

# **SEYCHELLES MARINE SPATIAL PLANNING INITIATIVE**

## **WORKSHOP #2**

### **STC CONFERENCE ROOM**

#### **VICTORIA MAHE SEYCHELLES**

**MAY 14<sup>TH</sup> -15<sup>TH</sup> 2014**

### **WORKSHOP REPORT**

## Table of Contents

|  |                              |
|--|------------------------------|
| Acronyms .....   | Error! Bookmark not defined. |
| Introduction and Background .....  | 4                            |
| <b>Workshop 2 Summary</b>  |                              |
| Day 1: Wednesday 14 <sup>th</sup> May 2014 .....                               | 5                            |
| <i>Introduction and Welcome</i> .....  | 5                            |
| <i>Marine Zoning</i> .....   | 5                            |
| <i>Drafting SMART Marine Spatial Planning Objectives</i> .....                 | 6                            |
| Day 2: Thursday 15 <sup>th</sup> May 2014 .....                                | 8                            |
| <i>Discuss data layers and identify gaps for current conditions</i> .....      | 8                            |
| <i>Roundtable Discussion</i> .....   | 11                           |
| <i>Key Messages from Workshop 2</i> .....                                      | 12                           |
| <i>Wrap Up and Next Steps</i> .....  | 12                           |
| <b>Annexes</b>   |                              |
| Annex 1 Agenda for the Workshop .....  | 13                           |
| Annex 2 List of Participants .....   | 15                           |
| Annex 3 An Overview of the Seychelles Marine Spatial Planning Initiative ..... | 17                           |
| Annex 4 Working Towards SMART Planning Objectives.....                         | 22                           |

## Acronyms

|             |  |
|-------------|--|
| ASCLME      | Agulhas and Somali Current Large Marine Ecosystems.  |
| CSIRO       | Commonwealth Scientific and Industrial Research Organisation   |
| DSTs        | Decision Support Tool(s)   |
| EBSA        | Ecologically and Biologically Significant Areas  |
| EEZ         | Exclusive Economic Zone  |
| FAD         | Fish Aggregating Devices   |
| FAO         | Food and Agriculture Organisation of the United Nations  |
| GEF         | Global Environment Facility  |
| GIS         | Geographic Information Systems   |
| GoS         | Government of Seychelles   |
| GVI         | Global Vision International  |
| IDC         | Islands Development Company  |
| IOC-UNESCO  | Intergovernmental Oceanographic Commission - United Nations Educational Scientific and Cultural Organisation |
| IOTC        | Indian Ocean Tuna Commission   |
| IUU fishing | Illegal, unreported, unregulated fishing   |
| LMMA        | Locally Managed Marine Area(s)   |
| MEE         | Ministry of Environment and Energy   |
| MFTI        | Ministry of Finance, Trade & Investment  |
| MLUH        | Ministry of Land-Use and Housing   |
| MNR         | Ministry of Natural Resources  |
| MPAs        | Marine Protected Area(s)   |
| MSP         | Seychelles Marine Spatial Planning   |
| MSY         | Maximum Sustainable Yield  |
| NBSAP       | Seychelles National Biodiversity Strategy and Action Plan  |
| OBIS        | Ocean Biogeographic Information System   |
| PA          | Protected Areas  |
| PPP         | Public - Private Partnerships  |
| SC          | Steering Committee   |
| SeyCCAT     | Seychelles Conservation & Climate Adaptation Trust   |
| SEYMEMP     | Seychelles Marine Ecosystem Management Project   |
| SEYMMAP     | Seychelles Marine Multi-use Adaptation Project (SEYMMAP)   |
| SFA         | Seychelles Fishing Authority   |
| SMART       | Specific, Measureable, Achievable, Relevant, Time Bound  |
| SMSA        | Seychelles Maritime and Safety Administration  |
| SNPA        | Seychelles National Parks Authority  |
| SOS         | Save Our seas  |
| SPA         | Seychelles Port Authority  |
| SSDS        | Seychelles Sustainable Development Strategy  |
| TNC         | The Nature Conservancy   |
| TWG         | Technical Working Group  |
| UNDP- PCU   | United Nations Development Programme - Programme Coordinating Unit   |
| WIOMER      | Western Indian Ocean Marine Ecoregion  |

## Introduction and Background

The Seychelles Marine Spatial Planning (MSP) Initiative is a public process focused on planning for, and management of, the sustainable and long-term use and health of the Seychelles Exclusive Economic Zone (EEZ), a marine area covering 1,374,000 km<sup>2</sup> and 115 islands. The MSP Initiative is a government-led process, with planning and facilitation managed by a partnership between The Nature Conservancy, the Government of Seychelles, and the United Nations Development Programme - Global Environment Facility Programme Coordinating Unit. Funding for the Initiative is being provided by UNDP-GEF grants to the Government of Seychelles, and an Oceans 5 grant to The Nature Conservancy.

Marine Spatial Planning (MSP) provides a participatory and transparent way to focus on sustainable uses for the Seychelles marine environment and minimise spatial conflicts between uses. The Seychelles MSP Initiative takes an integrated, multi-sector approach and will balance ecological, social, cultural and economic objectives. The participatory nature of MSP encourages communities and private sector partners to provide advice, information and input to the Seychelles Initiative.

Article 38 of the Constitution of Seychelles provides the authority for planning and the guiding principles, vision and goals of the Seychelles Sustainable Development Strategy (SSDS) helps provide the framework for the MSP Initiative. The Initiative will develop an integrated, multi-use marine zoning and climate change adaptation plan to optimise the sustainable use and effective management of the Seychelles marine environment while ensuring and improving the social, cultural and economic wellbeing of its people. This marine plan will serve as the basis for guiding the strategies and decisions of the Seychelles Conservation & Climate Adaptation Trust (SeyCCAT) that was established by the Government of Seychelles for a Debt-for-Climate-Change-Adaptation swap. Phase I of the MSP Initiative (February 2014 – June 2015) will produce a suite of design options, tools and management strategies as a basis for further development and implementation of the national multi-use plan.

The Seychelles MSP Initiative was launched at a workshop on 4-5 February 2014 in Victoria. The key objectives of that workshop were to introduce the MSP Initiative being facilitated by The Nature Conservancy, and identify the key components that will support the Seychelles Blue Economy. People at the workshop identified seven sectors important to the scope of the planning process (in no particular order): biodiversity conservation, cultural heritage, fisheries, marine transportation, petroleum (mineral & aggregate) extraction, renewable energy, and tourism. Focusing on the seven sectors, participants were led through a 10-20 year visioning exercise to describe what they did and did not want to see for these sectors over this time scale. The results of the visioning exercise were refined into general goals by the workshop participants and ranked in order of low, medium, and high priority.

A website is currently being developed for the MSP Initiative ([www.seychellesmarinespatialplanning.com](http://www.seychellesmarinespatialplanning.com)) that will host all the relevant background documents, reports and presentations. The website will be used to keep all stakeholders updated on progress of the process and should be accessible by early July. In the interim, all related handouts and documents are included in the annex section.

# Workshop 2 Summary

Day 1: Wednesday 14<sup>th</sup> May 2014

## Introduction and Welcome

A warm welcome to the workshop was given by Mr. Wills Agricole, MEE Permanent Secretary.

Presentations on marine spatial planning, the Seychelles MSP Initiative, timeframe and governance framework were used to develop a common understanding of the MSP initiative and the overview of the MSP initiative is included in Annex 3. All presentations and documents will be uploaded to the MSP website, [www.seychellesmarinespatialplanning.com](http://www.seychellesmarinespatialplanning.com), by the beginning of July.

## Marine Zoning

The workshop attendees brainstormed a list of possible zones types, zone names or zone categories based on their perception of the types of activities that need zoning in the Seychelles, or would benefit from zoning (see presentation on Zoning).

The list, developed during the workshop, as presented below will serve as information for the Technical Team and Technical Working Groups to establish a draft zoning process and draft zone categories that will be discussed at future workshops.

- Sustainable tourism zones
- Temporal closure zones
- Renewable energy harnessing zones
- Biodiversity habitat protection zones
- Fisheries zones.
- (International) shipping lanes/zones
- Recreational zones
- Set aside expansion zones for ecosystem services; areas that may become vulnerable in the future due to climate change effects like sea level rise e.g., mangroves.
- Extraction zones for petroleum, minerals and aggregates
- Cultural zones
- Reclamation zones
- There may be the possibility of designating military zones in the future.

A group discussion identified a list of issues to be considered for the zoning process:

- There's been good progress in aligning the MSP process with parallel planning initiatives but there's still a need for increased effort to ensure improved collaboration and accommodate other parallel planning processes ongoing under specific sectors (e.g. SFA's fisheries management planning processes);
- Given the availability of data and the timeline for the MSP Initiative, it is envisaged that the MSP process should provide an overarching planning framework and to use broad zoning categories, within which sector specific plans can be developed (e.g. fisheries specific management plans can be nested within the fisheries zones included in the MSP);

- The process should take into consideration the specific characteristics of each of the outer islands: e.g. those with lagoons as well as the integration of sustainable tourism and artisanal fisheries.
- The MSP process should also consider ongoing uses and initiatives outside the Seychelles EEZ which may impact the ecosystems, species, processes and uses within the EEZ;
- Terminology is important and the process should carefully consider the wording used in naming zones (e.g. “Best zones” instead of exclusion zones, Best-use areas and/or replenishment zones);
- The MSP process should take into consideration ongoing planning processes for the development of mariculture areas in the outer islands (Islands Development Company)
- There is a limited amount of data available for the marine environment which is a major limitation of the current planning process. The gap in the available data can be used to guide future research priorities.
- Given the expanse of the Seychelles EEZ, management and enforcement of large zones will be a challenge due to limited capacity at multiple levels. This challenge should be reflected in the development of management objectives.
- As part of the planning process, the MSP initiative needs to anticipate potential future uses (such as renewable energy), climate change impacts and ecosystems services while bearing in mind the lack of data and uncertainty surrounding these uses.
- There is a need to balance uses and priorities. Addressing overlapping uses can be achieved through effective stakeholder consultation that builds on inputs from the proposed Technical Working Groups.
- The process should highlight the benefits of no take areas and fishery closures as management tools for replenishment.

### **Drafting SMART Marine Spatial Planning Objectives**

The visioning results from workshop 1 formed the basis of developing draft SMART objectives in workshop #2. Guidance for developing these SMART objectives was provided in a handout to each break-out group (Annex 4). Four break-out groups created 2-4 SMART objectives for the following groupings:

- ecological (marine)
- human use (fisheries)
- human use (tourism, petroleum, marine transportation)
- governance

All groupings, except governance, reflected the structure of the proposed MSP Initiative Technical Working Groups (Annex 3). Governance was added because it is essential to the successful implementation of the Seychelles MSP Initiative, and serves as a crosscutting theme for all seven thematic sectors. The draft objectives (Table 1) will be further refined by the Technical Working Groups.

Table 1: Draft SMART Objectives resulting from four break out group sessions

|  |
|--|
| <b>Ecological</b>  |
| By 2035, “X” % of essential species, habitats and processes to ensure the viability of populations of key species are protected and effectively managed.   |
| By 2025 an inclusive platform to facilitate networking, collaboration, and knowledge sharing is fully utilised by all partners involved in biodiversity conservation,  |
| By 2020 explore, develop, and implement sustainable and transparent financing mechanisms to ensure the equitable sharing and long term availability of adequate resources for biodiversity conservation.   |
| <b>Tourism</b>   |
| By 2034, promote sustainable tourism by providing incentives (financial, marketing, etc.) to preserve the integrity of the environment and maintain economic stability through a public-private partnership that will result in 80% of all hotels complying with the Seychelles Sustainability Label on all the islands within the Seychelles EEZ. |
| <b>Petroleum</b>   |
| By 2025, develop the petroleum industry for economic development to cover x% (TBD based on current available data) of the EEZ by Petro Seychelles and the Government of Seychelles   |
| <b>Marine Transportation</b>   |
| By 2016, Seychelles is included on the International Maritime Organization White List resulting improved maritime transportation standards and capacity for the country.   |
| <b>Fisheries</b>   |
| By 2016, fisheries and mariculture zones as defined by the Fisheries Act are recognised within the broader MSP   |
| By 2020, intensify surveillance activities for fisheries and harmonise with those of the MSP to combat IUU fishing   |
| By 2016, use MSP to minimise conflict between local and foreign fishing fleets.  |
| Objectives within zones:   |
| By 2016, important demersal fish species on the Mahe Plateau are managed to maximum sustainable and economic yield through fisheries management plan <sup>1</sup> .  |
| By 2020, MSP supports IOTC to implement harvest control rules and management strategies to ensure sustainability of tuna fishery in the Indian Ocean.  |
| By 2020, small-scale and semi-industrial fisheries managed sustainably to ensure food security and livelihoods based on socio-economic impact assessment.  |
| By 2034, ensure that the target for mariculture production are met as defined in the sector plan.  |
| <b>Governance</b>  |
| Ministerial group makes a recommendation to Cabinet to set up a platform for coordination of multiple strategies, as soon as possible.   |
| Petroleum is fully integrated into planning processes and strategies to improve communication and information exchange   |
| Petroleum and related industries identify and adopt global best management practices to minimise negative impacts to ecosystems and human populations, including regulation, policies and observer programs.   |
| Ministry of Finance improves the regulation and transparency of the funds collected and disbursed as part of the Corporate Social Responsibility Tax.  |

<sup>1</sup> Ecosystem Approach to Fisheries Management (EAFM) implicit in fisheries management plans.

## Day 2: Thursday 15<sup>th</sup> May 2014

### Discuss data layers and identify gaps for current conditions

Two break-out groups discussed and identified data sources and layers related to the SMART objectives for four of the seven thematic areas: Biodiversity conservation (Table 2) and Tourism, Fisheries & Petroleum (Table 3).

Table 2: Data needs and sources – Biodiversity Thematic Area

|  | Details  | Data Holders  |
|--|--|---|
| <b>Coral cover</b>                                   | Limited to specific geographies<br>Grand-truth data<br>Monitoring                                  | <ul style="list-style-type: none"> <li>Individual researchers:</li> <li>SNPA, GVI, SEYMEMP (old) 40 sites, Wise Ocean, GIF, SIF, SOS/DRC,</li> <li>ICS,</li> <li>MCSS</li> </ul>                |
| <b>Coral Diversity</b>                               |  | <ul style="list-style-type: none"> <li>David Obura</li> <li>All above listed as well</li> </ul>   |
| <b>Coral health and resilience to climate change</b> |  | <ul style="list-style-type: none"> <li>David Obura: 4 + sites</li> <li>Karen Chong-Seng (connectivity)</li> </ul>   |
| <b>Turtle feeding</b>                                | Tracking data  | <ul style="list-style-type: none"> <li>Jeanne Mortimer (JM)</li> </ul>  |
|  | Satellite tag:   | <ul style="list-style-type: none"> <li>DRC, JM, SIF</li> </ul>  |
|  | Aerial survey  | <ul style="list-style-type: none"> <li>MCSS</li> </ul>  |
| <b>Turtle nesting beaches</b>                        | Point location   | <ul style="list-style-type: none"> <li>JM, ICS</li> </ul>   |
| <b>Number of nesting turtles</b>                     |  | <ul style="list-style-type: none"> <li>JM, ICS, Nature Seychelles for Cousin Is.</li> </ul>   |
|  |  | <ul style="list-style-type: none"> <li>SEYMEMP 2004</li> <li>MCSS, JM (MCSS, Nature Seychelles), Dept. of Env. Conservation Section, SIF</li> </ul>   |
| <b>Turtle development habitat</b>                    | <ul style="list-style-type: none"> <li>Fronts</li> <li>IOTC: By catch REWIOA/REMOA 2012</li> </ul> | <ul style="list-style-type: none"> <li>JM, IOTC, SFA</li> </ul>   |
| <b>Sea cucumber habitats</b>                         |  | <ul style="list-style-type: none"> <li>CSIRO report for Amirantes</li> </ul>  |
| <b>Sea grass habitats</b>                            | Ground truth data  | <ul style="list-style-type: none"> <li>Aldabra, North, Denis, Amirantes, SNPA – MPAS (Bijoux), GIF - Praslin and Denis, Anse Royale, Beau Vallon, Darros, Cosmoledo, Baie Ternay, JM</li> </ul> |
|  | Deep   | <ul style="list-style-type: none"> <li>SFA</li> </ul>   |
|  | Plateau  | <ul style="list-style-type: none"> <li>Petro Seychelles, Shoals of Capricorn, JM</li> </ul>   |
|  |  | <ul style="list-style-type: none"> <li></li> </ul>  |
| <b>Marine species</b>                                | Marine mammals   | <ul style="list-style-type: none"> <li>MCSS</li> </ul>  |
|  | Sharks and rays  | <ul style="list-style-type: none"> <li>John Nevill (lemon shark, Baie Ternay),</li> <li>BRUVs: Denis, North, Aldabra</li> </ul>   |
|  | Molluscs - Giant clams   |   |
|  | Game fish  |   |
|  | Coral reef fish  |   |
|  | Sea Cucumber   | <ul style="list-style-type: none"> <li>CSIRO report for Amirantes</li> </ul>  |
|  | Lobsters   |   |
|  | Phytoplankton and zooplankton productivity   |   |



|                       |   |   |
|-----------------------|---|---|
| <b>Mangroves</b>      | <ul style="list-style-type: none"> <li>• Old orthophotos</li> <li>• Inner island land use plans</li> <li>• Gaps outer islands</li> <li>• Viability</li> <li>• Topography</li> <li>• EIA before, during &amp; after reclamation</li> </ul> | <ul style="list-style-type: none"> <li>• ICS may have more info</li> </ul>  |
|                       | <ul style="list-style-type: none"> <li>• Mangrove monitoring &amp; rehabilitation</li> <li>• Map of prior to restoration</li> </ul>   | <ul style="list-style-type: none"> <li>• Monitoring (GVI)</li> <li>• Rehabilitation (SNPA, Daig Romain)</li> </ul>  |
| <b>Watershed</b>      | River layer: needs correcting   | Rivers committee (PUC)  |
| <b>Marine mammals</b> |   | <ul style="list-style-type: none"> <li>• MCSS historical data</li> <li>• REMOA study</li> <li>• WIOMER</li> <li>• EBSA</li> <li>• Michel Vely</li> <li>• ASCLME</li> <li>• OBIS</li> <li>• Petro Seychelles – MCSS</li> <li>• Kizka et al 2009 – FAO</li> <li>• IWC</li> </ul>  |
| <b>Game fish</b>      | <ul style="list-style-type: none"> <li>• Connectivity</li> <li>• Genetic</li> <li>• Shark tagging</li> </ul>  | <ul style="list-style-type: none"> <li>• ICS</li> <li>• Desroches/Alphonse</li> <li>• Poivre/ St. Joseph</li> <li>• St Francois</li> <li>• Cosmoledo</li> <li>• Farquhar</li> <li>• Seychelles Sports Fishing Club</li> <li>• GIF/North</li> <li>• Marine Charter</li> <li>• Silhouette Cruises</li> <li>• Catch release tagging – GIF</li> </ul> |

Table 3: Data needs and sources – Tourism, Fisheries and Petroleum Sectors

| Sector/Uses   | Data Holder  | Remarks  |
|---|--|--|
| <b>TOURISM/RECREATION:</b>  |  |  |
| Data available in catalogue: hotel sites, dive sites, beaches, hotels/restaurants |  |  |
| <b>Water sports</b>   | Seychelles Maritime and Safety Administration (SMSA) | <ul style="list-style-type: none"> <li>• Designated areas under Beach Control Act for Beau Vallon</li> <li>• Areas already demarcated at Anse Royale but not designated yet</li> </ul> |
| <b>Tourism Marinas</b>  | Seychelles Port Authority (SPA)                      | Located at Eden Island, The Wharf, Marine Charter  |
| <b>Recreational fishing/fly fishing</b>   | Island Development Company (IDC)                     | Location for outer islands: south of Mahe plateau  |
| <b>Cruise ships</b>   | SPA and maybe IDC                                    |  |
| <b>Island hopping cruises</b>   | Silhouette Cruises, Private boats                    | Overlap with marine transportation   |
| <b>FISHERIES</b>  |  |  |
| <b>Commercial, semi industrial fisheries, tuna/sword</b>                          | SFA  | <ul style="list-style-type: none"> <li>• Potential for growth to be considered</li> <li>• Log books available for Seychelles flagged vessels</li> </ul>                                |

|   |                                       |   |
|---|---------------------------------------|---|
| <b>fisheries</b>  |                                       | providing possibility of mapping areas where they fish  |
| <b>Artisanal fishery</b>  | SFA                                   | VMS data available though compiled by landing sites   |
| <b>Mariculture</b>  | SFA (Mariculture report)              | <ul style="list-style-type: none"> <li>Potential sites identified by SFA.</li> <li>Criteria on selection of sites will be useful to identify potential sites (Refer to Mariculture report)</li> <li>Survey for extended to outer islands</li> </ul>   |
| <b>Subsistence, artisanal and recreational/fly fishing (on IDC managed outer islands)</b> | IDC                                   | <ul style="list-style-type: none"> <li>Potential for conflict between IDC and other fishermen from Mahe in these areas. These areas need to be managed (sub zones on map?)</li> </ul>   |
| <b>Sports fishing</b>   | Seychelles Sports Fishing Association | <ul style="list-style-type: none"> <li><b>Currently no designated areas</b></li> <li>Association of Sports Fishing may have data as keep logs though will refer to catch and not location and may be for competitions only</li> </ul>   |
| <b>Sea cucumber</b>   | SFA                                   | Location: around outer islands: Darros, Remire, Amirantes   |
| <b>Octopus</b>  |                                       | Artisanal fishery   |
| <b>Lobster</b>  |                                       | Seasonal and fished by size   |
| <b>Infrastructure to support fisheries</b>  | SFA                                   | Potential expansion need to be considered (e.g. processing plants' landing sites, fishing ports)  |
| <b>IUU</b>  | SFA, SMSA, Coast Guards               | <ul style="list-style-type: none"> <li>Geographical location available from SFA</li> <li>Information on location may also be available from offences/cases/convictions</li> </ul>   |
| <b>PIRACY/SECURITY/MARINE POLLUTION</b>   |                                       |   |
| <b>Surveillance activities</b>  | Coast Guards                          | <ul style="list-style-type: none"> <li>Aerial patrols linked to piracy &amp; assistance for incidents for marine pollution response, search and rescue &amp; law enforcement</li> <li>Piracy: security alerts, concentration of incidents. Trend/incidents are seasonal (Nov-April) now declining.</li> </ul> |
| <b>PETROLEUM</b>  |                                       |   |
|   | Petro Seychelles                      |   |
| <b>MARINE TRANSPORTATION</b>  |                                       |   |
| <b>Local vessel traffic i.e. Inter island ferries</b>                                     | Boat operators                        | <ul style="list-style-type: none"> <li>Compass chart available</li> <li>Follow fixed lanes</li> </ul>   |
| <b>Outer islands</b>  | IDC                                   | Captain logs available for supply runs  |
| <b>International shipping lanes</b>   |                                       | Do not exist. Areas to be avoided are on charts for maritime safety issued by IMO   |
| <b>Fuel offloading ports</b>  |                                       | Location: Industrial fishing port Mahe (1); Praslin: 1 Eve Island; Seypec Jetty on La Digue   |
| <b>GOVERNANCE BOUNDARIES</b>  |                                       |   |
| <b>Privately owned islands</b>  |                                       |   |
| <b>Praslin: proposed community managed area for rabbit fish replenishment</b>             | SFA                                   | GPS coordinates available   |
| <b>Land use plan/ districts plans</b>   | MLUH                                  | This includes coastal areas   |
| <b>Point/ non point/land based sources of marine pollution (Flavien Joubert)</b>          | MEE (Flavien Joubert)                 | Output of Wiolab project  |

Presentations on developing scenarios, marine protected area network design, and climate change adaptation were provided to improve understanding of these components of the MSP Initiative and a link to the Debt-for-Adaptation Swap.

### Roundtable discussion

Several issues were raised during discussions with participants throughout the workshop and these are detailed below.

#### Governance Issues

- It was generally agreed that the Governance process as well as the engagement and consensus of all relevant stakeholders is critical to the success of the project.
- To this end, the current level of engagement and interest needs to be sustained.
- To ensure maximum participation of stakeholders in the development process of the MSP, representation of all the fisheries sectors is essential, particularly the industrial fisheries. Participation of representatives involved in maritime delimitation is equally important.
- Socioeconomic sectors must be taken into account such as the livelihoods of artisanal fishermen, as well as food security, where representation on the Technical Working Groups (TWG) and/or Technical and Scientific Advisors must be ensured. There is the need to have representation from both demersal and industrial fisheries in the governance structure and/or technical/advisory structure.
- In the development of the MSP, both proposed and existing financial initiatives and structures must be a link among the MSP governance structure (e.g. SeyCCAT), the Environment Trust Fund, and other government financing mechanisms.
- Concern was raised about the proliferation of governance structures in place in the country, e.g. the Seychelles Sustainable Development Strategy (SSDS). There is the need to integrate current initiatives and their governance structures in this process; in particular those linked to the marine environment and *maritime issues* e.g. the blue economy. There was a proposal to use the governance structures/ministerial meetings in place for each of those to discuss issues pertinent to all of those initiatives. The work of the TWG will feed into this process. The representative from MFA (name) is willing to facilitate this process.
- Inter linkages between all components of the governance structure need to be well defined.
- The process and selection for selecting the technical advisers as well as the possibility of having additional international experts on the team, as well as the possibility of merging MSP technical team and local TWG team was discussed. A request was made to the participants to advise the MSP technical team on possible candidates who could be approached to be scientific/technical advisers to the process.

#### Data Collection

- The data sharing initiative planned under this project is key to the success of the process.
- The table of contents presented at the workshop specifies data that the consultants are hoping to have as they are currently identifying gaps in data available to them. Key stakeholders have been requested to provide data. Data sharing that may be sensitive for critical species/plants must be highlighted to afford them the required protection even if no specific details are given.
- It was also clarified that Data Sharing Agreements already signed with stakeholders under the PA project will be utilised for the MSP Initiative, with no need for further agreements.

## Administrative Issues

The following proposals were recommended to enhance participation at future workshops:

- Circulate presentations and outcome of group works to participants in good time for their review
- Hold more group work in future workshops
- Ideas to attract more participants were discussed including the timing and location of the workshop as well as a shorter period for the workshop. The availability of internet has permitted participants to attend whilst carrying on their own work
- A preview of the objectives of next workshop was requested
- Specific workshops and one to one meetings with different sectors e.g. fisheries, are needed as a follow up to this workshop
- Prepare outreach/awareness initiatives on the process
- SFA needs to inform the different sectors involved in fisheries on the MSP initiative
- Design an Implementation Plan for the MS Plan.

## Key Messages from Workshop 2

- Continue to reach out to stakeholders and increase engagement and representation. For example, the tuna industry, which represents 90% of the export economy, were not in attendance.
- Continue efforts to align the MSP initiative with other on-going projects including the Seychelles Sustainable Development Strategy, Protected Areas Strategy, and Blue Economy
- Implementation of zones and enforcement across the EEZ will be a challenge.
- The TWG will provide guidance on how best to deal with areas of overlapping and conflicting uses and setting priorities for zoning.
- Include local and international scientific expertise on the Technical Advisory Committee.
- 

## Wrap-up and next steps

Before the workshop in August 2014, the following actions will be implemented:

- Invitations will be sent requesting nominations to represent relevant sectors/organizations on the Technical Working Group
- Participants of workshop #2 to send comments on Terms of Reference, MSP Summary document, Vision statements, MSP draft SMART objectives and suggestions for Technical Advisory Committee members by **9<sup>th</sup> July 2014 4.00 PM** to Iris: [carolusiris@yahoo.co.uk](mailto:carolusiris@yahoo.co.uk)
- Refinement of objectives and setting targets for the planning features (to be done by the TWGs)
- Participants are asked to provide feedback on "scope of work and stakeholder participation guidelines"
- Continue data compilation and development of data catalogue. A list of data will be sent to the TWG in June.
- Investigate options for decision support tools to support the MSP initiative
- Investigate the possibility of designing a website for the MSP process
- Form the Steering Committee and Technical Working Groups (TWGs)
- Next workshop: August 2014 to review the DRAFT scenarios for management objectives and zoning

## Annex 1 Agenda for the Workshop

### Seychelles Marine Spatial Planning (MSP) Initiative Workshop May 14-15, 2014

#### AGENDA

##### Workshop Goals:

1. Common understanding of Seychelles MSP Initiative
2. Draft SMART objectives
3. Discuss data layers and identify gaps for current conditions

| TIME                                   | TOPIC   |
|--|---|
| <b>DAY 1 – Wednesday, May 14, 2014</b> |   |
| <b>8:00 - 8:30</b>                     | Registration  |
| <b>8:30 - 9:00</b>                     | Introduction and welcome  |
| <b>9:00 – 10:15</b>                    | Seychelles Marine Spatial Planning Initiative   |
| <b>10:15 – 10:45</b>                   | Coffee break  |
| <b>10:45 – 12:00</b>                   | Marine Zoning<br>Update on revised Protected Area legislation and relationship to Marine Spatial Planning |
| <b>12:00 – 1:00</b>                    | Lunch   |
| <b>1:00 – 2:30</b>                     | Drafting SMART Marine Spatial Planning objectives (Small group exercise)                                  |
| <b>2:30 – 3:00</b>                     | Coffee break  |
| <b>3:00 - 3:45</b>                     | Continue drafting Marine Spatial Planning objectives  |
| <b>3:45 – 4:00</b>                     | Wrap-up of Day 1  |

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| DAY 2 – Thursday, May 15, 2014 |  |
|--------------------------------|--|
| TIME                           | TOPIC  |
| 9:00 - 9:15                    | Welcome back; review agenda<br>Recap of Day 1  |
| 9:15 – 10:15am                 | Discuss data layers and identify gaps for current conditions                                       |
| 10:15 – 10:45                  | Coffee break   |
| 10:45 – 12:00                  | Continue discussion  |
| 12:00 – 1:00                   | Lunch  |
| 1:00 – 2:30                    | Designing Resilient Networks of MPAs to achieve fisheries, biodiversity & climate change objective |
| 2:30 – 3:00                    | Coffee break   |
| 3:00 – 3:45                    | Roundtable discussion  |
| 3:45 – 4:00                    | Wrap-up and next steps   |

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## Annex 2 List of Participants

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### **Ministry of Finance, Investment and Trade**

Mr. Brian Charlette, Director Public Debt

Ms. Sara Fanchette

### **Central Bank of Seychelles**

Mr. Lenny Payet, Economist

Naddy Marie Economist

### **Ministry of Foreign Affairs**

Mr. Philippe Michaud, Special Adviser

Ms. Rebecca Loustau-Lalanne, First Secretary

Miss Nandi Jones

### **Ministry of Natural Resources**

Mr. Michel Nalletamby, Principal Secretary

Mr. Roger Desnousse, Personal Assistant to the Minister

### **Ministry of Land Use and Housing**

Cynthia Adrienne

### **Ministry of Environment and Energy**

Mr. Didier Dogley, Special Advisor to the Minister

Mr. Flavien Joubert, Director General-Wildlife & Enforcement

Mr. Alain Decomarmond, Director General-Climate Affairs

Miss Elyn Albert, GIS Section

Dr. P Murugaiyan, Environmental Engineering Section

Mr. Marcel Belmont, Meteorological Office

Mrs. Marie-Alise Mondon

### **UNDP-PCU**

Mr. Andrew Grieserjohns

Mrs. Helena Sims, National PA Project Manager

Dr. Rebecca Klaus, Consultant

### **Seychelles Fishing Authority**

Mr. Jan Robinson, Consultant

Mr. Jude Bijoux, Fisheries Consultant

Ms. Melissa Joseph

Mr. Rodney Govinden

### **Island Development Company**

Mr. Ronny Renaud, Deputy Chief Executive Officer

### **Ministry of Tourism**

Mr. Josue Cesar

Ms. Diane Charlot

Mr. Louis Desnousse

### **Seychelles National Parks Authority**

Ms. Isabelle Ravinia

Mr. Allen Cedras

### **Seychelles Ports Authority**

Mr. Ned Wirtz

Mr. Steve Pointe

Mr. Dean Zelia

### **Seychelles Maritime Safety Authority**

Mr. Richard Ernesta

### **Seychelles Coastguards**

Ms. Stephanie Theresine

### **Petro Seychelles**

Mr. Patrick Samson

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### **Non-Governmental Organisations**

|  |
|--|
| <b>Seychelles Hospitality and Tourism Association</b>            |
| Ms. Kate Carolus, Secretary to the Board                         |
| <b>Island Conservation Society</b>                               |
| Mr. Ahab Downer, Chief Executive Officer                         |
| <b>Sustainability for Seychelles</b>                             |
| Mr. Herve Barois   |
| <b>Marine Conservation Society of Seychelles</b>                 |
| Ms. Jo Bluemel   |
| <b>Green Island Foundation</b>                                   |
| Mr. Arjan de Groene, General Manager                             |
| <b>Plant Conservation Action Group</b>                           |
| Ms. Katy Beaver  |
| <b>Seychelles Island Foundation</b>                              |
| Dr. Frauke Fleicher-Dogley, Chief Executive Officer              |
| <b>The Nature Conservancy</b>                                    |
| Mr. Matt Brown, Africa Conservation Director                     |
| Ms. Julie Robinson, Marine Specialist                            |
| Ms. Nathalie Zenny, Marine Conservation and Fisheries Specialist |
| Ms. Joanna Smith, Marine Spatial Planning Science Manager        |
| Ms. Alison Green, Senior Marine Scientist                        |
| Mr. Rod Salm, Senior Advisor, Marine Program                     |
| Mr. Rick Tingey, GIS Consultant                                  |
| Mrs. Iris Carolus, Local MSP Coordinator                         |
| <b>Support Staff</b>   |
| Mrs. Sabrina Renaud, Administrative Assistant                    |





## Overview of the Seychelles Marine Spatial Planning Initiative

### 1. What is the Seychelles Marine Spatial Planning Initiative?

The Seychelles Marine Spatial Planning (MSP) Initiative is a process focused on planning for and management of the sustainable and long-term use and health of the Seychelles Exclusive Economic Zone, a marine area covering 1,374,000km<sup>2</sup> and encompassing the Seychelles archipelago of 115 islands. The MSP Initiative is a Government-led process, with planning and facilitation of the Initiative managed by a partnership between The Nature Conservancy (TNC) and the GOS/UNDP/GEF Programme Coordinating Unit (PCU). Funding for the Initiative is being provided through a number of GOS/UNDP/GEF grants as well as an Oceans 5 grant awarded to TNC. The MSP Initiative takes an integrated, multi-sector approach. The process will include input from the major sectors of the Seychelles which use the country's marine space such as fishing, tourism, conservation and petroleum development in order to develop a holistic climate-smart multi-use plan, integrating the new challenges created by climate change into planning and management efforts.

### 2. Why Marine Spatial Planning (MSP) for the Seychelles?

The world's oceans have become busier and their resources are increasingly in more demand. The Seychelles' EEZ is among the top twenty-five largest in the world, with some of the highest catches and landings of tuna and an area of immense marine and terrestrial biodiversity and resource wealth. Studies also indicate that there are potentially large off-shore [petroleum reservoirs](#). Marine Spatial Planning (MSP) provides a practical, transparent way to create and establish a more sustainable use of the Seychellois marine space and the interactions between its uses; to balance demands for development with the need to protect the environment; and to achieve social and economic objectives in an open and planned way. The Government of Seychelles has a planning mandate to fulfill, and the participatory nature of MSP encourages interested and committed civil society and private sector partners into the process as active participants and advisors.

### 3. What is the overall goal of the MSP Initiative?

Article 38 of the Seychelles Constitution declares that:

"The State recognises the right of every person to live in and enjoy a clean, healthy and ecologically balanced environment and with a view to ensuring the effective realisation of this right the State undertakes to ensure a sustainable socio-economic development of Seychelles by a judicious use and management of the resources of Seychelles". In light of Article 38 and the guiding principles, vision and goals of the Seychelles Sustainable Development Strategy (SSDS)<sup>2</sup>, the MSP Initiative seeks to provide a basis for developing and implementing an integrated multi-use marine zoning and climate change adaptation plan to (1) optimise the sustainable use and effective management of the Seychelles marine environment while (2) ensuring and improving the social, cultural and economic wellbeing of its people. This multi-use plan will serve as the basis for guiding the strategies and decisions of the Seychelles Conservation & Climate Adaptation Trust (SeyCCAT) established as part of the GoS-led

<sup>2</sup> [http://www.emps.sc/index.php?option=com\\_content&view=article&id=26&Itemid=86](http://www.emps.sc/index.php?option=com_content&view=article&id=26&Itemid=86)

Debt-for-Climate-Change-Adaptation swap. Phase I of the MSP Initiative (February 2014 – June 2015) will produce a suite of design options, tools and management strategies (a blueprint) as a basis for further development and implementation of the national multi-use plan.

#### **4. What is the planning scope?**

The planning scope covers the 1,374,000km<sup>2</sup> of the EEZ, and is focused on seven major thematic sectors or uses which are (in no particular order):

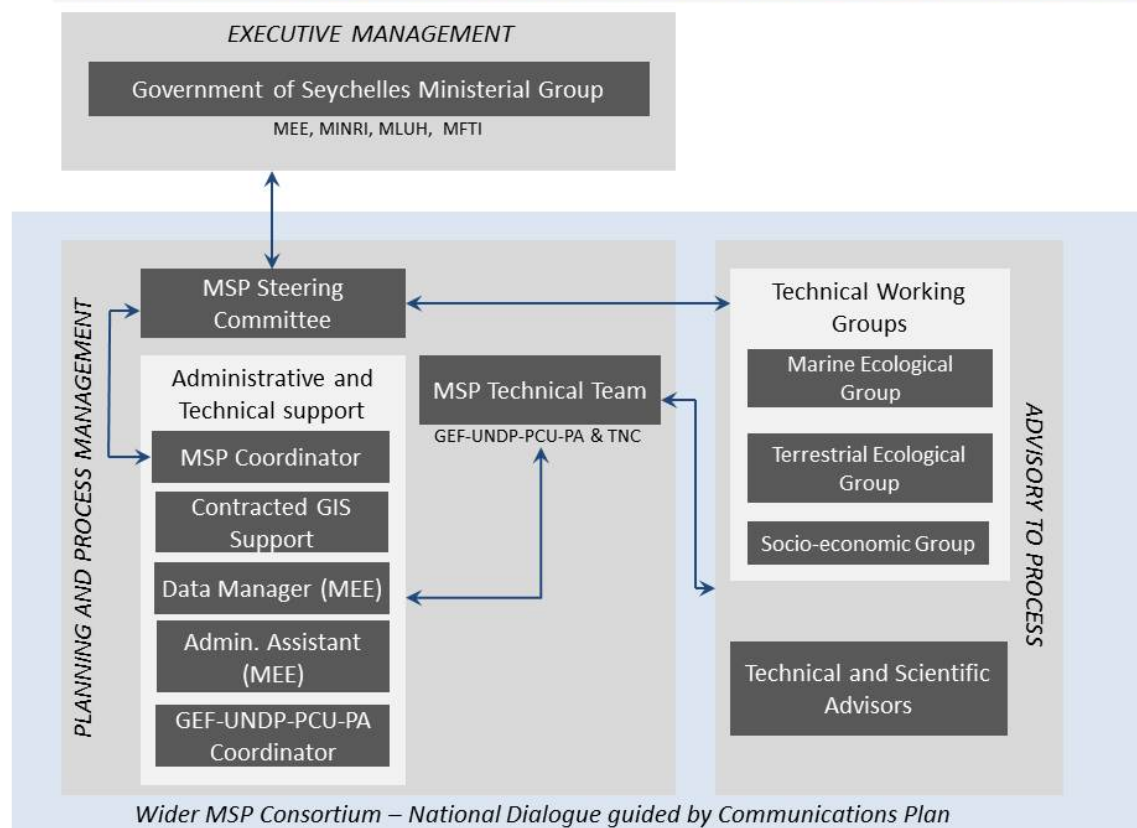
- Fisheries
- Tourism
- Marine Transportation
- Renewable energy
- Biodiversity conservation
- Cultural heritage
- Extraction (petroleum, mining, aggregate).

With regards to the output scope, Phase I of the MSP Initiative (February 2014 – June 2015) will produce a suite of design options, tools and management strategies (a blueprint) as a basis for further development and implementation of the national multi-use plan.

#### **5. How is the MSP Initiative structured? Who is involved?**

The governance and process structure of the Seychelles MSP Initiative has a number of components, including an MSP Consortium and an MSP Steering Committee. The Consortium is the vehicle for national dialogue and public input, its purpose being to provide key stakeholders and the wider public with a means to inform and guide the planning and project execution of the MSP Initiative and other relevant national/large-scale initiatives/projects. The MSP Steering Committee provides management leadership and oversight to the MSP Initiative, and also determines the means by which the wider public consortium will be informed about and participate in the MSP Initiative (through a Communications Plan to be developed). Executive decisions for the MSP Initiative are made by a GoS Ministerial Group to which the MSP Steering Committee reports. This Ministerial Group includes the Ministry of Environment and Energy (MEE), Ministry of Investment, Natural Resources and Industry (MINRI), Ministry of Land-Use and Housing (MLUH) and the Ministry of Finance, Trade & Investment (MFTI). There will also be three Technical Working Groups advising and guiding the Steering Committee. These groups will consist of Non-Government Organisations and Private Sector, representing socio-economic activities, specifically Fisheries, Tourism and Petroleum and biodiversity/ecology - marine and terrestrial. Additional technical/scientific advisors will be consulted on an 'as-needs' basis. The MSP Technical Team will be executing the spatial planning and data analysis, and is responsible for developing the MSP blueprint. This team comprises TNC staff and GEF-UNDP-PCU-PA consultants. Administrative and technical support to the Team is provided by the local MSP Coordinator (also the Steering Committee Secretary), GIS consultants, the MEE Data Manager and Administrative Assistant from the MEE Senior Advisor's office, and the GEF-UNDP-PCU-PA Coordinator (see diagram below).

## Seychelles Marine Spatial Planning (MSP) Initiative - Governance and Process Structures



An umbrella Agreement and Scope of Work outlines the MSP process, identifies partners, and provides details about the various roles and responsibilities of all involved parties. All data sharing and processing are governed by the terms outlined in an MSP Data Sharing Agreement. Roles and responsibilities of the Steering Committee (SC), the MSP Technical Team and the Technical Working Groups and Technical/Scientific Advisors are outlined in specific Terms of Reference or parallel documents.

### 6. Guiding Principles of the MSP Initiative

The guiding principles of the MSP Initiative lay the foundation of the MSP process and determine the basic or essential qualities of the process and its outputs. The Seychelles MSP Initiative principles were adapted from the IOC-UNESCO MSP Manual<sup>3</sup> and are as follows:

| Marine Spatial Planning Initiative Principles |   |
|---|---|
| <b>Integrated</b>                             | Address the interrelationship among issues and sectors and between nature and development; integration can help create complementary and mutually reinforcing decisions and actions.                            |
| <b>Ecosystem-based</b>                        | Safeguard ecosystem processes, resilience, and connectedness, recognizing that that ecosystems are dynamic, changing and sometimes poorly understood (therefore requiring precautionary decision-making).       |
| <b>Public Trust</b>                           | Marine resources are part of the public domain, not owned exclusively or benefited by any one group; decisions should be made in the interest of the whole community and not any one group or private interest. |
| <b>Sustainability</b>                         | Decision making should take into account environmental, economic, social and cultural values in meeting the needs of the present without compromising the ability of future generations to                      |

<sup>3</sup> Ehler, Charles, and Fanny Douvère. Marine Spatial Planning: a step-by-step approach toward ecosystem-based management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO. 2009.

|                      |  |
|----------------------|--|
|                      | meet their needs.  |
| <b>Transparency</b>  | The processes used to make decisions should be easily understood by the public, allow citizens to see how decisions are made, how resources have been allocated, and how decisions have been reached that affect their lives.  |
| <b>Participatory</b> | Communities, persons, and interests affected by marine resource or activity management should have an opportunity to participate in the formulation of ocean management decisions.   |
| <b>Precautionary</b> | Article 15 of the Rio Declaration on Sustainable Development states that: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". |
| <b>Adaptive</b>      | MSP is a continuing, iterative process that learns and adapts over time.   |

## 7. MSP methodology '101'

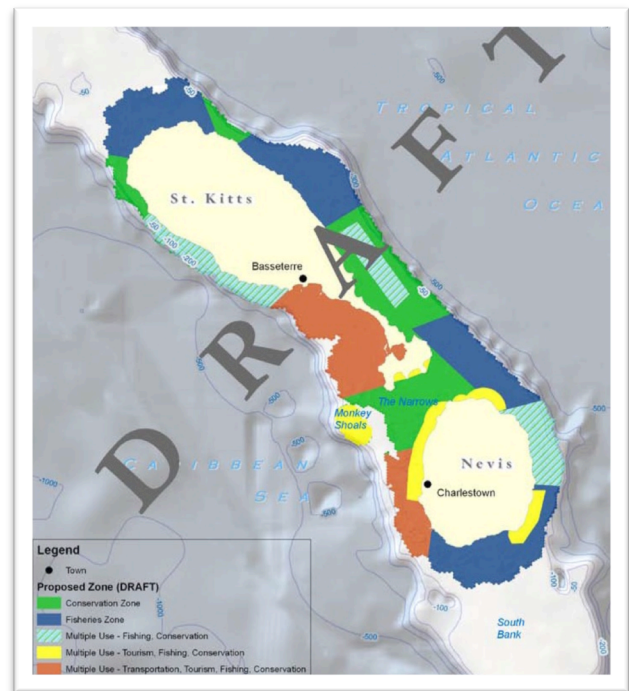
As with many planning processes, MSP does not lead to a one-time plan but instead it can be perceived as a continuing, iterative process that learns and adapts over time (Ehler and Douvère 2009<sup>4</sup>). MSP can be thought of as a series of inter-linked activities. Each individual activity consists of a number of iterative steps, which may involve the use of decision-support tools such as the spatial software MARXAN to help inform the design, the input of local experts and adaptive feedback loops. These iterative steps consist of:

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

It is important to note that Phase 1 of the MSP Initiative focuses on steps 1-6.

## 8. What will the MSP Initiative outputs be?

- Phase I of the initiative focuses on steps 1-6 of the UNESCO methodology, at the end of which a blueprint consisting of multi-use zoning design scenarios (maps) and a set of associated management strategies will be produced. Additional outputs are listed below:
- Workshop/interim reports documenting MSP methodology and process, conservation features (habitats, species, communities), development/socioeconomic features (heritage sites, important shipping lanes, etc.) conservation and development/socioeconomic targets (habitat area/%) and viabilities, threats and stakeholder analysis, strategy prioritization, and monitoring and evaluation
- Maps and other spatial products
- Customized Decision Support Tool(s) (DSTs)
- User Manual/'How To' document(s) to demonstrate the utility of spatial interactive tools developed
- Final report.

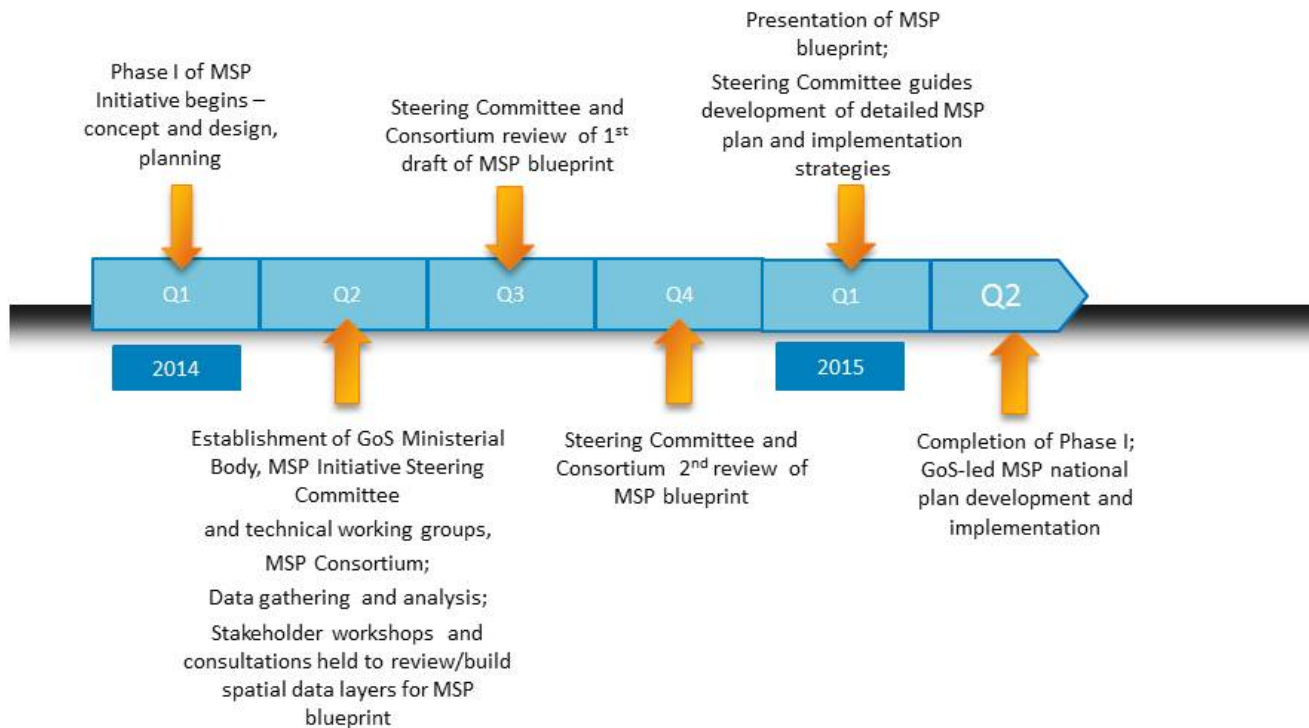


An example of a draft MSP zoning map for St. Kitts and Nevis in the Caribbean

<sup>4</sup> Ibid.

## 9. How long is the MSP process?

Phase I of the Initiative was launched in February 2014 and ends in June 2015 (see below) but must be recognised as the foundation of a longer, more elaborate process to move from a blueprint to an actual Zoning and Management Plan for the entire EEZ.



## 10. How can I get involved?

For more information about the Seychelles MSP Initiative, email [carolusiris@yahoo.co.uk](mailto:carolusiris@yahoo.co.uk)

and visit the website [www.seychellesmarinespatialplanning.com](http://www.seychellesmarinespatialplanning.com)



## Annex 4 Working Towards SMART Planning Objectives

### Handout # 3

#### Overall MSP Initiative Goal

The Seychelles Marine Spatial Planning (MSP) Initiative seeks to provide a basis for developing and implementing an integrated multi-use marine zoning and climate change adaptation plan to (1) optimise the sustainable use and effective management of the Seychelles marine environment while (2) ensuring and improving the social, cultural and economic wellbeing of its people.

#### Guiding Principles for the Seychelles MSP Process

Guiding principles lay the foundation for the marine planning process in the Seychelles and define the basic or essential qualities of the process and its outputs. Draft guiding principles were adapted from the UNESCO marine spatial planning guidebook (Ehler and Douvère 2009), publications, and other marine planning processes.

- **Adaptive:** An iterative, adaptive process that changes and adapts to these changes over time.
- **Integrated:** Address the interrelationships among marine issues and sectors, and between ecosystems and development.
- **Ecosystem-based:** Uses an adaptive management approach to managing human activities that seeks to ensure the coexistence of healthy and fully functioning ecosystems and human communities. The intent is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained, and human well-being supported and improved (Levin et al 2009, Foley et al. 2009). Ecosystem-based management approach includes three important elements: ecological integrity, human well-being, and governance.
- **Public Trust:** Marine resources are in the public domain and decisions are made in the interest of the whole ecosystem, including human communities.
- **Participatory:** Marine planning and marine management is a collaborative, inclusive, participatory process for all persons, interests, uses and activities.
- **Precautionary:** Article 15 of the Rio Declaration on Sustainable Development states that: “In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”.
- **Transparent:** Process for decision-making and input is clearly defined and easily understood.
- **Knowledge-based:** Based on science, local knowledge, and traditional ecological knowledge.

#### TOWARDS PLANNING OBJECTIVES

A marine spatial planning and zoning process is typically guided by an overarching goal statement to clarify ‘why are we planning?’ as well as specific and measurable objectives to identify “what are we planning for?”.

Participants at the first marine planning workshop for the Seychelles EEZ, held February 4-5 2014, were asked to identify the most important marine sectors and uses within the Seychelles EEZ relative to the planning process. These were listed (in no order of importance) as:

Biodiversity conservation, cultural heritage, fisheries, marine transportation, petroleum (mineral & aggregate) extraction, renewable energy, and tourism.

Focusing on these seven sectors, participants were asked to visualise the Seychelles marine space for the next 10-20 years and describe both what they wanted and did not want to see at that time. Two examples, for tourism and fisheries respectively, were “diversification and improved quality of tourism products” and “reduction of by-catch”. Workshop participants then refined the vision statements into goals, ranking these in order of priority (low, medium, high).

Medium and high priority goals derived from Workshop #1 are listed below for each of the seven sectors and are grouped into common areas such as management, governance and public policy, education, economic development and security and health. Cultural Heritage, Petroleum, Marine Transportation and Renewable Energy will require additional time for goals and priority development due to limited representation of these sectors in the workshop.

The MSP Initiative governance structure has identified the need for three Technical Working Groups to serve as technical/scientific advisors to the MSP Steering Committee and Technical Team. There will be two groups comprised of marine and terrestrial biodiversity specialists respectively and a third resource user group from the fisheries, tourism, petroleum and other development sectors. Once representatives have been identified and selected for these groups, they will be tasked with reviewing and refining the MSP planning objectives to ensure that they are SMART<sup>5</sup>. This process will be facilitated by the MSP Coordinator.

Medium and high priority planning goals (results from MSP workshop, February 4-5, 2014) are below.

## BIODIVERSITY CONSERVATION

### *Management*

- Ensure sustainable use and ecological integrity through the establishment of effective partnerships, effective conservation and management of the seascape
- Ensure ecological representation through identification/mapping, management and sustainable use (species, habitats, processes/function):
  - representation of certain % in protected areas
  - restoration and rehabilitation as appropriate
- Ensure all financing needs for marine biodiversity conservation in the NBSAP are met.
  - Strengthen national dialogue to achieve greater transparency in allocation of national project funding
  - Establishment of diverse sustainable financing mechanisms

### *Governance and Public Policy*

- Establish a functional platform for the implementation of:
  - The Seychelles National Biodiversity Strategy and Action Plan (NBSAP)
  - information management and effective dissemination
  - engagement in the design of the MSP Initiative
  - decision-making ability

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<sup>5</sup> SMART objectives are Specific, Measurable, Achievable, Relevant and Time-specific, defined as **a statement of desired outcomes or observable behavioral changes that represent the achievement of a goal.**

### *Education*

- Promote public awareness of the value of ecosystems
  - Valuation as a management tool and mainstreaming into decision making

## **CULTURAL HERITAGE**

### *Management*

- Preserve and protect cultural assets and national heritage/maritime heritage
- Preserve access and use of areas for traditional activities/uses'

## **FISHERIES**

### *Security and health*

- (Achieve) food security for the Seychelles Nation

### *Management*

- Effective sustainable EAF fisheries management through management planning, enforcement & compliance
- Set targets at maximum economic yield instead of Maximum Sustainable Yield (MSY)
- Eliminate IUU fishing (Illegal, unreported, unregulated)
- Meet international standards of best practise for sustainable fisheries (e.g. FAO fisheries standards) to open new markets
- Continue efforts on by-catch reduction minimising fisheries impacts on endangered or threatened species (e.g. as in FAD management plan)

### *Economic Development*

- Review of the capitalisation of the sector- capacity, economic efficiency and subsidies whilst ensuring equity across the fleets and ensuring local fleets are not disadvantaged
- Assessment of the implications of conservation and management on socio-economics of the industrial fishery sector
- Socio-economic impact assessment of small scale and semi industrial fisheries
- Promote sustainable mariculture and diversification in resources and markets

### *Public Education*

- Increase and improve public awareness and education on fisheries role and issues

### *Security and health*

- Promote maritime safety and security (e.g., against piracy)



### *Governance and Public Policy*

- Ensure that fishers are a part of the decision making / governance processes

## **MARINE TRANSPORTATION**

### *Security and health*

- Intensification and standardization of biosecurity measures relating to inter-island and inter EEZ transportation (boat and plane)

## **PETROLEUM**

### *Governance and Public Policy*

- Review necessary legislation and policies relating to petroleum exploration including:
  - to increase funding for environmental protection and conservation
  - relevant environmental legislation
  - a mitigation framework

## **RENEWABLE ENERGY**

### *Economic development*

- Increase the adoption of renewable energy; increase incentives and availability and capacity

## **TOURISM**

### *Economic Development*

- Achieve full integration and implementation of the Seychelles Sustainable Development Strategies through improved coordination and support
- Double the revenue per visitor for conservation activities based on average over the last five years
- Create more financial incentives for private business to adopt Sustainable Tourism related norms
- Increase access and accessibility to outer islands through the expansion of inter-island marine and airplane transportation and related infrastructures
- Increase the capacity of tourism related transport / development of infrastructure to allow for sustainable development of this sector

### *Governance and Public Policy*

- Improve and update policies, regulations, and laws pertaining to marine tourism and other maritime traffic in order to reduce the negative environmental impacts including those of self-sail and private boats

- Improve the regulations and increase the transparency (as concerns the distribution of funds) of funds collected and disbursed as part of the Corporate Social Responsibility tax

### *Management*

- Facilitate and promote the implementation of environmentally sound Public - Private Partnerships (PPP) as regards PA management and conservation.

### **References**

- Ehler, C. and F. Douvère. 2009. Marine Spatial Planning: a step-by-step approach toward ecosystem-based management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO.
- Foley, M., Halpern, B.S., Micheli, F., Armsby, M.H. et al. 2010. Guiding ecological principles for marine spatial planning. *Marine Policy* 34: 955-966.
- Levin, P.S., M.J. Fogarty, S.A. Murawski, and D. Fluharty. 2009. Integrated ecosystem assessments: developing the scientific basis for ecosystem-based management of the ocean. *PLOS Biology*. 7(1): 0023-0