

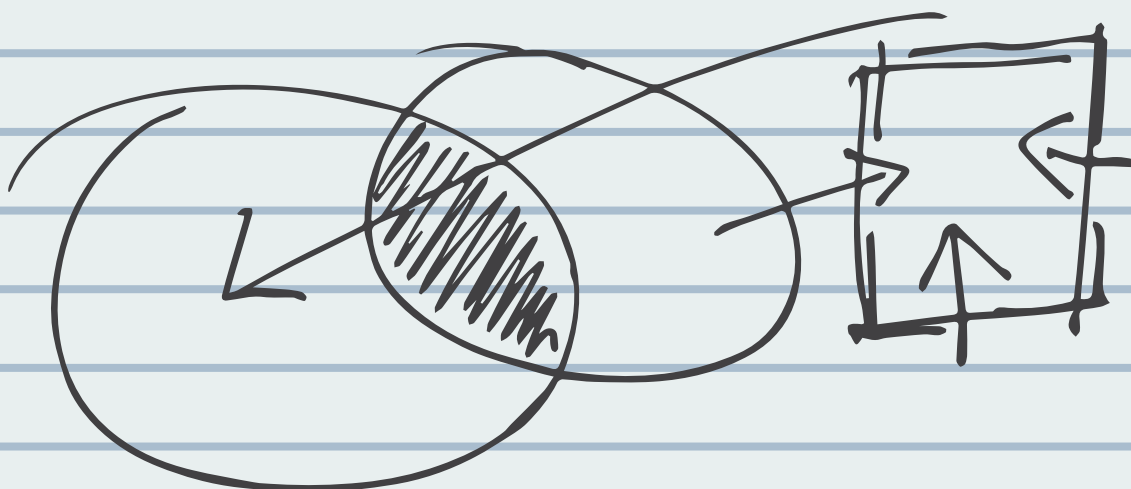
MPAS

IN



TIPS

A USEFUL AND ACCESSIBLE GUIDE FOR EVERYONE
INTERESTED IN PROTECTING OUR OCEAN



WE WOULD LIKE TO THANK SEAS AT RISK FOR
THEIR CONTRIBUTIONS AND SUPPORT IN CREATING
THIS GUIDE, ALL THE PARTNERS ON THE
PROJECT "MARINE PROTECTED AREAS - FROM PAPER
PARKS TO EFFECTIVE PROTECTION", AND
EVERYONE WHO CONTRIBUTED DIRECTLY AND
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CHAPTER I. MARINE PROTECTED AREA. WHAT IS IT ABOUT?

A marine protected area (MPA) is a clearly defined geographic space, officially recognized and managed through legal or other effective means, with the primary goal of ensuring long-term conservation of nature, along with associated ecosystem services and cultural values (IUCN, 2012).

→ [CLICK HERE](#)

In many **MPAs around the world, various activities are allowed**. In most cases, these are not areas where access is prohibited and restricted to a few entities, but rather places where **multiple uses coexist, provided they are well regulated and managed** to meet their objectives.

THE IMPORTANCE

In a world under increasing threat, where the ocean suffers from the effects of human activity, MPAs play a vital role in keeping the ocean healthy for future generations and in combating the challenges it faces.

Well-managed MPAs with clear objectives strengthen ocean resilience to climate change, protect fish populations, and form an essential part of effective maritime governance. Healthy marine ecosystems offer a wide range of services, including supporting resilient fisheries and aquaculture, tourism, and recreation. In addition, these areas help connect marine landscapes and **store blue carbon**.

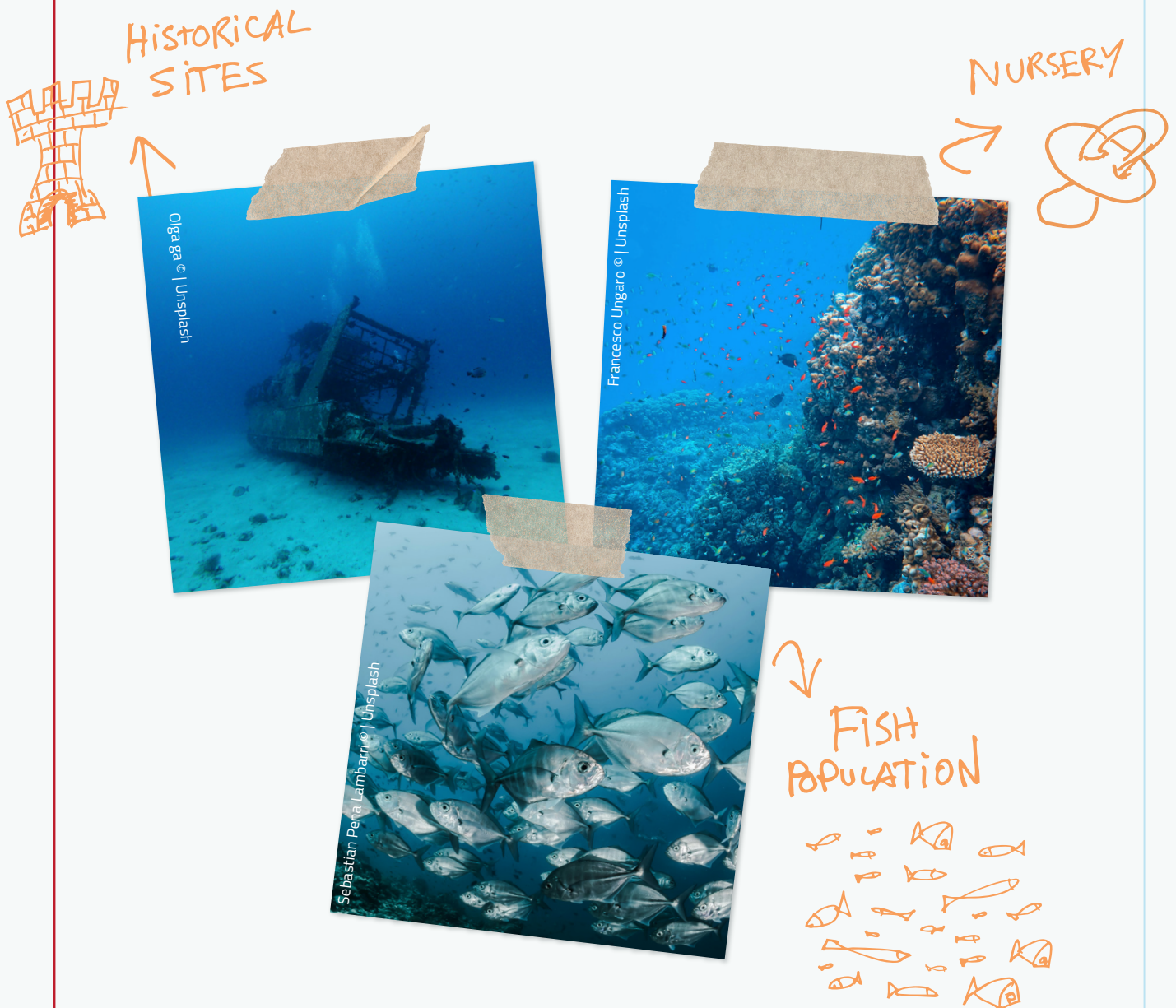
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CHAPTER II. DIFFERENT TYPES OF MARINE PROTECTED AREAS

Marine protected areas do not all share the same purpose. Although they are often created to protect specific marine habitats and the associated marine life, this is not the only reason for their establishment.

MPAs can be created to:

- **Protect local biodiversity or specific habitats** by limiting fishing and other activities;
- **Safeguard breeding and nursery areas** where ecologically important species give birth to new generations, allowing juveniles to develop and contribute to the survival of various species.
- **Preserve sites of historical significance** such as shipwrecks, to ensure their long-term protection.



ZONING REGULATIONS

Beyond the various goals of Marine Protected Areas (MPAs), a single area can include multiple zones with different rules.

Globally, **MPAs cover less than 10% of the ocean, and only about 1% hold full protection status**, meaning all extractive or destructive activities are banned ([MPAtlas, 2024](#)). The existence of MPAs, whether coastal or in the high seas, does not necessarily mean restricted access or use of the area. [Click HERE](#)

Different definitions and classification systems exist worldwide, which often makes it difficult to categorize MPAs due to the variety of activities and regulations applied.

The IUCN uses six categories for protected areas:

- I-Nature Reserve;
- II-National Park;
- III-Natural Monument;
- IV-Habitat/Species Management Area;
- V-Protected Landscape;
- VI-Protected Area with sustainable use of natural resources.

These categories do not clearly specify permitted activities under protected area regulations and sometimes do not align with the intended objectives, making it harder to distinguish areas by protection level.

[CLICK HERE](#) ←

To address this, a **classification system** was developed that considers permitted activities in MPA regulations. This guide is based on that system. [CLICK HERE](#)

In this system, **areas are divided into eight zone types** based on regulated and permitted activities. The classification of a new MPA is determined by the proportion of each zone type within it, resulting in one of **five possible protection levels**: Fully Protected, Highly Protected, Moderately Protected, Poorly Protected, and Unprotected.

Activities considered in the classification include, allowed fishing methods, both commercial and recreational ([see supplementary material](#)), aquaculture or seabed use(activities such as mining, oil drilling, sand extraction, or blasting, recreational activities such as private vessel traffic and anchoring rules). [CLICK HERE](#)

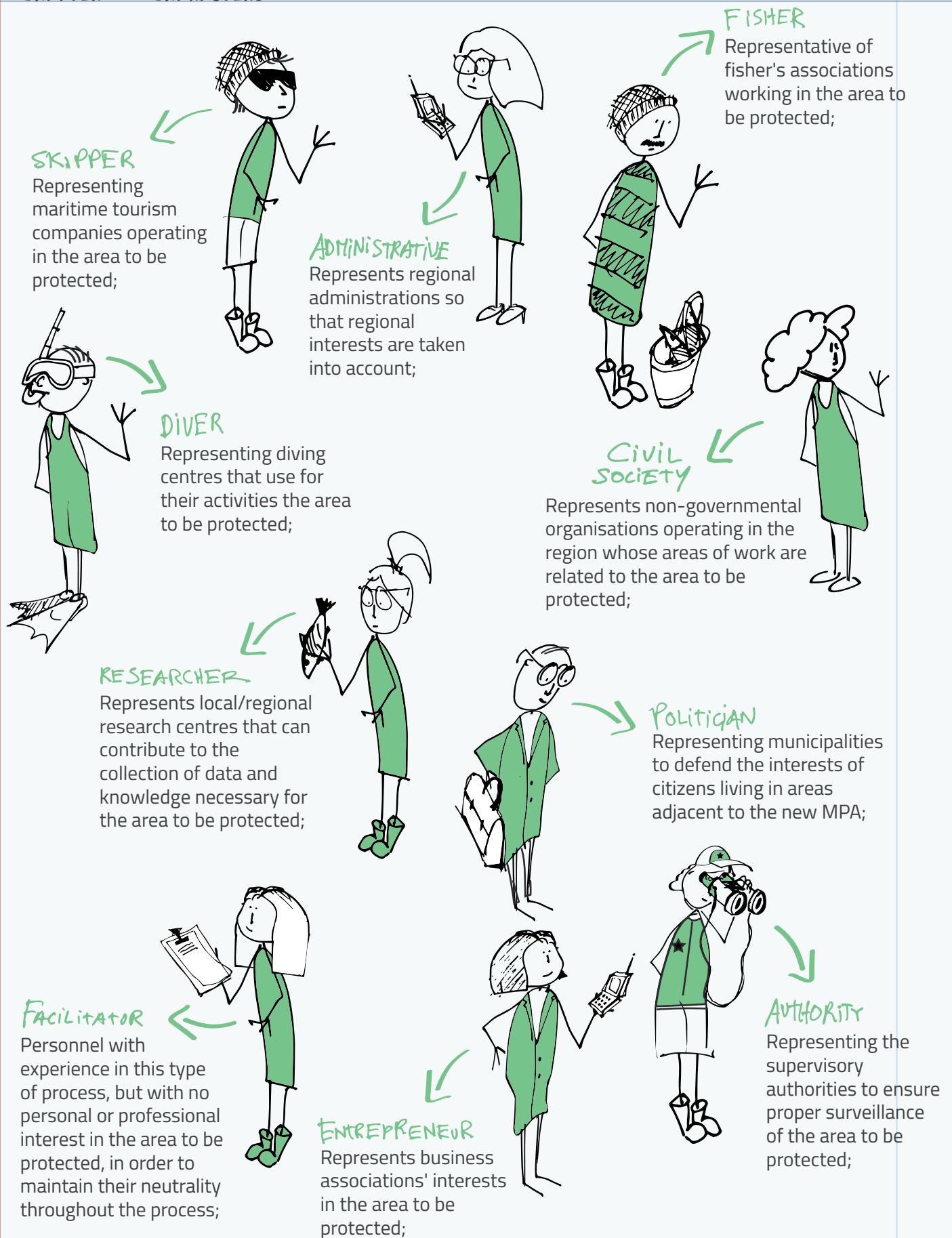
Protection Levels:

- **Fully Protected Area:** No extractive activities, or if allowed, they are strictly regulated.
- **Highly Protected Area:** All or most of the area is strictly regulated, allowing only a few low-impact activities.
- **Moderately Protected Area:** All or most of the area is moderately or weakly regulated, allowing more extractive activities with potential impacts on species and ecosystems, including various fishing methods and activities that harm the seabed.
- **Poorly Protected Area:** All or most of the area is weakly to very weakly regulated, allowing many extractive activities with potential ecological impacts, including fishing and seabed-disturbing activities.
- **Unprotected Area :** All or most of the area lacks regulation and allows a very high number of activities that impact species and ecosystems, including the seabed.

TYPE
REGULATION
EXTRACTIVE
ACTIVITIES
LOW
IMPACT
ACTIVITIES

FULLY PROTECTED AREA	HIGHLY PROTECTED AREA	MODERATELY PROTECTED AREA	POORLY PROTECTED AREA	UNPROTECTED AREA
High	Strong	Moderated	Weak	Almost nonexistent
Prohibited	Prohibited	Allowed in small number	Allowed	Allowed
Prohibited	Allowed in small number	Allowed	Allowed	Allowed

CHAPTER III - CHARACTERS



CHAPTER IV. MARINE PROTECTED AREAS THROUGH PARTICIPATORY PROCESSES

Creating marine protected areas (MPAs) through bottom-up processes involves engaging local stakeholders in their design, implementation, and management. This approach fosters ownership, builds trust, and ensures respect for unique ecological, social, and economic contexts, making MPAs more effective and sustainable.

CAPÍTULO IV.1 CREATE A SHARED VISION, THE FIRST STEP TOWARD A SUCCESSFUL STORY

The most important step toward achieving a successful story is to create a vision shared by all stakeholders in the process, fostering a sense of ownership and inclusion. This **shared vision** keeps everyone committed to their goals and, when problems arise during the process—as they will—such as conflicts of interest, it helps resolve them.

Developing a structured approach to create high-quality visions requires clear steps, participatory processes, and adherence to quality standards.

Developing a structured approach to create high-quality visions requires clear steps, participatory processes, and adherence to quality standards.

Six steps to create a strong vision

1. Define the scope and context:

- Identify the sustainability challenge and its scale, such as global, regional, or local.
- Set boundaries, including geographic, temporal, and thematic limits
- Involve diverse stakeholders to ensure inclusion and a range of perspectives.

2. Establish guiding principles:

→ [CLICK HERE](#)

- Apply quality criteria from the **(Wiek and Iwaniec framework)**, such as:
 - **Sustainability:** The vision aligns with sustainable development goals.
 - **Coherence:** Logical consistency across all elements of the vision.
 - **Feasibility:** Practical pathways to achieve the vision.
 - **Inspiration:** Aspirational and motivational for stakeholders.
 - **Relevance:** Addresses critical issues specific to the context.

3. Conduct a participatory visioning process:

- Facilitate workshops and discussion groups to gather input. → [CLICK HERE](#)
- Use techniques such as **Delphi, scenario planning, or backcasting** to structure discussions.
- Provide space for deliberation, enabling participants to co-develop elements of the vision.

4. Develop a shared vision:

- Synthesize contributions into a unified document or framework.
- Ensure the vision reflects desirable future states while avoiding unrealistic goals.
- Highlight connections between ecological, social, and economic dimensions.

5. Translate the vision into action goals:

- Break down the vision into targets and objectives.
- Develop strategies, policies, and interventions aligned with these objectives.

6. Evaluate and refine:

- Continuously assess the vision against emerging challenges and new knowledge.
- Periodically revisit the participatory process to maintain relevance and commitment.

IN SUMMARY:

THIS STRUCTURED APPROACH ENSURES THAT A SHARED SUSTAINABLE VISION IS NOT ONLY WELL-FOUNDED AND ACHIEVABLE, BUT ALSO IN LINE WITH THE ASPIRATIONS OF THE ENTITIES INVOLVED.

CHAPTER IV.II. - 7 TIPS FOR CREATING AN MPA :

1. MAP AND ENGAGE STAKEHOLDERS (CONTINUOUS PROCESS):

- **Identify stakeholders:** Map all relevant groups, including fishers, local leaders, community members, tour operators, scientists, environmental non-governmental organisations (NGOs) and policy makers.
- **Understand interests and concerns:** Conduct interviews, group discussions, and surveys to understand stakeholders' priorities, economic dependencies, and concerns regarding the proposed MPA.
- **Inclusive representation:** Ensure the representation of marginalised voices, such as women, indigenous groups and young people, in decision-making processes.

2. CREATE AWARENESS AND SHARED UNDERSTANDING (THROUGHOUT THE PROCESS):

- **Education campaigns:** Inform stakeholders about the ecological importance of the proposed MPA, highlighting benefits such as biodiversity protection, fish stock recovery, and climate resilience.
- **Demonstrate long-term benefits:** Use examples from other successful community MPAs to demonstrate economic and environmental gains.
- **Filling knowledge gaps:** Facilitating workshops where scientific data and local ecological knowledge are shared to create a comprehensive understanding of the marine ecosystem.

3. FACILITATE OPEN DIALOGUE AND TRUST BUILDING:

- **Participatory forums:** Organise community meetings to encourage dialogue on the objectives, design and implementation of the MPA.
- **Conflict resolution mechanisms:** Establish neutral mediators or trusted local leaders to resolve disagreements or competing interests.
- **Transparency:** Ensure free access to information and decision-making processes to create a sense of trust.

4. CO-CREATION OF THE MPA:

- **Collaborative definition of boundaries:** Involve stakeholders in defining the boundaries and zones of the proposed MPA (e.g., zone without extractive activities, sustainable use zones, etc.).
- **Management rules:** Co-develop rules for fishing, tourism, and other activities to balance conservation with community livelihoods.
- **Adaptive design:** Allow flexibility to adapt limits and rules based on results and continuous monitoring.

5. EMPOWERING THE COMMUNITY:

- **Create leadership mechanisms:** Identify and train community leaders to advocate for and manage the proposed MPA.
- **Capacity building:** Provide training in resource management, monitoring techniques, and sustainable livelihood practices.
- **Create incentives:** Link the benefits of the MPA to community well-being, such as ecotourism opportunities or sustainable fishing practices.

6. DEVELOP A SHARED GOVERNANCE STRUCTURE:

- **Co-management model:** Establish a management committee with representatives from all stakeholder groups.
- **Roles and responsibilities:** Clearly define surveillance, control and conflict resolution roles.
- **Partnerships:** Collaborate with ENGOS, academic institutions and government agencies to obtain technical and financial support.

7. CONCEPT TEST:

- **Start small:** Implement an initial project in a pilot area to demonstrate its viability and gain community support.
- **Monitor and evaluate:** Use participatory monitoring to track ecological and social outcomes, sharing the results with the community.
- **Refine:** Adjust boundaries, rules, or strategies based on results and data.

CHAPTER IV.II.I - EXAMPLES OF USEFUL TOOLS FOR CREATING A MPA

PARTICIPATORY MAPPING:

- Use tools such as GPS mapping and GIS software to visually represent community and ecological priorities.
- Involve fishers and other users in mapping their fishing areas and culturally significant sites.

SCENARIO PLANNING:

- Develop scenarios that explore different outcomes of MPA implementation (e.g., traditional business models vs. conservation-focused business models).

VISION EXERCISES:

- Facilitate community vision workshops to articulate a shared vision of the desired future state of the marine environment and livelihoods.

CONSENSUS-BUILDING TECHNIQUES:

- Apply tools such as the Delphi method or structured negotiation processes to identify common ground among stakeholders.

CHAPTER IV.II.II - KEY CHALLENGES AND SOLUTIONS IN CREATING A MPA

CHALLENGES:

1. **Resistance from fishers:** Fear of losing access to traditional fishing grounds.
2. **Conflicting interests:** Divergent priorities among stakeholders (e.g., tourism vs. fishing).
3. **Limited capacity:** Lack of technical expertise or funding for MPA management.

SOLUTIONS:

1. **Engage early and often:** Build trust by involving all stakeholders at every stage of the process and highlighting the long-term benefits.
2. **Commitment through zoning:** Designate areas for sustainable use alongside no-take zones to balance the various interests.
3. **Secure resources:** Establish partnerships with NGOs or government agencies to obtain financial and technical support.

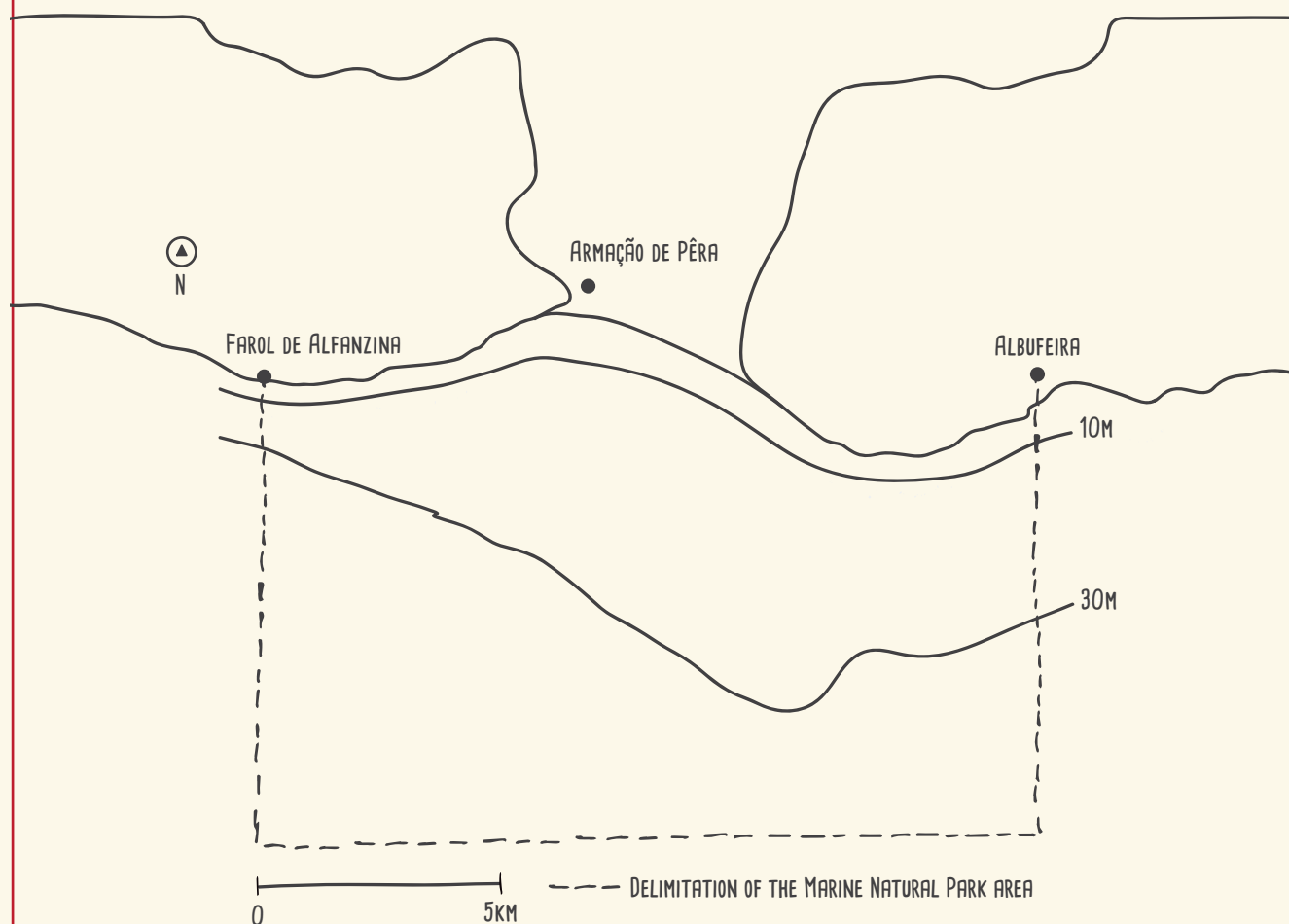
CHAPTER V - THE CASE OF PEDRA DO VALADO

The new Algarve Marine Natural Park of the Recife do Algarve – Pedra do Valado is a successful story born from an unprecedented participatory process that engaged over 70 entities for nearly three years. It relied on solid scientific data and the valuable contributions of all involved parties.

Along the Algarve's coastline between Albufeira and the Alfanfina Lighthouse, spanning the municipalities of Albufeira, Lagoa, and Silves, lies the largest shallow coastal rocky reef in mainland Portugal. Well known to local communities for its rich ecosystem, the reef offers unique conditions that support more than 900 species, 12 of them new to science, boosting both marine biodiversity and the area's productivity.

The process began after local communities, particularly representatives of the local fishing sector, raised concerns about the need to protect the site. The involvement of the Centre for Marine Sciences, the Oceano Azul Foundation, fishing associations, the municipalities of Albufeira, Silves, and Lagoa, and the Parish Council of Armação de Pêra led to the launch of a participatory initiative to safeguard the reef.

From 2019 to 2021, this participatory process brought together professional and recreational fishing associations, representatives of maritime tourism companies, local, regional, and central authorities, scientific research centers, sports federations, the maritime authority, school groups, non-governmental organizations, and business associations. It included six in-person sessions, over 60 bilateral meetings, and a final session to present the proposed zoning and the foundations for the regulation of this new marine protected area.



CHAPTER V.I- PEDRA DO VALADO, A SHARED VISION

The visioning approach used to create the community-based MPA, the Algarve Marine Natural Park – Pedra do Valado, drew inspiration from the Territorial Game method (Angeon and Lardon, 2008; Lardon, 2013; Littaye et al., 2016; Esgalhado et al., 2020). This method was chosen for its territorial focus, meaning the vision is developed with the territory in mind. It also uses facts and figures to spark debate among participants. As a result, it encourages “out-of-the-box” ideas and promotes discussion on the feasibility of all suggestions, while serving as a springboard for conversations based on the territory’s features and potential.

The process followed a structured path guided by broad questions that allowed for multiple perspectives. In this case, the visioning exercise began with two questions: “What type of MPA could exist in 15 years?” and “How can the MPA contribute to territorial development?” The first question aimed to extend the discussion to a medium-to-long-term horizon, where future options are less constrained by current or short-term conditions.

Summary table of stakeholders:

TABLE 1

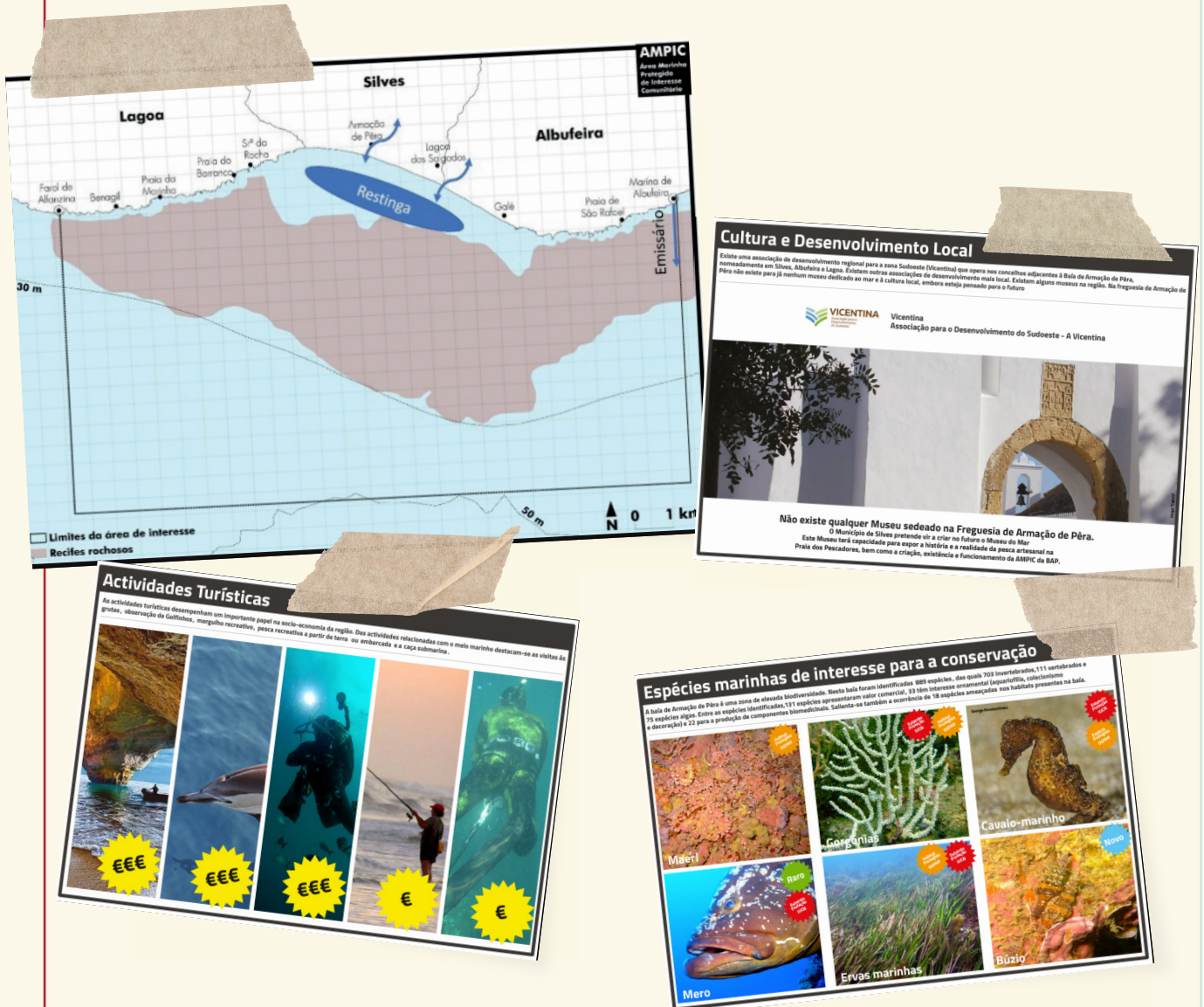
OVERVIEW OF THE STAKEHOLDER MAPPING AND THE TYPE AND NUMBER OF PARTICIPANTS IN THE VISIONING EXERCISE

TYPOLGY OF STAKEHOLDERS	SUB-TYPOLGY	INSTITUTIONS (N)	PARTICIPANTS
PUBLIC ADMINISTRATION	LOCAL DEVELOPMENT	6	3
	ENTERPRISES, BUSINESS AND TOURISM	1	0
	MANAGEMENT OF NATURAL RESOURCES	5	2
	EDUCATION	2	2
	PORTS AND NAVIGATION	2	1
	LOCAL ADMINISTRATION	15	7
	RESEARCH FOCUSING ON MARINE SYSTEMS	2	2
NON-GOVERNMENTAL REPRESENTATIVES & ASSOCIATIONS	LOCAL DEVELOPMENT AND SUSTAINABLE USE OF NATURAL RESOURCES	6	3
	COMMERCIAL FISHING SECTOR	12	3
	UNDERWATER ACTIVITIES AND RECREATIONAL FISHING	6	2
	BUSINESS & TOURISM	8	0
	NON-GOVERNMENTAL ORGANIZATIONS (NGOS)	12	3
	RESEARCH FOCUSING ON MARINE SYSTEMS	1	1
PRIVATE COMPANIES	HOSPITALITY/TOURISM SECTOR	6	1
	MARINAS	2	1
	THEMATIC PARKS AND AQUATIC ACTIVITIES	1	0
	ENVIRONMENT & SCIENCE COMMUNICATION	2	1
TOTAL OF INSTITUTIONS		89 (30)	50

NOTE: 89 INSTITUTIONS WERE IDENTIFIED AND INVITED, IN BRACKETS IS THE NUMBER OF INSTITUTIONS THAT WERE PRESENT IN THE WORKSHOP.

THE PROCESS TOOK PLACE IN THREE STAGES:

1. Diagnosis: Participants had to identify and draw up a diagnosis of the current situation in the territory. To this end, each participant received two cards with brief information on a topic relevant to the general questions.



2. Vision: This phase was based on the results of the previous phase, and participants had to imagine and draw a possible future development for the territory. The vision had to be spatially explicit, and only consensual ideas could be drawn. In this phase, participants were not limited to specific cards, so that the discussion had the potential to be broader.

3. Action: The objective of this phase was to define a series of actions to be taken at the present moment to achieve the desired vision or avoid an undesirable one. The actions had to be feasible for the participants in the group and possible to implement at the present moment. The actions could suggest stakeholders not present in the game, but with whom it would be possible to create a partnership (Lardon, 2013).

In this case, seven visions developed by the stakeholders participating in the process were created and validated, followed by plenary discussions. The description of the shared vision began with the desire for the MPA to help increase existing natural capital while safeguarding cultural heritage and economic activities in the area. The definition of a zoning scheme with various levels of protection was agreed upon as a common desire, but it was made clear that this step and others (i.e., regulation, monitoring, and enforcement) should be developed in close collaboration with stakeholders. The main objective was to create a sense of ownership so that the MPA would be fully accepted by the community.



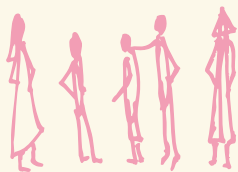
POINT 1

→ The MPA covers the coastal areas of the municipalities of Lagoa, Silves, and Albufeira.



POINT 2

→ Creation of zones with different levels of protection, including a no-take zone where no activities are permitted. Activities such as industrial fishing, aquaculture, and dredging should not be allowed within the MPA. Restriction of recreational fishing to specific zones and target species.



POINT 3

→ Engagement of the local community in management and monitoring from the outset of the MPA's creation. Ensuring adequate means of enforcement. The future MPA is considered an integrated part of the cultural heritage and local context. In addition, monitoring of land and marine pollution sources is recommended.



POINT 4

→ Inclusion of the MPA in school programs and promotion of awareness-raising actions for the community. Creation of an interpretive center and visits (in person and virtual).



POINT 5

→ Compromise conservation values with economic activities. Creation of navigation channels, ecological moorings, support for decarbonization, promotion of MPA products, and permission for direct sale of fish.

IN SUMMARY:

THIS STRUCTURED APPROACH ENSURED THAT SUSTAINABILITY VISIONS WERE NOT ONLY WELL-FOUNDED AND ACTIONABLE BUT ALSO ALIGNED WITH THE ASPIRATIONS OF THOSE INVOLVED.

EFFECTIVE VISIONS SERVE AS REFERENCE POINTS FOR DEVELOPING STRATEGIES THAT MOVE FROM CURRENT STATES TO DESIRABLE FUTURE CONDITIONS, ACTIVELY AVOIDING UNSUSTAINABLE TRAJECTORIES. IN ADDITION, PARTICIPATORY VISIONING PROCESSES CAN BUILD CAPACITY, EMPOWER STAKEHOLDERS, AND PROMOTE A SENSE OF OWNERSHIP AND RESPONSIBILITY.

CHAPTER V.II - FROM PEDRO DO VALADO TO AN MPA - A SUCCESSFUL STORY

The success of the design of this MPA in the Algarve depended on reconciling the needs of small-scale fishers, commercial operators, conservation NGOs, government agencies, scientific institutions, and tourism stakeholders.

CONTEXT OF THE ALGARVE, PORTUGAL

A) REGIONAL IMPORTANCE

The Algarve region, located in southern Portugal, is known for its rich marine biodiversity, diverse marine habitats such as seagrass beds and rocky reefs, and its vibrant small-scale fishing. Tourism is the most important economic driver, with popular beaches and coastal attractions welcoming visitors throughout the year.

B) LEGAL FRAMEWORK FOR MARINE PROTECTED AREAS IN PORTUGAL

Portugal's approach to MPAs is governed by national legislation aligned with European Union directives and international conventions. The main legal instruments include:

- **CLICK HERE**
- 1. Decree-Law No. 142/2008:** This law establishes the legal framework for nature and biodiversity conservation, defining the classification and management of protected areas. Protected areas are classified at national, regional or local level, depending on the interests they safeguard, and include classifications such as national parks, natural parks, nature reserves, protected landscapes and natural monuments.
 - 2. National Strategy for the Sea:** This strategy defines Portugal's commitment to marine conservation, emphasising the sustainable use of marine resources and the expansion of MPAs to meet international targets.
 - 3. OSPAR Convention:** A regional marine convention whose objective is to protect the marine environment of the North-East Atlantic. As a contracting party, Portugal is obliged to adopt the necessary measures and cooperate to protect the marine environment of the North-East Atlantic, including the establishment of MPAs.
 - 4. European Union Directives:** Portugal has acceded to the EU Marine Strategy Framework Directive and the Habitats Directive, which require Member States to achieve good environmental status for marine waters and establish Natura 2000 sites, respectively.

- 5. National entities:** The Directorate-General for Natural Resources, Safety and Maritime Services (**DGRM**) is responsible for proposing the creation of MPAs, in coordination with the Institute for Nature Conservation and Forests (**ICNF**) the national authority for nature and biodiversity conservation.

C) FUNDAMENTAL PRINCIPLES OF CO-DESIGN IN THE ALGARVE

a. Inclusion and participatory governance

- **Small-scale fishing associations:** Local fishers often have generational knowledge about fish migration routes and habitat conditions, as well as the preferred areas for their activity, which has made their contribution indispensable for the zoning of MPAs.
- **Tourism and recreational users:** Diving schools, nautical companies, and other stakeholders in tourism have been involved to ensure that they can continue their economic activities responsibly.

- **Local communities and municipalities:** Municipalities and environmental NGOs were able to act as bridges between government policies and the interests of local actors.

b. Recognising ecological and socio-economic value

- The Algarve's marine environment provides significant ecological services, such as fisheries productivity, nursery habitats and coastal protection.
- Socio-economic impacts (e.g. livelihoods in small-scale fishing communities, tourism revenues) were considered simultaneously to avoid creating conflicts between conservation and use.

c. Adaptive and dynamic management

- Changing climatic conditions, fluctuations in fish population biodiversity, and evolving tourism trends have necessitated flexible management structures that can be periodically reviewed and updated.
- Regular stakeholder engagement (e.g., periodic review meetings) will help maintain the relevance and credibility of the MPA zoning framework.

CHAPTER V.III. - THE PEDRA DO VALADO AND THE COLLABORATIVE DESIGN PROCESS

STEP 1: IDENTIFICATION OF STAKEHOLDERS AND INITIAL ENGAGEMENT

1. STAKEHOLDER MAPPING

- Fisher's associations in the region, fish trading companies and fish processing cooperatives, environmental NGOs, local conservation groups, representatives from tourism and municipalities, and scientific researchers were identified.
- Representation of smaller and less vocal groups – such as women in fishing, younger fishers, or seasonal tourism operators – was ensured so that no one was left out.

2. TRUST-BUILDING WORKSHOPS

- Initial meetings were organised to present the concept, scope and objectives of co-design.
- Emphasis was placed on transparency: clarifying what "co-design" entails, how decisions will be made and how each stakeholder's response could shape the outcome.
- Workshops were used to build relationships and gather initial concerns or questions about the restrictions, implementation and benefits of the MPA.

STEP 2: GATHERING BACKGROUND INFORMATION

1. ECOLOGICAL ASSESSMENT

- Existing data from government agencies, scientific research centres and the University of Algarve were compiled, relating to species abundance, habitats (rocky reefs, seagrass beds) and sensitive breeding or nursery sites.
- Field trips were organised and partnerships were established with local diving centres to collect additional underwater observations, especially in areas that had previously been little studied.

2. SOCIOECONOMIC AND CULTURAL DATA

- Community interviews, focus groups, or small surveys were conducted to map fishing areas, gear use, seasonal patterns, and points of tourist interest.
- Historical knowledge about changes in fish populations was collected, capturing changes that could indicate overfishing or climate impacts.

3. LOCAL AND TRADITIONAL KNOWLEDGE

- The knowledge of older fishers and coastal residents with decades of practical experience was utilised, including anecdotal evidence on fluctuations in fish populations, rainfall or wind patterns, and the presence of important spawning grounds.

STEP 3: PARTICIPATORY MAPPING AND SCENARIO DEVELOPMENT

1. PARTICIPATORY MAPPING SESSIONS

- Stakeholders met with physical maps or digital GIS platforms. Fishers were asked to mark the main points of interest for fishing, breeding habitats and migratory routes. Tour operators marked diving areas and their usual boat routes.
- Ecologically sensitive areas (e.g., seagrass beds) and areas with high tourist use were highlighted.

2. DESIGN OF ZONING SCENARIOS

- Multiple **zoning configurations** were proposed:
 - **No-Take Zones** (e.g., specific and critical habitats requiring strict protection).
 - **Sustainable Use Zones** (limitation of fishing gear types, possible restriction of certain activities during certain months).
 - **Tourism/Recreation Zones** (allowing low-impact recreational and educational activities).
- The ecological impact of each scenario (protection of sensitive habitats and species) and socio-economic viability (ensuring that fishers could maintain their livelihoods and that tourism could continue) were assessed.

3. ANALYSIS OF CONFLICTS AND OPPORTUNITIES

- Overlaps were identified – such as the overlap between small-scale fishing and popular diving sites – and possible solutions were discussed: seasonal closures, gear restrictions or the designation of buffer zones.
- Open dialogue was encouraged to mitigate potential conflicts before they escalate.

STEP 4: COLLABORATIVE DECISION-MAKING

1. FACILITATION OF COLLABORATIVE SESSIONS

- A neutral mediator (an academic team and an NGO representative) was used to guide discussions on compromise solutions inherent in each zoning scenario.
- Focus on transparency: presentation of data on the expected ecological gains from certain restrictions, along with the expected socio-economic impacts.

2. ITERATIVE FEEDBACK AND IMPROVEMENT

- Proposals for zoning maps were circulated among the interested parties. Written and verbal comments were collected, and changes were incorporated wherever possible.
- It was clarified which elements were non-negotiable (e.g. the protection of critically endangered species) and which aspects could be subject to compromise.

3. FORMAL APPROVAL

- The management plan was finalised with the consensus of the main stakeholder groups.
- Formal government approval was required (through the Institute for Nature Conservation and Forests) to ensure that the plan was well documented and aligned with existing conservation regulations and policies.

STEP 5: IMPLEMENTATION STRATEGY

1. REGULATORY FRAMEWORK AND ENFORCEMENT

- Establishment of clear rules defining permitted fishing gear, fishing seasons and no-take zones.
- Involvement of local fishers in enforcement efforts and exploration of technologies (e.g. GPS trackers, mobile apps) to monitor fishing activities.

2. CAPACITY BUILDING

- Training local stakeholders—especially fishers and community members—in basic monitoring and data collection techniques.
- Collaborating with the local university and NGOs to offer workshops on marine conservation, species identification, and sustainable fishing practices.

3. AWARENESS CAMPAIGNS

- Launch awareness programmes (media, local radio, public events) to inform communities and tourists about zoning regulations, the ecological significance of protected areas, and penalties for violations.

STEP 6: MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT

1. BASELINE AND CONTINUOUS MONITORING

- Collection of standardised data on key ecological indicators (e.g. fish biomass, invertebrate abundance, seagrass health) and socio-economic metrics (e.g. fish landings, fisher income, tourism revenues).
- Establishment of a schedule for field observations and stakeholder checks.

2. FEEDBACK LOOPS

- Maintain open channels of communication – through local fisher's associations, telephone contacts or scheduled forums – so that participants can quickly report problems or propose adjustments.
- Encourage collaborative problem solving for example, if fishers notice a seasonal spike in illegal fishing, they can coordinate with authorities and conservation partners to step up enforcement.

3. ADAPTATION AND PERIODIC REVIEWS

- Convene a multi-stakeholder committee annually or biannually to review monitoring data and assess whether the management plan is meeting ecological and socio-economic objectives.
- Adjust zone boundaries, gear restrictions, or control strategies when data indicate a better approach or emerging threats.

CHAPTER V.IV - LESSONS LEARNED FROM PEDRA DO VALADO

1. LOCATION OF THE KNOWLEDGE

- The integration of traditional fisher's wisdom can fill the gaps left by formal scientific studies. Local knowledge has helped to identify key conservation areas and promote trust in the co-design process.

2. BALANCING ECONOMIC PRESSURES WITH CONSERVATION

- The Algarve economy is heavily dependent on tourism, which sometimes puts pressure on marine resources (e.g. diving, sport fishing, intensive boating, coastal developments). Ensuring that tourism stakeholders also have a seat at the table has helped to prevent conflicts over resource use and identify creative solutions (such as seasonal restrictions or user fees earmarked for conservation efforts).

3. CREATE WIN-WIN SCENARIOS

- By highlighting potential “wins” (healthier fish stocks and reefs, stable tourist flows), more stakeholders saw the value of compliance.
- Joint diversification of livelihoods – such as promoting sustainable “tourist-fisher” experiences – could help reduce dependence on traditional extractive methods.

4. TRANSPARENT AND CONSISTENT COMMUNICATION

- Frequent and clear communication solidified trust. If stakeholders were not involved in management decisions, scepticism and resistance would increase. Maintaining open channels of communication was vital to the entire process.

5. LONG-TERM COMMITMENT

- Co-design is not a one-off project, but rather a continuous cycle of planning, action, monitoring and adaptation.
- Securing funding and institutional support (through local authorities, national government, European funds or others) will help to ensure the long-term viability of the initiative.

CHAPTER VI - FINAL THOUGHTS

Marine protected areas are not a new topic. Their use as a management tool dates back several decades, with the first MPAs created in response to growing concern over the degradation of marine ecosystems and the need to conserve biodiversity.

The major turning point in the history of MPAs lies in how they are designed and implemented. Many parks were created without any interaction with local communities or stakeholders, relying solely on limited scientific data and defined by regional or national governments. This approach often made it difficult for users to implement and comply with established rules. Creating protected areas through participatory processes enables stakeholders to develop management plans that reflect both community interests and scientific recommendations. By involving fishers, tourism operators, conservation organizations, and local governments from the outset—and by following steps such as exhaustive data collection, participatory mapping, iterative consensus-building, and adaptive management—co-designed MPAs not only protect biodiversity but also support local livelihoods and stand as lasting examples of collaborative and effective marine management.

For Sciaena, whose marine conservation work is built on interdisciplinarity, protecting and valuing natural capital requires considering the interests and needs of the communities that depend on it, always grounded in solid technical and scientific knowledge through inclusive participatory processes. The process that led to the creation of the Algarve Marine Natural Park – Pedra do Valado is an excellent example of this approach, in which Sciaena participated and contributed from the very beginning. It was a truly pioneering initiative, and we believe it will bring even more positive contributions to the future of ocean protection.

The future of ocean protection depends on giving a voice to local coastal communities, working in collaboration with all stakeholders, so that the shared vision for future MPAs is embraced by all. This requires including local interests and needs to ensure the existence and implementation of adequate management plans for these areas. A healthy ocean depends on informed and empowered communities. Only in this way can we ensure the sustainable use of marine resources and preserve the intrinsic value the ocean holds for all of us.

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MPAS

IN  TIPS

"IN AN INCREASINGLY THREATENED WORLD, WHERE THE OCEAN SUFFERS THE CONSEQUENCES OF HUMAN ACTIVITY, MARINE PROTECTED AREAS HAVE DEMONSTRATED THEIR FUNDAMENTAL ROLE IN ENSURING A HEALTHY OCEAN FOR FUTURE GENERATIONS AND IN ENABLING IT TO FACE THE THREATS IT ENCOUNTERS.

WELL-MANAGED MARINE PROTECTED AREAS WITH CLEAR OBJECTIVES HELP INCREASE THE OCEAN'S RESILIENCE TO THE IMPACTS OF CLIMATE CHANGE, PROTECT FISH POPULATIONS, AND ARE, THEREFORE, AN ESSENTIAL ELEMENT OF EFFECTIVE MARINE GOVERNANCE."