

MPAs in the Mediterranean Sea as a driver for local development

Med Sea Alliance

// Summary

Marine Protected Areas (MPAs) are essential for safeguarding the Mediterranean's unique and fragile ecosystems.



Although MPAs currently cover 8.8% of the Mediterranean Sea—close to the former Aichi target of 10%—this remains far below the "30x30" goal established under the Kunming-Montreal Global Biodiversity Framework, which calls for protecting 30% of land and sea by 2030.

This study estimates the socio-economic benefits of coastal MPAs at the national scale for Spain, Italy, Tunisia, and Morocco. The selected countries represent geographic diversity and different levels of MPA development.

The analysis relies on the MEDTRENDS framework, which maps maritime sectors across the Mediterranean. To capture the full range of MPA benefits, additional categories—biodiversity and ecosystems, and society and local communities—were included. **These reflect non-market values such as cultural benefits, environmental quality, and climate resilience.** Many of these impacts cannot be monetized, yet they are crucial for understanding the true benefits of MPAs and for determining public acceptance.

The results show that well-managed MPAs produce significant socio-economic benefits. Under full implementation scenarios, benefits increase by 25% to 36% across the countries assessed. In contrast, removing protection leads to reductions of 44% to 50%, and environmental degradation reduces benefits by up to 75%.

Spain and Italy show higher benefit values due to stronger economies, larger conservation budgets, and higher willingness to pay for environmental protection. However, although Italy shows relatively higher benefit values due to a stronger economy and higher willingness to pay for environmental protection, national MPAs still face structural funding gaps, particularly regarding stable staffing and long-term management capacity. Tunisia displays lower absolute benefit values but still stands to gain substantially—percentage-wise—from stronger protection measures.

At the sectoral level, the largest benefits derive from collective goods such as biodiversity, ecosystem services, CO_2 sequestration, and contributions to society and local communities, including coastal protection.

> *Under full implementation scenarios, benefits increase by 25% to 36% across the countries assessed. In contrast, removing protection leads to reductions of 44% to 50%, and environmental degradation reduces benefits by up to 75%.*

Tourism and recreation also show strong gains, and small-scale fisheries, in addition to being allowed to fish within the boundaries of marine reserves, can benefit from the spillover effect, although results vary depending on location and timescale.

Beyond economic metrics, MPAs generate significant social benefits. They contribute to physical and mental well-being, enhance environmental quality, and often lead to improved infrastructure and services in local communities. MPAs support livelihoods through sustainable tourism and fisheries, build scientific knowledge, and strengthen cultural ties to the marine environment. Social relations can also improve when MPAs establish participatory governance structures that reduce conflicts among users.

Public perception is another critical factor. MPAs frequently face initial resistance from communities and economic operators worried about restrictions. However, evidence from interviews and literature shows that perception shifts positively over time as people experience improvements in ecosystems and local opportunities. Early and ongoing dialogue, awareness-raising, and inclusive management are key to fostering long-term support.

MPAs deliver substantial socio-economic and environmental benefits, supporting biodiversity, climate resilience, and community well-being. They function as valuable national economic assets rather than barriers to development. Strengthening and expanding MPAs is therefore essential for achieving conservation goals while promoting sustainable economic growth across the Mediterranean.

ITALY

Italy's marine protected areas (MPAs) cover 10.71% of its seas, though only a small fraction is effectively managed. National MPAs face challenges including outdated regulations, limited staff, and insufficient protection measures.

Coverage & Progress

Marine protected areas cover 10.71% of Italy's marine waters. However, nationally designated MPAs, managed by the Ministry of the Environment and including sites such as the Arcipelago Toscano and La Maddalena National Parks, account for only 0.9% of the country's total marine area.

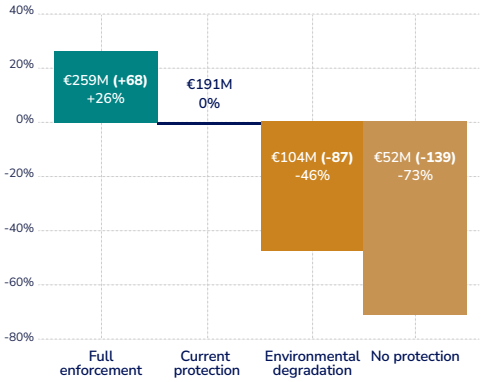
These national MPAs are generally better managed than Natura 2000 sites, yet they continue to face significant challenges, including limited scientific planning, outdated regulatory frameworks, and, in some cases, insufficient funding.

10.71%
MPA COVERAGE
(World Bank data, 2024)

4.07M
HECTARES IN TOTAL
(ISPRA, December 2025 — including all marine designations within territorial waters and the Ecological Protection Zone)

Socio-Economic Benefits

Annual socio-economic benefits of Mediterranean MPAs in Italy amount to €191 million, with potential to rise by 26% under full implementation.



Full protection: Management plans fully implemented in all national MPAs.

No protection: It is assumed that on-paper protection might still constitute a constraining factor to the exploitation of the area.

Environmental degradation: It is assumed that economic activities will still take place (e.g. fishing, tourism), although generating a smaller value due to degradation.

Management Challenges

- **Increase governmental funding to cover for a minimum number of staff** to ensure continuity to the MPA managers.
- **Some MPAs still have outdated regulations** (the first MPAs were established between the 1980s and 1990s) which should be revisited to update and harmonize them.
- **Rather than being mere 'paper parks,' certain sites benefit from protection measures;** however, these are inadequate, and additional interventions are necessary (e.g., Natura 2000 sites designated for the conservation of Posidonia).

Social Impacts

Education & cultural values: Public knowledge of MPAs has grown, while coastal residents develop emotional and cultural ties, increasing support for MPAs.

Behavior & participation: Citizens and fishermen engage in ocean-friendly practices, monitoring, research, and environmental education, fostering personal responsibility and collaboration.

Economic & social benefits: MPAs enhance tourism, recreation, and social cohesion, supporting local livelihoods and inclusion.

Case Studies

The Bergeggi Island

Liguria, Liguria

Established in 2006 at the request of the local community, this small MPA is effectively managed through collaboration between the municipality and residents.

The no-take zone has increased fish populations, while restricted access reduces overcrowding.

The MPA supports local networks, sustainable tourism like the 'Blue Path' and raises awareness through innovative tools such as live underwater camera broadcasts.

Capo Milazzo

Sicilia, Mesina

Officially managed since 2021, this MPA initially faced resistance from local artisanal fishermen. Collaboration in 2023 helped build trust, and fishermen now retain exclusive rights with minimal restrictions as fish populations increase.

Ongoing monitoring, tourism, cultural initiatives, and municipal support help integrate the MPA into Milazzo's social and economic life.

Tavolara – Punta Coda Cavallo

Sassari, Sácer

Established in 1997, this MPA initially faced strong local opposition. Trust was built after the 2003–2004 management consortium promoted dialogue and balanced ecosystem conservation with socio-economic needs.

Fishermen participated through paid monitoring and education, fostering pride, while stable leadership and political support ensured long-term community acceptance.



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MOROCCO

MPAs cover less than 1% of marine and coastal zones. Al Hoceima, the country's main MPA, spans both marine and terrestrial areas and illustrates the ecological and socio-economic benefits MPAs can provide on the southern shore of the Mediterranean.

Coverage & Progress

Morocco's marine protected areas (MPAs) cover less than 1% of its Mediterranean and Atlantic waters.

The main site, Al Hoceima MPA, encompasses 19,600 hectares of marine area and 48,460 hectares in total, including terrestrial zones, and is the country's primary example of MPA benefits.

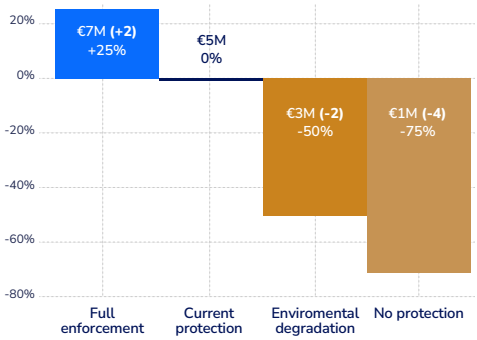
LESS THAN
1%
MPA COVERAGE

Al Hoceima
MPA

19,600
HECTARES

Socio-Economic Benefits

Annual socio-economic benefits of Mediterranean MPAs in Morocco amount to €5 million, with potential to rise by 25% under full implementation.



Full protection: Management plans fully implemented in all national MPAs.

No protection: It is assumed that on-paper protection might still constitute a constraining factor to the exploitation of the area.

Environmental degradation: It is assumed that economic activities will still take place (e.g. fishing, tourism), although generating a smaller value due to degradation.

Management Challenges

- **Very limited coverage of marine areas:** MPAs cover less than 1% of Morocco's waters.
- **MPAs support recreation and well-being:** Divers and tourists strongly value protected areas.
- **Economic benefits are modest:** Only some fishermen see higher productivity.
- **Social cohesion strengthened:** Tourism and water sports foster community ties.
- **Conflict management remains weak:** Stakeholder communication is limited; dialogue needed to reduce tensions.

Social Impacts

Ecosystem perception: Most fishermen (60%) perceive improvements in marine ecosystem health.

Well-being, recreation & cohesion: Preserved environments enhance well-being and recreation, while tourism and water sports strengthen community ties.

Economic & infrastructure benefits: MPAs support sustainable fisheries and contribute to better local infrastructure and facilities.

Governance & conflict management: Limited communication among stakeholders persists, highlighting the need for improved dialogue to support artisanal fishing and reduce tensions.

Case Studies

Al Hoceima National Park*

Tánger-Tetuán-Alhucemas

With an area of 48,460 hectares and a 40-kilometer stretch along the Mediterranean coast, it is recognised for its rich biodiversity, including the African golden wolf (*Canis lupaster*), the largest carnivore in the area, and Morocco's only colony of ospreys (*Pandion haliaetus*). Local communities, especially women, are actively involved in conservation efforts. The NGO AZIR has conducted workshops for fisherwomen, teaching sustainable fishing practices and environmental preservation. Despite challenges like habitat degradation and pollution, Al Hoceima National Park exemplifies how conservation and community development can go hand in hand. Through inclusive initiatives and sustainable practices, the park is fostering both ecological and socio-economic resilience.

**The economic benefit estimates for the Al Hoceima MPA should be interpreted with caution, as the area is currently not fully operational in practice. At present, protection measures are weakly enforced, and the figures are primarily based on extrapolations from other MPAs with higher protection levels.*

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SPAIN

Spain has exceeded 22.5% MPA coverage in the Mediterranean and shows clear economic and social benefits when MPAs are well-managed. Strong enforcement and adequate funding remain essential to maximize ecological and socio-economic gains.

Coverage & Progress

Spain is making considerable progress toward 30x30 goals. Seven new MPAs were designated in 2024 under Natura 2000, adding 9.3 million hectares (+8.7% of Spain's total MPA coverage).

In 2025, further designations added approximately 1.7 million hectares, bringing total marine protection to 22.45%.

13 NEW MPAS

11M HECTARES ADDED

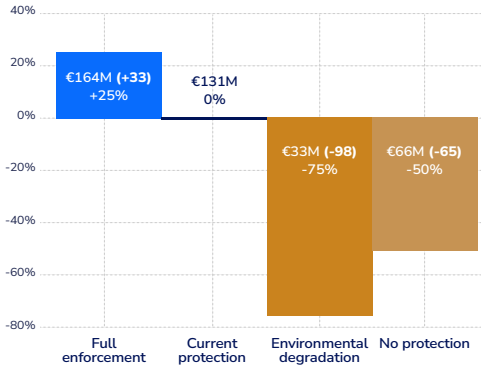
22.45% MPA COVERAGE

(Updated through December 2025)

MPAS EXPANDED FROM **12%** TO **22.45%**

Socio-Economic Benefits

Annual socio-economic benefits of Mediterranean MPAs in Spain amount to €131 million, with potential to rise by 25% under full implementation.



Full protection: Management plans fully implemented in all national MPAs.

No protection: It is assumed that on-paper protection might still constitute a constraining factor to the exploitation of the area.

Environmental degradation: It is assumed that economic activities will still take place (e.g. fishing, tourism), although generating a smaller value due to degradation.

Management Challenges

- **Lack of comprehensive management plans** overlapping responsibilities among administrations.
- **Challenges in aligning conservation measures** with traditional fishing practices, requiring dialogue and collaboration.
- **Limited budgets often cover only surveillance** not scientific monitoring or the full range of management needs, which often means that protection is not effective.
- **Strong enforcement brings recovery of marine biodiversity** but some MPAs show limited positive effects.

Social Impacts

Community buy-in grows over time while MPAs can initially spark conflicts (e.g., fishers vs. divers/scientists), public support often shifts towards active support of MPAs.

Strengthened cultural identity and social cohesion.

Improved services & infrastructure for local communities.

Case Studies

Parc Natural de Cap de Creus

Girona, Catalonia

Marine protected status boosted tourism and local economy: scuba companies grew from 2 (1990s) to 14 today.

Local businesses have also benefited from the increase in visitors. However, rising tourism is putting pressure on marine ecosystems, fishing grounds, and the local community.

New management plan should introduce stricter rules to better balance tourism and sustainability.

Nueva Tabarca Marine Reserve

Santa Pola, Alicante

Fish populations recovered, improving fishermen's catches.

Tourism opportunities expanded, boosting local livelihoods.

Creation of the MPA improved basic services (sanitation, power, tap water) for the island community.

However, overtourism is putting the protection of this emblematic site at risk, so strong measures are needed, such as a daily visitor cap.

Cabo de Palos and Islas Hormigas Marine Reserve

Cartagena, Region of Murcia

A flagship success story for fisheries recovery and spillover effects benefiting artisanal fishers.

One of Spain's top scuba diving destinations, generating significant revenues.

Initially opposed by fishers, now widely recognized and supported thanks to visible benefits.

Strong enforcement has been key- periods of weak management showed that without monitoring, gains are at risk.

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TUNISIA

Tunisia, on the southern Mediterranean shore, is advancing its marine protected areas (MPAs) despite legal, financial, and staffing challenges. Effective management actions in sites like the Kuriat Islands are already delivering measurable ecological benefits.

Coverage & Progress

Tunisia, on the southern Mediterranean shore, is steadily expanding its network of Marine Protected Areas (MPAs).

With the designation of new sites such as Kerkennah (2024) and Ras Rmal Djerba (2025), both accompanied by management plans, national marine protection coverage is now approaching 3% of Tunisia's marine waters.

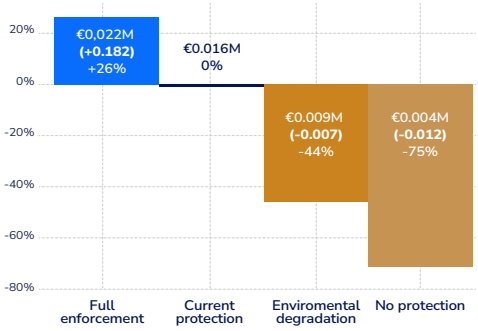
This expansion reflects growing national commitment to marine conservation, further reinforced by the "Tunisia towards 30x30" initiative launched in 2026, which aims to accelerate the designation and effective management of MPAs in line with global biodiversity targets.

BELOW 3%
MPA COVERAGE
(IUCN, 2026)

86,800
HECTARES IN TOTAL
(ProtectedSeas, 2024)

Socio-Economic Benefits

MPAs in Tunisia generate important local socio-economic benefits across fisheries, tourism, and ecosystem services.



Full protection: Management plans fully implemented in all national MPAs.

No protection: It is assumed that on-paper protection might still constitute a constraining factor to the exploitation of the area.

Environmental degradation: It is assumed that economic activities will still take place (e.g. fishing, tourism), although generating a smaller value due to degradation.

In the Bay of Monastir, within the wider influence area of the Kuriat Islands MPA, fisheries generate an estimated €29 million annually[1].

1. IUCN (2021). TUNISIA CASE STUDY. Offshore Finfish CageFarming and the Marine Protected Area of the Kuriat Islands in Monastir Bay.

Management Challenges

- **Legal and institutional framework:** the absence of legal declarations for all sites limits enforcement capacity and sanction mechanisms.
- **Financial constraints:** many management and conservation actions remain difficult to implement due to insufficient and unstable funding.
- **Human resources:** retention of skilled staff remains challenging due to low salaries, with a significant share of activities relying on voluntary or project-based contributions.
- **Co-management governance:** Marine Protected Areas in Tunisia increasingly operate under co-management arrangements between state institutions and civil society organizations, particularly NGOs.

Social Impacts

Well-being & economic benefits: Healthy marine environments support physical and mental health, recreational activities, local economies, tourism, and employment.

Infrastructure & living conditions: Projects improve water, sewage, waste management, buildings, and footpaths, enhancing daily life and work.

Knowledge, education & governance: Partnerships with universities and co-management with APAL (*Agence de Protection et d'Aménagement du Littoral / Coastal Protection and Land Planning Agency*) and NGOs foster research, environmental education, and local participation in decision-making.

Case Studies

The Zembra Marine Protected Area

Nabeul

Initially resisted by fishers, the MPA gained acceptance through sustained local engagement and the creation of a cooperative that supports sustainable fishing, funding access, and new income opportunities through markets and certification.

Around 60–70 members now participate in conservation, while education programs promote sustainability and show that protection and economic opportunity can coexist.

La Galite MPA

Bizerta

At Galite, the MPA is viewed with deep emotional attachment and nostalgia by those with historical ties to the island.

Widely admired as a pristine destination rich in biodiversity and heritage, it attracts growing recreational fishing with minimal impact, highlighting its unique value and the importance of protection.



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