SEYCHELLES Marine Spatial Plan

Elke TALMA
SeyCCAT

MSP & information management Workshop
29TH November 2022
Tanzania

Seychelles Archipelago

Seychelles Ocean Debt Conversion

'RIO +20' Convention Biological Diversity 2012

Expand Marine Protected Areas to 30% by 2020

Climate Change national strategies and commitments

Blue Economy 'Abu Dhabi' Commitment 2014

1

$21M DEBT CONVERSION

Independent Trust created to negotiate loan and debt buy back
Low interest, long term loan and Endowment
Conservation Commitments and Milestones

$15M GoS BLUE BOND

1st sovereign blue bond for ocean
Issuance with World Bank
Not associated with TNC

2

3

5

MARINE SPATIAL PLAN

30% Marine Biodiversity Protection Goal
Address Climate Change Adaptation
Advance Blue Economy
Implementation

6

SEYCCAT (Conservation Trust Fund)

$400,000 p.a from loan repayment
$350,000 p.a. from GoS Sovereign Blue Bond
$151,000 p.a. to Endowment for $6.7M maturity 20 yrs

4

BLUE GRANTS FUND

34 grants awarded for local projects
$1.55 Million disbursed

SMSP SEYCHELLES MARINE SPATIAL PLAN

The Nature Conservancy

What is an MSP "best practice" approach?

Includes:

- Identify a vision and create a forward-looking plan
- Develop clear objectives and timelines
- Identify all stakeholders
- Develop an inclusive and participatory engagement approach
- Create adaptive systems and frameworks for decision making
- Identify relevant data needs and gaps, and match to objectives
- Assess social and economic impacts of the Plan
- Develop implementation plans including costing
- Identify and secure long-term sustainable financing

Sources: Smith, J.L. 2018. Options for Adopting Marine Spatial Planning In: Cervigni, R. and P. L Scandizzo, Editors. The Ocean Economy in Mauritius. Making it Happen. Making it Last. World Bank. 329 pp. Beck et al. 2009. Best practices for marine spatial planning. The Nature Conservancy. 27 pages

Develop a Marine Spatial Plan by 2022 that:

1. Legislates marine protections that are 30% of Seychelles' Exclusive Economic Zone and Territorial Sea
2. Promotes the Blue Economy and other national strategies to support ocean health, local economy, and economic growth.
3. Addresses climate change in coastal and offshore habitats
4. Is monitored and adapted over time

Photo credit: © Manu San Félix/National Geographic

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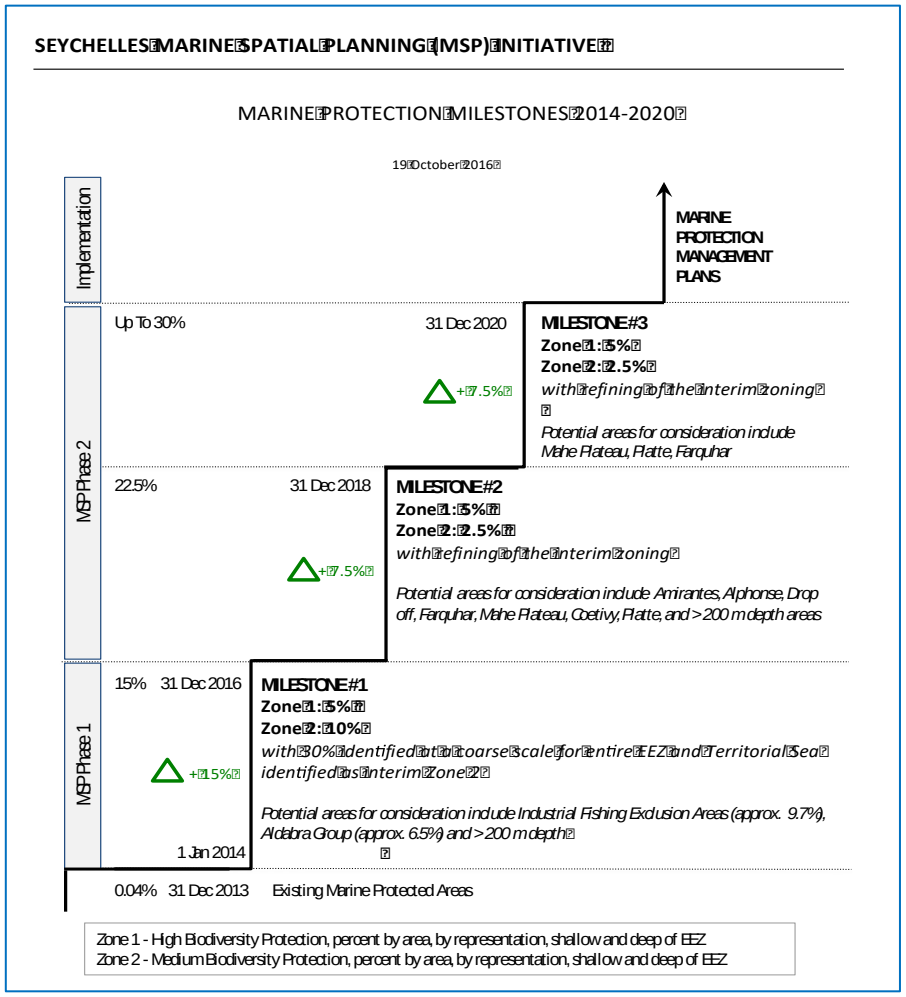
Key Outputs

- **Marine Spatial Plan**
  - Zoning Design for 30% marine protection goal
  - Allowable Activities
  - Management Considerations
  - Implementation Priorities
- **Planning tools**
  - Master List of Uses and Activities
  - Compatibility Matrix
  - Spatial data catalogue
  - MSP Atlas
- **MSP Policy**
- **Implementation Financing**
- **Governance Arrangements**

Conservation Milestones



2016 Milestone 1

+15% Marine Protection

Zone 1 - High Biodiversity 5%
Zone 2 - Med Biodiversity 10%

2018 Milestone 2

+7.5% Marine Protection

Zone 1 - High Biodiversity 5%
Zone 2 - Med Biodiversity 2.5%

2020 Milestone 3

+7.5% Marine Protection

Zone 1 - High Biodiversity 5%
Zone 2 - Med Biodiversity 2.5%

Stakeholder Sectors and Groups

ENVIRONMENT
Protected Areas, Climate Change, Biodiversity, Pollution, Restoration

FISHERIES
Industrial, Semi-Industrial, Artisanal, Sports, Subsistence, Recreational

FINANCE
Blue Economy, Finance, Funding, Grants

TOURISM
High Value tourism, Marine Charters

ENFORCEMENT
Coast Guard, Maritime Safety and Security

PETROLEUM
Geophysical Surveys, Oil & Gas Exploration

PUBLIC
Civil Society

INFRASTRUCTURE
Ports, Shipping, Transportation, Utilities, Marinas, Services

AQUACULTURE
Mariculture

RENEWABLE ENERGY
Offshore Wind, Solar Power, Other

Process Guiding Principles

Decisions Developed in 2014-2015 by Technical Working Groups. Reviewed and endorsed by Steering Committee and stakeholder workshops

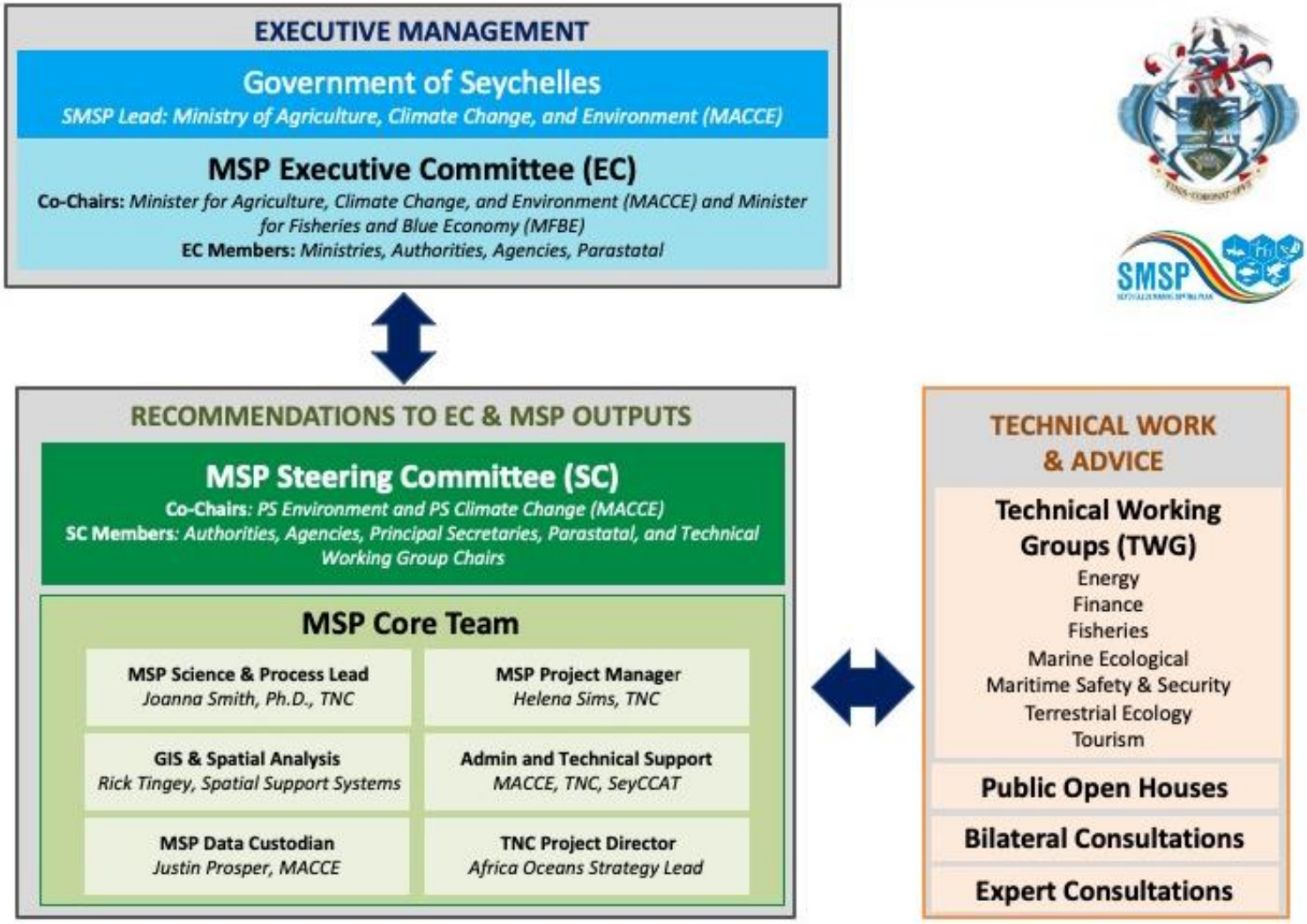
GOVERNANCE & MANAGEMENT

- Abide by National Laws, Regulations, Acts, International Agreements, Policy, Management Plans, Strategies, Action Plans
- Transparency, Inclusivity, Participation
- Integration, Co-management
- Environmental Stewardship
- Equity, Sustainable Development

APPROACH & PRACTICE

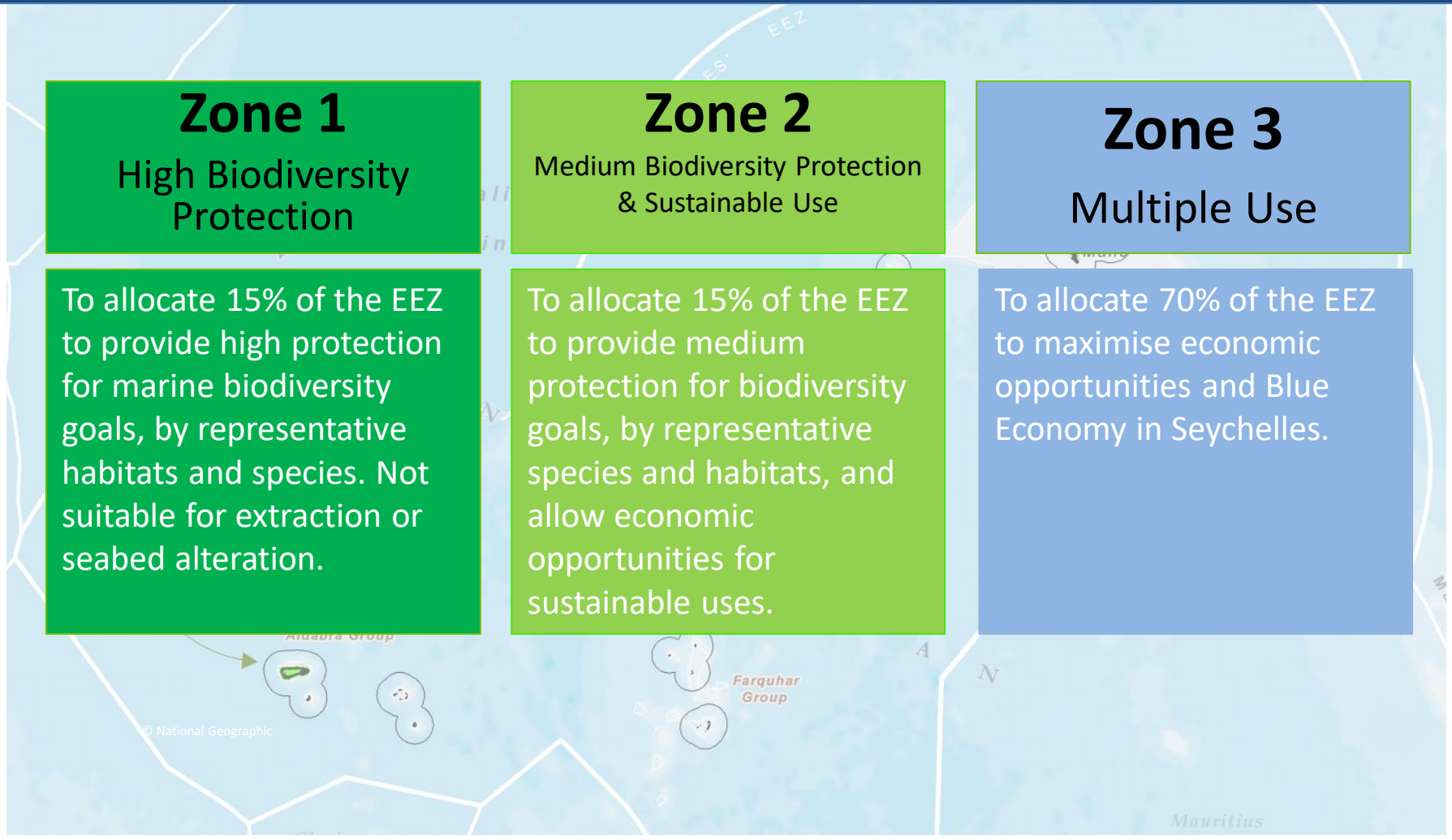
- Use Ecosystem-Based Management
- Use Precautionary Principle
- Balance ecological, economic, social and cultural objectives
- Feasible, Practical, Implementable,
- Financially Sustainable
- Adaptable, Dynamic
- Relevant Temporal and Spatial Scales

Decision-Making Framework



Version 8, June 2021

Zoning Framework



Zone 1

High Biodiversity Protection

To allocate 15% of the EEZ to provide high protection for marine biodiversity goals, by representative habitats and species. Not suitable for extraction or seabed alteration.

Zone 2

Medium Biodiversity Protection & Sustainable Use

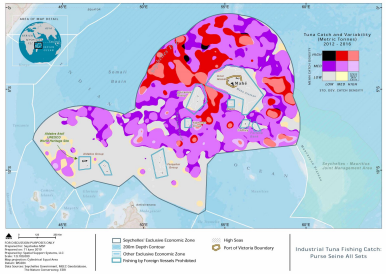
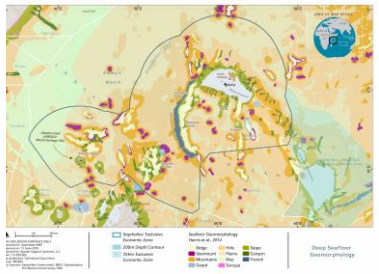
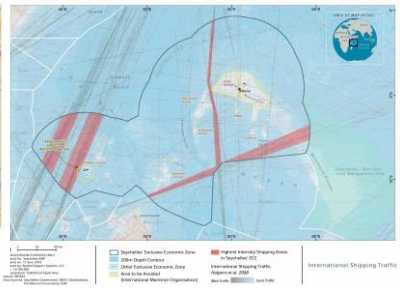
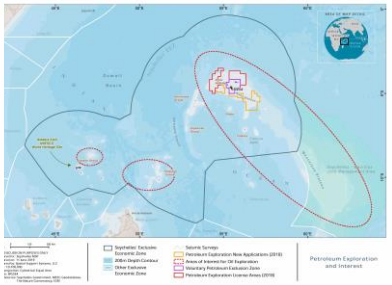
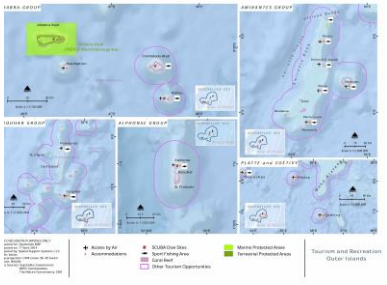
To allocate 15% of the EEZ to provide medium protection for biodiversity goals, by representative species and habitats, and allow economic opportunities for sustainable uses.

Zone 3

Multiple Use

To allocate 70% of the EEZ to maximise economic opportunities and Blue Economy in Seychelles.

Spatial Data Catalogue: 5 THEMES

FISHERIES	BIODIVERSITY FEATURES	INDUSTRIAL & PUBLIC UTILITIES	NON-RENEWABLE RESOURCES	TOURISM & RECREATION
Domestic Fishing Industrial Fishing Sport Fishing Mariculture Participatory Mapping	Benthic geology 174 “features” WIOMER Areas of Importance BirdLife Important Areas Participatory Mapping	Ferries & Shipping IMO Marine Highways Ports & Marinas Renewable Energy Participatory Mapping	Licensed Blocks Low Gravity Areas Seismic Surveys Sand Mining Participatory Mapping	Marine Charters Diving, Snorkeling Viewpoints Accommodation Participatory Mapping

Over 100 layers in data catalogue
2 Planning Unit Sizes: Shallow and Deep

SHALLOW
< 200 M depth
1 km²

DEEP
> 200 M depth
50 km²

Sources: British Admiralty Charts; Fishing Boat Owners Association 2018; Halpern et al. 2006; Harris et al. 2014; Klaus 2015; IMaRS-USF 2005; IMaRS-USF and IRD 2005; Ministry of Environment, Energy and Climate Change 2019; Ministry Land Use and Housing 2014; Ministry of Tourism and Culture 2014; PetroSeychelles 2019; Seychelles Fishing Authority 2018; Seychelles National Park Authority 2014; Seychelles Port Authority 2014; Seychelles Sport Fishing Club 2014; Seychelles Hoteliers Association 2014; Spalding, et al. 2001; The Nature Conservancy 2014; UNEP-WCMC, WorldFish Centre, WRI and TNC. 2010; see also UNDP 2015 for full citations.

Deep Seafloor Geomorphology

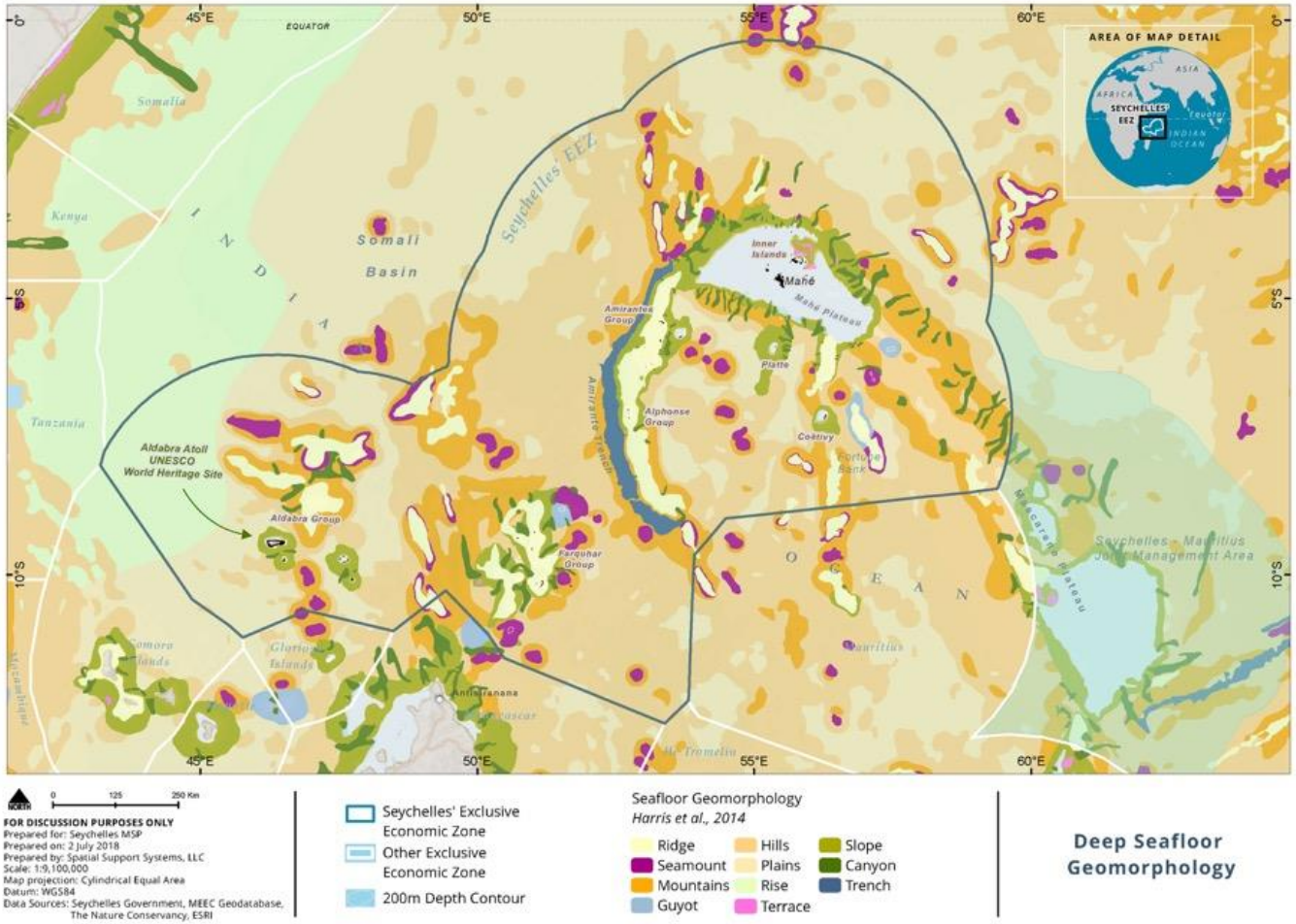


Photo credit: © NEKTON

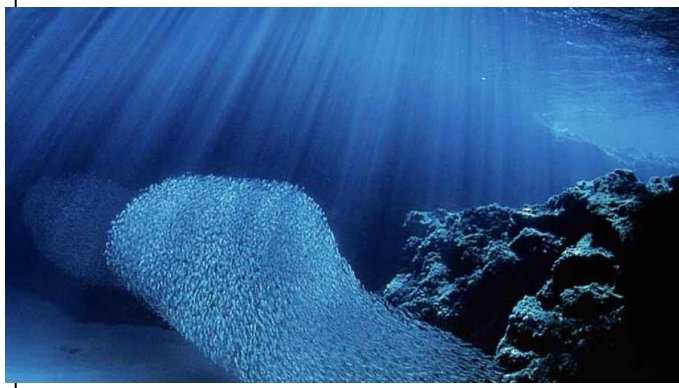
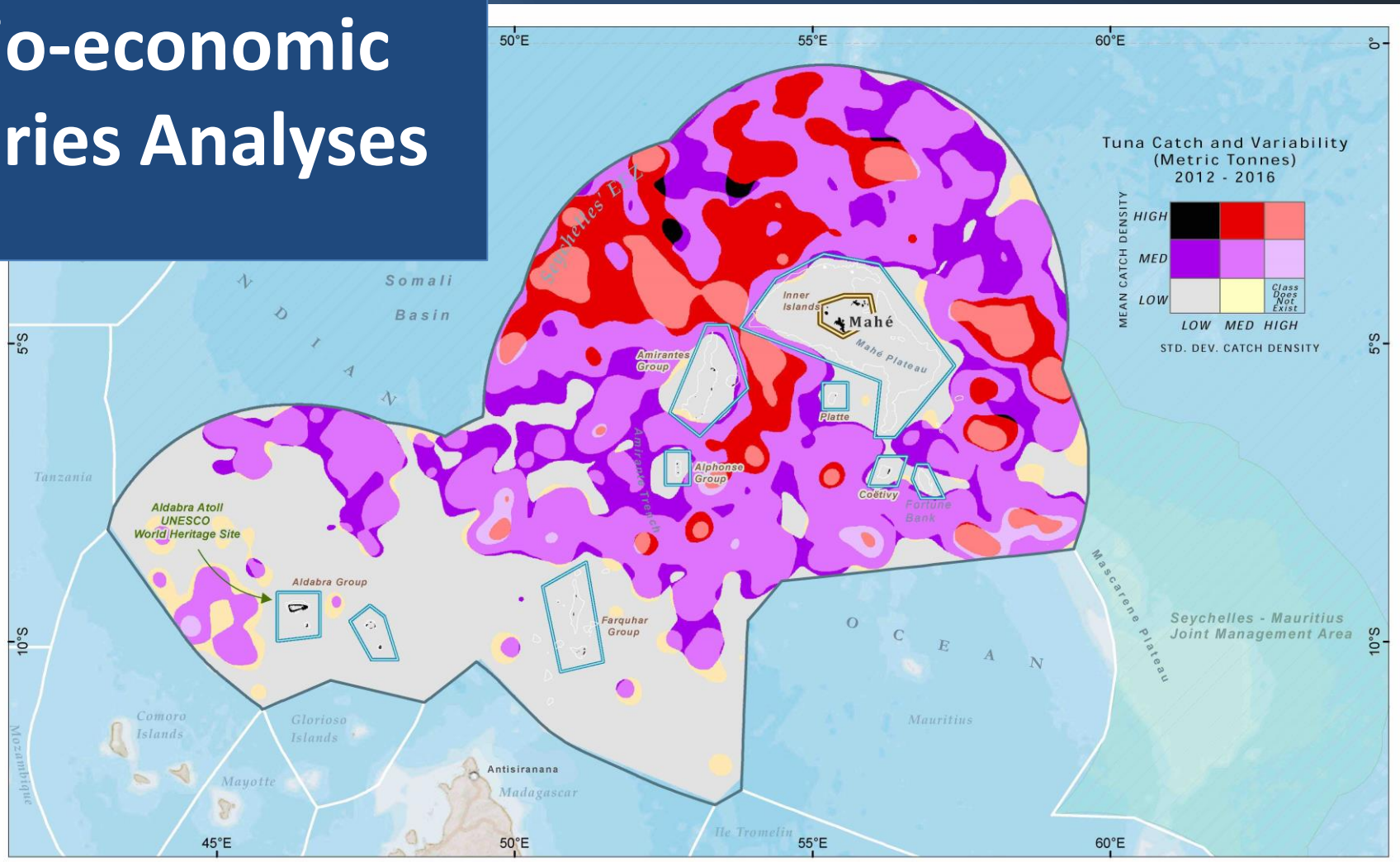


Photo credit: © Trek Divers Seychelles

A key layer for the zoning design proposals in deep water

Socio-economic Fisheries Analyses



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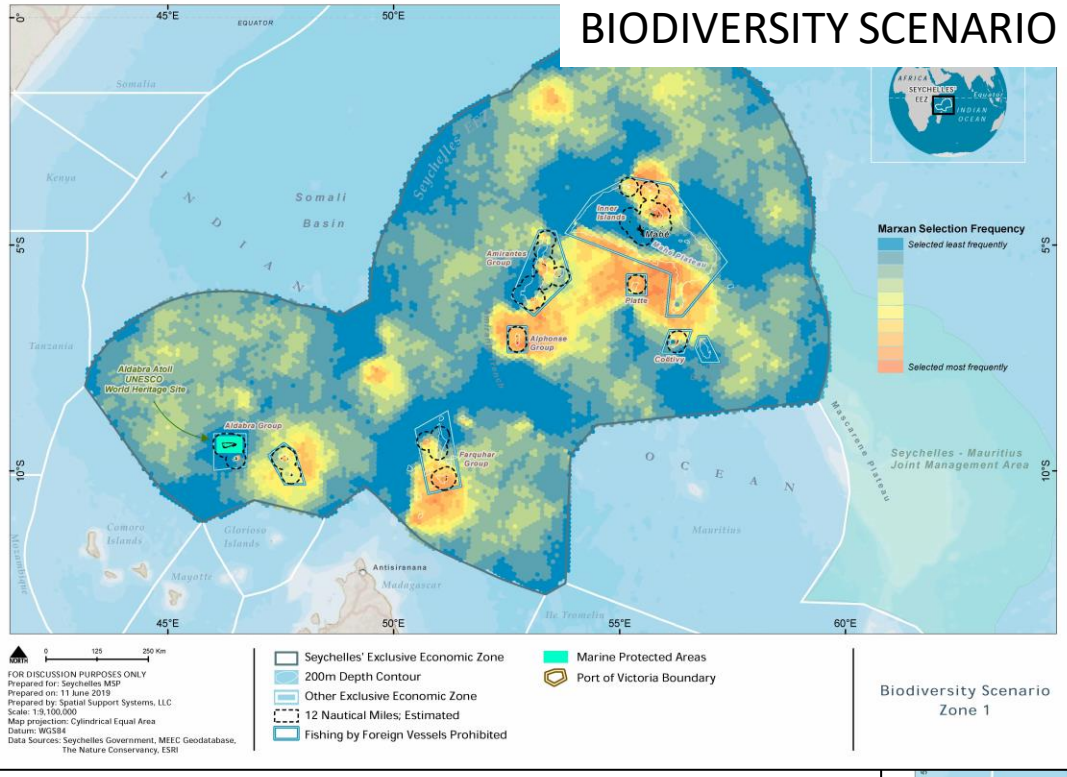
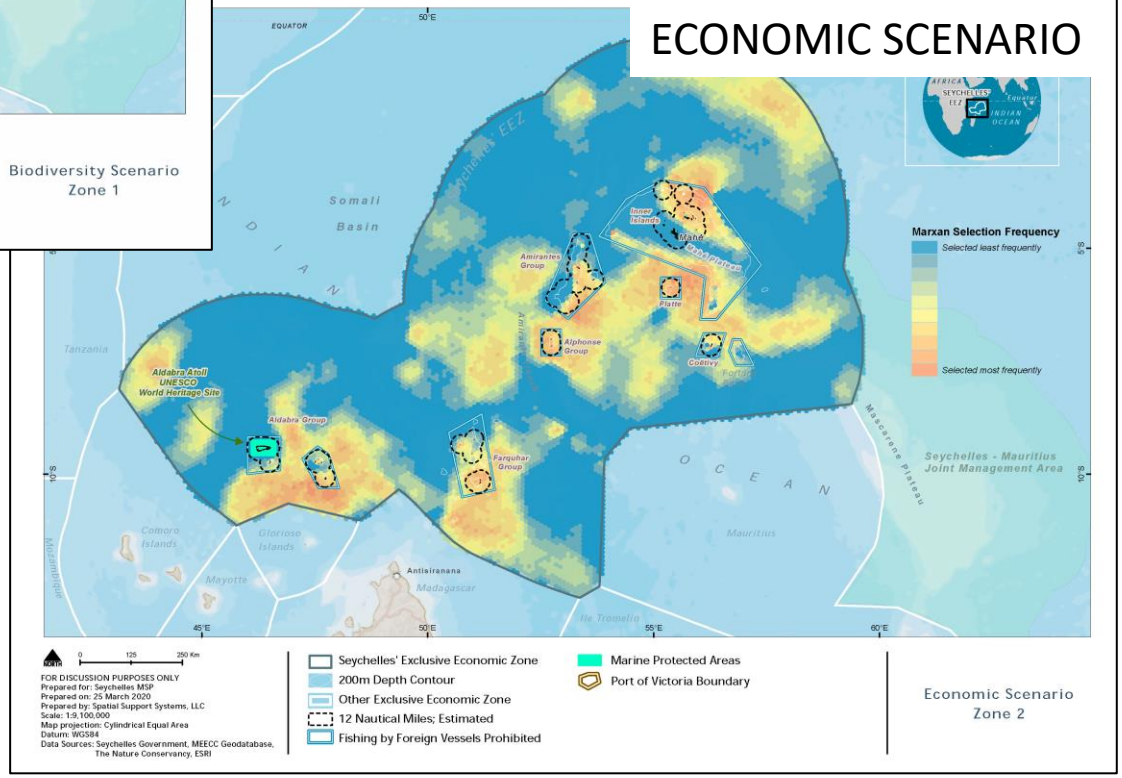
SEYCHELLES MARINE SPATIAL PLAN

Marxan with Zones

BIODIVERSITY SCENARIO



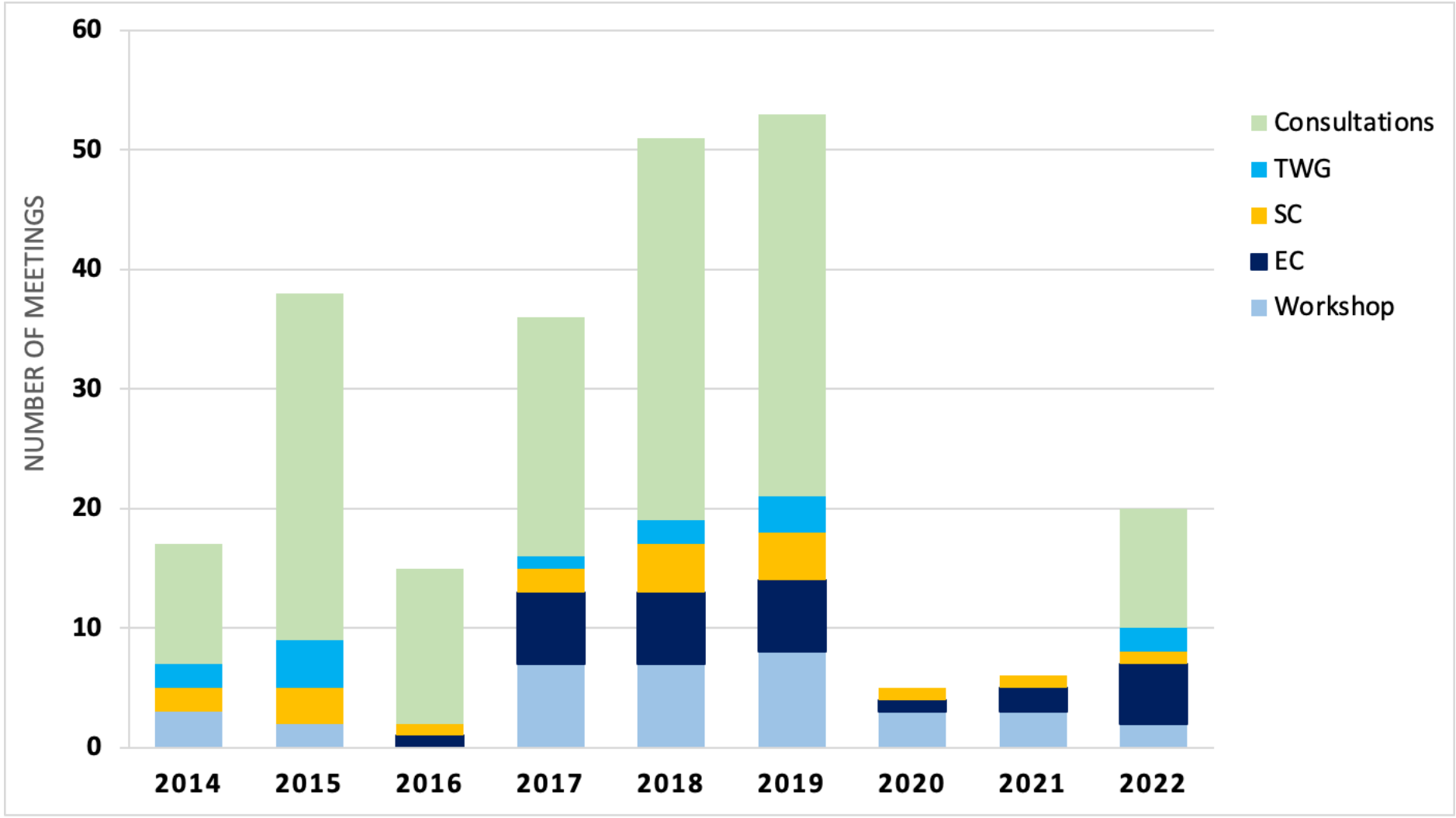
ECONOMIC SCENARIO



Scenarios developed with the MSP Zoning Framework to identify high priority areas for biodiversity conservation.

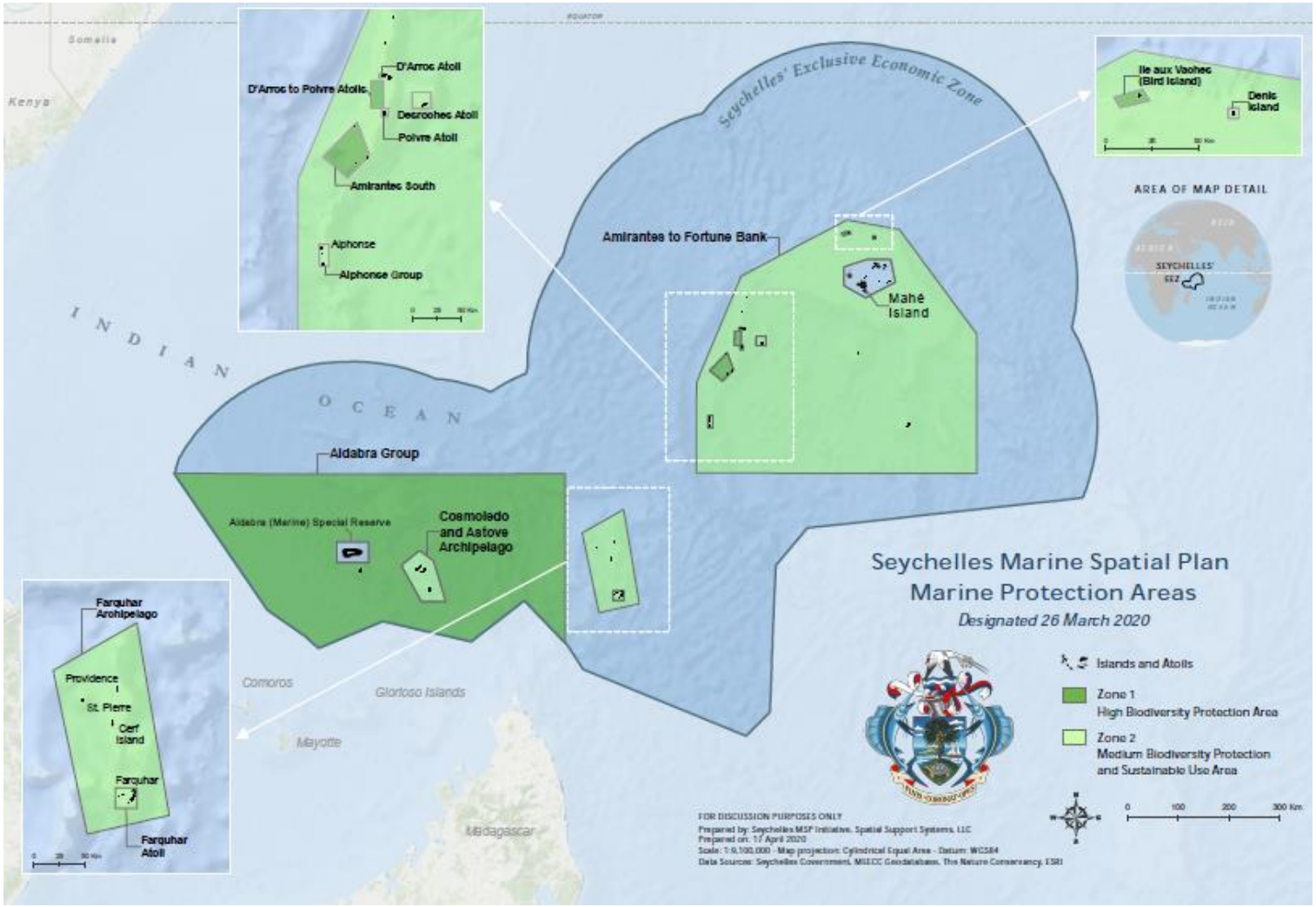
Areas with high selection frequency informed zoning design options in Phase 2 of the MSP.

Stakeholder Consultations 2014-2022*



** Plus many meetings where SMSP supports or coordinates with other projects in Seychelles*

Seychelles Achieved 30% Goal in March 2020



Zone 1 and Zone 2 = approx 30% of 1.35M km^2

Zone 1: 203,071 km^2
Zone 2: 238,442 km^2

Protection Areas legally designated under National Park and Nature Conservancy Act (NPNCA)

DRAFT Allowable Activities and Management Considerations

Ecosystem Services to support MSP

- TNC Mapping Ocean Wealth to value ecosystem services in the existing and new marine protection areas. A SWIOFish3 Project, with Ministry Agriculture, Climate Change and Environment (MACCE).
- Regulating, provisioning and cultural ecosystem services were evaluated. Downscaled global models were used, and discussed with stakeholders in Seychelles virtually 2021-2022.

KEY RESULTS

- 94,000 visitors are attracted to the natural aspects of Seychelles' beaches - $160 Million USD of tourism expenditures annually
- $51.5 Million USD annually from coral reef activities such as snorkeling and diving, the equivalent of 30,156 visitors
- 90% of the shoreline is protected by fringing coral reefs (1,034 km)
- 77% of the shoreline is inside – or adjacent to – MPAs.
- 18% of the population benefits from the coastal protection of reefs in, or beside, protected areas.
- 100% of MPAs contain seagrass and/or mangroves - 156.7 million metric tons (Mt) in blue carbon.

SWIOFISH 3

The Nature Conservancy

MAPPING OCEAN WEALTH

SMSP

Transition from Zoning to Implementation

Marine Spatial Plan

Allowable Activities

Management Units

Implementation Priorities

Approved Plan

Legally Enforceable

Implementation Plan

Governance

Management Framework

Management Plans

Regulations

MCS

Monitoring, Evaluation and Learning

SMART Indicators

Review Process

Management Effectiveness

Reporting requirements

Expected Outcomes by 2025

- Implement a comprehensive, multi-sector Marine Spatial Plan by 2023
- Develop effective management for:
  - Marine Protections across more than 410,000 km^2
  - Multiple Uses across more than 925,000 km^2
- Apply transparent decision-making frameworks for implementation and sustainable economic development
- Implement monitoring, evaluation and learning of the indicators during implementation

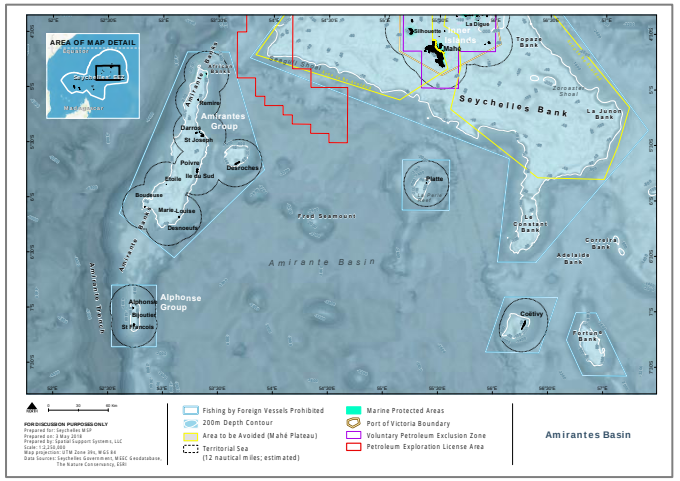


Photo Credit: © The Ocean Agency

Photo credit: © NEKTON

Lessons Learned from Seychelles

1. Gather lessons learned from other geographies
2. Marine spatial plans take time; need patience and persistence. Time is needed to gather information and discuss with all involved any implications that MSP may have on livelihoods and government agencies. Give stakeholders time to gather information and prepare comments and inputs.
3. Ensure all sectors participate fully; address equity issues related to engagement, representation and contribution. Engage stakeholders in diverse ways.
4. Milestones created clear steps along the way and spacing allowed for development of supporting science, documents, analyses and assessments.
5. Implementation of the MSP may hold future challenges; prepare for possible scenarios.

Smith, J.L., Sims, HE., and de Comarmond, A. 2021. Seychelles - using marine spatial planning to meet the 30 percent marine protected areas target. Commonwealth Blue Charter. Case Study: Marine Protected Areas. February 2021.

QUESTIONS

Photo © Warren Andre

For more information:
www.seymsp.com

Joanna Smith, PhD
MSP Process and Science Lead
joanna_smith@tnc.org

Helena Sims
MSP Project Manager
helena.sims@tnc.org

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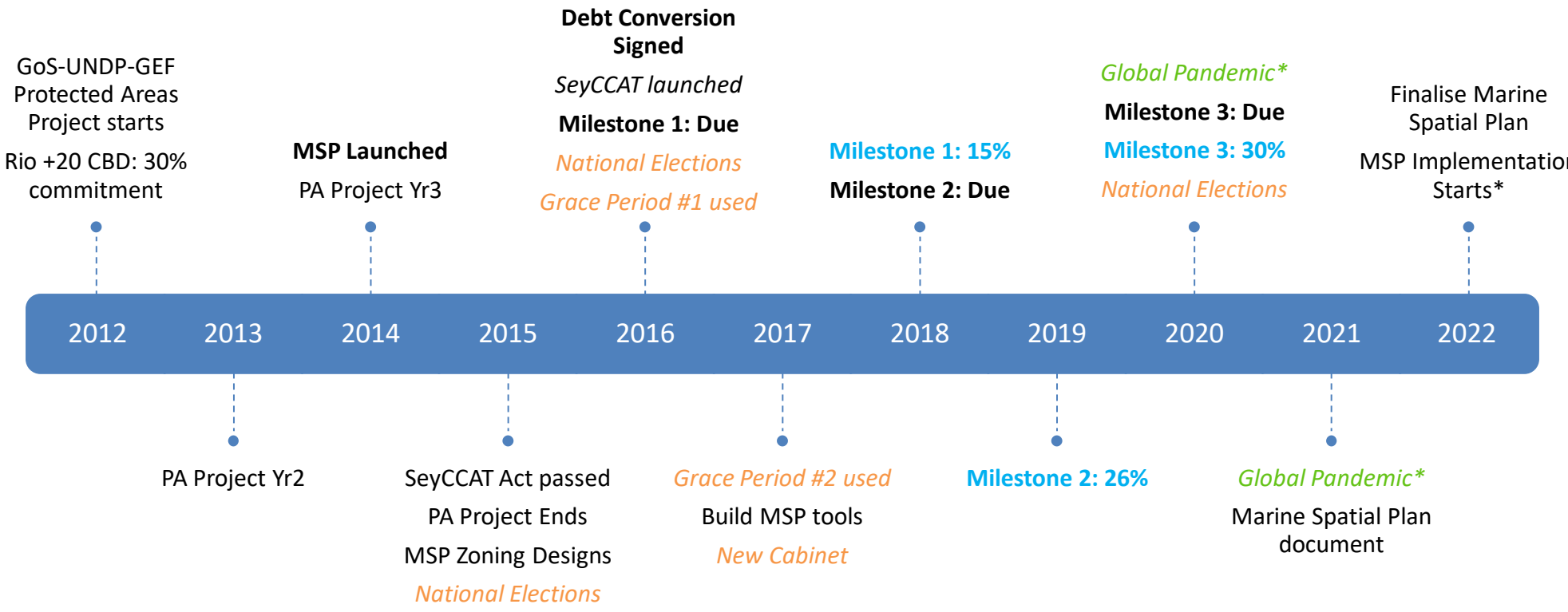
SEYCHELLES MARINE SPATIAL PLANNING

Seychelles MSP Timeline

Milestones to reach 30% marine protection by 2020



** Global pandemic resulting in delays*