboration avec les agences de tourisme avec la population des pays concernés. Avec des sorties répétées, et une sensibilisation au sein de la population, des intérêts seront suscités pour faire naître la culture de se distraire en mer en compagnie des cétacés. Pour l'instant, les cétacés sont présents sur les côtes béninoises, d'après les recherches de mi-août à mi-novembre.

Les éco-gardes et les populations de pêcheurs seront utilisés comme employés dans les différentes agences de tourisme. Des emplois directs et indirects seront créés au sein de la population.

Les intérêts indirects concernent l'augmentation du PIB du pays avec le développement de la nouvelle filière de l'écotourisme qui est créée.

**Ressources nécessaires**

Deux à trois ans de projet avec un financement extérieur et autofinancement issu des activités de l'écotourisme pour la suite afin de pérenniser les activités.

## National training on management and restoration of mangrove habitats in Cameroon

Ms. Sylvie Carole Ntyam Ondo  
Ministry of Scientific Research and Innovation  
Cameroon

### Background

- Mangroves constitute an important natural resource and have a high socioeconomic value, supporting the livelihoods of several coastal communities
- The estimated mangrove area in Cameroon was 195,700 ha in 2005, down from an estimated 272,000 ha in 1980 (a reduction of about 30 per cent over a period of 25 years or 2,500 ha per year);<sup>3</sup>
- Mangrove forests have sustained some communities for generations, but population rise is adding increased pressure on mangrove forests;
- Mangrove habitats are extremely prone to the impacts of climate change and sea level rise;
- Overexploitation and depletion of mangrove ecosystems is a growing problem in Cameroon.

### Rationale

This proposal seeks to address overexploitation and destruction of mangrove ecosystems in Cameroon through appropriate interventions.

### Global objective

The proposal seeks to strengthen regional capacities for sustainable mangrove management through training workshops. Participants will be trained in strategies, methods and techniques for mangrove management. Case studies as well as practical field training will be used.

### Target audience

These workshops will target both communities and NGOs to enable interregional information sharing across cultures, while enhancing capacity-building and problem-solving at a local and regional level.

### Format for the training workshops

- Presentations
- Discussions
- Field activities

### Partners to be involved

- Local government
- Universities
- Research institutions
- Private sector
- Resource people

### Specific objectives

Enhance the capacity of training recipients to:

- Understand the role of mangrove ecosystems and how the degradation of mangroves affects the marine environment;
- Understand principles and the scientific aspects of management and sustainable use of mangroves;
- Understand methodologies and techniques, as well as the scientific basis, for mangrove management and restoration, with a particular emphasis on *Avicennia marina* and *Rhizophora mucronata*;
- Understand data requirements and factors influencing successful mangrove management and restoration, including financial needs;

<sup>3</sup> UNEP (2007) Mangroves of Western and Central Africa. UNEP-Regional Seas Programme/UNEP-WCMC.

**Outcomes of the training**

The capacities of communities and NGOs are improved in terms of:

- Mangrove management strategies
- Mangrove restoration techniques

## **Programa de entrenamiento Colombia: desarrollo de una estrategia subnacional para el establecimiento de indicadores de biodiversidad marina**

*Ms. Martha Patricia Vides Casado*  
*Marine and Coastal Research Institute (INVEMAR)*  
*Colombia*

### **Antecedentes**

Desde la implementación de la primera estrategia de manejo integrado de zona costera y a partir de la evaluación de la vulnerabilidad de las zonas costeras frente al acelerado aumento del nivel del mar debido al cambio climático global en el año 1999, se han establecido cinco políticas nacionales<sup>4</sup> que hacen referencia al manejo y gestión de la zona costera del país en sus tres regiones, Caribe, Pacífico e Insular. En respuesta a esta necesidad, el *Instituto de Investigaciones Marinas y Costeras José Benito Vides de Andreis* – INVEMAR – ha propiciado el entrenamiento en temas de manejo integrado de zonas costeras (MIZC) y áreas marinas protegidas (AMP) de profesionales y funcionarios públicos en el ámbito nacional, subnacional y local, como una forma de propiciar el entendimiento e incorporación de los temas marinos y costeros en la planeación, ordenamiento territorial y la gestión de áreas protegidas. Estos cursos se han realizado con el objetivo de fortalecer la capacidad técnica de las instituciones del Sistema Nacional Ambiental (SINA) incluidos los entes territoriales con injerencia costera y consolidar un grupo interdisciplinario de profesionales que contribuyan al MIZC y AMP en el país. Estos cursos han sido enfocados hacia el entrenamiento en conceptos, contexto internacional y nacional del tema, métodos y aplicación mediante casos de estudio.

En total se han capacitado 820 personas entre estudiantes, comunidad local, representantes de Corporaciones Autónomas Regionales (CARs), Parques Nacionales Naturales y Ministerio de Ambiente, entre otros. Para el desarrollo de los cursos se han invitado a más de 30 expositores nacionales e internacionales de Brasil, Chile, Estados Unidos, Ecuador y España. En el año 2014 el curso MIZC tuvo como eje principal el tema de Planificación Espacial Marina – PEM – y fue desarrollado dentro de la estrategia OceanTeacher – Academia Global de la IODE-UNESCO.

### **Justificación**

El proceso de manejo integrado en Colombia ha seguido los lineamientos establecidos por guías nacionales, bajo una metodología reconocida como COLMIZC, la cual incluye una primera etapa de caracterización y diagnóstico, consistente en la elaboración de un inventario y descripción de las características propias del sistema, sus componentes, funciones, recursos, potencialidades, restricciones o limitaciones y el proceso evolutivo que lo ha llevado a la situación actual.<sup>5</sup> Estos inventarios deben incluir registros de biodiversidad marina y costera, su valor y estado actual, para que puedan luego servir de base para evaluaciones de gestión futura.

Es prioritario para el país que todos los procesos de generación, administración, intercambio y socialización de la información asociada a los indicadores mínimos que deberán incorporarse en los procesos de planificación de las Corporaciones Autónomas Regionales y de Desarrollo Sostenible

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<sup>4</sup> Política Nacional para Humedales Interiores, Estrategias para su Conservación y Uso Racional; Política Nacional Ambiental para el Desarrollo sostenible de los espacios oceánicos y las zonas costeras e insulares de Colombia; Política Nacional del Océano y los Espacios costeros; Política Nacional del Recurso Hídrico; Política Nacional para la Gestión Integral de la Biodiversidad y sus Servicios Ecosistémicos

<sup>5</sup> El proceso de manejo integrado en Colombia ha seguido los lineamientos establecidos por guías nacionales, bajo una metodología reconocida como COLMIZC, la cual incluye una primera etapa de caracterización y diagnóstico, consistente en la elaboración de un inventario y descripción de las características propias del sistema, sus componentes, funciones, recursos, potencialidades, restricciones o limitaciones y el proceso evolutivo que lo ha llevado a la situación actual. Estos inventarios deben incluir registros de biodiversidad marina y costera, su valor y estado actual, para que puedan luego servir de base para evaluaciones de gestión futura.

(CARs), sean normalizados (RESOLUCION 0964 DE 2007 del MAVDT).<sup>6</sup> Los indicadores mínimos de gestión relacionados con las acciones orientadas a la conservación del patrimonio natural, incluyen tanto los ecosistemas estratégicos (estuarios, manglares, playas, etc.), con planes de manejo u ordenación en ejecución como las especies de fauna y flora amenazadas, con Planes de Conservación en ejecución.

Por medio del Decreto número 1120 de 2013, el Gobierno Nacional reglamentó las Unidades Ambientales Costeras (UAC), ampliando la responsabilidad de gestión ambiental de las CARs sobre los sistemas marinos. Dado que estos sistemas solo hasta ahora empiezan a ser conocidos y gestionados en muchas Corporaciones costeras, la selección de indicadores de gestión sobre el medio marino se ha llevado a cabo de forma reactiva frente a los diferentes compromisos que impone la normativa reglamentaria, sin considerar muchas veces su eficacia o eficiencia.

Por otra parte, el sistema de indicadores nacionales se ha enriquecido e impulsado desde las iniciativas internacionales en las cuales el país participa.<sup>7</sup> De forma paralela el INVEMAR ha sido llamado a participar de la generación de indicadores de biodiversidad marina que permitan posicionar a Colombia en el contexto mundial (GEO, OHI, GBIF, IABIN, entre otras).

El uso de indicadores que permitan establecer los indicadores relacionados con las acciones orientadas a la conservación del patrimonio natural, no ha sido establecido con claridad en la metodología COLMIZC y permiten a cada comité que conforma las unidades de gestión costera, establecer sus propios criterios de selección y uso. Muchos de estos indicadores, si bien responden a los mismos objetivos, no son reconocidos como elementos complementarios que utilizan mecanismos y recursos comunes de medición. Esta situación no permite hacer comparaciones o mediciones en la efectividad de manejo y gestión de este componente. Una estandarización de mecanismos de medición referidos a partir de indicadores comunes, permitirían al país no solo el avance en términos de cumplimiento de sus compromisos a nivel internacional sino a una mejor y más eficiente gestión a nivel sub nacional y regional.

### **Objetivo**

Desarrollar un a través de una estrategia de entrenamiento, mecanismos de coordinación entre las autoridades ambientales de gestión regional costera, que permita reconocer indicadores de gestión de la biodiversidad marina comprometidos no solo en gestión relacionados con las acciones de las sobre los recursos naturales, sino a nivel internacional entre muchos otros frentes, tendiente a la optimización de recursos institucionales actuales y en el marco de la normativa nacional (Ley 1263 de 2008 y Decreto 2350 de junio de 2009).

### **Estrategia**

Desde finales del año 2014, el INVEMAR ha sido designado como Centro de Entrenamiento Regional en Ciencias del Mar para Latinoamérica, el cual hace parte de la estrategia OceanTeacher – Academia Global, de IODE-Comisión Oceanográfica Intergubernamental-UNESCO. OceanTeacher es un sistema de formación integral basado en la web que apoya la formación en el aula, el aprendizaje a distancia, la tutoría en línea y auto-aprendizaje. Ha sido desarrollado como un sistema de formación para los gestores de datos oceánicos, de información marina, así como para los investigadores que deseen adquirir o ampliar su conocimiento en temas específicos.

Esta experiencia permite al INVEMAR hoy en día contar con la capacidad de implementar sistemas para el manejo del aprendizaje en línea, semipresencial o presencial que permita la creación de herramientas con cursos dinámicos (Moodle). En respuesta al interés que la temática propuesta pueda generar entre los diferentes grupos, esta estrategia de capacitación servirá como herramienta de coordinación y divulgación.

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<sup>6</sup> MAVDT. 2007. Guía para la formulación y el seguimiento de los Planes de Acción de las Corporaciones Autónomas Regionales y de Desarrollo Sostenible 2007-2011. Ministerio de Ambiente Vivienda y Desarrollo Territorial. Bogotá. 81 p.

<sup>7</sup> Iniciativa Latinoamericana y Caribeña para el Desarrollo Sostenible-ILAC; Anuario Estadístico de la Comisión Económica para América Latina y el Caribe-CEPAL; Sistema de Información del Medio Ambiente de los Países de la Comunidad Andina-SIMA; Red de Información y Datos del Pacífico Sur para el Apoyo a la Gestión Integrada del área Costera (SPINCAM); Objetivo 7 del Desarrollo del Milenio – ODM.

## Grupo objetivo

La estrategia esta direccionada a los investigadores a cargo de la medición de indicadores de gestión dentro de cada una de las entidades que hacen parte del Sistema Nacional Ambiental de Colombia, las cuales se encuentran lideradas por el Ministerio del Medio Ambiente, las Corporaciones Autónomas Regionales con jurisdicción en la zona costera, la Unidad de Parques Nacionales Naturales, las entidades territoriales costeras del orden departamental y municipal y los Departamentos Ambientales de las ciudades costeras. La selección de los participantes se deberá establecer bajo los criterios de establecimiento de responsabilidades, competencias y alcances frente a los indicadores de biodiversidad dentro de cada entidad territorial, para así poder definir el perfil de las personas que serán invitadas a este entrenamiento.

## Temáticas

Para el abordaje de las temáticas a trabajar en el taller será necesario hacer una búsqueda y preparación de los diferentes indicadores de biodiversidad marina a los cuales Colombia debe responder en los diferentes niveles de gestión y manejo. Esta búsqueda se basara en la identificación dentro de la normativa nacional vigente, compromisos adquiridos o intereses a nivel global, que hayan llevado a las diferentes entidades a la generación o poblamiento de los diferentes indicadores.

La evaluación integral de la implementación de los indicadores mínimos de gestión previstos en la Resolución 643 de 2004, orienta hacia la revisión por parte de las CARs y demás entidades del sector los procesos de consolidación regional de la información y el reporte de indicadores, soportado entre otros aspectos, por la necesidad de integración de indicadores que permita reportes consolidados en función de aspectos temáticos, la exclusión de indicadores que no ofrecen datos de gestión comparativa y/o acumulativa concluyente, la reorganización de indicadores que permita una lectura integral sobre el desarrollo de la política ambiental, la evolución de algunos indicadores en función de superar la etapa de formulación y pasar a la etapa de ejecución, la inclusión de algunos indicadores a partir de los lineamientos ambientales vigentes y la revisión de algunas hojas metodológicas en función de hacer más operativo y funcional el flujo de la información

Esta estrategia de entrenamiento pretende entonces en primera medida, lograr el reconocimiento de los diferentes indicadores de gestión de biodiversidad marina propuestos en la etapa de *caracterización y diagnostico* establecida en la metodología COLMIZC, y llevada a cabo en cada una de las unidades ambientales costeras o unidades de manejo integrado. Sobre esta identificación, encontrar puntos de coincidencia, de contradicción o de vacío, haciendo uso de metodologías dinámicas y de fácil comprensión y en lo posible haciendo uso de cartografía social, lo que permitira identificar posibles conflictos o alianzas en los límites territoriales. Este mapeo permitirá iniciar una línea base de competencias de actores de la zona costera a nivel subnacional frente a la medición de indicadores de biodiversidad.

Por otro lado y a lo largo de la estrategia de capacitación, será relevante la presentación de esquemas y metodologías utilizadas a nivel nacional e internacional a los cuales Colombia ha debido responder como País. Estas presentaciones se llevaran a cabo por los investigadores de instituciones del orden nacional a cargo del reporte (IAvHumboldt, IDEAM, DANE y ONG's). En esta misma medida, se buscara el apoyo a nivel de la región o a nivel internacional, que permita conocer la base conceptual del reporte de la biodiversidad marina frente a compromisos internacionales (ej. CBD, IABIN, GBIF, PNUD) y algunos ejemplos de medición exitosa bajo la presentación de casos de estudio. Estas presentaciones serán el complemento para lograr establecer los puntos comunes de las hojas metodológicas de los indicadores propuestos, para encontrar la responsabilidad y la competencia que las entidades del orden subnacional tienen en el poblamiento de los indicadores y de esta forma encontrar sinergias para su medición.

En complemento, es de gran relevancia que los participantes sean expuestos a las diferentes iniciativas internacionales en las cuales ha participado el país para la definición y medición de biodiversidad marina (GEO, IPBES, UICN, SGA, ESP, entre otras).

**Alcances**

Se espera que los participantes puedan llevar los elementos técnicos necesarios para ser incorporados en los Comités de Manejo Integrado de Zonas Costeras de cada una de las áreas de implementación y se logre si bien no una estandarización, al menos si una visión y una concepción común de como medir la biodiversidad marina en cada uno de los procesos y sus etapas, para su gestión y manejo.



**Programa de entrenamiento: creando capacidades sobre manejo participativo en funcionarios del sistema nacional de áreas de conservación (SINAC)**

*Mr. Rotney Piedra Chacón*

*Sistema Nacional de Areas de Conservacion (SINAC)*

*Costa Rica*

En la actualidad hay una dependencia del SINAC de consultores externos a cargo de la facilitación de los procesos de formulación, elaboración o actualización de los planes de manejo de las AMP o de los sitios de importancia para la conservación, lo cual no está mal, pero si se asocia a una inversión económica fuerte en este rubro, que sería el peor de los escenarios, esto es lo que está mal, si no existe el recurso económico para hacer la contratación del consultor, los procesos se detienen, y con ello llega el atraso en el cumplimiento de las metas nacionales de conservación y en los compromisos internacionales que el país ha asumido, como son las metas Aichi del CBD.

Se iniciará un proceso de capacitación a nivel nacional que estará dirigido a Funcionarios del SINAC, representantes de las 7 áreas de Conservación que contemplan un componente marino. Este grupo, una vez que avance a la siguiente etapa del entrenamiento, ira adquiriendo capacidades en el manejo de procesos participativos. Posteriormente, los funcionarios ya capacitados, serán capacitadores de grupos locales en sus respectivas áreas de conservación, existiendo así una capacidad institucional instalada que le ayudará al Estado a atender los procesos institucionales de actualización de los Planes de Manejo de las Áreas Protegidas, así como la atención de los asuntos relacionados al manejo de los sitios de importancia para la conservación ya priorizados por el SINAC. Los funcionarios capacitados a nivel nacional funcionará como un equipo técnico asesor de las iniciativas que se lideren a nivel local.

Con este esfuerzo, el SINAC se asegura contar con un equipo de trabajo capacitado a nivel nacional, que se ira retroalimentando gracias a la sistematización, el monitoreo y la evaluación de los procesos, pero que a su vez, serán formadores de equipos locales.

A nivel Nacional hay actores claves como la Asociación Costa Rica por Siempre, que pueden ayudar de manera significativa en alcanzar los objetivos de este programa de entrenamiento, pero también a su continuidad. Si el Sistema Nacional de Áreas de Conservación es exitoso en su efectividad de manejo de las áreas marinas bajo su responsabilidad, también lo serán las organizaciones que en la actualidad le apoyan. Este es uno de los aspectos relevantes en la confección e implementación de los proyectos es la sostenibilidad de los mismos. Si el SINAC cuenta con un equipo de trabajo institucional capacitado para liderar todo aquel proceso que ayude a cumplir las metas nacionales en el marco de CBD, de alguna manera nos aseguramos el éxito de los procesos que ya se están desarrollando, porque este equipo puede dar seguimiento a esos esfuerzos o a los que estarían por implementarse, pero también, porque los funcionarios entrenados serian formadores de equipos a nivel local, existiendo un efecto multiplicador dirigido a funcionarios SINAC capacitadores-capacitados. Por otro lado, de alguna manera la conformación de un equipo institucional capacitado facilita el acceso a fondos.

El programa de entrenamiento será desarrollado a través de talleres en donde se abordaran los siguientes temas que se detallan más abajo.

**Objetivos**

1. Crear capacidad institucional en el manejo de procesos participativos.
2. Conformar un equipo de trabajo a nivel nacional, con representación de funcionarios de las once áreas de conservación y que trabaje a nivel local.

**Detalles del entrenamiento:**

1. **Charla introductoria al taller:** Conocimiento de aspectos fundamentales sobre los cuales se estará desarrollando el Taller: Marco Legal e Introducción sobre las diferentes categorías de manejo existentes en el país con respecto al ordenamiento de los espacios marinos – costeros.

## 2. Módulo 1. Información general sobre técnicas de capacitación y comunicación

**Objetivo:** Mostrar la importancia de las diferentes técnicas de capacitación y de comunicación que existen disponibles, así como demostrar la flexibilidad de combinar métodos de enseñanza para mejorar el aprendizaje.

**Charla introductoria:** Se programa una charla con experto en comunicación.

**Materiales:** Pancartas, marcadores, proyector

**Metodología:** Discusión en grupo, presentación y discusión en plenaria.

**Ejercicio:** Se discuten las ventajas y desventajas de algunos de los métodos más comunes como: Lección, presentación de la conferencia, demostración; Aprendizaje individual (programado), análisis en el grupo, y tormenta de ideas, estudio de casos, ejercicio y representación de papeles. Se selecciona un método, se practica en clase y se realiza una discusión posterior en plenaria.

## 3. Módulo 2. Diseño del plan de entrenamiento, definición de objetivos, desarrollo del proceso de aprendizaje y evaluación de resultados

**Objetivo:** Ser capaz de identificar factores que son esenciales para definir el diseño del Plan de entrenamiento, los objetivos apropiados de acuerdo al contexto donde se desarrollara la actividad. Definir el método de capacitación y evaluar los resultados.

**Charla introductoria:** Importancia de la evaluación y los tipos que existen.

**Materiales y equipo:** Pancartas, proyector, marcadores.

**Metodología:** Discusión en grupo, presentación en plenaria de resultados. Se desarrollarán dos ejercicios:

**Ejercicio 1:** El grupo será dividido en subgrupos (dependiendo de la cantidad de asistentes), a quienes se les pedirá que identifiquen una situación particular de sus áreas de conservación y para la cual deberán definir una capacitación. Deberán analizar el tipo de audiencia (contemplando el nivel académico, edad, creencias, genero, ocupación, opiniones, condición social, etc.). Definir el mensaje a transmitir, conocer sobre las prácticas que se desarrollan, los grupos existentes a lo interno del sitio, así como los canales de comunicación. Los resultados serán expuestos en plenaria y se abre la discusión.

**Ejercicio 2:** Se les pedirá a los participantes que indiquen al menos un taller de capacitación o actividad en donde hayan estado recientemente, entonces se le solicitara que registren que tan beneficioso les fue. Se compartirán las experiencias de todos en plenaria y serán registradas en las pancartas. Se abre la discusión.

## 4. Módulo 3. Análisis de la situación biológica, ecológica y social de la zona

**Objetivo:** Entender lo importante que es conocer el área de estudio y evaluar las necesidades. Elaborar el diagnostico Marino-Costero.

**Charla introductoria:** Enfatizar que la evaluación cuidadosa de un problema al comienzo del proceso, puede reducir la necesidad de correcciones costosas a mediados del mismo. Es esencial llevar a cabo un análisis de la situación que prevalece, ya que no se debe confiar en el mero instinto o la investigación al azar.

**Materiales y equipo:** Pancartas, proyector, marcadores para pizarra.

**Ejercicio:** Se le pedirá a los participantes que haga una lista de las herramientas mediante las cuales hayan llevado a cabo la recopilación de la información social, económica y ambiental, así como la evaluación de las necesidades. Estas se anotaran en la pancarta. Entonces, se explicarán los aspectos fundamentales de cómo realizar la evaluación de las necesidades, incluyendo: entrevistas a las personas involucradas; informes, encuestas, estadísticas; y observación directa de procedimientos y situaciones de trabajo.

El Instructor presentará y analizará brevemente una lista de técnicas de evaluación de las necesidades, incluyendo: entrevistas; cuestionarios; pruebas escritas; registros e informes; y análisis de los problemas por parte del grupo. Se hará énfasis en la necesidad de aplicar entrevistas, recopilar y estudiar la información existente y en la observación. Todo esto ayuda a tener un mejor panorama o fotografía del sitio.

Este módulo podría dividirse en dos secciones de trabajo. 1. Elaboración del diagnóstico. 2. Evaluación de necesidades.

Al final de la elaboración del diagnóstico sería muy relevante si es posible responder las siguientes preguntas: ¿Cuál es el problema a abordar?; ¿A quién y cómo afecta el problema?; ¿Qué actividades se han usado para abordar el problema?; ¿Qué otras instituciones del estado u organizaciones están haciendo cosas para ayudar?; ¿Qué se puede decir o hacer para eliminar el problema?; ¿Qué es lo que se desea lograr? Cuáles son los actor y como serán beneficiados?; Con que políticas, planes de acción, regulaciones estaría asociada la gestión?; Que información científica será requerida?; Como se incluye el conocimiento tradicional existente?; Que tipo y con quien se pueden establecer alianzas?; Que iniciativas se están desarrollando orientadas a resolver el o los problemas identificados?

Los resultados serán presentados en plenaria, y se abre un período de discusión entre los participantes.

#### 5. Módulo 4. Identificación de actores claves y definiendo la gobernanza

**Objetivo:** Comprender las razones y beneficios de vincular a los actores en la planificación y manejo de las áreas protegidas y sitios de importancia para la conservación, así como los requerimientos para la ejecución y la facilitación de procesos participativos efectivos.

**Charla introductoria:** Importancia de la planificación participativa y la necesidad de definir entre todos el esquema de gobernanza que se aplicara para manejar el área.

**Materiales y equipo:** Pancartas, proyector, marcadores.

**Metodología:** Interactiva, con un énfasis en la discusión y ejercicios en grupos que le permitan a los alumnos extraer lecciones, métodos y enfoques. Representación de papeles.

**a. Ejercicio 1. a) Identificación y comprensión de los actores claves:** El grupo se dividirá en dos grupos. Escogen una área marina de su área de conservación y proceden a: Identificar a los actores en su AMP; analizar como intervienen los actores; Identificar los factores políticos, sociales y culturales para diseñar un proceso equitativo de planificación participativa. Hacen uso de la información generada en el diagnóstico.

**b) De acuerdo a la información ya recopilada anteriormente, al grupo se le presenta un problema relacionado con el manejo de una área en específico (real o hipotético), para que lo resuelvan bajo un proceso participativo. Hay asignación de papeles a los miembros del grupo de acuerdo a los actores claves identificados en el diagnóstico y sus características e intereses. Diseñan un panel de discusión. Al final se analizan las conclusiones del ejercicio.**

Este ejercicio ayudara al funcionario a incrementar la probabilidad de aceptación y apoyo por parte de los actores claves al tomar parte en la toma de decisiones; Incorpora una amplia gama de ideas; Proporciona un foro para identificar conflictos entre usuarios y negociar soluciones.

**b. Ejercicio 2:** Definiendo un modelo de gobernanza para el sitio. El grupo analizara las expectativas, los derechos y las responsabilidades de los diversos actores. Es un ejercicio donde cada parte escucha y entiende las perspectivas de las otras partes, a la que escucha y comprende sus propias perspectivas. También analizará las necesidades, los problemas, causas y opciones, y por último, los participantes utilizan los resultados de los análisis para definir prioridades e identificar las diversas opciones disponibles, valorando costos y beneficios de cada una.

Se utilizará la metodología del acordino. El grupo se dividirá en tres sub grupos. Se harán 3 reuniones de negociación hasta llegar a un consenso. En la realidad hay que estar atentos a que las sesiones de negociación se extiendan a más de 3.

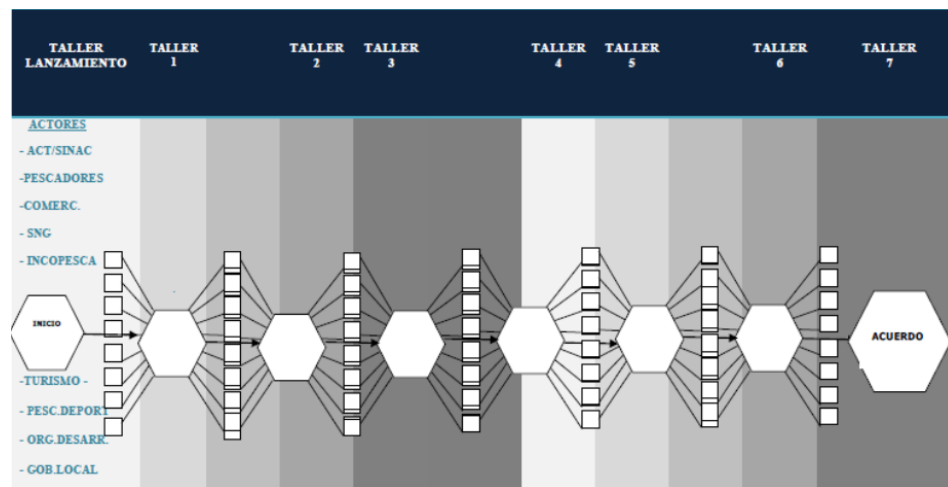


Figura de Acordino. Evaluación del proceso y se van cumpliendo con los objetivos.

## 6. Módulo 5. Definiendo el alcance geográfico del área en análisis y construcción de la visión

**Objetivo:** Comprender la importancia de poseer toda la información posible sobre los recursos del área durante el proceso de planificación.

**Materiales y equipo:** Ilustraciones, pancartas.

**Metodología:** Interactiva, con un énfasis en la discusión y ejercicios en grupos que le permitan a los alumnos extraer lecciones, métodos y enfoques.

**Ejercicio:** El grupo se divide en subgrupos, cada uno contará con un mapa lo suficientemente grande en donde se localiza el área por manejar, el mapa incluye información ecológica (p.ej. vegetación, topografía, batimetría), socioeconómica (p.ej., centros poblados, caminos), ecosistemas, especies. De acuerdo a la información suministrada, cada grupo deberá definir cuáles son aquellos objetos de conservación que son la razón de la existencia del área a manejarse hace una lluvia de ideas, se priorizan los objetos más relevantes según la discusión del grupo. Con esa información se propone el alcance geográfico del área y se describe el estado ideal o deseado a lo cual se quiere llegar con el manejo del área (Visión). Cada grupo expone en plenaria sus resultados e inicia la discusión.

## 7. Módulo 6. Usos y amenazas. Identificación de factores contribuyentes

**Objetivo:** Comprender la importancia del ambiente marino en el bienestar humano, tanto en bienes como en servicios y las afectaciones de un uso inadecuado.

**Materiales y equipo:** Pancartas, ilustraciones, artículos científicos, informes.

**Metodología:** Previamente se ha preparado y entregado material informativo relevante, así como artículos científicos y otros para ser estudiados con anticipación. **Ejercicios, discusión en grupo**

**Ejercicio:** El grupo se divide en subgrupos, cada uno contará con un mapa lo suficientemente grande en donde se localiza el área ya con su alcance geográfico definido, el mapa incluye información ecológica (p.ej. vegetación, topografía, batimetría), socioeconómica (p.ej., centros poblados, caminos), ecosistemas, especies. De acuerdo a la información suministrada, cada grupo deberá incluir los usos, las amenazas actuales y futuras a los objetos de conservación definidos y que factores son los que contribuyen a que ocurran esas amenazas. Se realiza una discusión en plenaria.

**8. Módulo 7. Definiendo estrategias y planes de acción. PENDIENTE**

**Objetivo:** Comprender cómo todo el análisis realizado debe ser sintetizado en estrategias y acciones que sean realistas y posibles de ser desarrolladas.

**Materiales y equipo / Metodología / Ejercicio (*PENDIENTE*)**

**9. Módulo 8. Monitoreo y evaluación.**

**Objetivo:** Comprender que cada sesión debe ser evaluada, de manera que permita hacer cambios en el tiempo suficiente y previendo cumplir con los objetivos propuestos.

**Presupuesto: Pendiente**

**Informe Final:** Evaluación final del proceso, conformación del equipo de trabajo.

## **Towards an intergovernmental committee for the conservation of biological diversity in Grenada**

*Mr. Olando Harvey*

*Ministry of Agriculture, Lands, Forestry, Fisheries and the Environment  
Grenada*

### **Background**

Grenada became a Party to the Convention on Biological Diversity with the ratification on the convention on September 1994. Shortly after ratifying the Convention, Grenada embarked on consultative process for the development of a national biodiversity strategy and action plan (NBSAP) for the conservation of biological diversity.

The process included participatory workshops with stakeholders from all government department/division, NGOs and the private sector. The Grenada Biodiversity Strategy and Action Plan (GBSAP) was the final output at the end of the consultation process. The GBSAP outlined actions that Grenada would endeavour to undertake during the subsequent 5 year period to sustainably manage the country's natural resources in partial fulfilment of the CBD obligations.

### **Challenges to biodiversity conservation**

Despite the fact that the GBSAP was developed as part of a collaborative and consultative process, the implementation of the strategies and actions of the plan take a sector-based approach. In this regard, the management actions were separated into tasks and distributed to various agencies that had the mandate to manage resources.

Currently, biodiversity management in Grenada is within the mandate of several institutions, primarily within the Ministries of Agriculture, Lands, Forestry, Fisheries and the Environment. Although these divisions are within one ministry, they each have their own budget, staff, mandates and associated legislation. Consequently, these divisions have historically worked in isolation with regards to the activities that are stipulated by their mandates.

The ecosystems that are managed typically straddle the mandates of the various divisions. However, they have continued to work in relative isolation, with limited exceptions. In some cases, this has resulted in the duplication of effort. The fragmentation of legislation has also made it relatively easy for developers to exploit loopholes, to the detriment of the environment and biodiversity therein.

As a case in point, the ecologically important and biologically rich mangrove ecosystems of Grenada have gone unprotected, as they are within the mandates of both the Fisheries Division and Forestry Department. More specifically, mangroves systems in Grenada, as is typical of their in the Caribbean Region, occur coastal areas influenced by tidal activity. The Fisheries Division has a mandate to manage resources that exist seaward of the mean high water line while the Forestry Department manages tree cover to prevent soil erosion and flooding and protect water supplies. Given that mangroves provide tree cover while existing in some cases below the mean high water line, these ecosystems are left essentially in a no-mans-land with regard to the jurisdictional mandates of these divisions for the management of these systems.

This example also highlights the need for the integrated management of these resources, especially given that mangrove systems provide several ecosystem services including, but not limited to, provisioning of coastal protection from wave and wind damage during cyclones, fuel for residents, as well as nursery and spawning habitats for economically important species. The management of timber products (fuel) and the management of spawning and nursery habitats are within the mandates of the Forestry Department and the Fisheries Division respectively. Therefore, this critically important ecosystem and its associated biodiversity must be managed in an integrated manner.

As this example demonstrates, the era of various divisions and departments working in isolation to manage resources and ecosystem that do not recognize jurisdictional mandates has come to an end, and the need for integrated management of these resources is critically important if the achievement of the Aichi Biodiversity Targets (ABTs) are to be realized.

**Goal**

This training is geared towards the improvement of human and institutional capacity for the enhanced collaboration for the conservation of biodiversity while fostering equitable and sustainable use of these resources and the maintenance of the services they provide.

**Objectives**

- To create an inter-ministerial committee for the implementation of the Grenada Biodiversity Strategy and Action Plan (GBSAP) towards the achievement of the Aichi Biodiversity Targets
- To foster the development of an integrated approach towards the implementation of biodiversity conservation through the maximization of synergies that exists within a sector-based management and governance regime

**Training details****Type of training**

This training would take the form of a 3-day interactive workshop where participants would have the opportunity to learn from subject matter experts (i.e. CBD, ABT, IRM, etc.) as well as share with their peers their perspectives on various issues developed from their experience working in resource conservation.

**Training tools**

The training would be delivered through a mixture of PowerPoint presentations and breakout working group sessions.

**Expected outcomes**

At the end of the training sessions, it is expected that the two persons from each agency that would have participated in the trainings would become members of the intergovernmental committee on biodiversity conservation. The primary function of this committee would be to ensure that all relevant agencies have a unified and holistic approach to the management of ecosystem. This would include the direct collaboration among scientific and technical staff in the management of resources using a holistic ecosystem approach, including coordinated monitoring, awareness-raising and stakeholder engagement.

**Target audience**

The ministerial departments and divisions with mandates to manage biodiversity, the Ministry of Finance along with key NGOs and statutory bodies would be invited to nominate two senior members of their department to become members of the inter-ministerial committee of biodiversity conservation.

Government Departments:

- Land-Use Division
- Agriculture Extension
- Livestock Division
- Pest Management Division
- Forestry Department
- Fisheries Division
- Environment Division
- Ministry of Finance

NGOs:

- Grenada Fund for Conservation (GFC)

Other:

- St. George's University (SGU)
- West Indies Research Institute Foundation (WINDREF)
- National Water and Sewage Authority (NAWASA)

**Training agenda items**

<b>Day</b>	<b>Agenda Item/Topic</b>	<b>Output/Outcome</b>
1	<ul style="list-style-type: none"> <li>– Introduce the CBD and the Aichi Biodiversity Targets</li> <li>– Introduce Grenada Biodiversity Strategy Action Plan</li> <li>– Outline the ABT priority areas for Grenada</li> <li>– Highlight Grenada's progress towards the ABTs</li> </ul>	Understanding of the ABTs and Grenada's progress towards achieving the ABTs
2	<ul style="list-style-type: none"> <li>– Introduce the concept of Integrated Resource Management</li> <li>– Present the project/programmes of each Department or Division</li> <li>– Identify project or programme synergies that could be exploited</li> </ul>	Unified work plan for agencies
3	<ul style="list-style-type: none"> <li>– Develop an MOA for integration of work programmes and sharing of resources</li> </ul>	MOA to support collaboration Focal Point for collaboration

**Partners to be engaged**

The key partners to be engaged for the development of this training programme would be the national focal points for the various components of the CBD (i.e., Protected Areas, resource mobilization, GTI, CBD national focal point). Given the familiarity of these focal points with the Convention and their positions as high-level government officers, they will be critical resource persons for refining and developing the training programme and mobilizing the resources that would be required to implement the programme.

<b>National Focal Point</b>	<b>Focal Area</b>
Mrs. Merina Jessamy	CBD Primary NFP
Mr. Mervin Haynes	Resource Mobilization FP
Mr. Paul Graham	GTI NFP
Mr. Justine Rennie	Protected Areas NFP

**Required Resources**

<b>Qty.</b>	<b>Items</b>	<b>Unit Cost</b>	<b>Line Total</b>
3	Training venue		
3	A/V Equipment rental		
3	Transportation for C'cou and PM participants		
3	Accommodation for C'cou and PM Participants		
3	DSA C'cou and PM Participants		
3	Refreshments (Break and Lunch)		
1	Integrated Resources Management consultant		
-	Stationary (flip charts, paper, pens, etc.)		



## **National Capacity Building Programme to Strengthen the Local Capacity on Integrated Management of Coastal Resources for Sustainable Development and Climate Change Adaptation**

*Mr. Rifath Naeem  
Environmental Protection Agency  
Maldives*

### **Goals and objectives:**

Providing the skills and tools needed to build capacity of island councils for integrated management of coastal resources for sustainable development and climate change adaptation. By the end of the training, the participants will have acquired the necessary skills to develop a management plan to manage their coastal resources as a Locally Managed Marine Area (LMMA).

### **Output and outcome:**

By the end of the workshop the participants will have a working document of the LMMAs management plan for their respective island. Participants will gain knowledge and technical knowhow on to complete the management plan. In addition to receiving training on technical tools and skills, the participants will be introduced to resource persons that will be helping them to complete the management plan after the workshop.

**Overall strategy:** Identifying the capacity need and prioritizing

### **Target audience**

- Decision makers
- Technical staff
- NGOs and CBOs

### **Training format**

- Presentations
- Breakout sessions
- Hands-on exercises
- Resources persons

### **Skills and information given in the training workshop**

- Integrated Coastal Management (ICM) tools
- Communication and negotiation tools and skills
- Marine spatial planning tools
- Management planning tools
- Proposal writing skills
- Laws, regulations and current government policies
- Funding opportunities
- Case studies and success stories
- Other training opportunities

### **Resources persons to assist in the training**

- Policymaker from the government
- MPA manager
- MMA manager
- Expert on donors and funding opportunities
- Experts ICM
- Expert in marine spatial planning
- Expert in communication skills

**Partners to be engaged**

- Ministry of Environment and Energy
- Ministry of Tourism
- Environmental Protection Agency (EPA)
- Maldives Research Center (MRC)
- Local government authorities
- Biosphere Reserve Office
- Maldives National University
- UNDP
- IUCN and other NGOs

## **Training Programme Strategy for a Community-Based Demonstration on Integrated Coastal Management (ICM) Towards Achieving Biodiversity Conservation and Sustainable Development in Nigeria**

*Ms. Halima Bawa-Bwari  
Federal Ministry of Environment  
Nigeria*

### **Introduction**

Nigeria has a land area of about 900,000 km<sup>2</sup> with a coastline of over 850 km. The coast is hot and humid with an annual temperature range of 26° to 36°C. The country has 36 states, including a Federal Capital Territory (FCT) and 9 of these states are coastal. The country has a 3-tier government; Federal, state and local. More than 20 million of the country's over 160 million people live along the coast.

The coastal area is richly endowed with abundant aquatic and other natural resources, both renewable and non-renewable. It is also rich in biodiversity and home to Africa's largest concentration of mangroves.

Fishing is the main occupation in Nigeria's coastal communities, with various types of gear being employed. Fishing is conducted in creeks, rivers, estuaries, mudflats, near-shore and offshore areas. Most of the commercial fishing targets the shrimp resources. The mangrove plants are used for building, extraction of tannin, construction works, curing of fish, and other fishing implements. Mineral resources in the coastal and marine waters include petroleum and gas. Sand and gravel are exploited onshore and offshore, in the riverbed, lagoons, estuaries and beaches. Millions of cubic meters of sand are dredged annually during oil exploration and exploitation, as well as for the construction industry.

Nigeria is currently a mono-economy, generally dependent on revenues from oil. The coastal environment especially of the Niger Delta has hosted the country's oil and gas exploration and exploitation for the past 50 years.

The coastal areas are of great importance as a large variety of social, economic and ecological activity takes place in the coastal zones including tourism, commercial and recreational fishing, oil and gas development, habitats for endangered species, species breeding and resting areas, groundwater recharge, water treatment and flood attenuation.

### **Justification**

Despite the clearly high value of the Nigerian coastal marine ecosystem, it continues to be subjected to various serious threats, usually linked to development pressure, unsustainable use and poor institutional and legal frameworks. Man-made impacts tend to impair the integrity of the marine environment and negatively affect biodiversity. Some recognized threats include; pollution, gas flaring, land reclamation, coastal erosion, over fishing, deforestation, sand mining, invasive species, non-existent or poor institutional and legal frameworks and capacities, flooding/sea level rise.

The problems mentioned above have resulted in deleterious effects on the ecosystem and on coastal communities. Despite the several interventions aimed at mitigating these impacts and improving the richness of resources of the area, the people of the area continue to live in poverty with the environment being steadily degraded.

It is towards sustainably curbing the situation that this training strategy is being proposed to serve as a demonstration that ICM can help improve biodiversity conservation alongside the socioeconomic life of the coastal communities.

It is recognized that a good national coastal governance structure will facilitate the implementation of a successful ICM plan by coastal communities. Hence, developing institutional, communal and individual capacities for addressing ICM is important.

## Goal

Establishing a sustainable ICM framework that is community-based and strongly supported by a national multi-sectoral ocean governance platform.

## Objectives

- i) Development and strengthening national coastal and marine governance framework by adopting a multi-sectoral approach;
- ii) Having a unified vision of integrated coastal and marine conservation and management;
- iii) Developing an adaptive management plan;
- iv) Broad involvement and empowerment of local communities in decision-making and management;
- v) Raising the awareness of stakeholders on the ICM concept.

## National priorities it will contribute to

- i) Implementation of the National Biodiversity Strategic Action Plan (NBSAP);
- ii) Implementation of the National Forest Policy and framework;
- iii) Abidjan Convention's proposed ICM Protocol
- iv) Nigeria's climate change strategy and action Plan;
- v) Nigeria – Erosion and Watershed Management Project;
- vi) Seven cardinal programmes of government i.e., food security, women empowerment, environmental protection and the youth employment programme, among others.

## Focal area

National and LGA level

## Training description

### Batch 1

- **Activities**
  - Capacity Building Workshop on ICM Process;
  - Training modules on communication and engaging stakeholders;
  - Coordinating skills for national coordination team.
- **Target audience:** Coastal and marine ecosystem national office team (Ministry of Environment) and the NBSAP team
- **Expectation**
  - Increased knowledge on ICM and its relationship to NBSAP;
  - Effective coordination and facilitation of the proposed national and coastal community level ICM programme;
  - General readiness for development and implementation of the ICM approach to biodiversity conservation in coastal and marine areas.
- **Partners:** Experts in ICM, communication and governance, experts from the national oceanography institutes

### Batch 2

- **Activities:** Experience-sharing workshop; Study tour for decision makers
- **Target audience:** Relevant National Assembly Members, Minister, Permanent Secretary (Ministry of Environment) and local community leaders
- **Expectation:**
  - Gain their buy in and endorsement

- Developing a unified but multi-sectoral approach towards coastal and marine environment governance
- **Partners:** International/national experts on ICM and governance; Chinese or other applicable embassies

### **Batch 3**

- **Activities:** National workshops on ICM concept and process; National workshop on ICM plan development
- **Target Audience:** National stakeholders – Relevant Ministries and Agencies, research institutes, academia, NGOs, target CBOs and the private sector (oil companies)
- **Expectation:** Buy-in, develop an ICM plan
- **Partners:** International/national experts on ICM and governance, Abidjan Convention, CBD

### **Batch 4**

- **Activities:** Community-level series of workshops on ICM process, plans and relevant tools (including GIS and conflict resolution); Awareness campaigns; Continuous consultation with National Coordination and technical Team
- **Target Audience:** Identified community-based organizations (men, women and youth group), traditional leadership, local government chair and clergy
- **Expectation:** Increased awareness, buy-in and implementation
- **Partners:** National experts on ICM, communication and project management

### **Training outcomes**

- i) A unified shared vision among stakeholders on integrated coastal and marine conservation and collaboration
- ii) Increased stakeholder engagement and participation
- iii) Increased government commitment to marine and coastal issues
- iv) Increased capacity for ICM at national and local levels
- v) Development of an adaptive ICM plan
- vi) Healthier ecosystems
- vii) Improved socioeconomic life of the local community through successful implementation of the ICM plan at the community level
- viii) Ownership of ICM by the communities
- ix) Adaptive replication of the ICM process by other local and regional communities

## **National Workshop in Understanding and Identifying Actions to Conserve Marine Environment**

*Ms. Aida Al Jabri*

*Ministry of Environment and Climate Affairs*

*Oman*

### **Introduction**

The following laws and rules have been established by Royal Decree (RD) and Ministerial Decree (MD) to protect marine environment and punish offenders: RD (114/2001) on conservation of the Environment and Prevention of Pollution, MD (20/90) on regulating and specifying coastal setbacks and RD (6/2003) for Natural Reserves and Conservation of Wildlife which followed by number of MD: MD (159/2005) on disposal of liquid effluent into marine Environment, MD (39/2004) for Marine Environment, MD (200/2000) on transport of sand from coasts, MD on imposing visit charges for visiting Natural Reserves, MDs on regulating and Reserves management plan, MD (20/90) and its amendments (issued by Ministry of Housing, Electricity and Water) and MD (40/09) Controlling Diving in the Marine Environment outside Parameters of Marine Protected Areas. Under these Royal Decrees, and the associated regulations, it is mandatory that all development projects (and economic strategies) obtain a “no objecting” Environmental Permit from MECA before the commencement of any construction works and operation of the proposed scheme.

However, there are violators, and follow-up or enforcement of the laws are weak. Part of this poor enforcement is due to the fact that environmental rangers focus on terrestrial wildlife rather than both the marine and terrestrial environment. In addition, they are not well qualified and have a poor understanding of their responsibility to conserve the marine environment as well as terrestrial wildlife.

### **Goals and objectives**

- Make the rangers aware of the value of Oman’s marine biodiversity
- Make the rangers aware of their functional mission
- Make the rangers aware of implementing marine environment conservation laws and rules

### **Target audience**

Rangers in Oman’s coastal regions

### **Training details**

The workshop will be held in the Ministry of Environment and Climate Affairs from 14-16 February 2016. The workshop will provide participants with paper files with notebook, pen and flash memory drives containing the workshop documents, as well as snacks and drinks. The logistic and expenses will be around \$5000 which will pay by Ministry of Environment and Climate Affairs.

The activities of the workshop will be:

- Break-out group discussion on what the participants expect to get from the workshop
- Information of values of marine biodiversity by identifying the ecosystem, life cycle and benefits to human livelihoods. This will be done through PowerPoint slides that will include information, maps, pictures, graphs and video movie of marine ecosystems in Oman.
- Explanation of the importance of applying marine environment conservation laws and rules. This will be done through PowerPoint slides that include detailed explanation of how to implement each law and rule and present how violators on marine environment could affect:
  - ✓ Coastal environment by construction works without environmental permission, rubbish throwing and beach damaging by wrong behaviour.
  - ✓ Turtles nesting beach by disturb, killed and eggs stolen by human.
  - ✓ Mangroves environment by sewage drainage, rubbish throwing or oil spill.
  - ✓ Stranding marine mammals by wrong behaviour to deal with.

- Break-out group activity to identify and map any threats to the marine environment and to propose an action to address these threats.
- Field trip to Al Sawadi beach, which will provide several examples of the (negative) interaction of human activities with the marine environment.
- Discussions with the rangers about their specific needs related to capacity-building, field equipment, specialist assistant and vehicles for their work in the field.
- Getting feedback on the workshop from participants through a questionnaire.

**Outcomes:**

- The rangers will know the importance of the enforcement of the law and decrees for the protection of marine environment
- The rangers can identify and take action to address offenders
- The rangers will understand their needs to develop their work

**Partners to be engaged:**

- Fisheries specialist of the Ministry of Agriculture and Fisheries
- Ecotourism specialist of the Ministry of Tourism
- Marine environment lecturer of Sultan Qaboos University

## **National Training to Build Capacity for Effective and Efficient Management and Sustainability of Programmes for MPAs and Network of MPAs in the Philippines**

*Mr. Vincent Hilomen*

*Department of Environment and Natural Resources  
Philippines*

### **Rationale**

The need to improve the capacities of the staff of the Philippines Department of Environment and Natural Resources (DENR) and Department of Agriculture Bureau of Fisheries and Aquatic Resources (DA-BFAR) at the regional offices as well as the environmental officers at the municipal and provincial level is necessary for the effective, efficient and sustainable management of MPAs and networks of MPAs in the Philippines.

To date, there are nearly 1,900 MPAs established in the country, but only about 10 per cent are currently managed effectively and with sustainable financing. Part of the mandate of DENR and DA-BFAR as well as the environmental officers at the municipal and provincial levels is to facilitate, coordinate and enhance the management of MPAs in the country. However, many of the staff of the DENR and DA-BFAR and the municipal and provincial environmental officers have little competence to perform these tasks. Raising the competences of the staff will greatly improve the implementation, operation and management of MPAs and network of MPAs in the country. The increased competence the target participants will gain from this proposed training will contribute to the achievement of Aichi Targets 1 (awareness values of biodiversity), 5 (halve the rate of loss of all natural habitats), 6 (fish and invertebrates are managed and harvested sustainably) and 11 (10 per cent of coastal and marine environment are conserved and effectively managed).

Training will be coordinated by the Biodiversity Management Bureau, Department of Environment and Natural Resources, Republic of the Philippines

### **Scope**

National Training Workshop

### **Goals**

- MPAs and network of MPAs are effectively and efficiently managed in the Philippines
- Costs for management is sustainably financed
- An established enabling policy framework for the conservation of marine biodiversity

### **Objectives**

After the training, the participants are expected to gain:

1. Increased understanding of the dynamics of ecosystem-based and ICM
2. Demonstrated capacity to lead and facilitate effective and efficient management of MPAs and network of MPAs
3. Ability to identify and mobilize human and financial resources towards the management of the coastal and marine environment
4. Ability to support the establishment of enabling policy frameworks for the conservation of marine biodiversity



**Target audience (n=30):**

1. Division chiefs, section chiefs and staff of the coastal and marine sector of DENR Central and Regional Offices and DA-BFAR (n=15)
2. Provincial and Municipal environmental officers (n=10)
3. Members of Protected Areas Management Boards (n=5)

<b>Goal</b>	<b>Skills to be developed</b>	<b>Type of activity</b>	<b>Indicator/s</b>
1	a. Ability to discuss the important concepts and elements of Integrated Coastal Management (ICM) and ecosystem-based approaches	Lectures/discussions and case studies	Participants identify and explain causes and effects in case studies provided
2	b. Understanding of the steps and requirements of marine spatial planning and ability to support marine spatial planning development with stakeholders in their jurisdiction c. Ability to develop, review, revise and improve ICM plans at the municipal level d. Ability to implement management plan	Lectures/discussions  Simulation exercises  Workshops/writeshops	Participants can explain zonation plan from simulation exercise  Participants can write, revise and improve ICM plans for adoption and approved of authorities  Participants can develop an operational plan and identify support facilities and materials
3	e. Ability to address the recurring costs of management of MPAs and MPA networks	Lecture/discussion on sustainable financing and business plans	Participants are able to develop a business plan and show availability of financial resources
4	f. Ability to identify issues necessary to develop a communication strategy relevant to the conservation of marine biodiversity to build constituencies on the ground and gain support g. Ability to facilitate development, approval and implementation of key policies needed to create enabling environment for the conservation of the marine biodiversity	Lecture/discussion  Group interaction, role playing	Participants list issues  Participants identify key policies Participants identify personalities who can help push policies

### **Format of training**

- Lectures and exercises by expert facilitators to demonstrate concepts)
- Interactive sessions
- Simulation activities
- Sharing of learning experiences by key participants
- Hands-on exercises using existing decision support systems (e.g. FiSHBE)
- Sessions on writing plans and proposals
- Activity during a field trip for monitoring and enforcement
- Post-workshop activities, such as e-groups, support groups, etc.

### **Partners to be engaged**

- Department of Agriculture –Bureau of Fisheries and Aquatic Resources
- GIZ, UNDP, GEF
- RARE Philippines
- Conservation International-Philippines
- WWF-Philippines

### **Topics to be covered during the training**

- Overview of the marine ecosystems
  - Characteristics
  - Diversity
  - Role and function
  - Values
  - Pressures and drivers
- Key concepts of ecosystem-based approaches to management
  - Limits to productivity
  - Interconnectivities
  - Ecosystem resilience
  - Current trends in ecosystem management
- Best practices in MPA and MPA network management
  - The common sense
  - The ICM planning cycle
  - Building constituencies
  - Conflict resolution
  - Marine spatial planning process
  - Communication, education and public awareness
- Development of sustainable business plans/models to sustain management
  - Estimating financial costs between current management practice versus ideal management practice
  - Developing creative ways to narrow financial gap (e.g., ecotourism activities, establishment of user fees, tourism taxes, dive passes, etc. on proviso that a study on the willingness to pay is conducted properly)
  - Development of support enterprises (mementos, service providers)
- Monitoring and evaluation process
  - Determination of key metric indicators
  - Feedback process
  - Mechanisms for adaptive management
- Support for enabling policy development for marine biodiversity conservation
  - Identifying issues
  - Analysis of issues

- Developing solutions
- Bringing issues to concerned authorities (through channels)
- Follow through
- Pushing advocacies

**Number of training days:** Five days

**Venue:** Tagaytay City

**Trainers and facilitators:**

- Marine scientists to discuss overview and key concepts of ecosystem-based approaches
- MPA practitioners to discuss best practices in MPA management
- Policy experts to discuss policy development
- Resource economists to discuss sustainable business models

## **Strategic Framework for Integration Coastal Management for the Achievement of the National Strategy Development Framework and Aichi Target in Tonga**

*Mr. Sione Tukia Lepa  
Department of Environment  
Tonga*

### **Background**

This strategic framework was built upon the concept and working modality of integrated coastal management (ICM) to demonstrate how the ICM approach and methodology can be applied to achieve the Aichi Biodiversity Targets in Tonga.

### **Structure**

- ▶ **1. Vision, Mission and Goals**
  - The vision, mission and goals align with Tonga Strategic Development Framework, 2015-2019, as approved by the Cabinet
- ▶ **2. Tonga Strategic Development Framework (NSDF)**
  - They form the basis for development of key activities, objective, output, outcome, indicator, resources, timeframe and guideline for implementation of key thematic areas for Integration of Marine Coastal Management and Biodiversity in Tonga
- ▶ **3. Principle of implementation**
  - Principles of integrated coastal management and biodiversity are lessons learned from the past action strategy. The scope of the principles reflects the outcome of 5-day training of trainers workshop that was held in Yeosu, Republic of Korea, September 11-15, 2015

### **Three key activities**

**Activity 1:** Restoration of mangroves habitat at degraded area in Tonga through rehabilitation programmed

- ▶ **Objectives**  
To minimize coastal erosion and loss of fish habitat along the coast
- ▶ **Output**  
Number of training programmes support by the local community
- ▶ **Outcome**  
Number of communities participating in the training programme
- ▶ **Indicator**  
Percentage of mangrove cover along the coast
- ▶ **Resources**  
Department of Environment and coastal community
- ▶ **Time** 2015-2016

**Activity 2:** To increase public awareness on the values, including social, economic and ecological values, of MPAs

- ▶ **Objectives**  
Promote public awareness of MPA and steps taken for their protection
- ▶ **Output**  
Increase number of the public participating in the MPA awareness programme
- ▶ **Outcome**  
Increase fisherman support and public awareness throughout Tonga

▶ **Indicator**

Number of MPAs established in Tonga

▶ **Resources**

Co-financing from government and donor partners

▶ **Time** 2015-2016

**Activity 3: Finance mechanism**

▶ **Objectives**

Established financing mechanism to be able to continue self support integrated coastal management (ICM) for sustainable development in Tonga

▶ **Output**

Number of meetings and training programmes organized by government for sharing experiences and lessons learned on financing

▶ **Outcome**

Increase finance support for biodiversity protection in Tonga

▶ **Indicator**

Increased community support of MPAs and habitat rehabilitation programmes in Tonga

▶ **Resources**

Co-financed by government and donor partners

▶ **Time:** 2015-2016

**Type of training recommend**

▶ **ACTIVITY 1 - HABITAT REHABILITATION**

**Community Consultation Meeting**

**Coordination:** Organized by Department of Environment and Community leader

**Target:** Coastal manager, schools, fisherman

▶ **ACTIVITY 2 - MPA**

**Training of Trainer**

**Target:** Fisherman, public, schools and Government

**Organized:** by Department of Environment, Fishery, Marine and Port and Tourist Department.

▶ **ACTIVITY 3 – FINANCE**

**In-house training**

**Target:** Government Senior staff and Head of Department

Coordinated by the Ministry of Finance and National Planning on writing project proposal and access to GEF financial support and donor partner

## **Integrated Coastal Management (ICM) Planning for Qeshm and Adjacent Islands**

*Mr. Koosha Dab*

*Centre for Sustainable Development and Environment*

*Iran (Islamic Republic of)*

**Goal: To achieve sustainable coastal development in Qeshm and adjacent islands**

### **Problem**

Coastal and marine ecosystems of the Indian Ocean shores of Iran (including the Persian Gulf and the Gulf of Oman) and their local communities face a number of threats, including impacts from intensive oil and gas development, land reclamation, habitat destruction (especially coral reefs and mangrove forests), severe air pollution by gas flares, water and soil pollution and external pressures by large-scale commercial fisheries. Reliance on harmful practices and unsustainable development plans is negatively impacting coastal and marine biodiversity in this area. Local communities in these coastal areas have been isolated and marginalized by a combination of factors, including their location, access to information, lack of access to technology, external pressures on their livelihoods, and cultural differences. Lack of integration among different stakeholders and policymakers and mismanagement has caused environmental, social, political, cultural, and economic injustices in the coastal areas of Iran. This is happening in the face of industrialization, which affects their access to marine resources, which is essential to their livelihoods. Increased industrialization and the subsequent misuse of water and land resources has impinged on their traditional habitats and limited their access to the marine resources they need to sustain their way of life. In this context, capacity-building among stakeholders is vital for sustainable development in coastal areas of Iran.

### **Project approach**

*Participatory workshops:* A key to the success of this project is capacity-building through participatory workshops. The method consists of a series of periodic workshops, each of which will engage the participants and stakeholders in successive topics. It includes training in such topics as baseline methodologies, participatory geographic information systems (PGIS), resource management plans, natural resource conservation, etc.

*Participatory Action Research (PAR) Workshops:* This project will use PAR, a tested and proven approach. In each workshop, there is a basic structure or approach that adapts to the specific communities, issues, and circumstances. In each instance, the project team works within the established and traditional structures of local communities. The project works with the customary community leadership (community elders), which has shown time-tested resilience over the centuries. It builds the capacity within the cultural norms and decision making structures of the community in order to allow change from within while infusing the group with new understanding and skills that can ensure that progress can be sustained. Within any given project, the team will use a combination of community organization, training, process planning, and implementation strategies that are appropriate to the circumstances. In this case, the results would be achieving a common vision and elaboration of a road map for sustainable development in coastal communities. The UN has found this approach to be an accepted standard when working with Ips and LCs. This process has been used in various ways in Central Asia, Asia, Africa, and the Middle East.

*Establishing CBOs for Empowering Local Communities as Critical Stakeholders:* This project will utilize the local communities' traditional structures already in place to engage and support them in developing CBOs. These organizations are designed to empower marine and coastal communities through the appropriate recognition and/or establishment of ICCAs and co-managed areas and to strengthen community cohesiveness. To accomplish this, the CBOs will be provided with opportunities and support for communication and mutual learning workshops. In turn, they will create a forum for input and discussion of issues that affect the marine and coastal indigenous peoples. Dissemination of information and the creation of an open discussion forum will be combined to provide these groups with the skills and means to protect their interests, have their voices heard, develop a cohesive resource management

structure and stabilize their governance of natural resources. Each group will form a Women's Committee to address the specific concerns, issues, and impacts that women in these communities face. These committees will be institutionalized as an organ of their respective CBOs—a structure that supports women's input and gives them a stronger voice in community issues and decision making.

*Sanduqs:* The project will also use Innovative Community Funds for Sustainable Livelihoods (Sanduqs) that each community has established under its nationally recognized CBO umbrella. Each Sanduq has an associated uniform operating procedure. The project will use grants to Sanduqs to compensate the work of community animators and facilitators and for relevant project activities. The project will establish a committee of project staff and Community Elders to determine the levels of compensation to these individuals, to be based on factors such as the level and importance of individual efforts. The project compliance team will use the statutes of the Sanduqs to ensure transparency and accountability of these decisions.

*Involving Community Elders:* It should be noted that the word “Elder” is not necessarily age-based and could be female under some circumstances. Thus, “Elder” refers to a respected commonly accepted person chosen to lead the community, and does not just refer to old men or women. Eldership applies to wise and trusted people, traditionally selected on the basis of the person's capacity to resolve conflicts and act as a local fair and just judge, as well as guide the tribe or community in important matters such as natural resources management, tending to outside visitors (government, academia, development projects, NGOs), transmission of indigenous knowledge and community security.

*Women's Participation:* This project will use a culturally appropriate approach to engage women in its activities as well as to include and promote the role of women in the process of management planning, decision making and implementation. As a result, these activities will restore and raise the status of women in the social structure of participating communities. Female community elders will be encouraged and mobilized to take an active part in various committees of this project.

### **Objective 1. Capacity building for achieving a common vision for sustainable development among stakeholders**

**Activity 1.** Holding capacity-building workshops for each identified stakeholder for awareness-raising on the concept of sustainable development and ICM planning

Specific results: The concept of sustainable development is internalized and all the stakeholders are willing to participate in the integrated coastal management planning for Qeshm and adjacent islands

**Activity 2.** Holding participatory action research (PAR) workshops for local communities to understand and explore their environmental/social/political context and challenges, to build a vision of a desirable sustainable future, and to elaborate a road map for achieving sustainable development in their coastal areas

Specific results: Local communities have elaborated a road map for achieving sustainable development in their coastal areas

**Activity 3.** Establishing and supporting community-based organisations (CBOs) in enhancing and strengthening the legal capacity of local communities of Qeshm and adjacent islands

Specific results: At least one CBO is established for Qeshm and adjacent islands

**Activity 4.** Establishment and recognition of co-managed (shared governance) and Indigenous Peoples' and Community Conserved Areas (ICCAs) through close collaboration of organized CBOs, civil society organizations (CSOs) and relevant government agencies

Specific results: The ICCAs and co-managed areas have been designated, established and appropriately recognized at national level as the new MPAs<sup>8</sup>

## **Objective 2. Elaboration of an ICM plan for Qeshm and the Adjacent islands**

**Activity 1.** Holding multi-stakeholder workshops to elaborate a road map for sustainable development in the target area

Specific results: Elaboration of a participatory road map for sustainable development in the target area

**Activity 2:** Holding multi-stakeholder marine spatial planning (MSP) workshops

Specific results: Participatory marine spatial planning is elaborated and appropriately recognized by all the stakeholders within the target area

**Activity 3:** Holding participatory zoning and management planning for the MPAs within the target area

Specific results: Elaboration of a participatory management plan including conservation, restoration and sustainable use of natural resources for each MPA

## **Objective 3. Implementation of the ICM plan**

**Activity 1:** Setting up the ICM coordinating committee

Specific results: Establishment of a coordinating committee including all the stakeholders and a technical supporting team for adaptive implementation, monitoring and evaluation the performance and impacts of the ICM programme

**Activity 2:** Elaboration of a Coastal Strategy Implementation Plan (CSIP) for the target area

Specific results: A CSIP is elaborated and appropriately recognized by the stakeholders at the local and national level

**Activity 3:** Implementation of CSIP

Specific results: The CSIP is appropriately adopted

**Activity 4:** Monitoring and evaluation of the CSIP

Specific results: Refinement of the CSIP for the follow-up cycle

## **Environmental, social and political context/assets of the target area**

### **Political context/assets**

In 1991 Qeshm and its adjacent islands were transformed into a “Trade and Industrial Free Area” with the goal of creating the largest ‘Free Area’ between Europe and the Far East. To that end, the area was granted considerable leeway to set its own policies and local governance independent of the central government, including an independent department of environment. However, the Island retains the advantages associated with its connection to the mainland, including the rights to explore and develop oil and gas opportunities.

In August 2013, there was a change of government in Iran which brought with it a significant change in the sociopolitical environment. The new government has a positive stance towards local communities. For example, in Article 116 of the “Charter of Citizens’ Rights”, the new government emphasizes cultural, linguistic, and ethnic rights of citizens. In Article 118 of that same Charter, the rights of local communities to affordable income and decent quality of life is recognized. In Article 119 it establishes the

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<sup>8</sup> The IUCN and CBD distinguish four broad governance types for protected and conserved areas including governmental, shared governance (co-managed), private and indigenous peoples’ and community conserved areas (ICCAs).



rights of the local community to participate in the development process. All of these rights have been officially recognized by the new Iranian government. The new government has taken a participatory stance towards the protection of the natural environment and the utilization of natural resources. For the first time in the history of contemporary Iran, the government is in the process of preparing a Comprehensive Law of Natural Resources with broad consultation with many sectors of society. One of the chapters in this draft document addresses the participation of local communities in the protection, restoration and sustainable use of natural resources. It has been developed in consultation with representatives of marine and terrestrial ICCAs and co-managed areas.

This is also a critical time in the history of Iran. In 14 July 2015, the Joint Comprehensive Plan of Action (JCPOA)<sup>9</sup> was signed in Vienna between Iran, the P5+1 and the European Union. The agreement provides that, in return for verifiably abiding by its commitments, Iran will receive relief from the US, European Union, and United Nations Security Council nuclear-related sanctions. With the prospective lifting of some sanctions, the agreement is expected to have a significant impact on both the economy of Iran and global markets. Technology and investment from global integrated oil companies are expected to increase capacity from Iran's oil fields and refineries, which have been in disarray in recent years, plagued by mismanagement and underinvestment.<sup>10</sup> In June 2015 (the month before the JCPOA was announced), senior executives from oil giants Royal Dutch Shell, Total S.A, and Eni met with the Iranian oil minister in Vienna, and have been seeking business opportunities in Iran. In this political context, Qeshm Island, the largest island in the Persian Gulf located in the entrance of the Strait of Hormuz with 4 billion barrels of in-place oil reserves and 10 trillion cubic feet of natural gas reserves, could turn into a new hub.

With the lack of an ICM plan, however, this could result in the adoption of hurried and unsustainable development plans in Qeshm and the adjacent islands.

As the country moves towards expanding the role of civil society in management reform and the development of policies for sustainability on a national scale, it is time to have an action plan for achieving sustainable coastal development and bring the concerns of local communities directly affected by those policies into the dialogue.

### **Environmental context/assets**

The target area comprises Qeshm and adjacent marine and coastal areas including Hormuz, Larak and Hengam islands. This area is part of the Strait of Hormuz, a channel approximately 50 km wide and 100 m deep at its narrowest point that connects the Persian Gulf, a warm, hypersaline, shallow and semi-enclosed sea, to the Gulf of Oman, which is relatively more exposed to the deep component of the Arabian Sea in the North-West Indian Ocean (Riegl and Purkis, S.J. 2012a; 2012b). Due to the counter-clockwise pattern of the water circulation in the Persian Gulf, the northern part and the Iranian coastline is characterized by nutrient-rich oceanic waters from the Indian Ocean, lower temperature, lower salinity, higher aragonite saturation and greater depth (Riegl and Purkis, 2012a). This results in increasing species richness in this area comparing with the other parts of the Persian Gulf (Riegl and Purkis, 2012a). There are two seasons in the area, cold from December to March and warm from April to November. This area plays the most significant role in the ecological and genetic connectivity across the Persian Gulf, Gulf of Oman and the Arabian Sea. This area has a wide range of coastal habitats, including coral reefs, mangrove forests, seagrass beds, estuaries, and rocky, muddy and sandy shores. The coral reefs of the area are among the healthiest ecosystems in the Gulf. There are 44 species of hard corals reported in the Persian Gulf. With 37 and 24 species of scleractinian corals having been reported from Larak and

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<sup>9</sup>The Joint Comprehensive Plan of Action (JCPOA) is an international agreement on the nuclear programme of Iran signed in Vienna on 14 July 2015 between Iran, the P5+1 (the five permanent members of the United Nations Security Council—China, France, Russia, United Kingdom, United States—plus Germany), and the European Union.

<sup>10</sup> Clifford Krauss, A New Stream of Oil for Iran, but Not Right Away, *The New York Times* (14 July 2015). Bill Spindle, Nicole Friedman and Benoît Faucon, Iran Deal Raises Prospect of Fresh Oil Glut, *The Wall Street Journal* (14 July 2015).

Hengam Islands, respectively, this area representing the highest biodiversity of coral reefs within the Persian Gulf (Riegl and Purkis, 2012a; SOMER, 2013; Vajed-Samiei et al., 2013). This area supports significant feeding, breeding and nursery grounds for sea turtles, waterbirds, marine mammals, reef fishes, sharks, rays and skates (BirdLife International, 2015a, 2015b; DoE of Qeshm Free Zone; Neinavaz et al., 2012; Rezai et al., 2010). The area has the highest abundance of mollusc larvae and zooplankton in the northern Gulf (ROPME, 2013). The area consists of two important mangrove forests of Iran, including Hara and Hara-e Khuran protected areas with monospecific stands of *Avicennia marina*. They are also recognized as wetlands of international importance (Ramsar sites), important bird areas by BirdLife International (IBAs) and are biosphere reserves. Hara biosphere reserve supports the largest mangrove/mudflat ecosystem of the entire Persian Gulf and the Gulf of Oman, with 100,000 ha of mangroves, creeks, mudflats and low islands and play a critical role in the livelihood of local communities in Qeshm Island and as a very important wintering ground for migratory birds in the East African-Asian flyways (Naderloo et al., 2013; Neinavaz, 2012; Spalding et al., 2010). The target area was also described as an ecologically or biologically significant marine area (EBSA) at the CBD Regional Workshop to Facilitate the Description of Ecologically or Biologically Significant Marine Areas (EBSAs) in the North-West Indian Ocean and Adjacent Gulf Areas.

There are several significant marine areas in the target area including coral reefs, soft coral beds, breeding sites for marine mammals and sea turtles which have not been designated as MPAs. The department of the environment (DoE) of Iran does not have the capacity for designation of new governmental MPAs due to the lack of human resources and financial support, and the lack of integration and communication capacity with local communities. As the country moves towards expanding the role of civil society in management reform and the development of policies for sustainability on a national scale, it is time to have an action plan for achieving an integrated and sustainable coastal development and bring the concerns of local communities directly affected by those policies and plans into the dialogue.

It is in this context that we see the urgency and opportunities for the organization of coastal communities of Qeshm and adjacent islands to give them a place at the table as decision makers to elaborate and implement an ICM plan for sustainable development.

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