



WWF

2012



# Making Marine Protected Areas Work

LESSONS LEARNED IN THE MEDITERRANEAN



Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem  
**MedPartnership**



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WWF supports MedPAN, the network of MPA managers in the Mediterranean.

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## WWF Mediterranean

WWF Mediterranean's mandate is to pursue WWF global priorities to conserve biodiversity and reduce the human footprint on nature. In the Mediterranean, WWF works through field projects advocating improvements in regional and national policy processes affecting nature conservation and resource management. Complementing the work of the five WWF national organizations active in the region (France, Greece, Italy, Spain, Turkey), WWF Mediterranean operates in fourteen countries: Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Libya, Montenegro, Morocco, Portugal, Serbia, Slovenia, Syria, and Tunisia.

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# FOREWORD

This report, *Making Marine Protected Areas Work—Lessons Learned in the Mediterranean*, is timely, practical, and constructive. Although it focuses on the Mediterranean, it provides easily understandable and useful guidance to the many thousands of practitioners working to protect and manage the seas in so many places.

As the health of much of our marine environment suffers from growing problems of pollution, poor coastal development, overfishing, damaging fishing practices, shipping, and the effects of climate change, the search for workable solutions becomes more urgent. There is more and more interest in the role that well designed and effectively managed Marine Protected Areas (MPAs) can play in helping to maintain and rehabilitate the health of our seas. Providing protection and management to important areas of coasts and seas, of course, is not new. It has been going on in one form or another for as long as there have been communities dependent on the marine ecosystem for their food, livelihood, and general well-being. This is as true of the communities around the Mediterranean as anywhere on the globe. I believe there is one important element of this that still holds true today—those communities that utilise and rely on the sea hold the best potential for being able to contribute knowledge and capacity to its sustainable management. Just as they can be part of the problem, they are definitely part of the solution especially in terms of effectively functioning MPAs. Active community and stakeholder engagement in turn smooth the way for governments to provide necessary legal and policy frameworks.

However, it seems that in the last 100 years or so, the pressures and demands have grown so fast they have outstripped our ability or capacity to manage these important areas. We need to get better at protecting, so that places like the iconic Mediterranean Sea are restored and protected to provide for the needs of the many millions of people who make use of its beauty and bounty. MPAs can make a major contribution to this vision.

Unfortunately, what has happened too often in the debate around the role and

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SUSTAINABLE  
MANAGEMENT**





## WELL-FUNCTIONING MPAs MAKE A DIFFERENCE AND PROVIDE BENEFITS FOR PEOPLE

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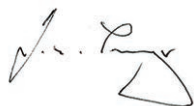
potential of MPAs as a management tool is that it has become polarised. At one end of the spectrum, there are those who argue that MPAs may be useful for protecting unique or scientifically interesting or beautiful places and species, but not for supporting wider benefits such as sustainable fisheries. At the other end are those who argue that MPAs offer a panacea for all ills affecting the seas. These simplistic views are an unhelpful distraction from the important task at hand. The truth lies somewhere in the middle. MPAs can make a very significant contribution to protecting and sustaining the goods and services healthy seas provide. Well-designed and effectively managed networks of MPAs can be a critical part of management that ensures sustainable fisheries. Similarly, we know that protected areas with good habitat and diversity are very attractive for marine tourism. Well-functioning MPAs make a difference and provide benefits for people—non functional MPAs do not.

I believe the challenge lies in making sure MPAs are built in as part of an integral part of any management framework and that they are recognised and valued for their role in supporting the sea's capacity to provide us all with the goods and services we need—food, livelihoods, recreation, and so much more.

Just as strong local knowledge and engagement is very important to successful MPAs, so too are partnerships between the various sectors and stakeholders—fishing, tourism, government agencies, and our other NGO partners. I would very much like to acknowledge the efforts of all those who have supported this work especially the donors, NGOs, government institutions, and the MPA staff, and thank them for their preparedness to safeguard the future of this important part of the world's oceans.

The lessons learned and recommendations in this report provide a very useful basis for embarking on the journey to build MPAs that work.

WWF is working with communities and governments all around the world to help them protect their coasts and seas. WWF is investing many millions of dollars in support of communities establishing and managing MPAs because we know the contribution these areas can make to the health of the seas and to the people who depend on the marine environment. Early engagement with these communities and development of MPA management capacity are recognised by WWF as critical elements for success. This report makes a significant contribution to our knowledge and understanding and I thank the MedPAN South project team for their efforts.



**John Tanzer**  
Director, Global Marine Programme  
WWF International







# DEDICATION



This work is dedicated to the memory of Umut Tural, our friend and colleague. His smile, his passion, and his commitment will continue to live through our efforts in protecting what he cared about the most—the Mediterranean Sea.



# CHAPTER 1: INTRODUCTION

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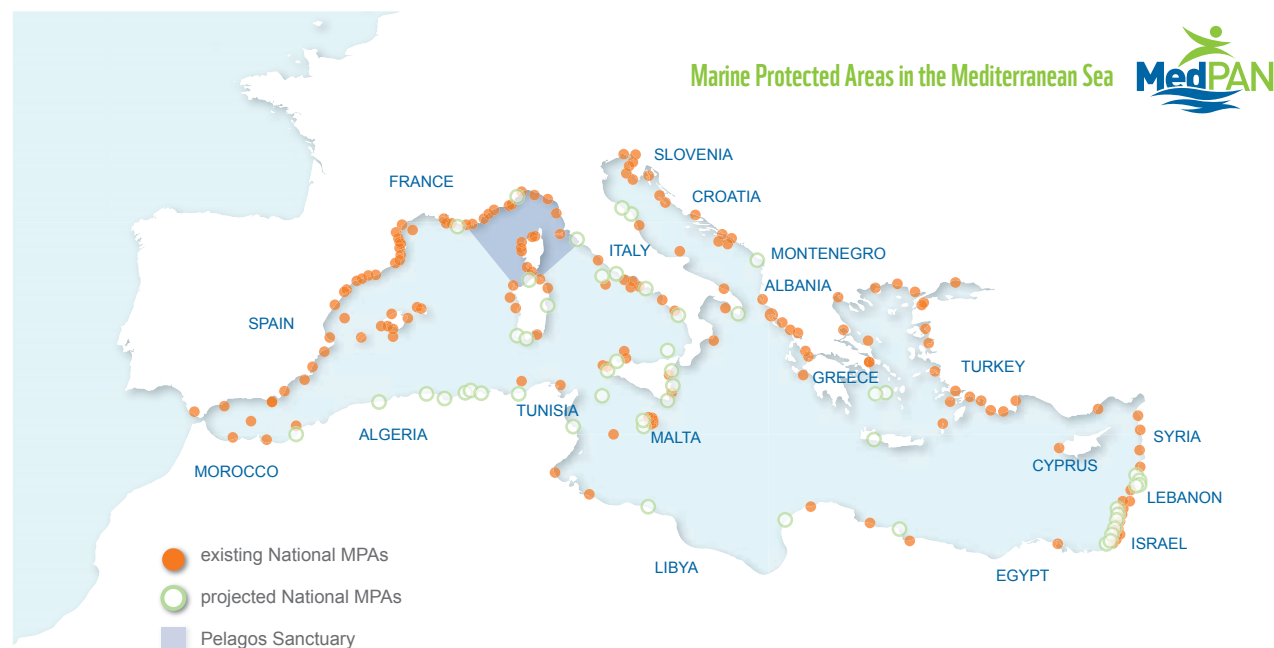
# Marine Protected Areas in the Mediterranean

The Mediterranean has long been recognised for its natural and cultural heritage. Its natural wealth stems from the multitude of features and habitats that coexist in a space highly influenced by a complex geological history. This has resulted in the Mediterranean Sea becoming a key area for biodiversity. Representing less than 1% of the area of the world's oceans, the Mediterranean Sea accounts for over 10% of all known species, including many endemic species. It hosts a remarkable diversity of life and is a vital reproduction zone for key pelagic species, some of which are endangered.

The coastal and marine environment of the Mediterranean Sea has experienced intensive human pressures for thousands of years, and in the last century, these pressures have escalated to extreme proportions with irreversible impacts on these natural ecosystems. Overfishing, invasive species, waste, mass tourism, and coastal habitat degradation have resulted in poor water quality and unprecedented declines in biodiversity. This situation is likely to be further exacerbated by the various impacts of climate change.

Currently, 4.23% of the Mediterranean Sea is designated as protected areas, the largest being the Pelagos Sanctuary in the northwest, which accounts for 3.84% of this percentage. At present, Marine Protected Areas (MPAs) are limited to the coastal zone and almost all are located in the northwestern basin of the Mediterranean.

*Marine Protected Areas, existing and projected, in the Mediterranean.*



Source : MAPAMED, the database of Marine Protected Areas in the Mediterranean, MedPAN, RAC/SPA, 2012. Note: only some Natura 2000 at sea sites are present on this map.

**WWF SUPPORTS  
23 MPAS IN 10  
COUNTRIES**

In 2008, a region-wide assessment of the management capacity and efficiency of Mediterranean MPAs was conducted. The report, based on interviews with managers and MPA agencies, identified a number of challenges to achieve functioning MPAs, and requirements to improve marine protection efforts (Table 1).

Together with its partners, World Wide Fund for Nature (WWF) launched the MedPAN South Project to address these specific challenges and respond to managers' needs.

## MedPAN South Project

The MedPAN South Project responded to the need to protect biodiversity and strengthen MPA management effectiveness in the Mediterranean. It involved a multitude of partners (governments and NGOs) and MPA stakeholders (at national and local levels) from 11 non-EU countries. The Project was integrated in the MedPartnership—a collective effort of leading organizations and countries towards the protection of the Mediterranean Sea (see Annex 2). The MedPAN South Project was the first and largest-to-date project focused on MPA participatory management planning in the southern and eastern Mediterranean.

Through a combination of initiatives at the regional and national level, the Project addressed several shortfalls that prevented MPAs from becoming operational. At the regional level, the Project delivered on building the capacity of MPA practitioners, in strengthening the network of MPAs in the region and creating troubleshooting mechanisms that MPAs can refer to when in need of support. In addition, the Project specifically engaged 5 countries (Algeria, Croatia, Libya, Tunisia, and Turkey) to ensure that their MPAs were transformed from a dormant state into an operational state, with trained and equipped staff, standardised management plans, scientifically sound monitoring, and approved zoning plans. However, the real strength of the WWF approach through the MedPAN South Project was the adoption of a participatory approach, where stakeholder engagement in MPA ‘business’ was key to securing buy-in from local communities and stakeholders (including fishermen), endorsement from national and local governments, and ownership of the MPA. In parallel, thanks to the collaboration and exchanges built during the entire process, the MedPAN South Project supported and strengthened MedPAN, the network of MPAs in the Mediterranean.

**THE MEDPAN SOUTH PROJECT HAS BEEN SUCCESSFUL IN IMPROVING THE FUNCTION OF MPAS IN THE MEDITERRANEAN**

**THE PROJECT STRENGTHENED THE CAPACITY OF MPA PRACTITIONERS IN 11 COUNTRIES**

### Croatia

All five existing Croatian MPAs have worked towards standardising their MPA management planning process, while enhancing collaboration between MPA staff, relevant administrations, stakeholders, and NGOs.

### Algeria

Staff of the Taza National Park launched a fully participatory process to develop the management plan of the marine area adjacent to the Park. This involved all local stakeholders as well as two other national coastal parks and relevant national authorities.

### Turkey

A fully participatory process to develop the management plan for the marine area of Kaş-Kekova SPA was launched and is currently contributing to the national strategy towards strengthening the system of MPAs in Turkey.

### Tunisia

The office of the Cap Negro-Cap Serrat Marine and Coastal Protected Area (MCPA) was established, personnel recruited and trained, and a business plan developed. The plan set out long-term, sustainable financing solutions for all activities in the MCPA, as well as for all other MPAs in Tunisia.

### Libya

Ain Al-Ghazalah Gulf was identified as a priority marine and coastal area for protection and was officially declared an MPA in January 2011. Baseline studies were completed and a detailed work plan was launched to build local capacity and ensure adequate preparation for effective management of the new Libyan MPA.

Additional information on these projects including detailed activities and technical reports can be found at [www.panda.org/med\\_mpa](http://www.panda.org/med_mpa)



Table 1. MedPAN South Project achievements in response to challenges identified by the 2008 status report on Mediterranean MPAs.

## Major challenges of Mediterranean MPAs addressed by the MedPAN South Project

### MPA challenges identified in 2008 Status Report

### Response by MedPAN South Project

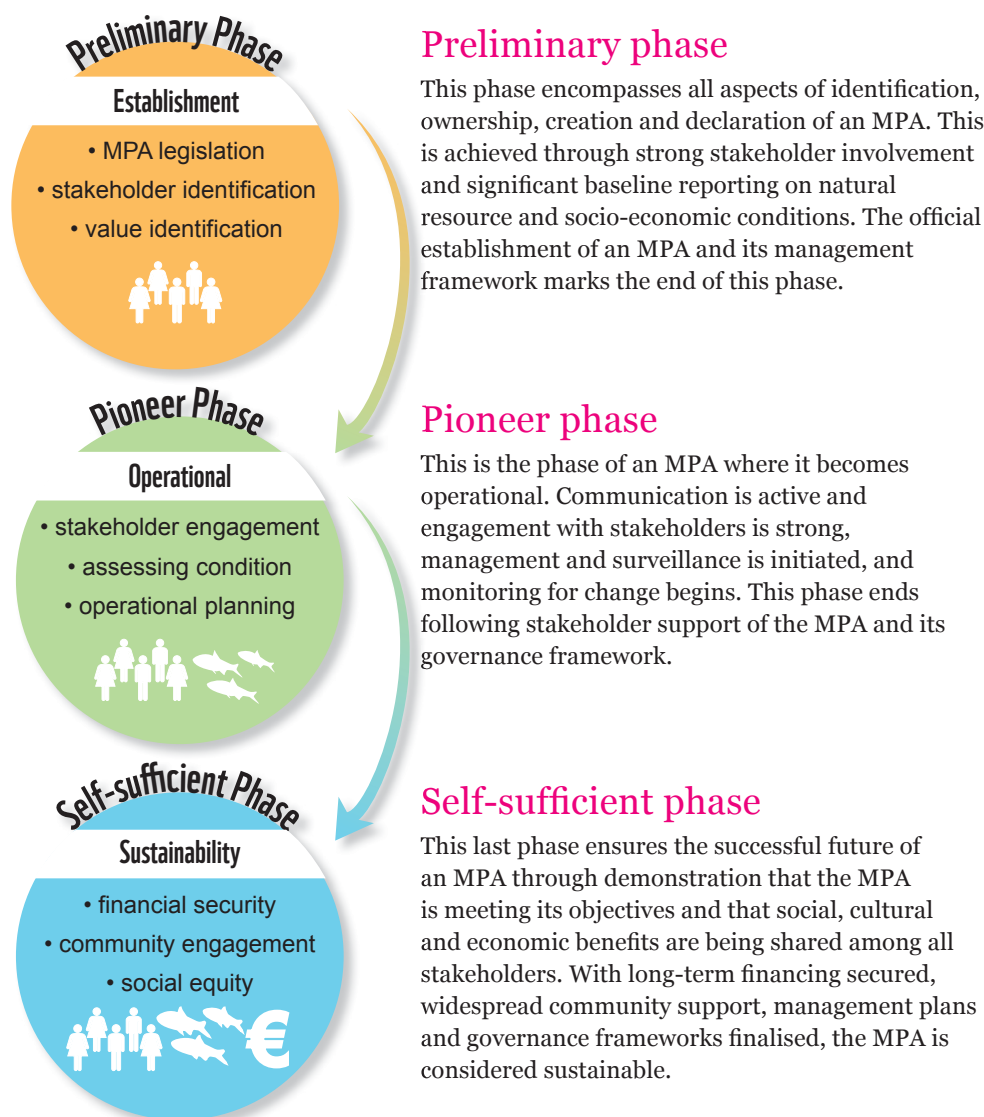
Inadequate management plans, with unclear objectives, zoning, and monitoring plans to assess whether objectives are met	<ul style="list-style-type: none"> <li>New comprehensive management plans completed for 6 MPAs: Brijuni National Park, Kornati National Park, Lastovo Islands Nature Park, Telašćica Nature Park (Croatia); Taza National Park (Algeria); and Kaş-Kekova SPA (Turkey)</li> </ul>
Insufficient understanding of the socio-economic context and natural resources	<ul style="list-style-type: none"> <li>34 biodiversity and socio-economic assessments conducted in 9 MPAs, habitat maps completed, and standardised monitoring plans implemented in Algeria, Croatia, Libya, Tunisia, and Turkey</li> </ul>
Insufficient human resources and field-based staff	<ul style="list-style-type: none"> <li>Management body established for Cap Nègro-Cap Serrat (Tunisia) with field staff hired and trained</li> </ul>
Lack of community involvement and participation	<ul style="list-style-type: none"> <li>Stakeholder participation and buy-in from local authorities secured for the development of the management plans of 6 MPAs</li> </ul>
Inadequate staff capacity to plan and manage effectively	<ul style="list-style-type: none"> <li>More than 300 MPA practitioners from 11 countries trained on subjects such as MPA management, planning for sustainable fishing in MPAs, planning for sustainable tourism in MPAs, conflict resolution, facilitation and stakeholder engagement, marine GIS, communications for MPA managers, MPA zoning, MPA monitoring and evaluation, and sustainable financing and MPA business planning</li> <li>Peer-to-peer dialogue, MPA to MPA and north/south exchanges organized to showcase lessons learned and best practices on MPA management among 100 MPA managers and local stakeholders</li> </ul>
Lack of education and awareness-raising activities	<ul style="list-style-type: none"> <li>Awareness raised on the importance and value of functioning MPAs among national and local governments</li> </ul>
Inefficient and weak collaboration and coordination between stakeholders, NGOs, and regional organizations	<ul style="list-style-type: none"> <li>Strong networking at national and regional level achieved among MPAs to strengthen the MedPAN Network</li> <li>Collaboration strengthened among several conservation organizations to plan and deliver projects responding to the needs of the MPAs</li> </ul>

# The Journey to Becoming an Effective MPA

A key charter of the MedPAN South Project was to evaluate and learn from the challenges faced by Mediterranean countries implementing MPAs. With a long-term vision, WWF and its partners collaborated to strengthen the capacity of these countries to deliver conservation solutions through functioning and effective MPAs. Achievement of this ambitious goal was the result of a long journey requiring the widespread participation of all stakeholders.

## The life cycle of an MPA

Creating an MPA requires a holistic approach that includes and integrates ecological, biological, social, and economic considerations. This cannot succeed without proper legislation, a functioning institutional framework, financial resources, and active engagement of stakeholders that support the approach through the application of unique experiences and skills. This integrated approach takes time and can be divided into three distinct phases.



*The three phases required to become a functioning marine protected area, as outlined in the “Compass Card” method for MPA assessments developed by FGEF 2010.*

*“Taking MPAs through these three phases is challenging, complex, and takes a long time.”*

Tundi Agardy  
Executive Director  
SOUND SEAS

In practice, however, the described phases may not occur necessarily in the same sequence and they can also vary among MPAs. Managers can adapt the implementation of different tasks according to actual circumstances, capacity, and resource availability, but to achieve functional and effective management, all steps need to be fulfilled.

## The journey requires participation by all

The key to a successful MPA is active engagement of all stakeholders from the beginning of the planning process. Stakeholders include government authorities, marine resource users, researchers, local communities, and Civil Society Organizations. Being stakeholders, these groups have a vested interest in the decision-making process and how natural resources are managed.

The benefits for MPA authorities that engage stakeholders include:

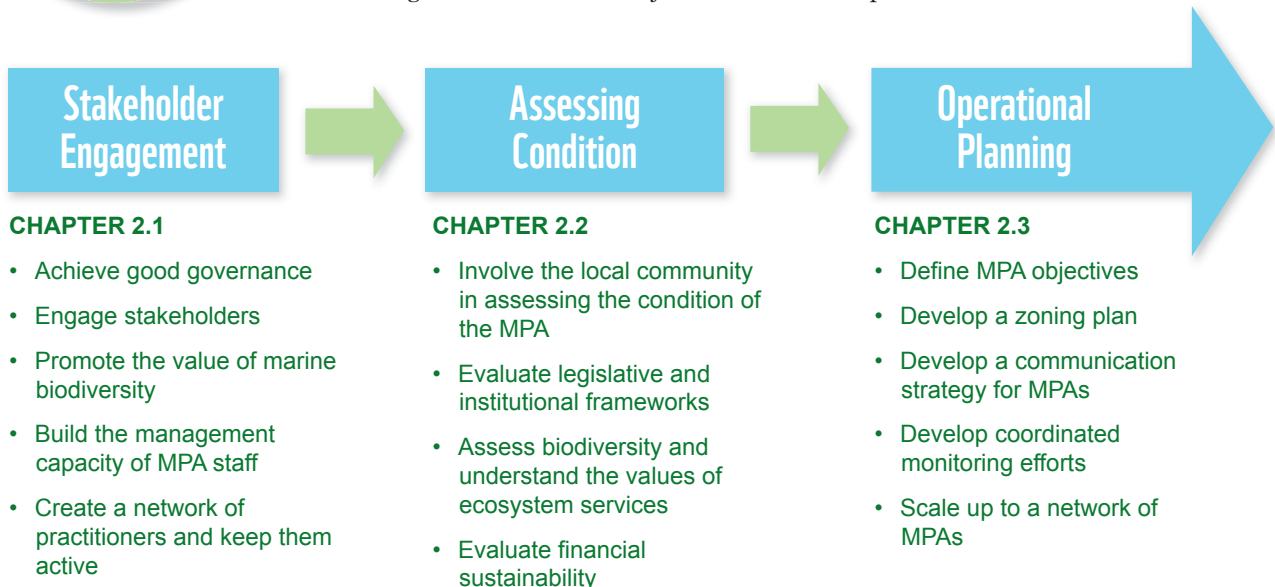
- Improved understanding of environmental and socio-economic issues through pooled information and diverse backgrounds;
- Increased trust and alliance among local stakeholders and government authorities;
- Shared management and decision-making responsibilities (i.e., planning, monitoring, and enforcement);
- Improved dialogue among conflicting sectors and resource users; and,
- Facilitation of voluntary compliance on agreed regulations (reducing the need for enforcement).

With the MedPAN South Project, WWF worked with 20 partner organizations to support selected MPAs in the Mediterranean to take the first steps of this journey. The Project supported 7 MPAs as they completed the Preliminary phase and moved towards the Pioneer phase. Employing a participatory approach, field projects were designed to involve a wide range of local and national stakeholders to develop effective management plans.

## Roadmap to this Document

This document provides a series of lessons learned based on activities, achievements, and experiences of the MedPAN South Project, specifically on MPA planning and management. It outlines the steps needed to take an MPA from creation to a fully operational state (Pioneer Phase), and highlights through case studies and first-hand experiences the challenges identified by stakeholders and how good practices can be implemented to overcome these challenges.

This document concentrates on the three steps that constitute the Pioneer phase of MPA development: Stakeholder Engagement; Assessing Condition; and, Operational Planning. For each of these steps, key processes are illustrated, and lessons learned and challenges identified from Project case studies are presented.





## CHAPTER 2: MAKING MPAs OPERATIONAL

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## 2.1 Stakeholder Engagement

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- Achieve good governance
- Engage stakeholders
- Promote the value of marine biodiversity
- Build the management capacity of MPA staff
- Create a network of practitioners and keep them active





## Achieve good governance

Securing the support and commitment of decision-makers is an activity that should start at the beginning of the MPA implementation process, and be maintained during MPA implementation.



### TAZA NATIONAL PARK STEERING COMMITTEE

- General Secretary of Wilaya
- Directorate General of Forests
- Coast Guard
- Environmental Department
- Tourism Department
- Culture Department
- Fishery Department
- Public Works Department
- Hydraulic Department
- General Administration Department
- Universities
- National Commission of coastal areas
- Mayors of three municipalities of the Park
- Chamber of Fishing
- Fishermen's associations
- Local cultural associations
- League of underwater activities

## CASE STUDY: ENGAGING LOCAL AUTHORITIES IN MANAGEMENT PLAN DEVELOPMENT IN ALGERIA

In 2009, Taza National Park (3,807ha) started an expansion request process by including the adjacent marine area (9,603ha). The project is an excellent example of good governance reached early in the preliminary phase. Park staff were successful in engaging representatives from all local stakeholders and authorities to participate in the development of the management plan for the future MPA. Strong governance during the planning process was achieved through a Steering Committee (SC), which paved the way for long-term commitments during the implementation phase of the MPA.

SC members consisted of high-level representatives from different sectors of the Wilaya (province) where the Park is situated. The SC was led by the General Secretary of the Wilaya (the governor of this administrative division), which ensured a strong commitment of members.

The role of the SC was stated in the agreement signed by all members at the beginning of the project. The SC was responsible for:

- Supervising and facilitating the implementation of the project;
- Providing technical guidance and support to the planning team in the different phases of implementation;
- Taking all necessary measures to facilitate the realisation of the project;
- Ensuring the future implementation of the management plan; and,
- Promoting the replication of the experience within the province.

What facilitated the success of this approach in delivering a robust management plan was the inclusion of local stakeholders in the two-year consultation process.



## Lessons Learned

- If a recognised authority chairs the Steering Committee, the governance of the overall process improves.
- Active participation of the Steering Committee in MPA management planning facilitates dialogue and collaboration among different sectors and stakeholders.
- A Steering Committee that makes clear what is expected from members is more likely to sustain commitment than a Steering Committee that does not.



## Challenges Identified

- If responsible government authorities do not have the technical capacity to lead the participatory process or if circumstances do not allow the establishment of good governance, more effort should be directed to local stakeholder engagement.
- Creating a strong Steering Committee can take up to one year of lobbying and consultation.
- The effort required to foster and facilitate the work of a Steering Committee is often underestimated. Time, budget, and human resources for a Steering Committee should be properly planned in advance.



## Engage stakeholders

Engaging stakeholders, such as fishermen and divers, in MPA development and management planning is critical to achieving a functioning MPA. Stakeholder engagement and participatory planning are the foundation for an MPA that delivers benefits, both environmental and socio-economic, through a shared understanding of needs and priorities, local knowledge, and ownership.

### CASE STUDY: ENGAGING STAKEHOLDERS IN THE PLANNING PROCESS IN TURKEY

Between 2003 and 2006, Kaş-Kekova was legally designated as a Specially Protected Area (SPA). Despite this, there were no strategies developed to manage marine resources within the area and no regulations for charter boat tours, fishing, diving, or anchoring. Destructive and unsustainable fishing activities were regularly conducted in the area, mainly targeting large fish sold to local restaurants. The MedPAN South Project supported Turkish MPA authorities to develop a management plan for Kaş-Kekova SPA. In addition, WWF Turkey fostered participatory development of the management plan for Kaş-Kekova, to secure commitment for and ownership of this plan from the onset of the project.



**THE PARTICIPATION  
OF DIFFERENT  
STAKEHOLDERS IN A  
TRAINING WORKSHOP  
IS AN EXCELLENT  
TOOL TO UNDERSTAND  
RECIPROCAL NEEDS  
AND INTERESTS**

### Local and national stakeholders were identified and engaged in a series of tailored activities addressing different needs

#### Identify

WWF Turkey, with the University of Boğaziçi and legal and management advisors, formed the planning team, which together with the Steering Committees (SC) led the participatory planning process for the MPA. The planning team identified groups of stakeholders to be targeted throughout the project according to their relationship and influence over the MPA. This list and different levels of engagement were reviewed several times as people's interest and a sense of ownership grew.



#### Inform

A series of activities were developed for different stakeholder groups to improve their understanding of the purpose and benefits of MPAs. Informing stakeholders in the process of creating new regulations for human activities at sea ultimately built trust among the different groups, authorities, and the planning team.

#### Participate

Selected representatives of different stakeholder groups were involved in thematic workshops to bring together diverse backgrounds in resource use, marine policy, natural and social science, business, conservation, and marine recreation, identify MPA objectives, and to propose a set of management strategies.

#### Involve

The planning team synthesized information gained through this participatory process and submitted the MPA proposal to decision-makers from local and national steering committees.



Training Workshop on Sustainable Fishing in MPAs organized in Kaş-Kekova SPA.

*“We attended several meetings to learn about these topics. I think things will move faster now and people will get involved more quickly. This procedure is essential for both local people and decision-makers.”*

Murat Draman  
Owner of Dragoman Dive  
Centre in Kaş-Kekova SPA

## Engaging stakeholders with a range of activities and tools at Kaş-Kekova SPA

### Activities and Tools

Stakeholders	National SC	Local SC	Planning team	Participatory planning	Consultation meetings	Training workshops	Communications
NGO							
Local businesses							
Government							
Directorate							
Educational institutions							
Local citizens							
Tourists							



## Lessons Learned

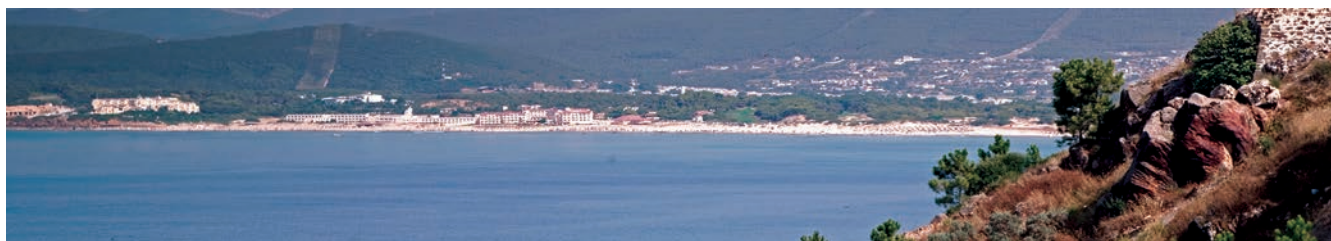
- Extensive work done by local stakeholders to propose effective management solutions and regulations for MPAs can influence and accelerate policy decisions at the national level.
- Dedicated a proper amount of time at both preliminary and planning phases (three years) gradually empowers stakeholders to be proactive throughout the management planning process.
- The planning team should spend time in the field with local communities to have an on-the-ground understanding of the MPA and to build trust.
- Both supportive and opposing parties of the future MPA should be invited and supported to participate in the planning process. This allows conflicts to be addressed and differing needs to be acknowledged by both parties.



## Challenges Identified

- A lack of previous experience in MPA management planning, stakeholder engagement, conflict resolution, and facilitation may hinder progress.
- Drafting a management plan is a ‘learning-by-doing’ process that should be supported by access to experts and capacity building opportunities.
- Political instability—due to government turnover—may place the endorsement of an MPA management plan at risk. The level of trust and collaboration created between the planning team and key government authorities can offset delays.





## Promote the value of marine biodiversity

The lack of awareness and understanding on the value of MPAs as a benefit-generating tool by local communities and stakeholders can pose risks to the development of functioning MPAs. Raising awareness among local communities on the value of marine resources is an integral component of MPA management. Good engagement secures support and ownership, thereby promoting and facilitating the implementation of the management plan.

### CASE STUDY: INVOLVING LOCAL WOMEN TO RAISE AWARENESS ON MPA BENEFITS IN TUNISIA

The future Cap Négro-Cap Serrat Marine and Coastal Protected Area (MCPA) is located in the northern part of Tunisia, one of the most rural and undeveloped areas of the country. Here, the creation of a new protected area is a tool to implement national strategies directed at sustainable development for the local population. To increase awareness on how MPAs can provide alternative livelihoods and contribute to the well-being of the local community, WWF together with the Regional Commission for Agricultural Development, developed a series of target actions. Over 30 women from Khorgalia and Dmaein participated in a series of workshops that focused on the value of protecting local marine biodiversity to maintain ecosystem services that can benefit the coastal population. Most local revenues come from the production of handicrafts, local and organic products, and the use of aromatic plants to produce essential oils and medicines. These workshops helped women to understand the connection between their food and livelihood security and the benefits of natural resources, highlighting how MPAs can help them retain these benefits. The initiative succeeded in gaining support for the creation of the MCPA. Women in the local villages are now supportive of the MPA establishment and are engaged in exploring solutions for how the MPA can become a driver for a more equitable and sustainable use of natural resources.



**LOCAL COMMUNITIES  
LEARN THE VALUE  
OF PROTECTING  
BIODIVERSITY**



*A practical session on the handmade production of lobster creels included in a sustainable fishing workshop organized for the women of the region of Cap Négro-Cap Serrat MCPA.*





## COLLABORATION BUILDS CREDIBILITY

First prize of the Underwater Photo Contest at Taza National Park was won by Mehdi Hemani and Mahmoud Sehouane for this photo of a red scorpionfish (*Scorpaena scrofa*). A slide show of the photo contest is available at: <http://www.youtube.com/watch?v=vLoF1aO8Ym8&feature=related>.

## CASE STUDY: ORGANIZING UNDERWATER PHOTO COMPETITION IN ALGERIA

Taza National Park in Algeria organized the first underwater photo competition featuring the coast of Jijel. This is one of the first examples in Algeria of communicating the importance and beauty of the marine environment.

In collaboration with the Rescue, First aid and Underwater Activities League of Jijel, the competition aimed at promoting responsible diving practices in the area. The Park took advantage of this event to promote MPAs as a tool for developing ecotourism and opened a dialogue with local stakeholders about the future in the soon-to-be-created MPA. The popularity of this event and the quality of the pictures presented contributed to strengthening the local support of the MPA creation. The League is now involved in the promotion of responsible diving practices in the region. They also transformed this first event into an annual underwater photography contest involving tourists. Outdoor information panels and underwater leaflets about the marine heritage of Taza National Park are now available for tourists during the summer season. The initiative is a good example of collaboration between the MPA management and scuba dive operators, which helped to change local residents' and tourists' perception of MPAs and build the credibility of MPA staff.



### Lessons Learned

- In the planning phase, higher priority is usually given to communication activities targeting new partners to be engaged in the development of the management plan. In order to not leave behind the broader public, a communication strategy should be drafted at the beginning of the process, including all target audiences.
- Starting awareness-raising activities during the planning phase of an MPA helps the planning team have a proper understanding of the area to then develop a sound environmental education programme for the future MPA.
- Outreach and environmental plans should be tailored to the specific target audience of the MPA. The planning team should be innovative and think out of the box.



### Challenges Identified

- Whether for cultural reasons or because they live far from the coast, people often do not have a direct connection with the marine environment. A creative effort is therefore required to engage people with the sea to ensure they understand why protecting marine biodiversity is vital for human well-being.
- In newly established MPAs, there is often no staff with a marine environment background and with communication skills. Technical support and mentoring are valuable support to launch simple, focused, and effective communication initiatives to reach key stakeholders.
- Designing a communication strategy can be challenging, particularly when there is a need to engage rural communities in new MPA development. Local people tend to focus on short-term needs and distrust authority. In these cases, communication should be simple, incorporate people's concerns, and ultimately build confidence.



## Build the management capacity of MPA staff

In many Mediterranean MPAs, managers and practitioners do not have the capacity to address management issues, or proactively start a participatory planning process. The MedPAN South Capacity Building Programme was specifically tailored to strengthen the capacity and skills of MPA managers, NGOs, academics, practitioners, and officials of relevant authorities and institutions. With regional and national training events, the Programme provided the tools and knowledge needed to address the specific management weaknesses identified in preliminary need assessments.

National training events were tailored to local needs, priorities and management context, and strived to engage practitioners both at the national and MPA level. Training focused on the requirements necessary for the development of a management plan: Conflict Resolution, Facilitation, and Stakeholder Engagement; MPA Zoning; and, Sustainable Financing and MPA Business Planning. This allowed practitioners to advance quickly in achieving important management targets.

### CASE STUDY: BUILDING THE CAPACITY OF LIBYAN AUTHORITIES TO ESTABLISH MPA

Although Libya hosts one of the last near-pristine stretches of Mediterranean coastline, the first two MPAs were only established in 2011. Libya's institutional changes over the last two years, however, created delays in moving these MPAs towards an operational state. In this context, a set of basic training activities were developed to build the capacity of Libyan practitioners responsible for future marine conservation efforts. These training workshops were designed to improve managers' understanding of how to make MPAs work and to support the implementation of the first steps towards MPA planning.

Representatives of the General Environmental Authority and the Marine Biology Research Centre, together with University researchers, and the Coast Guard came together for Introductory Training on MPA Management. This four-day intensive workshop allowed participants to acquire basic knowledge on threats to marine biodiversity and ecosystem services, legal frameworks, MPA objectives, benefits and limitations of MPAs, site selection criteria, ensuring capacity for and stakeholder engagement in management plan processes.

Field activities typically complemented formal training. For example, a one-week mission to conduct a survey in the Ain Al-Ghazalah MPA provided the opportunity to deliver on-the-job training on underwater sampling and monitoring techniques.



### TARGETED TRAINING WAS PROVIDED FOR SELECT PARTICIPANTS

- Marine GIS
- Scientific approach to MPA design
- Biodiversity and socioeconomic assessments
- Stakeholder engagement

*“Each day is a progression, building on the previous day’s work.”*

Dr. Khaled Allam Harhash  
Nature Conservation Sector,  
Egyptian Environmental Affairs  
Agency, who led the MPA  
Introductory Training workshop

*“MPAs are a new concept in Libya—we have opened a door to a new and better way, and there is a feeling that we have started something important.”*

Hisham Ghmati  
Director of Studies  
Marine Biology Research  
Centre, Tajura/Tripoli, Libya

*Libyan participants from MPA training workshop working groups.*



## NINE TRAINING EVENTS WERE ORGANIZED

- Assessing National MPA Legal Framework
- Developing Effective Management Plans
- Site Characterization
- Stakeholder Engagement
- Marine Zoning
- Sustainable Fishing
- Monitoring and Evaluation
- Business Planning
- Conflict Resolution

*“The most valuable knowledge I learned was to approach the problem in a different way and change my opinions and priorities.”*

Croatian participant in the MPA management planning workshop

*Presentation by a Croatian participant in the Training Workshop on Marine Zoning.*

## CASE STUDY: A STEP-BY-STEP PROGRAMME TO IMPROVE THE MANAGEMENT OF MPAs IN CROATIA

One of the most common shortfalls of MPAs is a lack of skills and management capacity among its staff. This is considered a limiting factor in achieving effective management and conservation objectives. To increase the skill capacity of staff in 5 MPAs across Croatia (Lastovo Islands and Telašćica Nature Parks, and Mljet, Kornati, and Brijuni National Parks), WWF—together with the NGO Association Sunce, in partnership with MPA authorities, the State Institute of Nature Protection, the Ministry of Environmental and Nature Protection, and County authorities—developed a series of capacity building activities. Over the course of the MedPAN South Project, a step-by-step programme was implemented including training activities and field work.

These training events were followed by the implementation of acquired skills into management planning for these 5 MPAs. This helped the staff produce a solid management framework through a participatory approach, engaging stakeholders in the planning process for each MPA. Consultations, open dialogue, negotiation, and conflict resolution were key to ensuring commitment and endorsement of MPA goals by the local community. In addition, the events allowed MPA staff to begin in-house monitoring programmes and to prepare business plans for the MPAs.



## Lessons Learned

- Capacity building training workshops should be designed to include problem-solving exercises, consultation and negotiation trials, and develop a long-term vision for systematic planning. In this way, teams can acquire the skills to lead the development of participatory management plans.
- Capacity building programmes need to be tailored to the specific needs of the target audience, which will vary from country to country. It is important to consider the different background and skills of participants and the level of progress of MPA development.
- Curriculum content is best received if made relevant to the Mediterranean setting, including geographically representative case studies, and cited management approaches. However, when there is a lack of actual or documented points of reference, it may be necessary to identify examples from a wider geographic reach.



## Challenges Identified

- In the Mediterranean, there is a lack of instructors who have both teaching skills and on-the-ground experience and who can deliver capacity to MPA practitioners. Professional trainers should team up with MPA managers and experts to provide practical case studies.
- Training opportunities are often attended by officers who are not interested in building their capacity. A successful capacity building programme depends on the selection of participants who are willing and interested in making a professional investment in building their own capacity, sharing that capacity with other practitioners, and structuring their MPA responsibilities with the intent of implementing new skills and knowledge in the field.
- After a training event, not all participants have the opportunity to apply the acquired knowledge in the field. There are several external factors that may impede implementation. Training programmes should provide innovative mechanisms to implement new skills and improve management capacity of MPAs (i.e., post-training coaching, on-the-job training, experience sharing, small grants).





## Create a network of practitioners and keep them active

Social networks, interactions among practitioners, and the exchange of good practices enable managers to benefit from lessons learned in other MPAs, and support each other in achieving key management targets. The MedPAN South Project provided an opportunity to create a network of trained practitioners who will sustain and strengthen the existing Mediterranean MPA network, MedPAN.

### CASE STUDY: A COMPREHENSIVE CAPACITY BUILDING PROGRAMME

Capacity building initiatives are not a mere teaching tool. Training events and other skill implementation initiatives are a means of creating interactions, connections, and collaborations among practitioners, and stimulating ideas on how to overcome management challenges. Through a series of training workshops on sustainable tourism planning, fisheries management, and others, MPA managers from 11 countries identified and addressed specific MPA shortfalls. The MedPAN South Capacity Building Programme created a platform for these practitioners to assemble and learn new skills while discussing solutions to common problems.

*“Sharing expertise and lessons learned in MPAs within the Mediterranean and beyond is an effective way to build capacity for the network as a whole.”*

Anne Walton, Program  
Director for NOAA's  
International MPA  
Capacity Building Program

## Targeted actions developed as follow-up to the MedPAN South Capacity Building Programme training workshops

### Expert Database

An Experts' Database was developed to provide contact details for experts that can support managers on various aspects of MPA business including science, management, and finance. The database links professional practitioners to MPAs, enabling a direct mechanism for collaboration and networking.

### Expert visits

One of the best ways to overcome challenges faced by managers is to seek advice from other experienced managers, scientists, and NGOs. The MedPAN South Project facilitated access between experts and MPA managers who needed support on specific issues (e.g., managers from Cabrera National Park visited the staff of the General Directorate for Natural Assets for Protection in Turkey to work on tourism planning). This approach enhanced collaborations among practitioners across the region while finding the best way to resolve management shortfalls.



### Web Portal

A Web Portal is in development that will host interactive learning and networking tools. This represents the first capacity building portal for MPA management available in the world. The Portal will be a practitioner's forum to network, share information, and access learning opportunities and interactive training material as well as photo and video libraries on Mediterranean MPAs.

### Small grant program

Small grants were assigned to individual MPAs or national networks of MPAs to implement skills following capacity building training. Small grants were particularly designed to close existing information gaps in MPAs (e.g., an assessment of the fishing fleet and gear within Karaburun-Sazan MPA in Albania was conducted). This Programme significantly contributed to increasing MPA condition assessments which was key to identifying management objectives.

## WORKING TOGETHER CAN SOLVE COMMON PROBLEMS

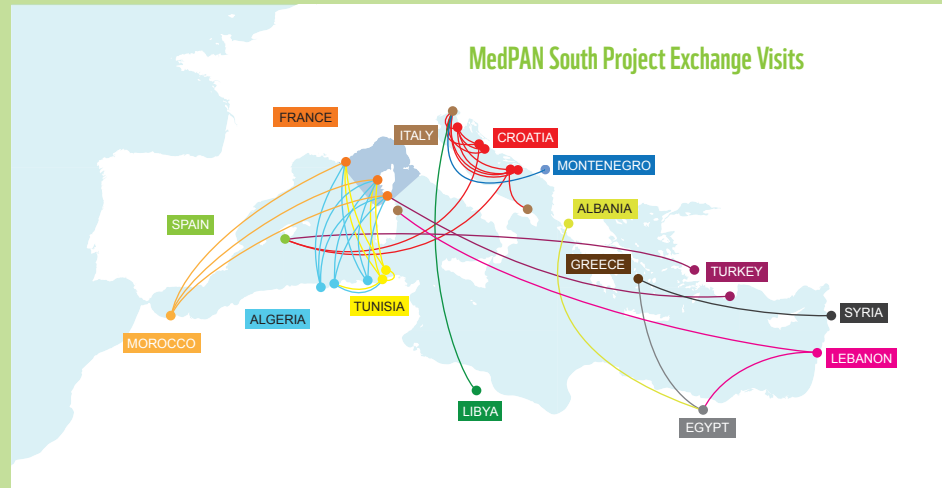
*The Mediterranean network of cooperative exchange visits between MPA countries.*

*“When you meet people from Italy, France, or the USA, then you start to think in another way. Your problems are not unique. Even in other MPAs, people have the same issues, the same problems, and they did solve those problems. There is a way to work it out.”*

Sandro Dujmovic  
General Manager  
Brijuni National Park

## CASE STUDY: SHARING OF BEST PRACTICES

To facilitate stakeholder networking among Mediterranean MPAs, the MedPAN South Capacity Building Programme supported exchange visits involving managers, fishermen, and dive operators from various countries. Mentor MPA sites with well-established co-management approaches and management plans hosted MPAs with internal conflicts (e.g., where no-take zones are being designated with stakeholder opposition) or that were still developing management plans. These visits led to agreements between MPAs, formally stating cooperation on activities including management plan development and monitoring. Such cooperation strengthens the Mediterranean MPA network and secures stakeholder support for MPA activities.



Fishermen from the recently designated Lastovo Islands Nature Park (Croatia) visited the Marine Reserve of Torre Guaceto (Italy). Torre Guaceto has achieved a co-management approach between the MPA authority and local fishermen (roughly one-tenth of the 22km<sup>2</sup> site is no-take, while in the remaining area, fishing with selective gears is allowed). This approach has brought high revenues for the fishermen while meeting conservation targets for the MPA. The Italian fishermen shared how they benefited from the creation of protected zones and fishing grounds. This exchange was key in securing the support of Croatian fishermen for the new zoning plan for Lastovo.



## Lessons Learned

- Participants to be involved in exchange visits should be carefully selected. Ideally, participants from the visiting MPAs should be (a) community leaders, (b) committed to learn, (c) willing to share their experience with peers at home, (d) clear on why they were invited, and (e) ready to contribute actively to the planning of the exchange.
- For a single practitioner, becoming part of a network means benefiting from peer experiences, and linking to scientists and experts from different countries. This ultimately supports a bottom-up approach, which builds ambassadors for conservation who can influence national policy processes and resource management at the local level.
- Capacity building opportunities enable collaborations that go beyond the duration of single initiatives. For example, by fostering the establishment of long-term collaborations between visiting and hosting MPAs, the participation of key decision-makers in the exchange is ensured. Also, initiatives following training workshops should be planned to extend the connections between MPA managers, technical experts, and scientists.



## Challenges Identified

- MPAs are usually overwhelmed with pre-existing responsibilities and have limited time to dedicate to exchanges, particularly during the summer. Planning exchanges should start at least four months ahead.
- For small organizations, designing and implementing effective small-grant projects can be challenging. External technical support, expert visits, or twinning programmes between MPAs can support organizations in their learning process.
- Building and maintaining databases and web portals takes a lot of work. It also requires a long-term commitment to keep them updated and to disseminate them between users.



## 2.2 Assessing Condition

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- Involve the local community in assessing the condition of the MPA
- Evaluate legislative and institutional frameworks
- Assess biodiversity and understand the values of ecosystem services
- Evaluate financial sustainability





## Involve the local community in assessing the condition of the MPA

The involvement of local stakeholders is necessary for a full understanding of the complexities of the site being assessed. Local people, especially resource users (e.g., divers, fishermen), have an incredible wealth of knowledge regarding their local environment. As such, it is always recommended to complement scientific studies with local knowledge. This is also particularly useful when human and financial resources are not available to conduct comprehensive scientific assessments.



*“Developing management activities and designing MPA Zoning Plans will be based on the results of nearly 10 years of solid scientific research in Kaş-Kekova. This is key to ensure the support of local stakeholders.”*

Umut Tural  
WWF Turkey

### CASE STUDY: INTEGRATION OF LOCAL KNOWLEDGE AND SCIENTIFIC ASSESSMENT IN KAŞ-KEKOVA SPA, TURKEY

Since 2002, WWF Turkey and Boğaziçi University have been conducting marine research in the coastal waters of the Lycian Coast. The underwater survey team included scientists from seven different universities, post graduate students, volunteers, diving club members, and consisted of 81 divers coordinated by the research team of Boğaziçi University. Long-term routine assessments provided significant amounts of data towards characterizing the MPA including the status and distribution of threatened species, important habitats, and keystone species. However, scientific assessments alone did not capture long-distance mobile species, some of which had high ecological value such as the Mediterranean monk seal (*Monachus monachus*), the loggerhead sea turtle (*Caretta caretta*), and dolphins like the short-beaked common dolphin (*Delphinus delphis*) that are common in the area.

The planning team was only able to gain this additional information from local community members involved in the site characterization process. This was achieved through interviews with individuals representing local authorities, NGOs, as well as fishermen, diving clubs, and boat and hotel owners and operators. This process also highlighted important information about commercial species, important nesting and feeding areas, and helped better define the distribution maps of key biodiversity features. Moreover, a climate of trust was built between the planning team and stakeholders facilitating the process of capturing their knowledge and addressing their concerns and ideas.



### Lessons Learned

- Local knowledge and transfer of skills between stakeholders and scientists lead to a more comprehensive characterization of the MPA.
- Explaining scientific data in a simple way to local people is important to enable their participation in the future MPA planning process and to gain credibility in the community.
- Engagement empowers community members and increases their stake in the MPA's development and long-term success.



### Challenges Identified

- Unstructured interviews often lead to open discussion about the daily problems affecting the local community, and can become very heated and difficult to manage. Despite this, the planning team should have a clear long-term vision of the process, be patient and listen, as the informal atmosphere can be helpful in understanding the real issues.
- The concept of participatory planning is typically new for local communities. To motivate them to engage in meetings can be a challenge as people may not feel their contribution is important. Time and patience is required to explain the process, and to make them feel comfortable enough to share their knowledge and voice their opinions.



## Evaluate legislative and institutional frameworks

In countries where experience with MPA implementation is limited, it is essential to have a clear understanding of all national, regional, and local legislation related to MPAs. This information constitutes the framework for management plan development. Making an initial assessment not only highlights gaps or uncertainties related to the legislative and/or institutional framework, but also serves to identify existing opportunities for addressing issues while waiting for improvements in the legislative system.

### CASE STUDY: ASSESSING NATIONAL LEGAL AND INSTITUTIONAL FRAMEWORKS IN KAŞ-KEKOVA SPA, TURKEY

The Turkish MPA system includes ten Specially Protected Areas (SPA) under the responsibility of the General Directorate for Natural Assets Protection (GDNAP). Although Turkey has been active in establishing MPAs to protect its marine biodiversity, at the beginning of the project (2008) at Kaş-Kekova SPA, no management plan had been designed to address human impacts at sea. Turkish legislation does not allow for a single management plan under which all activities at sea are managed. As a result, the development of the management plan for Kaş-Kekova had to take into consideration several laws and regulations (Zoning Law, Environmental Law, Fishery Regulation, Cultural and Natural Heritage Protection Act).

The MPA planning team in Kaş-Kekova SPA decided to make an initial legal, institutional, and regulatory assessment to have a clear framework for the development of the management plan. This assessment informed the development of the management plan for Kaş-Kekova, which had to take into consideration several laws and regulations for the management of each specific activity (e.g., fisheries, diving).



**EXISTING LEGISLATION  
WAS WOVEN INTO THE  
MPA FRAMEWORK**

## Elements considered in the review of the Turkish legislation and regulations for MPAs

- 1** National and international legislations and treaties related to the establishment of SPAs
- 2** Legal, institutional, and regulatory provisions for the management, surveillance, and enforcement of the impacts and human activities identified at Kaş-Kekova SPA (including fishery, tourism, urban development, agriculture, harbour and maritime traffic, aquaculture, and water and waste treatment)
- 3** Competing or overlapping jurisdictions and responsibilities for conservation, management, and use of SPAs
- 4** Legal tools to approve and implement the management plan (including zoning and regulations, staff, collaboration with other authorities, enforcement, funding, education, research, and monitoring)
- 5** Administrative procedures for permits and concessions for fishing (professional and recreational), dive operators, and charter boats
- 6** Coordination mechanisms among national, regional, and local authorities
- 7** Future development plans for the area (including tourism, agriculture, infrastructure, and roads)

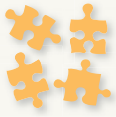
Results of the assessment were used to identify different legally binding tools required to regulate human activities at sea such as fishing, diving, and boat tours. These regulations were included in the management plan prepared by WWF Turkey, in consultation with local and national stakeholders. Finally, GDNAP endorsed the document and led the procedure to issue regulatory decrees and orders.





## Lessons Learned

- Legal framework assessments should be performed by a professional who has previous experience in the area. Assessments should be performed in collaboration with MPA management staff.
- To compensate for the lack of appropriate legislation for MPAs, alternative solutions should be identified to regulate local activities (e.g., local fishing permits, diving code of conduct).
- Experience shows that management solutions at the MPA level can influence legislative revisions and administrative re-organization at national level.



## Challenges Identified

- An in-depth assessment may take as long as six to twelve months to complete, not inclusive of revisions or actions required to correct deficiencies in information. It is important that this activity is included in the workplan and budget. Time is needed to identify the people who have the right information, interview them, understand all implications, and compile background documents.
- Often, immediate solutions to solve legislation or institutional issues cannot be found in time. This should not prevent the application of some management strategies agreed to by local stakeholders.
- Usually, the MPA planning team lacks expertise on legal aspects and cannot foresee implications and constraints in developing new regulations. A legal expert should support the work of the planning team in reviewing national legislations and drafting new regulations at sea for coastal and marine activities.

*Legal expert leading a consultation meeting with representatives of authorities responsible for marine policy, monitoring, and enforcement in Turkey.*





## Assess biodiversity and understand the values of ecosystem services

An assessment of the status of marine ecosystems is a necessary step in the management planning process. However, a lack of funds or capacity is often an obstacle for managers trying to conduct scientific assessments. Conversely, specific and theoretical scientific research that is performed in MPAs often has little or no relevance to managers' needs. Basic data collection has to be focused on management issues and threats to allow managers to make sound management decisions.

### CASE STUDY: BIODIVERSITY AND SOCIO-ECONOMIC CHARACTERIZATION FOR A FUTURE MPA IN TAZA NATIONAL PARK, ALGERIA

The marine area adjacent to Taza National Park is renowned for hosting a high diversity of species and habitats important to the Mediterranean ecosystem. The Park is in the process of turning this area into an MPA and began by following Algerian guidelines for developing a National Park Management Plan. These guidelines required an initial review of the biodiversity values of the area. As Algeria's National Park staff had strong terrestrial backgrounds and were not fluent in developing marine biodiversity assessments, the team at Taza National Park overcame this lack of marine experience by establishing a collaboration with three national universities and two international researchers.



**A DIALOGUE WAS INITIATED BETWEEN SCIENTISTS AND MPA MANAGERS**

### A three-year collaboration resulted in the following datasets:

- 1 Status and distribution of habitats and species of concern**
  - Seagrass meadows
  - Coralligenous habitat
  - Coastal vegetation
  - Sea birds
  - Insular ecosystem
- 2 Socio-economic status of the fishery sector**
  - Fishermen profiles
  - Perceived threats
  - Resource dependency
  - Gear and method classifications
  - Fishing areas
  - Commercial species
- 3 Beach visitation frequency during the tourist season**
- 4 Physico-chemical water quality of the main rivers leading to the sea**

To learn more about the specific studies conducted in the 9 MPAs of the MedPAN South Project, visit [www.panda.org/msp](http://www.panda.org/msp)

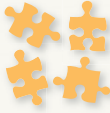
Data were compiled in a GIS database and thematic maps were created to identify impacts and biodiversity distribution. This information was then used, in consultation with local stakeholders, to design future MPA regulations and the zoning plan.





## Lessons Learned

- To be cost and time effective, the biodiversity and socio-economic characterization process should be tailored and focused on specific management issues and threats relevant to the marine resources of the MPA.
- The data collection phase of the planning process is a great opportunity to establish long-term collaborations with universities and external experts. This initial work can attract the interest of research groups who may offer their support for ongoing regular monitoring.
- Planning teams who work within a network of MPAs benefit from and have access to international experts from a variety of disciplines.



## Challenges Identified

- MPA design is typically based on benthic communities due to ease of assessment. Lack of expertise is common in fields such as fish visual census, socioeconomic assessment, and tourism-carrying capacity.
- Technical and financial constraints make it difficult for managers to organize comprehensive assessments. In these situations, the planning process should not be delayed as management decisions can still be made based on the best scientific information available and local knowledge. Adaptive management will allow managers to review and update management plans based on new information.
- National universities can lack the capacity to support MPA managers on issues related to marine conservation and management. Collaboration with international scientists provides a great opportunity to strengthen national capacity and conduct follow-up monitoring and research studies.

*Mediterranean dolphins (such as Delphinus delphis shown here) are common in the area of Taza National Park.*





## Evaluate financial sustainability

Financing is a limiting factor for most marine protected areas in the world. Developing effective business plans and identifying the most appropriate and diversified mechanisms for a continuous, long-term source of funding is imperative to the success of every MPA.

### CASE STUDY: SUSTAINABLE FINANCING MECHANISMS FOR THE TUNISIAN MPA SYSTEM

As in other Mediterranean countries, the lack of adequate legal and institutional frameworks to regulate the designation, management and enforcement of MPAs in Tunisia has so far hampered their effective implementation. Moreover, the current system of MPAs suffers from the lack of financial resources for ongoing viability. North Africa has the lowest ratio of national governmental budgets for protected areas in the Mediterranean region with an investment of 1 US\$/ha, while the regional average is 24.7 US\$/ha. To date, activities implemented at MPA level (scientific assessments, stakeholders engagement, awareness raising and education) were largely financed by foreign funds.

In 2010, WWF and the Agence de Protection et d'Aménagement du Littoral (APAL) launched a feasibility study to identify possible funding mechanisms for Tunisian MPAs.

Results clearly showed that the MPA system should become more innovative and diversified in seeking and allocating funds. Income diversification refers not only to the variety of existing national finance mechanisms but also to the external funding sources.

An in-depth analysis provided a more complete picture of potential sustainable financing mechanisms and income generation mechanisms, describing their advantages and limitations, relevance to the Tunisian context, and how different financing mechanisms can complement each other.



*“Few protected areas in the world are able to finance themselves through their own resources. They usually combine resources generated by the area and a number of additional funds.”*

Fadhel Ghariani  
IDEATunisia

## Potential financing mechanisms identified for Tunisian MPAs

### Marketing resources and eco-taxes

- MPA entry fees
- Concession fees
- Other mechanisms:
  - Cruise ships taxes
  - Hotel/camping taxes
  - Recreational hunting and fishing taxes
  - Rights and royalties for the extraction of natural resources
  - Property taxes
  - Private sector investment

### Promotion of ecosystem services

- Diving
- Boat trips
- Fishing tourism
- Ecotourism
- Local products

### Environmental funds

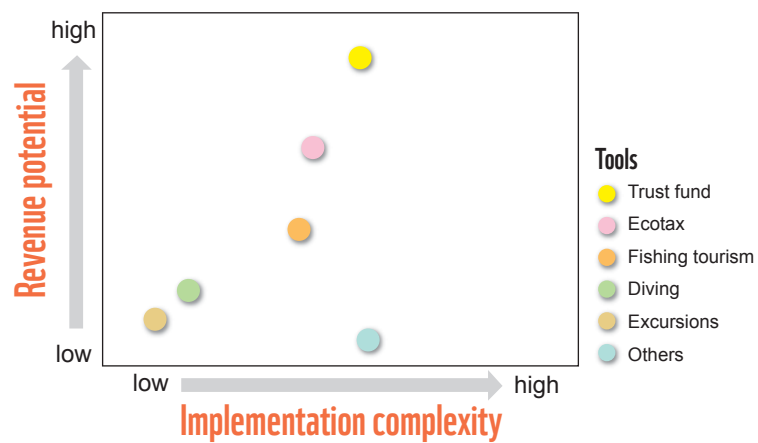
- Grant funds for conservation or development projects run by NGOs
- Funds for the management of parks (i.e., operational expenses, MPA creation, national MPA system)
- Funds for site rehabilitation from pollution, which include grants for conservation

### Trust funds

- Endowments
- Sinking funds
- Revolving funds



Potential MPA financing mechanisms in Tunisia according to the degree of complexity to implement them and potential to generate revenue. Source: F. Ghariani, IDEATunisia.



The limitations identified for the current situation in Tunisia call for the introduction of a new and long-term funding policy for MPAs. The use of eco-taxation or trust-funds can diversify resources and financing instruments to generate sufficient income and ensure the sustainability of MPAs. However, these solutions should be complemented by MPA self-financing mechanisms and a reform of current national financing mechanisms.

## Overall recommendations for developing sustainable financing mechanisms for Tunisian MPAs

### 1 Explore new financing mechanisms

- Trust-funds swap
- Eco-taxation
- Debt-for-nature

### 2 Improve the efficiency of existing mechanisms

- Implementation of the legal provisions related to concessions and public-private partnerships
- Strengthening partnerships with NGOs on MPA co-management

### 3 Enable the implementation of a new MPA funding policy

- Improving institutional and regulatory frameworks (i.e., promulgation of regulations to implement the MPA law)
- Strengthening national capacities on MPA financing and business planning, targeting MPA managers, NGOs, and private sector

### 4 Conduct market analyses, feasibility studies, and incentive development to encourage private investments



## Lessons Learned

- Feasibility studies of MPA financing mechanisms can be used to facilitate discussion with decision-makers (i.e., Ministry of Tourism, Environment, and Finance) on how MPAs can be integrated into existing and emerging financial instruments for the environment.
- Managers should be aware of potential additional financial mechanisms for MPAs so that they can lobby for a more sustainable financial policy at the national level.
- The participation of different sectors of stakeholders in identifying sustainable financing mechanisms is important to elaborate a comprehensive analysis and to build future partnerships for the application of the recommendations.



## Challenges Identified

- Financial needs of national MPA systems are often associated with hypothetical budgets not linked to real management plans. Management plans should be based on the concrete assessment of the available resources, and the costs associated with their implementation. Identifying the financial gaps to achieve MPA management objectives should be done before implementing alternative income generation or financial mechanisms.
- Assessments of funding sources for MPAs are usually too theoretical and include all sources of potential funds. Developing application scenarios to a specific MPA that illustrate the benefits, limitations, and feasibility of different mechanisms will provide more useful information for decision-makers.
- The capacity for MPA financial planning is often limiting. To implement innovative financing instruments of income-generating mechanisms, specific capacity building programmes should be developed targeting MPA managers, governmental agencies, NGOs, and the private sector.



## 2.3 Operational Planning

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- Define MPA objectives
- Develop a zoning plan
- Develop a communication strategy for MPAs
- Develop coordinated monitoring efforts
- Scale up to a network of MPAs





## Define MPA objectives

An MPA should have specific management goals and objectives to be functional and effective. Too often, management activities are developed and put into practice without testing to see if there is a real improvement in the status of the resources that the MPA intends to protect. Precise goals and objectives help MPA managers to focus and tailor management efforts, and allow them to measure progress toward desired results.



### IDENTIFY IMPORTANT BIODIVERSITY, ECONOMIC, AND CULTURAL VALUES

## CASE STUDY: THE PROCESS OF DEVELOPING MPA GOALS AND OBJECTIVES IN KAŞ-KEKOVA SPA, TURKEY

The planning team in Kaş-Kekova SPA involved local stakeholders to collectively decide the goals and objectives for the MPA management plan. Through facilitated discussions with over 120 participants, the planning team involved local and national institutions and local stakeholder groups in the development of goals and objectives. This was a relatively long process that required several workshops to allow everyone to understand the problems and conflicts affecting their natural resources before being able to set specific objectives.

The first step was to agree on those natural and cultural resources and processes that required greatest protection in Kaş-Kekova. A team of researchers explained complex scientific concepts so that non-specialists could contribute to the discussion. Together, the group identified important biodiversity and cultural values on a map and prioritised them in order to select the main conservation targets of the MPA.

## Natural and cultural resources requiring the highest level of protection

### Habitats of concern

- Seagrass meadows
- Important habitats (cave, canyon, wetlands)

### Special geomorphic features

- Lycian coastal landscape
- Freshwater resources

### Species of concern/Endangered species

- Mediterranean monk seal (*Monachus monachus*)
- Marine turtles (*Caretta caretta*)
- Dolphins
- Groupers

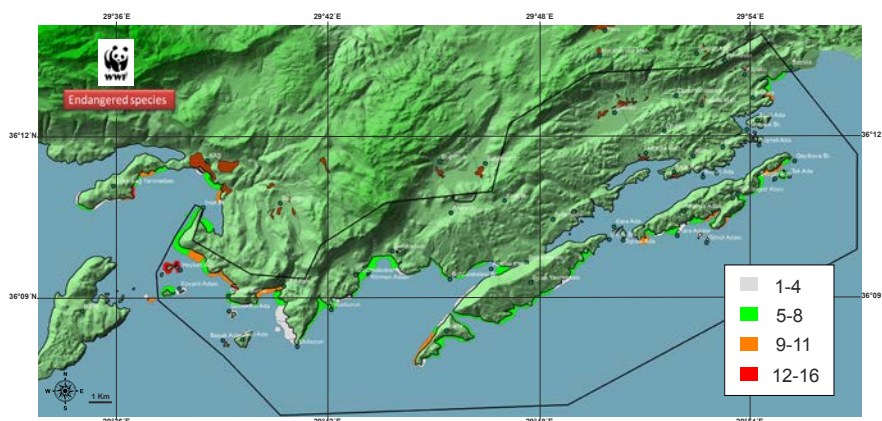
### Economic values

- Charter boat routes
- Dive sites
- Fishery

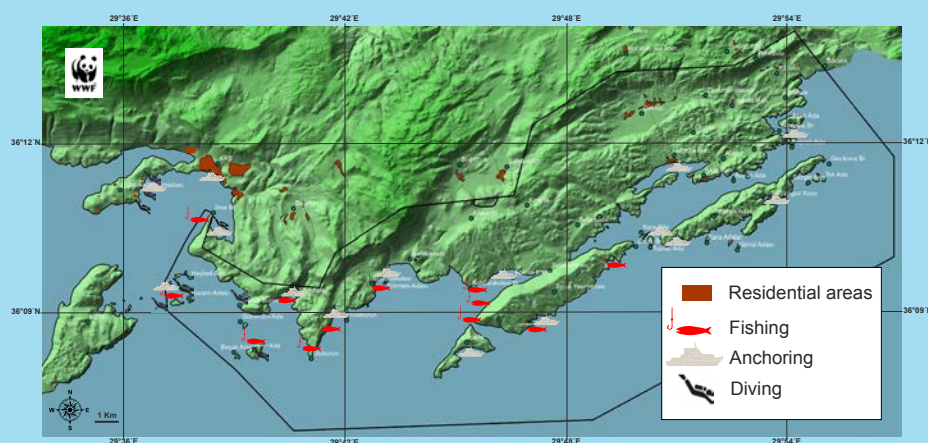
### Social/Cultural/Historic values

- Archeological areas

This map of biodiversity hotspots (number of endangered species) in Kaş-Kekova SPA was used during workshops to prioritise marine resources requiring protection.



The second step was to identify major pressures, impacts and future threats for Kaş-Kekova SPA. These issues were prioritised and, through facilitated discussions, participants identified the cause of these problems and how they affect conservation of target resources.



*Human impacts and affected user groups are identified in the Park.*

Following these two steps, participants had a better appreciation of the status of the Kaş-Kekova SPA. Only once this was achieved could all stakeholders agree on goals and objectives and frame what kind of results they wanted the MPA to achieve through new regulations of human activities at sea. Following these workshops, the planning team synthesised and prioritised the outcomes of the discussions into SMART objectives (see box). The subsequent monitoring plan was based on these objectives and designed to measure and evaluate the progress towards the achievement of desired MPA results.

A practical example of SMART objectives is provided in Annex 1 in the management plan of Telašćica MPA, Croatia.

**A GOOD OBJECTIVE  
IS SMART:**

**SPECIFIC  
MEASURABLE  
ACHIEVABLE  
REALISTIC  
TIME-LIMITED**



## Lessons Learned

- Defining SMART objectives is the most important step to develop systematic and strategic management plans. SMART objectives are fundamental to successful planning for all elements of the management plan, including regulation, monitoring, business, and communication.
- Assisting stakeholders to understand their marine environment and involving them in decisions on goals and objectives will improve compliance with new regulations.
- Prioritising management objectives is crucial when human and/or financial resources are limited.



## Challenges Identified

- Selecting goals and objectives can be a long and complex process. Maintaining strong and consistent participation can be challenging, especially for those stakeholders not used to attending long meetings. To manage this, the planning team must have a clear understanding of the meeting goals and can opt to employ an external facilitator.
- When scientific information is limited, it can be a challenge drafting SMART objectives. Adaptive management allows managers to review implemented management activities, acquire new knowledge, and re-define MPA objectives.
- Managers often have problems in defining SMART objectives, especially those that are related to habitats and species. Collaboration with individual scientists or universities should be established to support this planning phase.





## Develop a zoning plan

Marine zoning is a valuable tool to regulate specific uses and human activities at sea and reduce conflicts among users, while addressing conservation objectives in MPAs. The active participation of stakeholders and user groups is crucial to achieving a mutually acceptable and successful zoning plan.



**ALL PARTIES  
PARTICIPATED TO  
CREATE A ZONING  
PLAN THAT WORKS**

### CASE STUDY: CREATING A MARINE ZONING PLAN THROUGH A CONSULTATION PROCESS IN TAZA NATIONAL PARK, ALGERIA

The Taza National Park pioneered the first marine zoning plan in Algeria for the area adjacent to the existing terrestrial Park. Park staff worked closely with scientists from National Universities, the local fishing department, and the Algerian fishery authorities represented by the Coast Guard. In addition, they requested the support of a marine biologist who had extensive experience in Mediterranean MPA design and also acted as facilitator in key consultation meetings.

Considering that the local economy at Taza NP was mainly based on artisanal fishery, the planning team worked to develop a multiple-use zoning scheme, to meet both protection of sensitive habitats and creation of specific areas for sustainable development. Nevertheless, they were aware that by proposing a zoning plan with closed fishing areas, local artisanal fishermen would have strongly opposed the plan, as their job and livelihood would have been put at risk. Park staff decided to embark on a long consultation process with fishermen, inviting them to actively propose solutions for future regulations. Fishermen received all the necessary information about their rights and also about the real possibility of increased fish catches once the MPA was in place. In addition, the Park launched a parallel initiative to develop ecotourism activities in the area to increase future revenue for people who could be negatively affected by the new fishery regulation.

## In Algeria, the two-year consultation process was carried out in multiple phases

### 1 Creation of the Advisory and Consultation Committee

- The Committee included key representatives from three MPA municipalities (fishermen and fishery authorities, tourism sector authorities, and local administrators)
- Committee members helped the scientists and planning team better understand the issues and concerns of different economic sectors

### 2 Development of the first draft zoning plan

- The planning team prepared a draft for the location of the different zones on a map and proposed regulations of human activities and designation of uses

### 3 Negotiation process

- The proposal was submitted for review to the Advisory and Consultation Committee
- Long and difficult discussions took place and the planning team facilitated the negotiations to review the first proposal and reach a general agreement
- To collect comments from a wider audience, a public hearing preceded the finalization of the zoning

### 4 Zoning plan finalization

- Park staff incorporated all comments and meeting outcomes to produce a final zoning plan to be included in the management plan and submitted to relevant authorities
- The no-take zones were smaller compared to the first proposal
- There was a large consensus to protect the important habitats for key commercial species within no-take zones

## Zoning plan of Taza National Park, proposed through a consultation process, included three types of zones

### Peripheral zones

**Characteristic**

- Low protection

**Function**

- Sustainable development

**Surface**

- 65.5%
- 6,293ha

### No-take zones

**Characteristic**

- High protection

**Function**

- Conservation
- Repopulation

**Surface**

- 13.5%
- 1,299ha

### Buffer zones

**Characteristic**

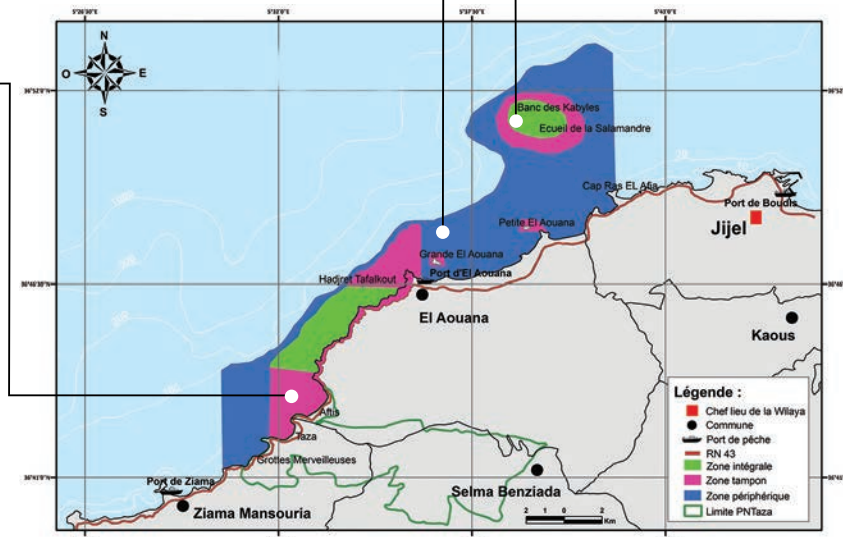
- Special protection (small islands and key coastal areas)
- Average protection

**Function**

- Education and training
- Protection of key resources

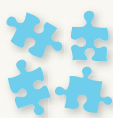
**Surface**

- 21.0%
- 2,011ha



## Lessons Learned

- Zone boundaries should be clearly defined and easy to interpret (i.e., straight lines or depth contours); otherwise compliance and enforcement may become difficult.
- If national legislation does not include MPA zoning, local ordinances or regulations can be used to start implementing and enforcing regulations agreed among stakeholders.
- Through a participatory process, different user groups will better understand reciprocal needs and concerns (e.g., fishermen versus dive operators), which, in turn, can reduce conflict.
- Patience, respect, simple communication, persistence, and listening skills are required from the planning team to go through the entire process. Dialogue with stakeholders should focus on solutions that benefit all.



## Challenges Identified

- MPA compliance and support is the result of a process that can only be accomplished when MPA benefits (e.g., fish density increase) can be shared among stakeholders.
- Too often, external consultants are employed to prepare zoning plans because MPA managers feel that a participatory process is too difficult and consensus is not likely to be reached. However, building trust and addressing conflicts is necessary to prepare a solid ground for future implementation of MPA regulations.
- When there is no tradition of community-based management and/or stakeholder involvement, capacity needs to be built by developing individual skills and knowledge.
- Negotiations with local stakeholders can be difficult. The planning team should be well prepared to discuss alternative zoning solutions, keeping in mind recommendations by scientists.





## Develop a communication strategy for MPAs

Active and frequent communication is required to inform stakeholders about MPA regulations, build ownership and trust, increase participation, and change behaviour. A good communication plan is critical to promote the MPA with tourists, the local community and other stakeholders, and will thereby facilitate compliance and bring revenues.



### KEY AUDIENCES WERE IDENTIFIED

- MPA management authority
- Hotels
- Fishermen
- Rental apartment owners
- Restaurants
- Dive shops
- Tourists

## CASE STUDY: TOWARDS MORE EFFECTIVE COMMUNICATION FOR LASTOVO ISLANDS NATURE PARK, CROATIA

Lastovo Islands Nature Park is the youngest MPA in Croatia. Since its establishment in 2006, the Park had not invested in promoting its role in protecting the marine environment. Local stakeholders had little conservation awareness and viewed visitor entrance fees as the only monetary value of these islands.

With the support of the MedPAN South Project, the NGO Association Sunce analysed the communication needs of the Lastovo Islands Nature Park and developed a series of recommendations for the communication strategy. The recommendations can be used by Park staff as a baseline to develop a more structured efficient Communication Plan. The staff of Association Sunce acquired the skills to do this analysis through capacity building training events and mentoring. They learned how to design an effective strategy, understand their target audience, and develop realistic activities tailored to the MPA objectives.

Identification and analysis of key target audiences constituted the basis to develop communication activities. For example, the planning team clarified how each audience can be best reached by looking at their role and opportunities in the MPA, understanding their current mind-set, and which messages and tools would be effective to motivate them to adopt the MPA approach. Development of a communication timeframe and budget was part of the communication strategy.

### Example of a communication strategy targeting fishermen

#### Who are they?

- Approximately 45 commercial fishermen inside the Park
- 200-300 recreational fishermen (residents and non-residents) in the area

#### Objectives

- Raise awareness on sustainable fishing practices and fish stock values for other users (i.e., divers, general public)
- Gain confidence in the long-term benefits of no-take zones
- Halt illegal fishing

#### Key messages

- No-take zones = preservation of fish stock. Not a myth, but a long-term investment. Fish population will grow, but will need to be regularly monitored
- Respect the regulations
- Share the sea with other users
  - Illegal fishing seriously undermines the common interest of achieving sustainable fisheries

#### Activities

- Organize formal and informal meetings with fishermen
- Ensure that fishermen are able to participate in fish stock monitoring
- Provide first-hand observations of no-take zones by arranging visits to other MPA fishermen and supporting the dissemination of their experience
- Create a network of fishermen ambassadors to disseminate the principles of sustainable fishing
- Support fishermen in communicating their needs and interests to media and decision-makers



#### Tools

- Informal meetings
- Easy-to-understand fact sheets and videos on monitoring results, MPA values, and sustainable fishing



## Lessons Learned

- The communication strategy should be specific to the MPA, so that messages are tailored for each target audience. This avoids ineffective communication products that waste time and money.
- Although managers are not required to be professional communicators, basic knowledge can be easily acquired to develop a meaningful communication strategy and manage the collaboration with external experts.
- The communication strategy should include an evaluation process so that the plan can be updated and improved on the basis of feedback received and changes in target audience behaviour.

*“In the end, we will conserve only what we love, we will love only what we understand and we will understand only what we are taught.”*

Baba Dioum  
Senegal conservationist  
IUCN meeting in 1968

(Quote from the communication strategy of MedPAN South Pilot Project in Croatia prepared by Association Sunce and available at: [www.sunce-st.org](http://www.sunce-st.org); [www.panda.org/msp](http://www.panda.org/msp)).



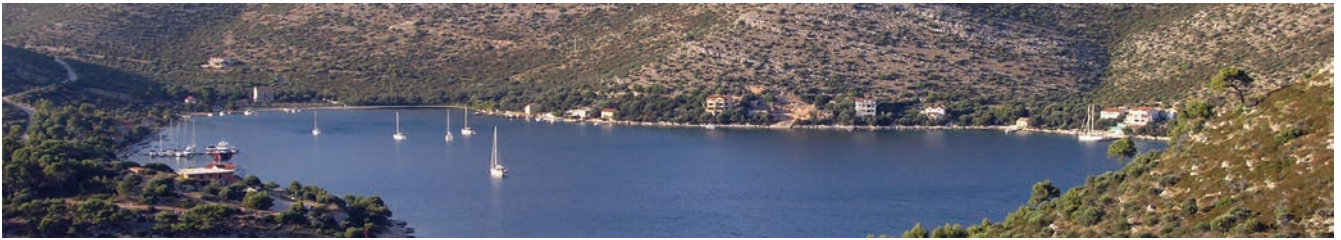
## Challenges Identified

- Communication is often perceived as a low priority and subsequently, communication activities are often implemented too late in the process of management planning and seldom regularly maintained.
- Funds are usually not available to collaborate with professional communicators to develop specific strategies, and consultants with MPA expertise are rare and expensive.
- In developing a communication plan, the most difficult task was drafting effective messages. A number of consultation meetings and specialist support was required to create specific messages for each target audience.

Park staff from Lastovo and Brijuni shared their experiences and viewed examples of effective communication.







## Develop coordinated monitoring efforts

Monitoring is fundamental for keeping track of the effectiveness of management actions in achieving MPA objectives. To inform management approaches and objectives and monitor progress towards achieving them, it is important to have standard monitoring plans. These plans should target sensitive species and biological indicators that can provide a rapid assessment of how resources and the environment are changing over time.



**THE MONITORING  
PROTOCOL WAS  
DESIGNED TO BE  
SIMPLE, RAPID,  
NON-DESTRUCTIVE,  
REPLICABLE, AND  
LOW-COST**

*“MPAs cannot be managed effectively without proper monitoring programmes that inform how physical, ecological, biological and socio-economic systems change over time.”*

Ivan Guala  
International Marine Centre,  
Oristano, Italy

To learn more about results, methodology, and additional guidelines about seagrass monitoring and management, visit [www.panda.org/msp](http://www.panda.org/msp)

Marine Nature and National Parks in Croatia (blue boxes).

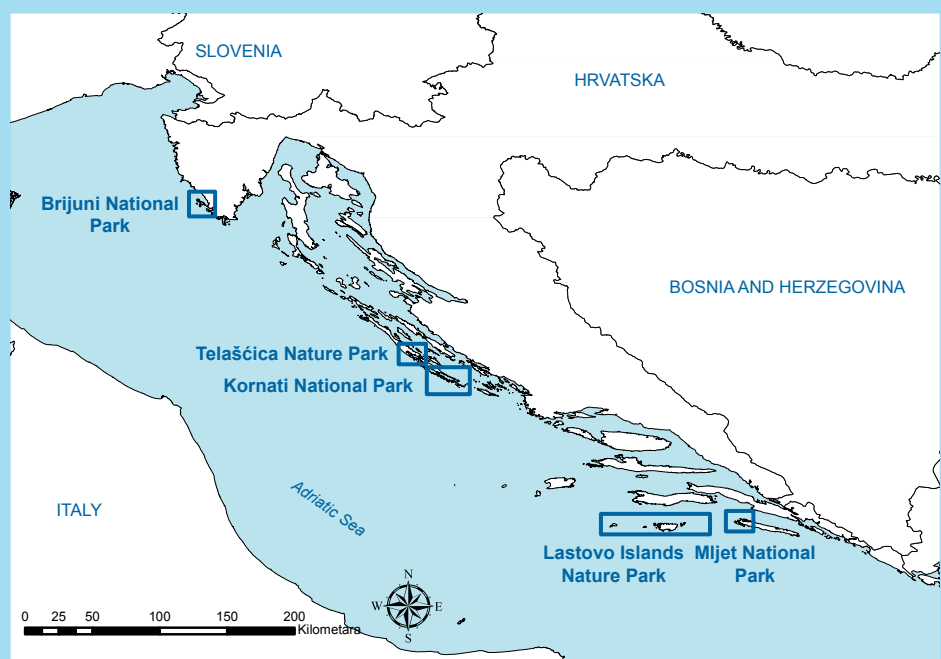
## CASE STUDY: MONITORING OF SEAGRASS MEADOWS IN CROATIAN MPAs

The first standardised monitoring of neptune grass (*Posidonia oceanica*) was developed for the Croatian MPA network and implemented in four MPAs (Brijuni and Mljet National Parks, and Telašćica and Lastovo Islands Nature Parks). Although, monitoring protocols for seagrass meadows were available and widely used in Mediterranean MPAs, this was the first time that MPAs within one country applied a standard protocol that allowed data comparison.

This first assessment provided (i) a baseline for the MPA monitoring plan, (ii) conditions of disturbance in locations highly frequented by recreational boaters, (iii) additional sources of threat (i.e., sewage outfalls), and (iv) proposed conservation measures for *P. oceanica* and solutions for boating management.

Based on the first set of results, the following practical recommendations were provided to MPA managers:

- Monitoring of *Posidonia oceanica* meadows should be done on a regular basis to record long-term changes of habitats and their conservation status.
- Complementary monitoring of boat frequentation in order to assess the effective pressure of anchoring on meadows should be carried out. Results should be used to better design regulations for boat anchoring and frequentation.
- Appropriate mooring systems should be installed to minimise the pressure of anchoring.
- Boaters should be educated on the best methods for anchoring on seagrass beds and how they can contribute to the conservation of this important habitat.







## Lessons Learned

- Standardised monitoring plans can strengthen MPA networks through exchanging lessons learned, providing access to a wider set of experts, comparing data, and reducing costs.
- By including local people in MPA monitoring activities (i.e., dive operators, conservation volunteers), the cost of monitoring is reduced and their sense of stewardship increases.
- Results of regular monitoring should be communicated by managers to all MPA stakeholders to demonstrate the benefits of management decisions.



## Challenges Identified

- Lack of financial resources is often the cause of inadequate monitoring. One means of overcoming financial limitations and still providing useful information for adaptive management is long-term monitoring that alternates between indicators over time (e.g., each indicator once every 2–3 years).
- Although socio-economic parameters are rarely monitored, they can dramatically affect the outcome of MPA implementation. The network of Mediterranean socio-economists working on MPA assessments is growing and is accessible.
- Especially in new MPAs, the internal capacity of staff cannot cover all fields of expertise to develop and implement monitoring plans. Collaboration between scientists and MPA staff is crucial to design monitoring plans relevant to management needs, based on sound science, and efficient in terms of cost and time needed to implement the plan.
- Collaboration with volunteers provides valuable support for monitoring. Plan adequate time and resources to train and mentor volunteers before and during field activities.

*A common two-banded seabream (Diplodus vulgaris) finds shelter in a healthy seagrass meadow of Posidonia oceanica.*







## Scale up to a network of MPAs

Individual MPAs benefit from being part of a network of MPAs. Creating a national network of MPAs increases the management and administrative efficiency through standardised management practices, information and knowledge sharing, and improved collaboration among different sectors.



**NGOs CAN BENEFIT FROM THEIR INDEPENDENT STATUS TO ACT AS FACILITATORS BETWEEN VARIOUS SECTORS AND STAKEHOLDERS**

*Marine National and Nature Parks of Croatia that worked together within the MedPAN South Project.*

*“This is one of our best protected area management projects at the Ministry. Few projects feature such planned outputs, and such intensive and productive intersectoral cooperation.”*

Loris Elez, Head of the Protected Areas Dept.  
Ministry of Environmental and Nature Protection

## CASE STUDY: CROATIAN MPA NETWORK IMPROVES QUALITY OF MPA MANAGEMENT

Croatia is one of the few countries in the Mediterranean where all existing MPAs are working together to improve the quality of their management in a coordinated fashion. Although, the current system is not yet an ecological network of MPAs, the active collaboration among managers created the opportunity to standardise approaches, share practices, and maintain a platform for dialogue that benefits all MPAs.

During the MedPAN South Project, managers of five MPAs and representatives from national authorities (State Institute for Nature Protection, Ministry of Environmental and Nature Protection, and County authorities) developed their management plan through a harmonised approach and a standard template. This four year process was facilitated by the NGO Association Sunce under the responsibility of the Ministry. The development of the management plan entailed meetings and consultations to identify shortfalls in national legislation, clarify terminology, and prioritise the needs at both the MPA and national level related to the management, surveillance, monitoring, and evaluation of the marine park. An extract of the Management Plan developed by Telašćica Nature Park is available in Annex 1. It provides a practical example of the work done in Croatian MPAs.



**Outcomes of this process included:**

- MPA management plans designed in parallel with comparable marine zoning frameworks, monitoring protocol principles, evaluation and revision processes, and financial plans.
- Management planning based on best practices developed in Croatian terrestrial Parks and MPAs worldwide.
- Stakeholder engagement through the design phase and subsequent engagement secured implementation of management activities.
- Management plans included future cooperation among MPA authorities, nature protection institutions, NGOs, research centres, and other sectors.

**Benefits of this process included:**

- Increased political support for marine related issues.
- Strengthened sense of ownership of and responsibility for MPAs.
- Active democratic and participatory processes to address multiple-use conflicts among local stakeholders.
- Improved capacity of MPA staff.
- Raised awareness of the importance and roles of MPAs at the local and national level.
- Increased communication and knowledge sharing among MPA staff.
- Clear guidelines for development of future MPA management plans.
- Integration of MPA managers and relevant institutions in MedPAN, the network of the Mediterranean MPA managers.



## Lessons Learned

- Individual MPAs can benefit by working within a collaborative network enabling knowledge exchange, greater access to experts and collaborators, and reduced costs.
- An MPA network is a network of people. Building trust and partnerships requires time and effort, but facilitates future work.
- At the national level, nature conservation authorities can be motivated to work with an MPA network because they can simultaneously address major administrative, legislative, and financial constraints. This, in turn, creates an efficient governance structure and higher commitment at the national level.



## Challenges Identified

- Working simultaneously with geographically distant MPAs with different institutional capacities, motivations, political set-up, and protection levels can be challenging. Relatively long projects proved to be flexible and able to best address those constraints.
- Too often, there is not consensus on management plan standards at the national level. Development of methodology, management plan structure and details, and the role of management plans with respect to other planning and regulatory documents can significantly improve the quality of the daily management and coordination at national level.
- Although a management plan is a legally binding document in many countries, much has to be done to improve the legislation and institutional coordination for its implementation and enforcement.



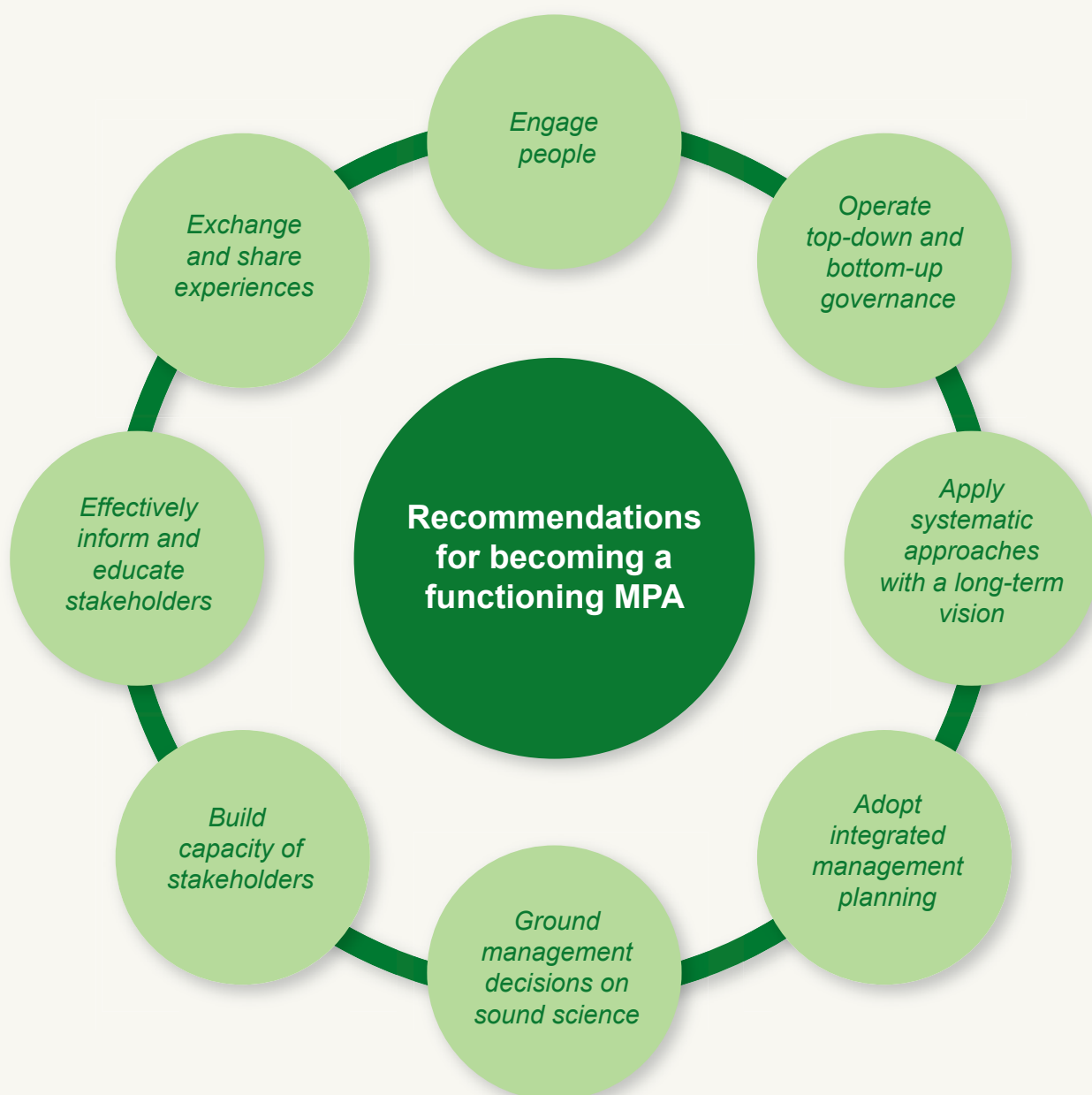
## CHAPTER 3: RECOMMENDATIONS BASED ON LESSONS LEARNED





# Recommendations for becoming a functioning MPA

Managers and practitioners from the countries involved in the MedPAN South Project (Algeria, Croatia, Libya, Tunisia, and Turkey) have built significant capacity to improve the management of their marine protected areas (MPAs) in the south and east Mediterranean. Using the experience gained and lessons learned from these MPAs, this post-analysis of the MedPAN South Project has resulted in eight key recommendations to assist those working towards creating functioning MPAs.



## 1. Engage people

Although challenging and time consuming, the engagement of stakeholders is the most important recommendation for the success of an MPA. Representatives of natural resource agencies, conservation managers, research centres, and communities should be involved from planning through to implementation of the management plan. Their engagement provides valuable support to the decision-making process, reinforces the sense of ownership and responsibility, creates solid partnerships, and facilitates future compliance on agreed regulations.

## 2. Operate top-down and bottom-up governance

Securing the support and commitment of decision-makers is crucial to the development of a credible management plan. Equally important is securing the support and commitment of local stakeholders in both finding sustainable solutions for long-term benefits, and having them agree to the new regulations. The combination of the approaches becomes decisive when external constraints hinder high-level commitments.

## 3. Apply systematic approaches with a long-term vision

A key success factor of a functioning MPA is the strategic planning of management activities based on good practices that should be adapted to each context. Such a systematic approach is particularly important when human and financial resources are limited, providing focus on priorities and thereby maximizing efficiency.

## 4. Adopt integrated management planning

A functioning MPA management plan should consider ecological, social, and economic goals related to coastal, terrestrial and marine resources. The human dimension should be integrated by recognising that people are key components of an MPA.

## 5. Ground management strategies on sound science

To achieve successful conservation targets, the establishment and management of MPAs should be based on sound scientific data describing the site (e.g., biodiversity, socioeconomic indicators). This requires open dialogue between scientists and managers to ensure adaptive management of marine resources.

## 6. Build capacity of stakeholders

Management planning requires a wide range of skills, including resource management and conservation, facilitation and conflict resolution and communication. Training programmes on these topics should be developed for both the team in charge of management planning, and those stakeholders involved in the planning process. Training combined with on-the-ground experience allows all involved in the management and use of the park to build their skills and learn from each other's abilities.

## 7. Effectively inform and educate stakeholders

Communication is a key tool for management planning and changing behaviour. Effective information and education programmes engage stakeholders at the various phases of MPA development. Such engagement leads to increased awareness, trust, and ownership by stakeholders and provides a connection to decision-makers.

## 8. Exchange and share experiences

Challenges faced by managers, government agencies and resource users are typically generic across different regions and countries. Networking and exchanging experiences among MPAs is an effective tool to promote peer-to-peer dialogue. This is particularly effective for specific stakeholder groups such as fishermen and tourism operators who benefit from experiencing first-hand the value that a functioning MPA can bring to their activities and income.





Vertical cliffs of Telašćica Nature Park that host ecologically important species.



# Annex 1: Sample management plan

Learn more about the natural, cultural, and economic values of Telašćica Nature Park at [www.telascica.hr](http://www.telascica.hr)

Telašćica Bay is situated in the southeast part of the island of Dugi otok, along the eastern Adriatic Sea coast. Thanks to its extreme beauty, richness, and importance, this Bay was proclaimed a Nature Park in 1988.

In 2008, the MPA Public Institution of Telašćica Nature Park—together with the Šibenik-Knin County, State Institute of Nature Protection, the Ministry of Environment, and Association Sunce—launched the development of a new management plan for marine and terrestrial areas within the Park. The Telašćica Nature Park Management Plan was developed in consultation with the local community and extracts from the draft Plan are presented in this Annex to outline key components.

## Elements of the Park Management Plan

The Telašćica Nature Park Management Plan is divided into a number of themes that represent the main goals that the Plan aims to achieve. The goals have unique objectives with indicators that can be monitored to determine whether original goals are being achieved. Through prioritised activities, the Plan is implemented over a 10-year period (with annual reporting on progress), and with 5-yearly reviews allowing amendments to existing actions while retaining the original intention of the Plan as defined by its vision and goals. A preliminary list of institutions and collaborators for the implementation process complete the basic elements of the Plan.

### The Management Plan of Telašćica Nature Park, Croatia (adopted for 10 years)

#### Vision for Park

Telašćica Nature Park is an area known for its preserved, unique nature including coastal cliffs and inland lagoons (e.g., Lake Mir). The local people engage in traditional activities in harmony with nature, while tourists experience the island's diverse environment and enjoy its products and handicrafts.

#### Elements of Management Plan

##### Themes



##### Example

Protection and conservation of natural values and landscapes.

##### Goals



Preserve and protect valuable marine and terrestrial habitats, species, and unique landscapes through the promotion, regulation, and sustainable use of natural resources.

##### Objectives



Maintain or increase fish populations from the original baseline data provided by the monitoring plan.

##### Indicators



Catch per unit effort; weight and size of individual species in experimental catches; number, size, and species measured by visual census.

##### Activities



Implement regular monitoring of fish populations:

##### Implementation Indicators

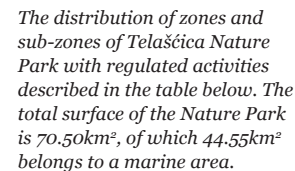
annual monitoring report

##### Collaboration

- Institute for Oceanography and Fisheries
- Expert Service of Telašćica Nature Park
- Subcontractors

##### Plan Implementation (year)

1	2	3	4	5	6	7	8	9	10
●	●	●	●	●	●	●	●	●	●
				5-year review					5-year review



**Zoning Framework for the Pacific Islands National Park**

**Legend:**

- prohibited activities
- R regulated activities
- allowed activities

Zone	1a	1b	Active Protection	Sustainable Use
<b>Zone of Strict Protection</b>				
Objective: Preserve valuable habitats and species and ensure smooth operation of natural processes without anthropogenic influences.				
<b>Zone of Active Protection</b>				
Objective: Preserve, rehabilitate, and/or restore the values of the area through engagement and management.				
<b>Zone of Sustainable Use</b>				
Objective: Promote traditional activities and sustainable tourism activities that contribute to the sustainable development of the local community of the Park.				

**Activities and their status across zones:**

Activity	1a	1b	Active Protection	Sustainable Use
scientific research	○	○	○	○
monitoring	○	○	○	○
diving	●	R	R	●
swimming	●	●	○	○
fishing	●	●	●	R
anchoring	●	●	●	R
boating	●	●	○	○
mooring on buoys	●	●	○	○
sea kayak	●	●	○	●
jet ski	●	●	●	●
marine traffic path	●	●	○	●

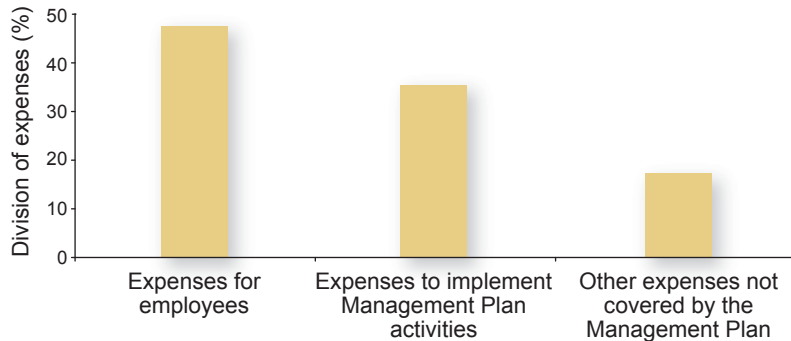


## Planned financial resources

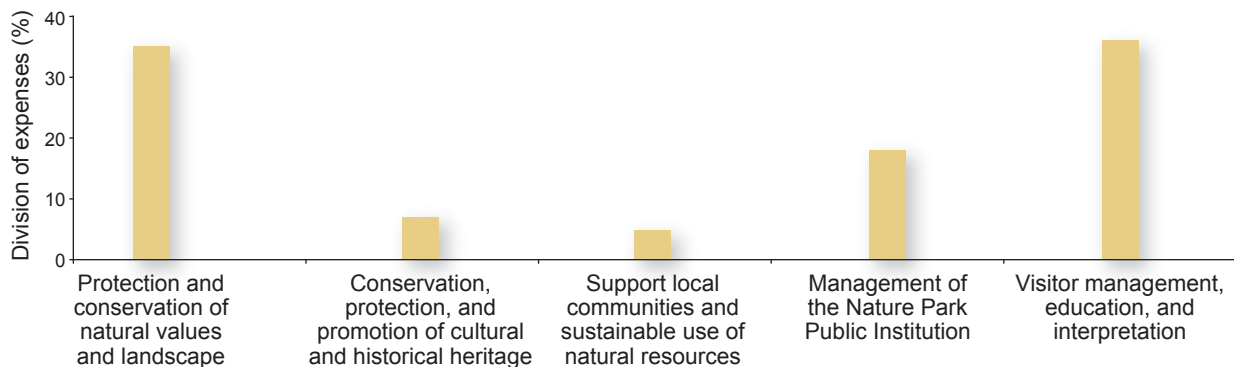
Funds to implement the work of the Nature Park Public Institution are provided from the state budget based on the Nature Protection Law. The Institution is self-funded through its own revenues (e.g., tickets, permits, professional management services, sale of souvenirs), donations, and sponsorship from various companies, as well as projects through national and international co-financing programmes.

A budget was drafted for the 10 year implementation and distributed as follows:

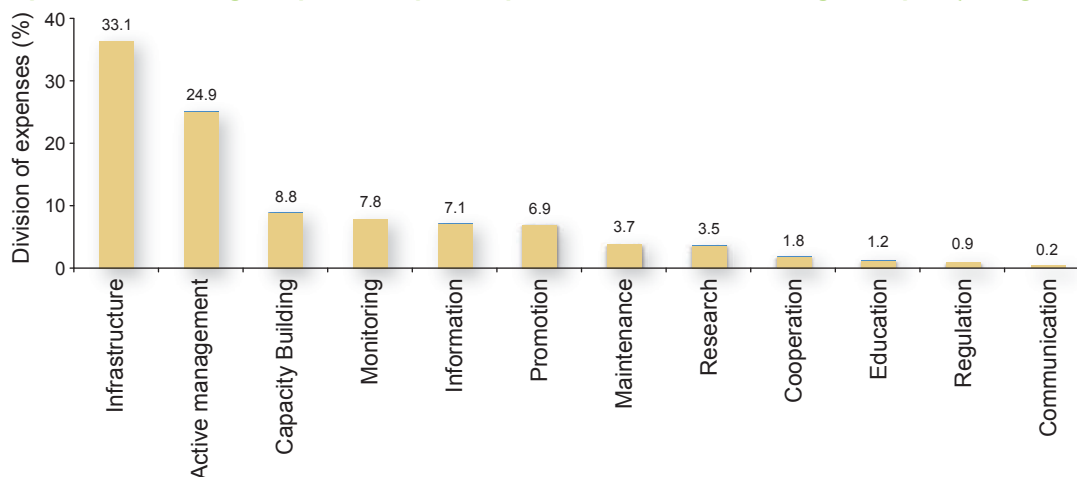
### Proportion of total budget required to implement the Management Plan (average for 10 years)



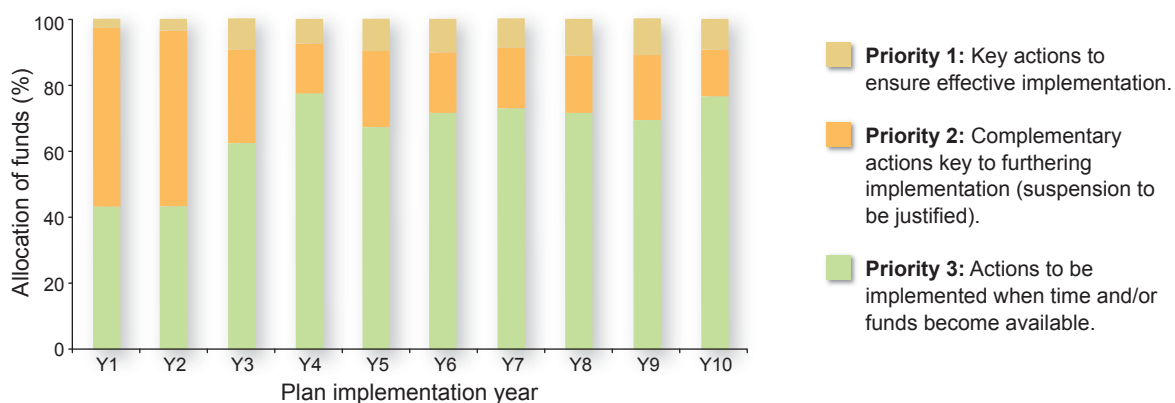
### Proportion of total budget required to implement management plan actions according to the five themes (average for 10 yrs)



### Proportion of total budget required to implement planned activities of the management plan (average for 10 years)



### Proportion of yearly budget required to implement management plan actions according to priority rankings



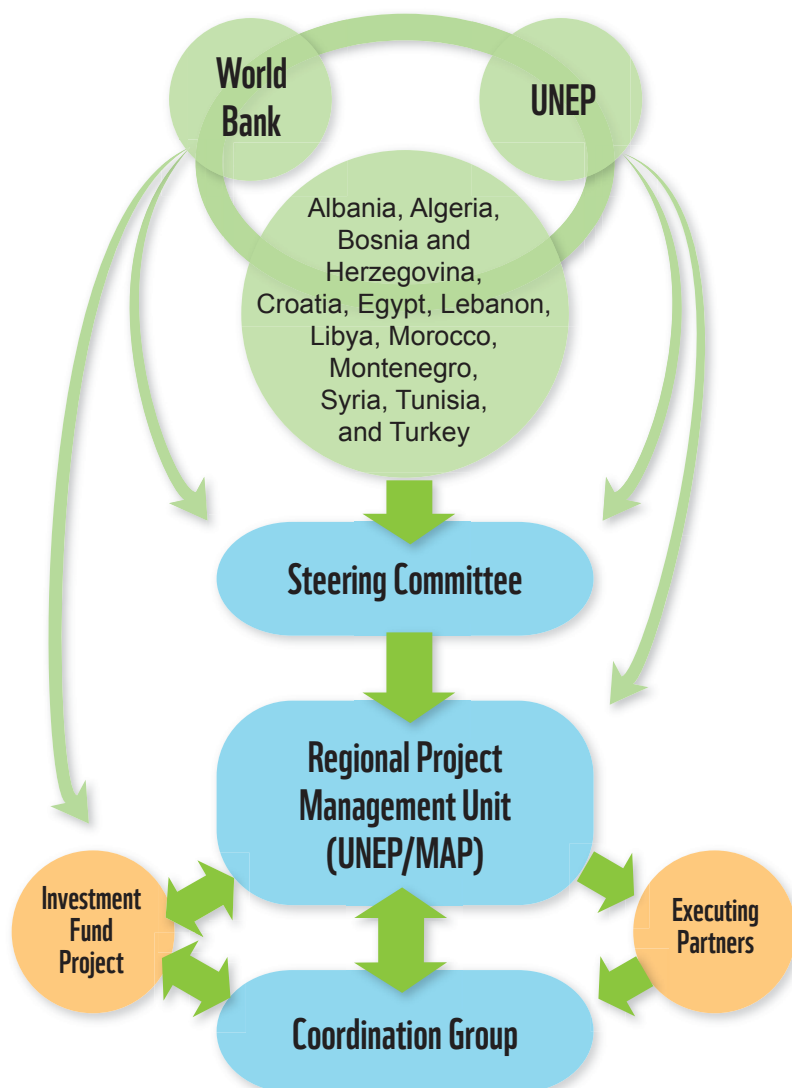
# Annex 2: MedPartnership and MedPAN South Project

The UNEP/MAP GEF Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) is a collective effort of leading organizations (regional, international, non-governmental) and Mediterranean countries working towards protecting the marine and coastal environment of the Mediterranean Sea.

The MedPartnership is articulated in several components with the overarching goal of enabling a coordinated and strategic approach to catalysing policy, legal, and institutional reforms, and procuring the investments necessary to reverse the degradation trends affecting the unique Mediterranean Large Marine Ecosystem, including its coastal habitats and biodiversity.

WWF's MedPAN South Project falls under Component 3.1 of the MedPartnership ([themedpartnership.org](http://themedpartnership.org)) that aims at maintaining the long-term function of the Mediterranean Large Marine Ecosystem through the implementation of an ecologically-coherent network of protected areas for the sustainable use of renewable marine resources.

The MedPartnership has been instrumental in catalysing the political commitment needed to advance Mediterranean countries on the SAP-MED and SAP-BIO adopted by the Contracting Parties of the Barcelona Convention.



*Project structure and coordination mechanism of the MedPartnership.*



## The MedPAN South Project

The MedPAN South Project (2009–2012) is a collaborative effort bringing together more than 20 partner organizations to improve the management effectiveness of Marine Protected Areas (MPAs) in the south and east of the Mediterranean and to support the creation of new ones.

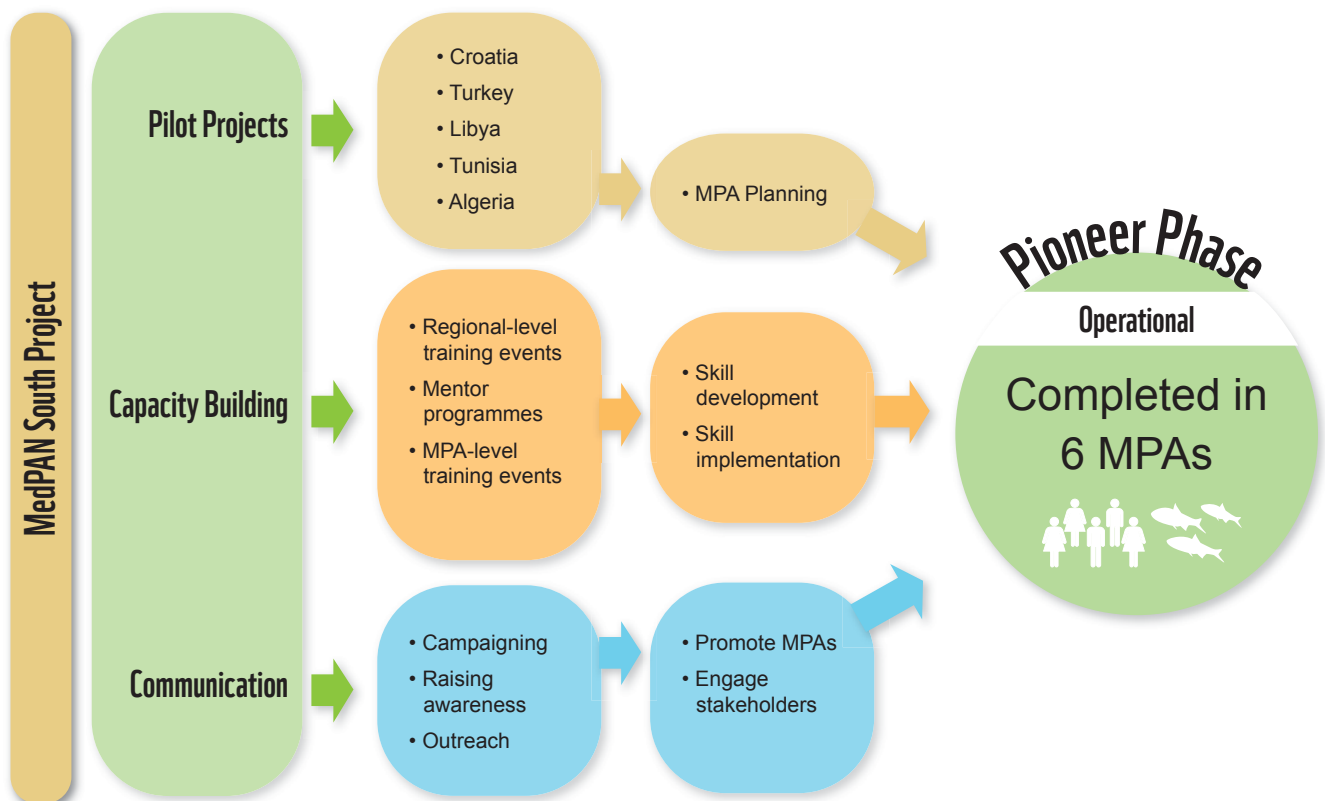
### Objectives:

- Support countries in the south and east of the Mediterranean to improve the management effectiveness of their MPAs;
- Promote the establishment of new MPAs; and,
- Strengthen MedPAN, the Mediterranean network of MPA managers.

### Targeted actions:

- Pilot projects in Algeria, Croatia, Tunisia, and Turkey to plan and develop effective MPAs (see page 3);
- A pilot project in Libya (jointly with UNEP MAP RAC/SPA) to establish new MPAs; and,
- A comprehensive capacity building programme (at regional, national, and site level) to develop the skills of MPA practitioners and advance the process of MPA management planning.

MedPAN South Project structure and major achievements.



## Source information

- Abdulla A., Gomei M., Maison E., Piante C., 2008. Status of Marine Protected Areas in the Mediterranean Sea. IUCN, Malaga and WWF, France. 152 pp.
- Ainbaziz M., Sakher S., 2010. Caractérisation des fonds des coralligène et de la flore associée aux écosystèmes de l'herbier a *Posidonia oceanica*, a l'ouest de Jijel. Commandée par Parc National de Taza 123 pp.
- Badalamenti F., Ben Amer I., Dupuy De La Grandrive R., Foulquie M., Milazzo M., Sghaier Y.R., Gomei M., Limam A., 2011. Scientific field survey report for the development of Marine Protected Areas in Libya. Commissioned by WWF MedPO/ UNEP/MAP/RAC/SPA. 32 pp.
- Basak, E., 2012. Assessing the effects of the Kaş-Kekova Specially Environmental Protected Area (SEPA) on the sustainable development of the surrounding area, in Plan Bleu (in Press), The effects of preserving the coastal and marine environment for the local sustainable development—the case of Mediterranean Marine Protected Areas. Commissioned by Plan Bleu. 42 pp.
- Belbacha S., Ramos Esplá A., 2012. Inventaires des peuplements de coralligène de l'aire marine de Taza (Wilaya de Jijel). Commandée par Parc National de Taza. 115 pp.
- Belbacha S., Ramos Esplá A., Mechekkef Y., Bourouis M., 2012. Rapport d'enquête sur les abris de pêche du Parc National de Taza. Commandée par WWF-MedPO/Parc National de Taza. 14pp.
- Carić H., Gatti P., 2011. Report on the research on tourism in Lastovo Islands and Telašćica Nature Parks Commissioned by Association Sunce/WWF MedPO. 4pp.
- Chakour S., 2011. Étude socio-économique Création d'une aire marine protégée. Commandée par Parc National de Taza. pp. 83.
- Di Carlo G., Lopez A., Staub F., 2012. Capacity building strategy to enhance the management of MPAs in the Mediterranean Sea. Commissioned by WWF MedPO/MedPAN/UNEP/MAP/RAC/SPA. 19 pp. + Annexes.
- Environmental Protection Agency for Specially Protected Areas (EPASA), 2012. Kaş-Kekova Special Environmental Protection Area Socio-Economic, Historical and Cultural Assets Study Final Report. 162 pp. + annexes.
- French Global Environment Facility (FGEF), 2010. Marine Protected Areas—Review of FGEF's cofinanced project experiences. Assessment carried out by Thierry Clément, Catherine Gabriele, Jean Roger Mercier and Héloïse You. Study coordinated by Julien CALAS.
- Gabrié, C. and MedPAN Secretariat. 2012. The Status of Marine Protected Areas in the Mediterranean Sea 2012. Commissioned by MedPAN and UNEP/MAP/RAC/SPA.
- Ghariani F., 2012. Etude sur les mécanismes de financement durables et réalisation d'un business plan pour l'aire protégée marine et côtière de Cap Négro-Cap Serrat. Commandée par WWF MedPO. 51 pp. + annexes.
- Grimes S., 2009. Diagnostic environnemental de la zone côtière de Taza (Wilaya de Jijel) WWF-MedPO/Parc National de Taza: 65 pp + annexes.
- Grimes S., 2010. Fréquentation des plages de la zone de Taza. Commandée par WWF-MedPO/Parc National de Taza. 38 pp + annexes.
- Guala I., Di Carlo G., Jakl Z., et al., 2012. Monitoring of *Posidonia oceanica* meadows in Croatian Protected Areas. Commissioned by WWF MedPO/Association Sunce. 49 pp. + annexes.
- Kacher M., 2010. Vers un plan d'aménagement et de gestion des pêcheries de la future aire marine protégée de Taza. Commandée par WWF MedPO/Parc National de Taza. 66 pp.
- Moulai R., 2010. Etude des oiseaux de mer de la zone marine adjacente au parc national de Taza dans le cadre de son classement comme aire marine protégée. Commandée par Parc National de Taza. 78 pp.
- Pergent G., 2010. Parc National de Taza - Formation sur les SIG marins et le suivi de l'herbier de Posidonies. Commandée par WWF-MedPO/Parc National de Taza. 6pp.
- Pergent G., Bonacorsi M., Marengo M., 2010. Parc National de Taza—Cartographie des principaux peuplements et types de fonds. Commandée par WWF-MedPO/Parc National de Taza. 6pp.
- Ramos Esplá A., 2010 Biodiversité Marine du Parc National de Taza. Commandée par WWF-MedPO/Parc National de Taza. 69pp + annexes.
- Stagličić N., Matić-Skoko S., Pallaoro A., 2012. Expert opinion on the effectiveness of the protection of coastal fishery resources in the Nature Park “Lastovo Islands” Commissioned by Association Sunce/WWF MedPO. 10pp.
- Tural U., 2010. Results of Marine Biodiversity Research at Kaş-Kekova SPA, Turkey. Commissioned by WWF Turkey. 26pp.
- WWF-Turkey, General Directorate of Natural Assets for Protection, 2012. Kaş-Kekova Marine Protected Area Management Plan. Ed: Lopeç Onat, A.



## Abbreviations

APAL	Agence de Protection et d'Aménagement du Littoral
EU	European Union
FGEF	French Global Environment Facility
GDNAP	General Directorate for Natural Assets
GEF	Global Environment Facility
GIS	Geographic Information System
IUCN	International Union for Conservation of Nature
MAP	Mediterranean Action Plan
MCPA	Marine and Coastal Protected Area
MedPAN	The network of managers of Marine Protected Areas in the Mediterranean
MPA	Marine Protected Area
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
RAC/SPA	Regional Activity Centre for Special Protected Areas
SAP BIO	Strategic Action Programme for the Protection of Biological Diversity in the Mediterranean Region
SAP MED	Strategic Action Programme for the Mediterranean Sea
SC	Steering Committee
SPA	Specially Protected Area
Sunce	Association for Nature, Environment, and Sustainable Development
UNEP	United Nations Environment Programme
WWF	World Wide Fund for Nature

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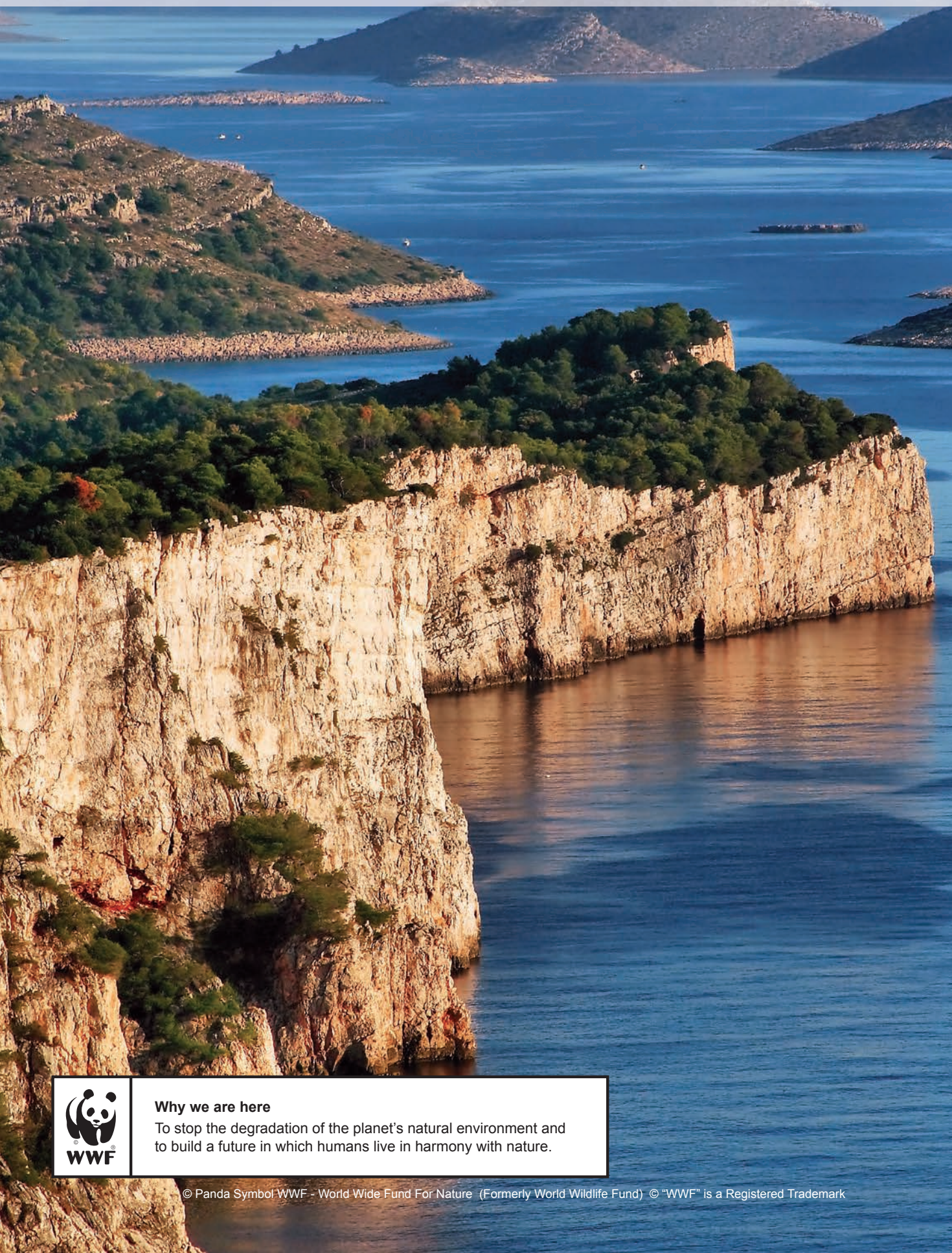
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# Making Protected Areas Work

## Lessons Learned in the Mediterranean



### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.