



# **Capacity Development Workshop on Marine Spatial Planning Tools and Information Management in the Western Indian Ocean Region**

*(20<sup>th</sup>-24<sup>th</sup> November 2023 at Bahari Beach Hotel-Mombasa, Kenya)*

## **MSP A-Z**

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# Outline

1. Introduction
2. Concepts
3. Principles
4. Approach-EBM or economic
5. Global (Countries with established MSP)
6. Benefits/ advantages
7. Lessons learnt
8. Trainings offered
9. Institutions offered trainings
10. Best practices
11. Case Studies -Show land -seascape approach
12. Exercise: Ecocycle Planning for MSP & SBE

**What's your personal and professional relationship with the sea?**

## Introduction

### The global ocean: from the margins of the earth to the center of the system

- The global ocean has always been associated with the idea of vast entities, immensity, large expanses. The space of “*oceanic solitudes*” (Vidal de la Blache, 1955) illustrating this idea of water as far as the eye can see.
- This idea of immensity which characterizes marine surfaces has so marked human representations that the terms “*ocean*” or “*sea*”: expanses and the immensity of spaces: “*an ocean of greenery*”, “*a sea of sand* ”.
- It arouses: “anxiety”; “the fear of a perilous, roaring, tumultuous, implacable, dark sea”; “The sea is personified in a wicked being, an enemy of man, a refuge of the gods”; “But it is also a domain of wonders, of splendours”. The mysteries of the sea push Man to venture on and under this liquid mass: “The marine space excites the imagination and responds to the need of men to dream and escape. (Paulet, 2006)
- The development of knowledge at sea has not been easy for human societies which had to overcome both the technical difficulties of access (development of navigation, invention of the diving suit) but also difficulties linked to cultural and religious barriers

- ❖ “Is the ocean full”? / « La mer est pleine » ?
- ❖ Fear of need for space/Crainte besoins en terme d'espace ➤ **Availabilities / Disponibilités**



- Risk of usage conflicts/Risque de conflits d'usages

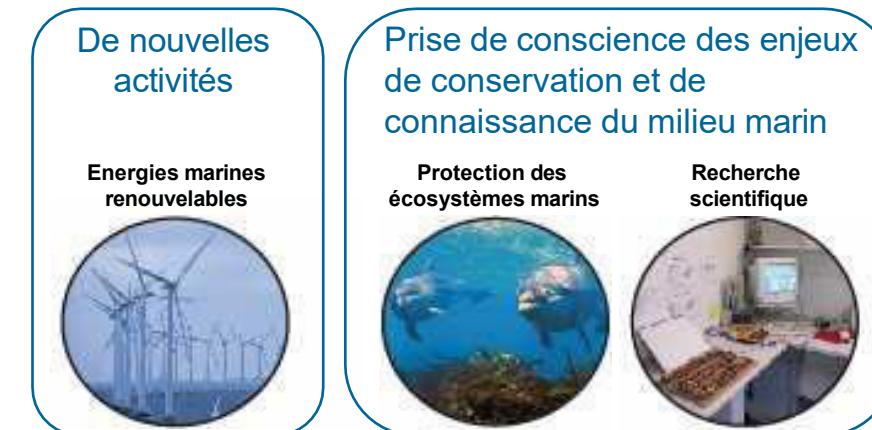
- Increased pressures at sea / Augmentation des pressions sur le milieu marin



**Need for integrated management of the coastal sea /**  
*Besoin d'une gestion intégrée de la mer côtière*

## ❖ A maritime space increasingly used by Humans /Un espace maritime de plus en plus utilisé par l'Homme

✓ Increase of activities at the coastal sea/ *Multiplication des activités en mer côtière*



❖ **Integrated management of the sea that's difficult to achieve/Une gestion intégrée de la mer côtière difficile à concrétiser**

✓ **Specific space / Un espace spécifique :**

- public
- **Without visible geographic borders / sans frontières géographiques visibles**
- **Dynamic in space and time / dynamique dans l'espace et dans le temps**
- **Multi-dimensional / multidimensionnel**
- **Interactive with/interfered by land / en interférence avec le domaine terrestre**

✓ **Experiences with mixed results /Des expériences, mais des résultats mitigés (SAUM, SMVM)**

✓ **ICZM / La GIZC : achievements at the coastal zone despite the spirit / réalisations essentiellement sur le littoral terrestre malgré l'esprit**



**Towards Maritime Spatial Planning? / Vers la Planification Spatiale Maritime (PSM) ?**

# The geography of the sea

- The coastal maps of geographers have long remained vast flat areas of blue: *"And on the maps, the maritime spaces very often constitute a simple unicolor backdrop and "The submarine cables must have come opportunely to fill in the "ocean vacuum" to see the transport of data.*
- The different geographical approaches to maritime/marine space:  
*Geography of fishing, Geography of islands and insularity, Geography of recreational uses at sea, visits, coastal tourism, Geography of maritime transport, ports, trade, maritime geography precision, regional approach, physical approach, history and geography of maritime areas*

# Can we talk of a maritime/marine territory?

- A territory corresponds to “*that portion of the surface appropriated by a social group to ensure its reproduction and the satisfaction of its vital needs*” (Le Berre, op. cit.). According to Guy Di Méo, a territory is "at the meeting point of nature and culture, of societies & their environment, but also in the field of duration & history, in such tenuous contact with the subject , Man and social groups. [...] Territory testifies to an economic, ideological & political (thus social) appropriation of space by groups who give themselves a particular representation of themselves, of their history, of their singularity. (Di Meo, 1998, 2001).

# Ocean governance: foundational approaches and tools

- *The International Law of the Sea:* the foundations of ocean management: **United Nations Convention on the Law of the Sea (UNCLOS)** 14 International Tribunal for the Law of the Sea was adopted on April 30, 1982, in Montego Bay with 117 signatory states. *The United States is still not a signatory.* This convention came into force on November 16, 1994. The convention establishes an **International Tribunal for the Law of the Sea (ITLOS)**, which sits in Hamburg, is responsible for settling disputes related to the sharing of maritime space.

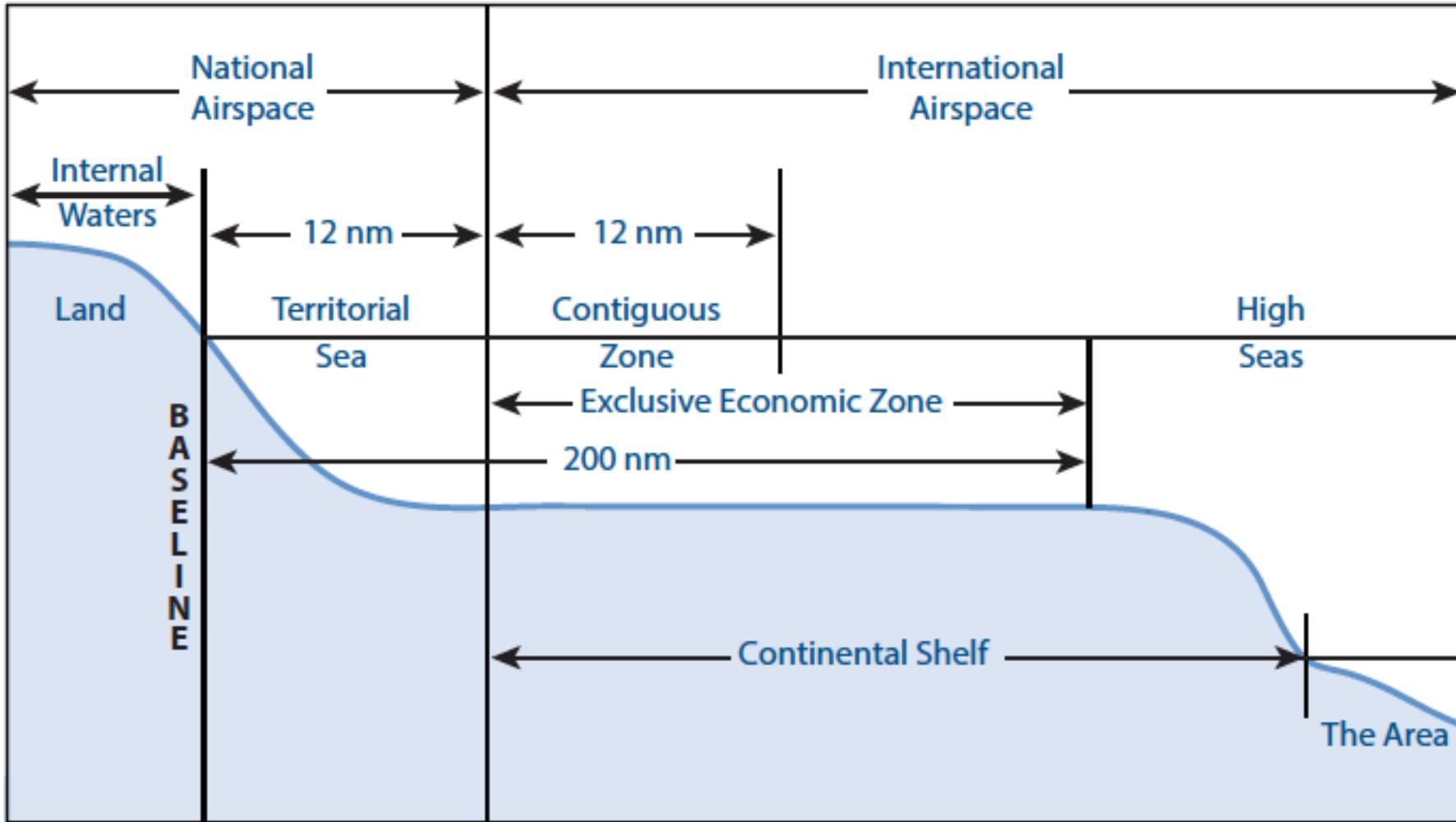
**Territorial sea: Art. 2.** — 1. The sovereignty of the coastal State extends beyond its territory and internal waters to an area of the adjacent sea designated as the territorial sea. 2. This sovereignty extends to the airspace above the territorial sea, as well as to the bottom of this sea and to its subsoil.

**Art. 3.** — Every State has the right to fix the breadth of its territorial sea; this width does not exceed 12 nautical miles measured from baselines

**Contiguous zone: Art. 33.** — 1. In a zone contiguous to its territorial sea, referred to as the contiguous zone, the coastal State may exercise the necessary control with a view to: (a) preventing violations of its customs, fiscal and sanitary laws & regulations or immigration into its territory or territorial sea; (b) to repress violations of these same laws and regulations committed on its territory or in its territorial sea. 2. The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.

**Exclusive Economic Zone: Art. 55.** — The exclusive economic zone is an area beyond and adjacent to the territorial sea; **Art. 56.** — 1. In the exclusive economic zone, the coastal State has: (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds; (b) jurisdiction as provided for in the relevant provisions of this Convention with regard to: (i) the establishment and use of artificial islands, installations and structures; (ii) marine scientific research; (iii) the protection and preservation of the marine environment

# MSP Boundaries



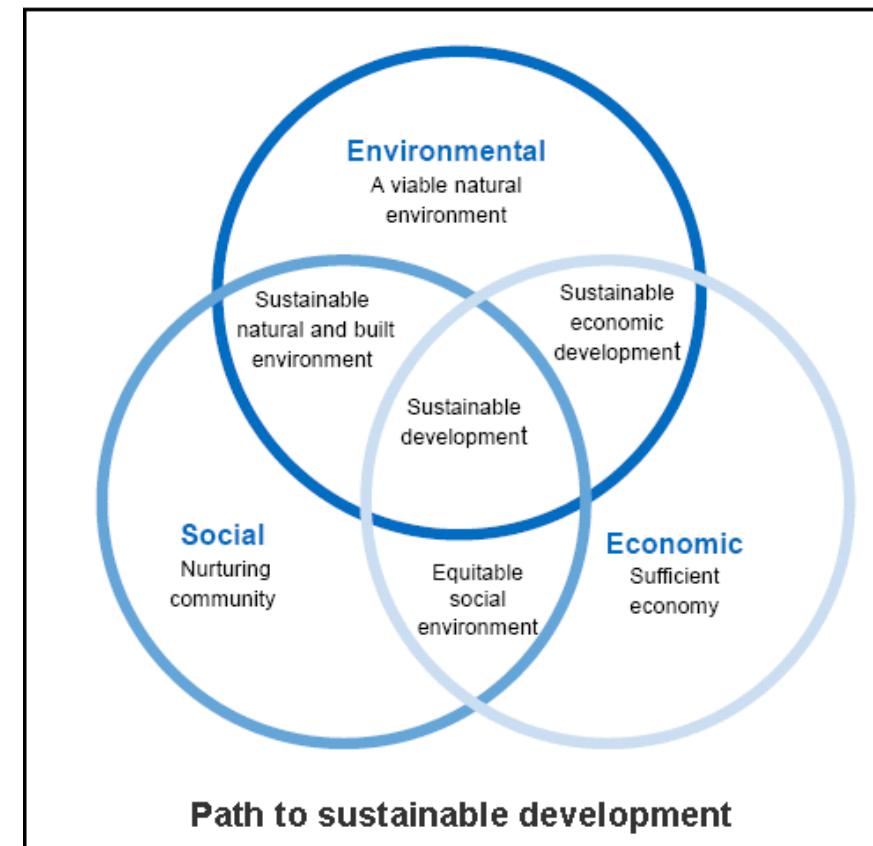
nm – nautical mile

<https://sites.tufts.edu/lawofthesea/chapter-two/>

**Legal  
Boundaries of  
the Oceans and  
Airspace**

# The different approaches to managing the oceans

## 1. *Sustainable development: a foundational concept*



## ❖ The integrated approach / Une approche intégrée

- ✓ **Integration of data sources and disciplines** / *Intégration des sources de données et des disciplines*
- ✓ **Integration of scales** / *Intégration des échelles*
- ✓ **Integration of actors** / *Intégration des acteurs*
- ✓ **Integration of activity/usage sectors** / *Intégration des secteurs d'activités*
- ✓ **Integration of societal concerns** / *Intégration des préoccupations sociétales :*
  - **Collaboration with Lorient Town Planning & Economic Agency** /  
*Collaboration avec l'Agence d'Urbanisme et d'Economie de Lorient*
  - Maritime component of the territorial coherence scheme** / *Volet maritime du SCOT*  
(schéma de cohérence territorial)
- **Collaboration with the General Council of Morbihan** / *Collaboration avec le Conseil Général du Morbihan*
- Sea and Coastal Management Plan** / *Schéma de Gestion de la Mer et du Littoral*

## ❖ How can we understand MSP? / Comment cerner la Planification Spatiale Maritime (PSM) ?

### THEORY / LA THÉORIE

Scientific articles, political - legal texts, planning documents, geographic info. /

Articles scientifiques, textes politiques - juridiques, documents de planification, info. géographiques

**MSP / La PSM :**  
**A research object to stabilize /**  
*un objet de recherche à stabiliser*

**Field surveys: semi-structured interviews /**  
*Enquêtes de terrain : entretiens semi-directifs*

► **International scale /**  
*Échelle Internationale*

**Project Leaders, Experts /**  
*Porteurs de projets, experts* 26

**pax met / personnes rencontrées :**  
**Belgium - Australia / Belgique – RU**  
– Australie

=**Feedback / Retour**  
*d'expériences*

► **National & regional scale /**  
*Échelle nationale et régionale*

**MSP “Theorists” / « Théoriciens » de la PSM**  
19 pax met / personnes rencontrées

= **Perceptions of the French on the maritime strategy being developed / perceptions de la place de la PSM dans la stratégie maritime française en construction**

► **Local scale /**  
*Échelle locale*  
► « **Practitioners / Praticiens »**

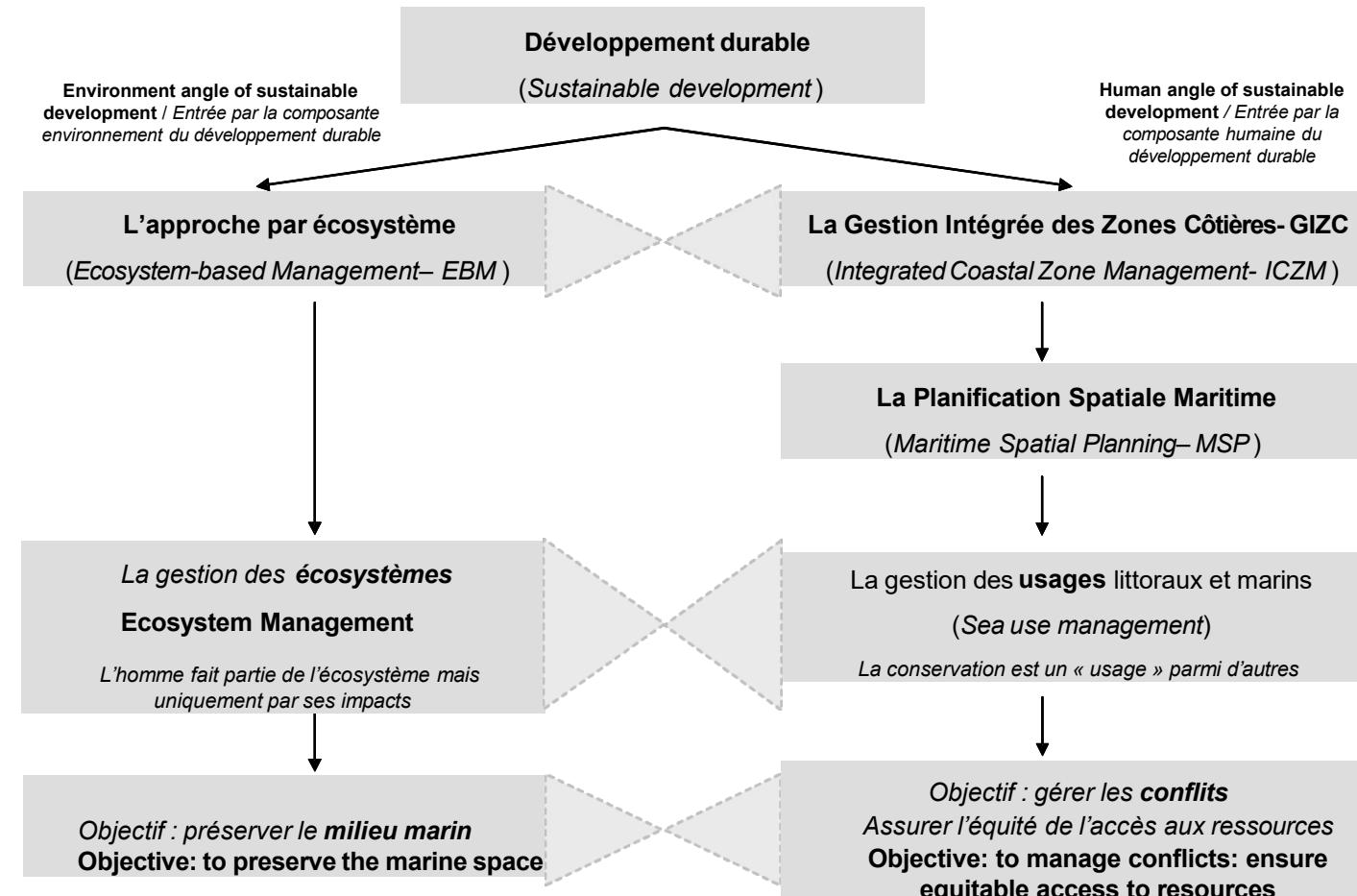
**39 pax met / personnes rencontrées**  
= **Know better / Mieux connaître**  
= **Obtain views / Obtenir leurs points de vue**  
= **Obtain future developments hypotheses / Obtenir des hypothèses d'évolutions futures**

### LE TERRAIN

## ❖ The meaning of MSP / Le sens de la PSM

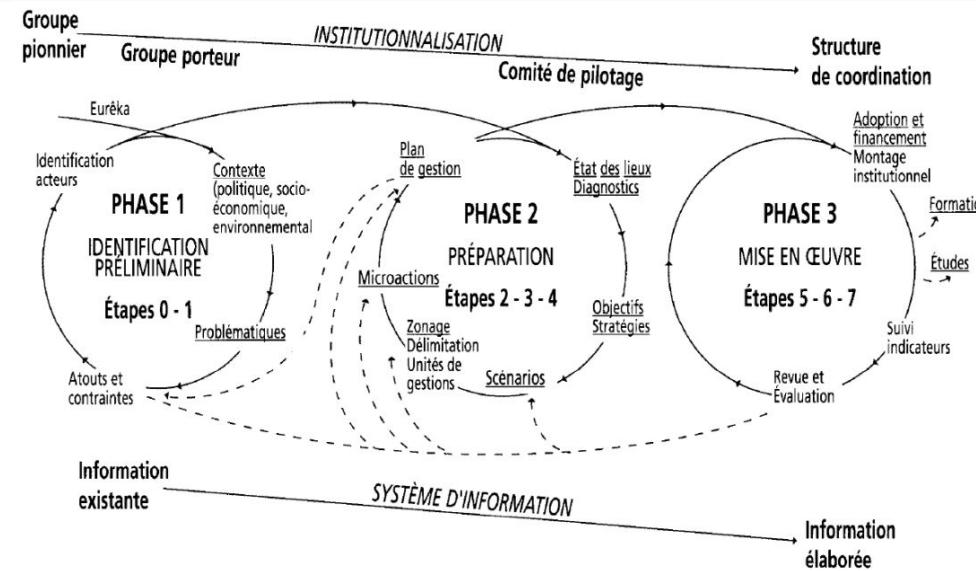
- ✓ **A Tool, a Process, an Organizing principle / Un outil, un processus, un principe organisateur**
- ✓ **Several terms / Plusieurs termes**
- ✓ **No commonly accepted definition but recurring principles which are those of ICZM, specifically applied at sea / Pas une définition communément admise mais des principes récurrents qui sont ceux de la GIZC, mais spécifiquement déclinés en mer**
- ✓ **Implementation = Spatial Management Plan, co-developed / Mise en œuvre = plan de gestion spatialisé, co-construit**
- ✓ **Integrated zoning is a tool for implementation of an MSP / Le zonage intégré est un outil de mise en œuvre de la PSM**

## ❖ MSP and other integrated approaches / La PSM et les autres approches intégrées



# **Integrated Coastal Zone Management (ICZM)**

- A "dynamic process that brings together government and society, science and decision-makers, public and private interests for the preparation and execution of a plan for the protection and development of coastal systems and resources. This process aims to maximize **long-term** choices favoring resources and their reasoned and reasonable use. The integrated management of coastal zones thus appears to be the preferred instrument for the sustainable development of this complex "eco-socio-system", by **reconciling development and the biological balance** of resources over the long term, and by definitively linking **environmental and social issues.**" (*Cicin-Sain and Knecht, 1998*)



# What is and what isn't an MSP?

## **It is:**

- An adaptive process
- A (spatial) tool
- A way of bringing people and sea uses together
- Forward looking

## **It isn't:**

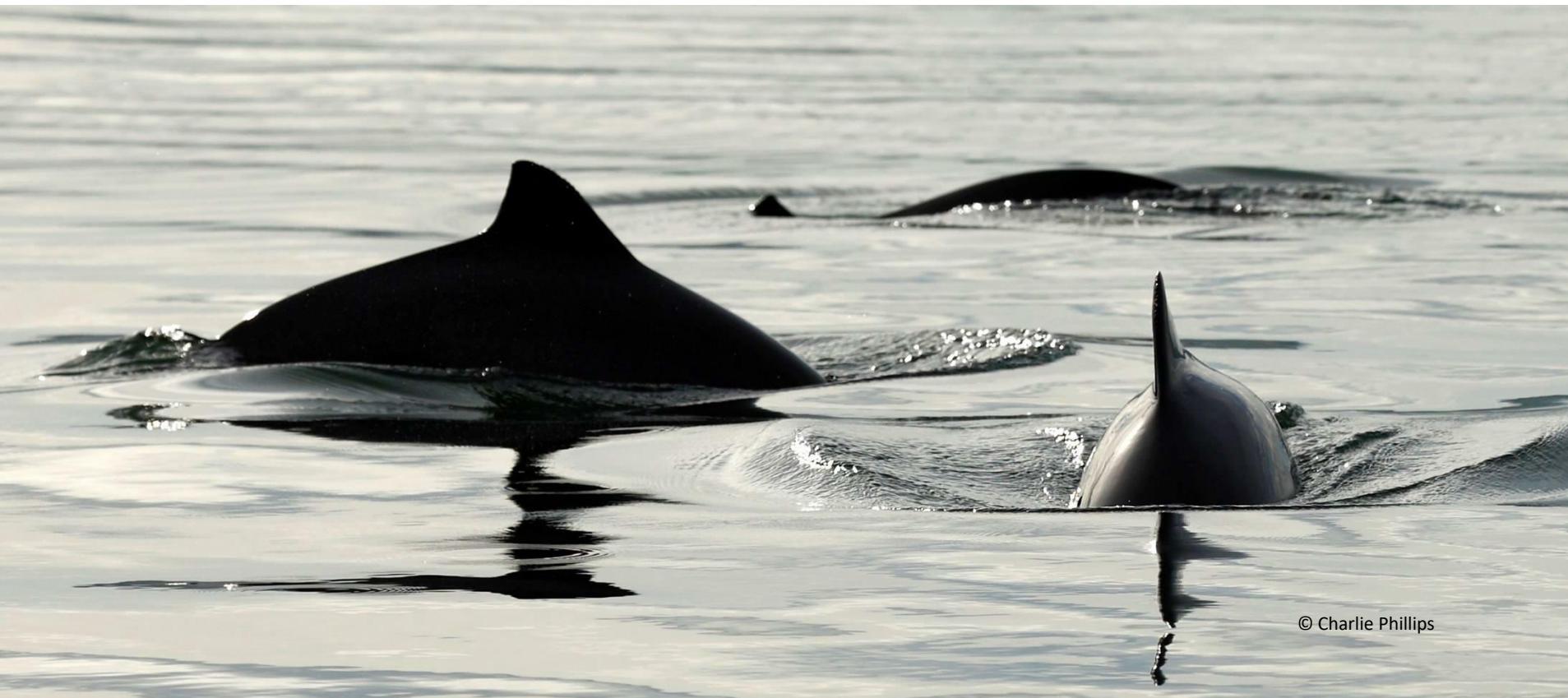
- A silver bullet
- A conservation measure
- A 'one size fits all' solution
- Just about technology and data



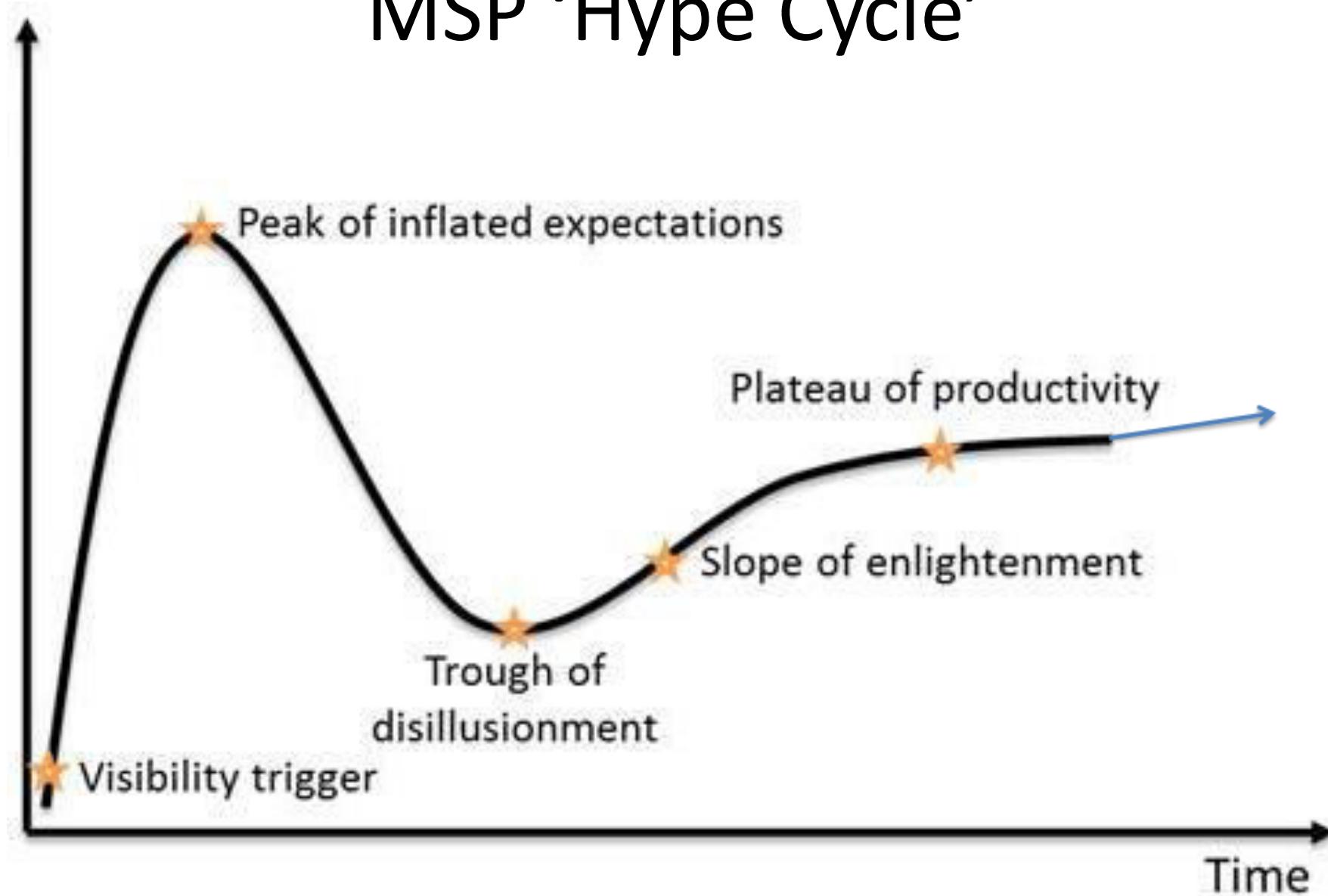


# Some key general principles:

1. Forward thinking
2. Supported by stakeholders
3. Ecosystem-based



# MSP 'Hype Cycle'

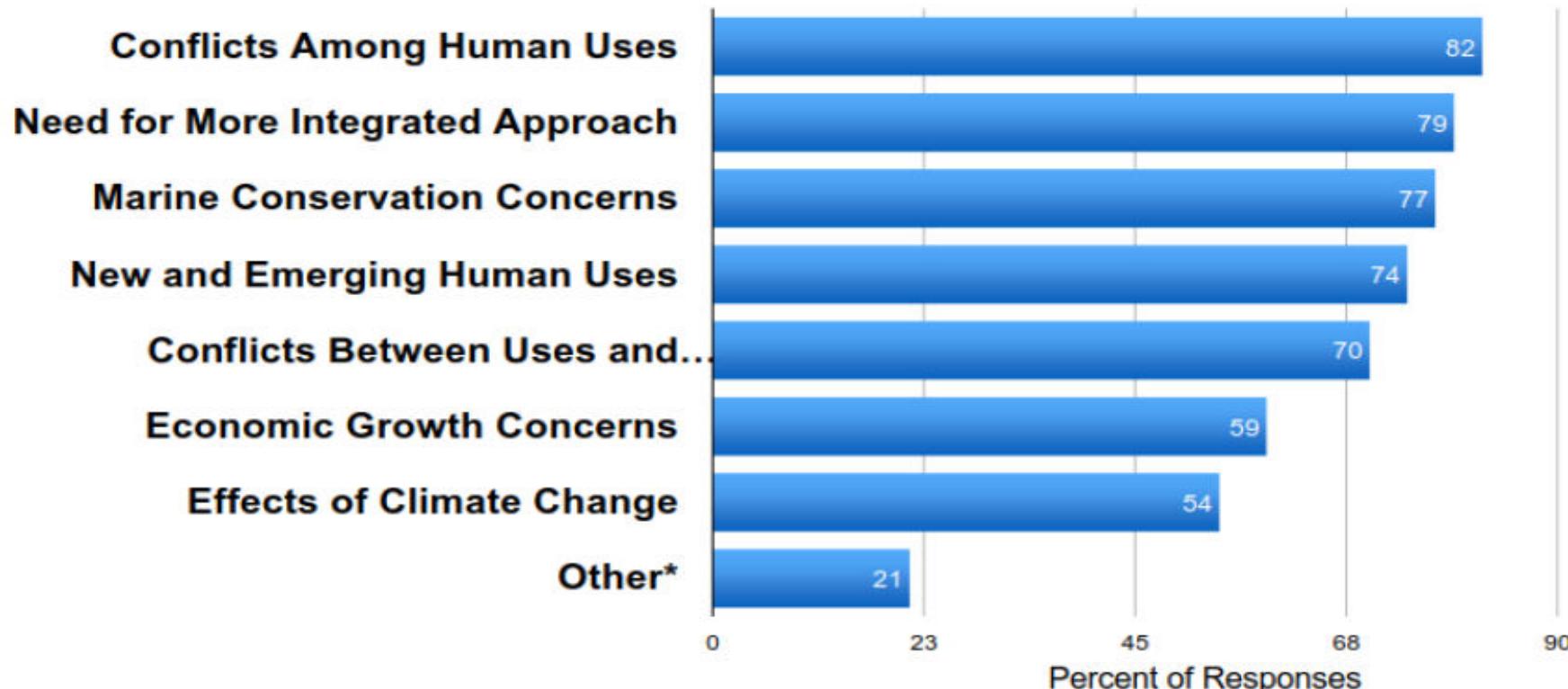


# Issues – why do you need/want MSP?

- Find space for new Activities
- Develop the “Blue economy”
- Safeguard the environment/design MPAs
- Resolve user-user or user-environment conflicts



## Drivers of MSP



Examples of “Other” Drivers:

- Comply with EU MSP Directive
- Transparency in decision making
- Trans-boundary planning advantages

*n = 64 MSP survey responses*

Source: Charles Ehler, 2018

❖ **What do we learn from international MSP experiences? /**  
❖ ***Que retenir des expériences internationales de PSM ?***

✓ **Similarities in / Des similitudes dans:**

- **The context of emergence / le contexte d'émergence**
- **Implementation / la mise en œuvre**
- **Difficulties in applying MSP / les difficultés d'application de la PSM**

✓ **Varied applications depending on context and objectives / Des applications variées selon les contextes et les objectifs :**

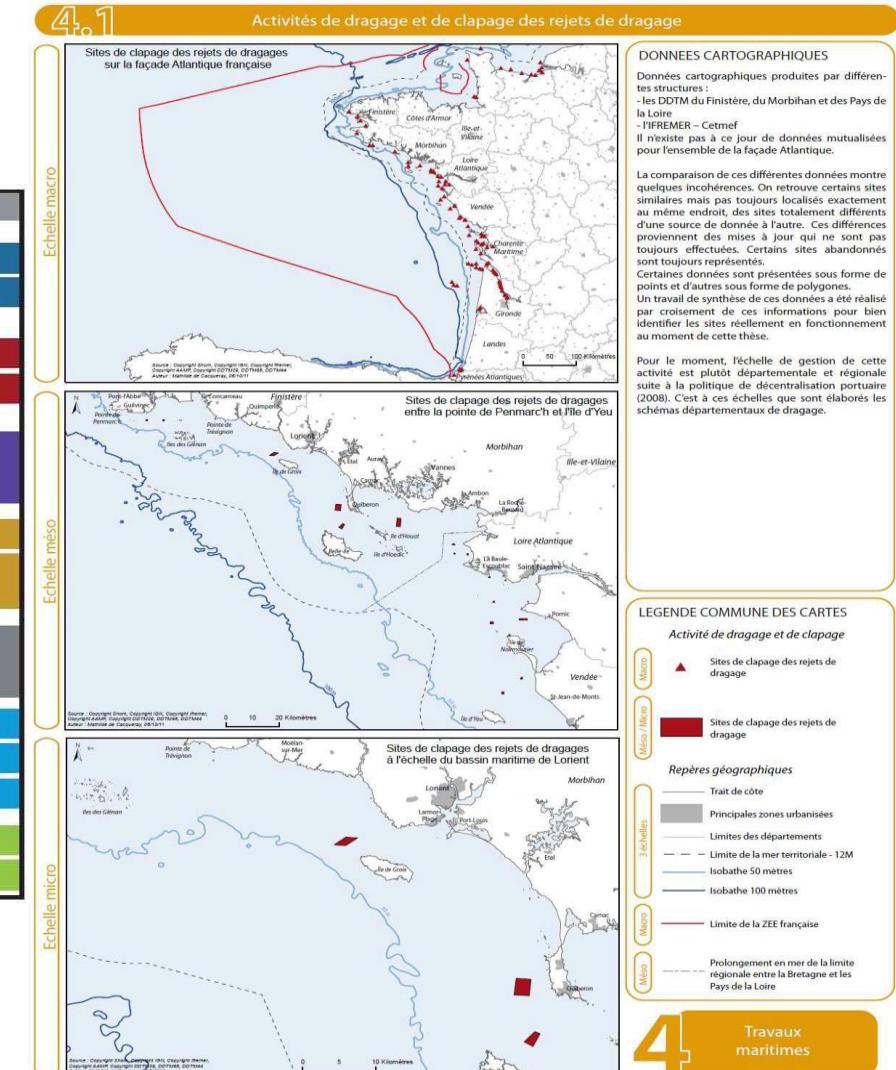
- **MSP to manage maritime space within an MPA / PSM pour gérer l'espace maritime au sein d'une AMP**
- **MSP to constitute a coherent network of MPAs / PSM pour constituer un réseau cohérent d'AMP**
- **MSP to manage all uses at sea (multi-uses) / PSM pour gérer l'ensemble des usages en mer (multi-usages)**
- **Transboundary MSP / PSM transfrontalière**

❖ **Perceptions of MSP in France: towards Strategic Planning /**  
❖ ***Perceptions françaises de la PSM : vers une Planification Stratégique***

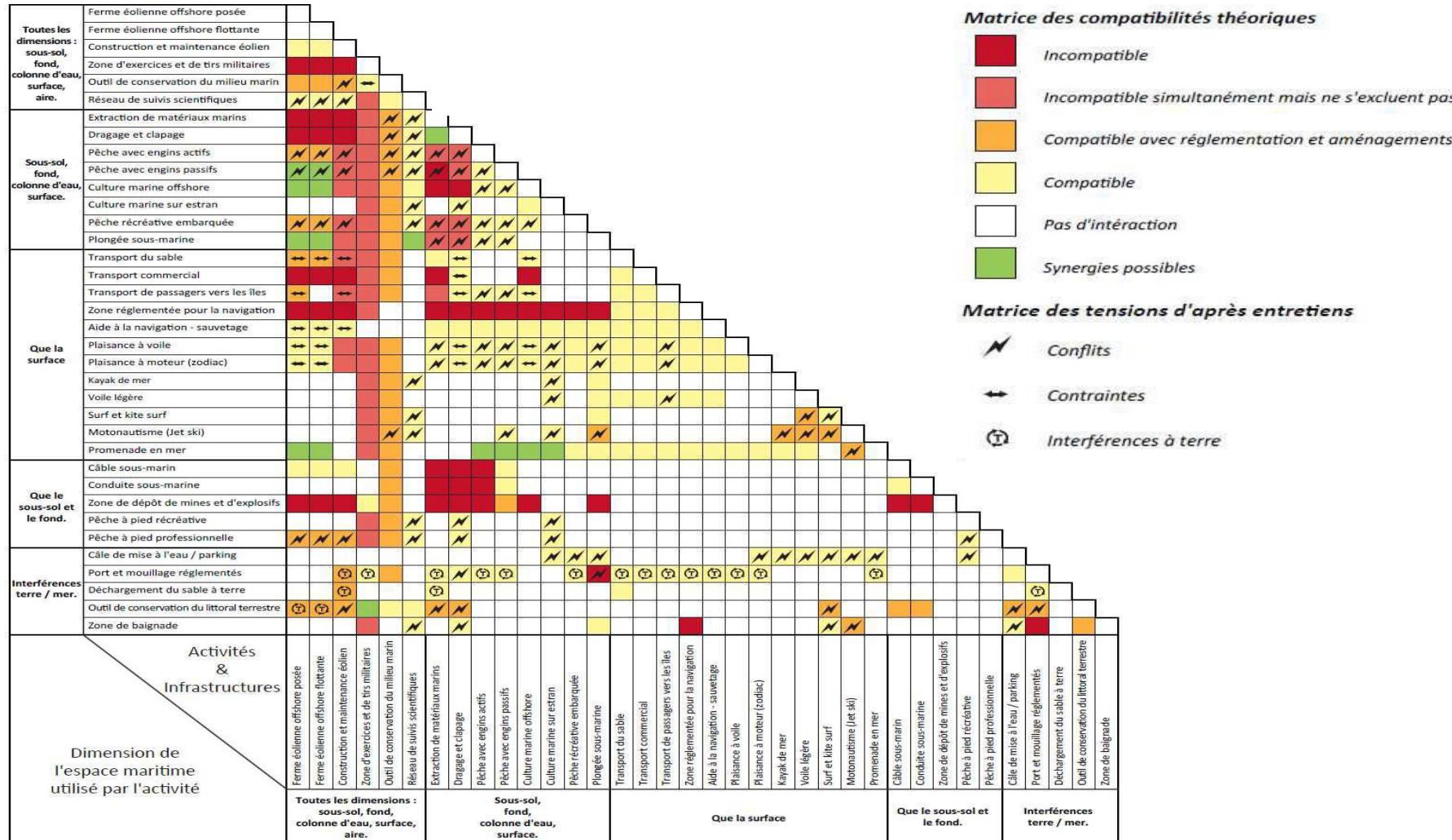
- ✓ **Strategic Planning BEFORE Spatial Planning / Planification Stratégique avant Planification Spatiale**
- ✓ **MSP = Operational Tool for implementing Strategic Planning / PSM = *outil opérationnel de mise en œuvre de la Planification Stratégique***
- ✓ **Willingness not to reduce MSP to zoning / Volonté de ne pas réduire la PSM au zonage**  
= **fear of complicating things and of appropriation of public domain / crainte de figer les choses et d'une appropriation du domaine public**
- ✓ **Tensions/Nervousness around planning = emanating from experiences with land use planning / Crispations autour de la « **planification** » = histoire de l'aménagement du territoire**
- ✓ **Risks of discrepancy between commitments and spatial realities / Risques de décalage entre engagements et réalités spatiales**
- ✓ **Artificial distinction / Distinction artificielle**

## ❖ Summary sheets by maritime activity useful for MSP / ❖ Des fiches de synthèse par activité maritime utiles à la PSM

N°	Usages	Activités
1	Exploitation des ressources vivantes	1.1 Pêches maritimes professionnelles 1.2 Cultures marines sur estran ou offshore
2	Exploitation des ressources non vivantes	2.1 Extraction de matériaux marins 2.2 Production d'énergies marines renouvelables
3	Transport maritime	3 Transport de passagers vers les îles et transport de commerce
4	Travaux maritimes	4.1 Dragage et clapage des rejets de dragage 4.2 Raccordement aux réseaux électrique et de télécommunication, Raccordement au réseau d'eau potable et d'assainissement
5	Défense	5 Zones d'exercice et de tirs / dépôts de mines et d'explosifs
6	Loisirs	6.1 Navigation de plaisance 6.2 Pêche récréative 6.3 Activités sportives
7	Protection et connaissance du milieu marin / Recherches scientifiques	7.1 Outils de protection et d'inventaire 7.2 Réseaux et systèmes de suivis scientifiques



#### ❖ Compatibility issues between activities / *Des enjeux de compatibilité entre activités*



## Some MSP Tools

### **1. Tools for analysing skills/competencies and regulations at sea:**

- a. NOAA Legislative Atlas - United States
- b. MINOE (Management Identifying the Needs of Ocean Ecosystems) – United States
- c. The European Maritime Atlas
- d. Terra Maris - on France scale

### **2. Tools for diagnosing environmental conditions:**

- a. Habitat Digitized Extension – NOAA
- b. Marine Geospatial Ecology Tools – United States
- c. Ecopath with Ecosim and Ecospace (EwE)

### **3. Tools to better understand human activities at sea, their interactions, and their impacts on the environment:**

- a. Cumulative Impacts Model-NCEAS
- b. Multipurpose Marine Cadastre-NOAA
- c. Participative GIS
- d. Open OceanMap

### **4. Tools to describe and analyse prospective future conditions:**

- a. Marxan
- b. InVEST (Integrated Valuation of Ecosystem Services and Tradeoffs)
- c. Statistical Tools e.g. R-statistiques, Tableau, SPSS, Power BI, etc.

## ❖ Obstacles to MSP / Des freins à la PSM

- ✓ **Difficulty of co-existence between activities at the heart of MSP challenges / Les difficultés de cohabitation entre activités au cœur des enjeux de la PSM**
  - Poor representation of maritime activities / La mauvaise représentation entre les activités maritimes
  - Fear of other activities (impacts, spatial competition) / La crainte des autres activités (impacts, concurrences spatiales)
  - Lack of mutual trust among certain categories of actors / Le manque de confiance réciproque entre certaines catégories d'acteurs
  - Failure to comply with existing regulations / Le non respect de la réglementation existante
  - Scales of representation that are difficult to integrate / Des échelles de représentation difficiles à intégrer
  - Inequality among activities (stated or implicit priorities) / L'inégalité des activités (priorités affirmées ou implicites)
- ✓ **Obstacles to MSP resident in inadequate governance / Des freins à la PSM qui résident aussi dans les limites de la gouvernance**

❖ **Typology of local actors: shifting positions during MSP /**  
❖ *Typologie d'acteurs locaux : des positions variables face à la PSM*

- ✓ **Actors “not convinced of the interest” / Des acteurs « pas convaincus de l'intérêt »**
- ✓ **Actors defiant of the State / Des acteurs « défiants vis-à-vis de l'Etat »**
- ✓ **Libertarian Actors / Des acteurs « libertaires »**
- ✓ **Favorable Actors, who give their recommendations / Des acteurs « favorables », qui donnent leurs recommandations**



## MSP process

- Planning at sea is new. Not the same as land planning.
- Early & transparent stakeholder engagement is essential
- NGOs need to be recognized as full stakeholders
- Need to make time for plan preparation stage
- Uncertainty is a fact of life!
- Site visits really useful
- Provides context to data
- Builds knowledge and relationships

# MSP process...

## **Key Activity 1:**

**Engage stakeholders:** Workshops and meetings to keep stakeholders engaged throughout the planning process, from developing the vision to designing draft zones to plan development and implementation.

## **Key Activity 2:**

**Establish clear objectives:** Through a participatory process, stakeholders and decision makers define a vision for marine zoning in their waters.

## **Key Activity 3:**

**Build a multi-objective database:** The project team devotes significant resources to gathering, evaluating and generating spatial data on ecological characteristics and human uses of the marine environment. Three main approaches are used to fill data gaps: (a) expert mapping, (b) fisher surveys, and (c) habitat surveys.

## **Key Activity 4:**

**Develop decision support products:** The project team produces a multi-objective spatial database, geo-referenced files, web-based map viewer, maps of fisheries uses and values, benthic habitat maps, compatibility maps, and outputs of multi-objective analysis.

## **Key Activity 4:**

**Generate draft zones:** The project team creates a marine zoning design that was reviewed by select government agency staff and stakeholder groups.

## Trainings Offered & Institutions Trained

Date	Training Offered	Institution (s)
10-14 <sup>th</sup> Sep 2018	Understanding, selecting & designing Stakeholder Pathways THEN effecting Capacity Building, Mombasa	KMFRI, Partners under OTGA Programme
8 <sup>th</sup> – 12 <sup>th</sup> Oct 2018	Comprendre, sélectionner et concevoir les parcours des parties prenantes et puis affectuer le renforcement de leurs capacités, à Maurice	Mandated Institutions & Academia
10 <sup>th</sup> -11 <sup>th</sup> Dec 2018	Process Design for CSO Capacity building to participate fully in Mozambique MSP, Maputo	CSO Networks in Mozambique (WWF an partners)
13 <sup>th</sup> – 14 <sup>th</sup> Dec 2018	La conception PSM aux Comores pour but de renforcer les capacités des OSC, Moroni	Comoros CSO network
15 <sup>th</sup> -16 <sup>th</sup> Dec 2018	Guide to Stakeholder Collaboration in Marine Spatial Planning (MSP) Process in the South Western Indian Ocean (SWIO) Region	SWIOTUNA & Partners
5 <sup>th</sup> -7 <sup>th</sup> Oct 2021	Le processus de la Planification des Espaces Marins/ Planification Spatiale Marine (PEM/PSM) aux Comores : L'atelier national, Moroni	Mandated Institutions (Commissariat au Plan, Université de Comores, UNESCO-OIC, etc)
21 <sup>st</sup> – 25 <sup>th</sup> Aug 2023	Le processus de la Planification des Espaces Marins/ Planification Spatiale Marine (PEM/PSM) et de l'Economie Bleu Durable (EBD) à Ampefy: L'atelier national	Mandated institutions, WWF, Blue Economy Clusters in Madagascar
18 <sup>th</sup> – 22 <sup>nd</sup> Sep 2023	Marine Spatial Planning (MSP) and Sustainable Blue Economy (SBE) in Tanzania: National Blue Economy Cluster workshop, Dar es Salaam	Mandated institutions, WWF, Blue Economy Clusters in Tanzania
26th – 28th Sep 2023	Sustainable Blue Economy (SBE) in Kenya: National Blue Economy Cluster workshop, Mombasa	Mandated institutions, WWF, Blue Economy Clusters in Kenya



# Some reports & certifications

GUIDE TO STAKEHOLDER COLLABORATION IN MARINE SPATIAL PLANNING (MSP) PROCESS IN THE SOUTH WESTERN INDIAN OCEAN (SWIO) REGION



**Certificat en Planification Spatiale Marine (PSM)**

La Commission Océanographique Intergouvernementale de l'UNESCO (à travers sa sous-commission pour l'Afrique et les états insulaires adjacents – COIAFRIQUE) en collaboration avec le Commissariat Général au Plan, la Commission Nationale des Comores pour l'UNESCO et l'Université des Comores (Faculté des Sciences et Techniques) attestent que:

a participé à une formation sur la Planification spatiale marine (PSM) qui s'est tenue du 23/nov/2021 au 25/nov/2021 à l'hôtel Rétaj à Moroni au cours de laquelle les sujets suivants ont été traités :

- Les aspects théoriques et juridiques de la PSM
- La PSM étape par étape
- Les méthodes, approches, outils et technologies utilisés dans la préparation d'une PSM
- L'identification et l'analyse des parties prenantes en PSM
- Conception du processus de préparation de la PSM

Mika Odido  
(Le Coordinateur du CIO en Afrique)

Zachary Maritim  
(L'Expert PSM)

Fouad Goulame  
(Le Commissaire Général au Plan)



**Processus PSM/PEM et EBD à Madagascar**  
*Renforcement de capacités*

**ABSTRACT**  
Le processus de la Planification des Espaces Marins / Planification Spatiale Marine (PEM/PSM) et de l'Economie Bleue Durable (EBD) à Madagascar: L'atelier national

Zachary Maritim  
Expert en Planification Spatiale



**Certificat**

Rakotosoa Rahaonjanahary Sitraka Henintsoa

Pour la participation à la formation :

**Renforcement de capacité sur la conception du processus national gouvernemental du développement de l'économie bleue Durable et la mise en place de la planification de l'espace maritime à Madagascar**

à l'Hôtel Kaviraha à Ampefy du 23 au 25 Août 2023

**Thèmes abordés durant la formation :**

- Comprendre le système PSM et EBD
- Atteindre l'espace sûr et juste – Economie circulaire
- Comprendre la finance bleue durable

RAKOTOSOA Rahaonjanahary Sitraka Henintsoa  
Directeur Général de l'Economie Bleue au sein du Ministère de la Pêche et de l'Economie Bleue

Zachary Kimutai Maritim  
Land Use Planning Expert

**CERTIFICATE**

Hamida M. Mtambo

Participant certificate for training in Processes and approaches for the development and implementation of a Sustainable Blue Economy and establishing Marine Spatial Plans in Tanzania.

held from 18<sup>th</sup> to 21<sup>st</sup> September 2023 in Ramada Resort Hotel, Dar es Salaam,

**Key themes included in the training:**

- Understanding Marine Spatial Planning and Sustainable Blue Economy approaches, Achieving an Inclusive and Just Sustainable Blue Economy, Understanding Sustainable Blue Finance frameworks and approaches.

Anani Nguruwa  
WWF Tanzania Country Director

Louise Heaps  
Global Lead Sustainable Blue Economy

**CERTIFICATE**

Dixon Mwamba

Processes and approaches for the development and implementation of a Sustainable Blue Economy in Kenya.

Held from 26<sup>th</sup> to 28<sup>th</sup> September 2023 at Travelers Beach Hotel, Mombasa,

**Key themes included in the training:**

- Understanding Sustainable Blue Economy approaches, Achieving an Inclusive and Just Sustainable Blue Economy, Understanding Sustainable Blue Finance frameworks and approaches.

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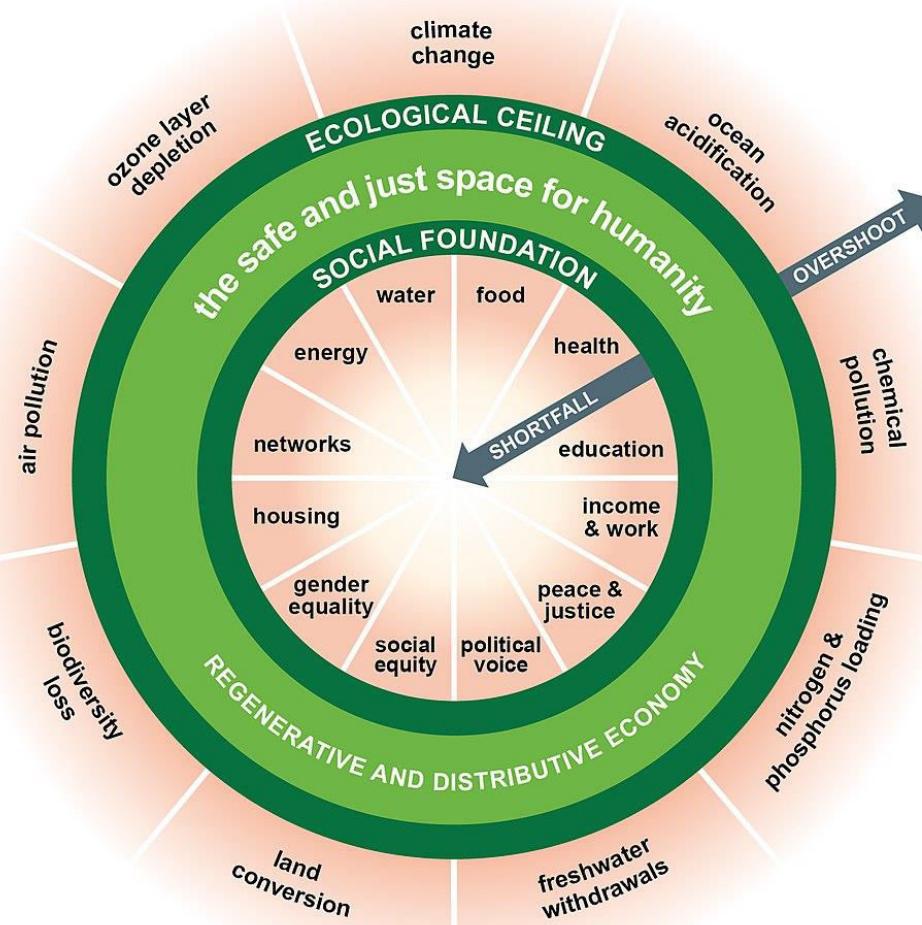


## Sustainable Blue Economy

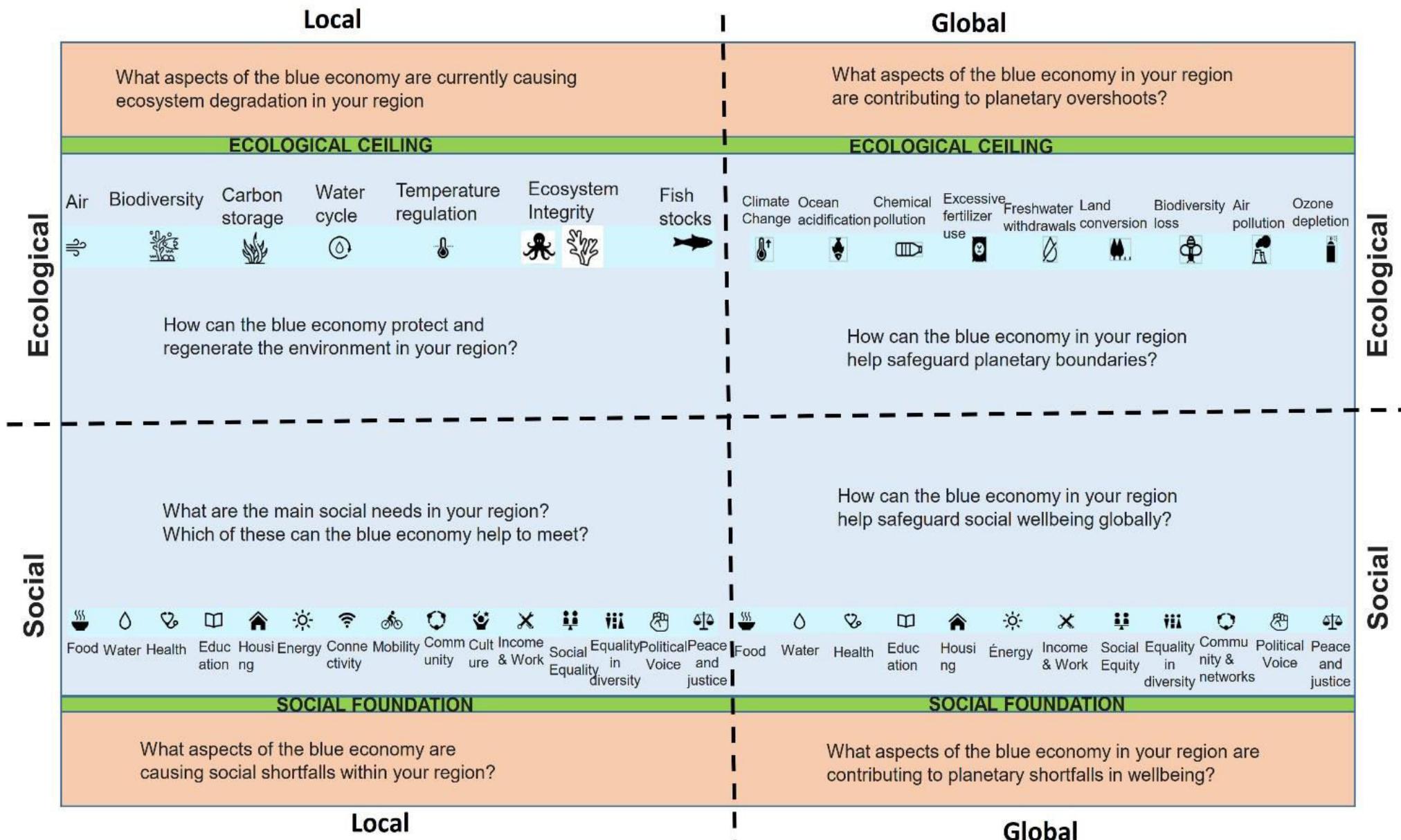
- The Blue Economy Sectors
- Value Chains in each of the sectors
- Circular Economy
- Actor Mapping
- Sustainable Blue Finance/Investments
- The Ecocycle Planning

# The Blue Economy Sustainability Principles

A successful economy is one that meets the needs of all people within planetary limits.



Raworth 2017: Doughnut Economics





# Conclusions

- MSP is better than no MSP!
- MSP is about people & politics as much as data & technology
- Where possible, use environmental sensitivity
- If stakeholders are involved, MSP has much better chance of succeeding
- MSP must be ecosystem based

# Exercise

