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Karaburun-Sazan National Marine Park

A model of management in Albania for Marine Protected Areas

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This report was prepared for UNDP Albania as per the contract
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ABBREVIATIONS

ADF	Albanian Development Fund
AICS	Italian Agency for Cooperation and Development
CBD	Convention on Biological Diversity
DCM	Decision of the Council of Ministers
EU	European Union
FSS	Financial Sustainability Scorecard
GBD	Global Burden of Disease
GEF	Global Environment Facility
GIS	Geographic Information System
ICZM	Integrated coastal zone management
INCA	Institute for Nature Conservation in Albania
IUCN	International Union for Conservation of Nature
K-S MPA	Karaburun-Sazan Marine Protected Area
MCPA	Marine Coastal Protected Areas
MEET	Management Effectiveness Tracking Tool
MoTE	Ministry of Tourism and Environment
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
NAPA	National Agency of Protected Areas
NMP	National Marine Park
PA	Protected Area
RAPA	Regional Agency of Protected Areas
SCMCPA	Strategic Plan for Marine and Coastal Protected Areas
SPA/BP	Specially Protected Areas/ Barcelona Protocol
SPAMI	Specially Protected Areas of Mediterranean Importance
UCO	Used Cooking Oil
UN	United Nations
UNDP	United Nations Development Programme
UNEP-WCMC	United Nations Environment Programme - World Conservation Monitoring Center

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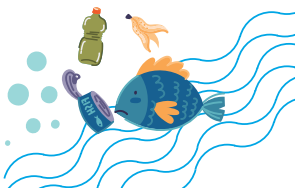


1. FORWARD

Nature protected areas are considered the most effective means in conservation of protected species, habitats and ecosystems. In addition, protected areas offer ecosystem services, such as food and water, nutrient recycling and recreational opportunities.

As a signatory member to the United Nations Convention on Biological Diversity since 1994, Albania has committed to comply with a set of global goals aimed at protecting and conserving global biodiversity, named the Aichi Biodiversity Targets, (a total of 20), arising from the CBD strategic goals:

A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

B: Reduce the direct pressures on biodiversity and promote sustainable use

C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

D: Enhance the benefits to all from biodiversity and ecosystem services

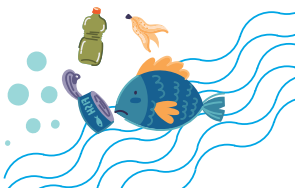
E: Enhance implementation through participatory planning, knowledge management and capacity building

In line with Aichi 11 target of the Biodiversity Convention, the National Objective for Albania was that by 2020, 17 % of terrestrial areas and 6% of marine and coastal areas to be designated as Protected Areas and to be managed in a sustainable integrated approach.

The IUCN definition of Marine Protected Areas is "Any area of inter-tidal or sub-tidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment".

According to UNEP/World Conservation Monitoring Center (UNEP-WCMC, 2022), the surface of protected areas territory in Albania has been increasing since 1960's, with a significant increase from year 1998, currently reaching a total number of 807 protected areas (including natural monuments), with a terrestrial protected area coverage of 18.59% [1]of the territory, or 5,344 km^2

1 Currently, according to the DCM No. 59. date 26.01.2022 on National Parks and DCM No. 60, date 26.01.2022 on Nature Parks, the coverage is approx. 21% of the territory, 6137.42 km^2



land area; and marine protected area coverage of 2.84%, or 318 km^2 of 11,199 km^2 total marine and coastal area.

The United Nations Development Programme in Albania has been actively involved in assisting the country to comply with biodiversity and conservation targets arising from ratification of numerous international conventions and protocols in this area. In partnership with the Ministry of Tourism and Environment and the National Agency of Protected Areas, the projects "Improving coverage and management effectiveness of marine and coastal protected areas", followed by the project "Enhancing Financial Sustainability of the Protected Areas System in Albania", since 2010, contribute to secure an effective management of Marine Protected Areas and long-term financial resources, at the same time ensuring that the protected areas are managed effectively and efficiently with respect to conservation and other complementary objectives.

This report will have an informative and awareness raising character and be prepared based on the existing project reports and other published literature, original photos and video recordings. It focuses on:

- Evidencing the issues related to the situation on marine biodiversity conservation and MPAs in Albania
- Describing the biodiversity, natural and cultural values of the MCPA's network
- Indicating and illustrating the programs and synergies for improved MPA management and conservation
- Highlighting and revealing the natural values and eco-touristic potentials of the MPA

The following chapters are organized based on the valuation of existing information, new developments in the field of protected areas, examples of best-case studies and recommendations from international organizations on management of Marine Protected Areas.

This document is structured into the following main chapters:

The first chapter describes the Karaburun-Sazan Marine National Park, the initiative taken by the UNDP MCPA project, phases I and II, to follow a proper process for proclamation of this area as the first marine protected area in Albania. The chapters that follow outline the efforts taken by the project, through a collaboration of UNDP with the Albanian Government, the Ministry responsible for the environmental and the National Agency of Protected Areas.

The main objectives of this report are organized as per the following inputs of the project:

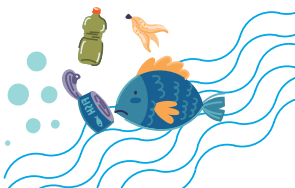
- Intensifying and strengthening management activities for Karaburun - Sazan MPA
- Community involvement through active participation
- Continuous environmental monitoring
- Promotion of sustainable tourism, eco-labelling and certification efforts
- Improvement of management effectiveness of the Karaburun-Sazan MPA

2. Project "Improvement of coverage and effectiveness management of Marine and Coastal Protected Areas"

Through the Italian Agency for Cooperation and Development (AICS) , UNDP is committed into a very important project jointly with the Ministry of Tourism and Environment (MoTE) which addresses assistance in Improving coverage and effectiveness management of Marine and Coastal Protected Areas (MCPA), is targeting Karaburun-Sazan Marine Park, as an essential complement to national network of terrestrial PAs and contributes to Albania's obligations under different UN Conventions and the EU accession process.

The project focused on three distinct, but logically and incrementally interrelated, areas of development:

a. intensifying and strengthening management activities for Karaburun-Sazan MPA to prove that MCPAs can effectively protect marine biodiversity, maintain/restore ecosystem health and provide a sustainable source of economic growth
b. replicating this model across Albania's coastal and marine areas through the development of a scientifically designed and multiple objective-based network of MCPAs;
c. strengthening the governance-based institutional support to the MCPAs network and ensuring that relevant authorities, administrations, and stakeholder groups have the necessary capacities and tools to sustain the management and monitoring of the MPCAs network



Significant achievements are made in the Vlora region by catalyzing the involvement of stakeholders and by supporting the establishment of a clear institutional and legal framework for MCPA designation and management. However, multiple stages of development are needed before an Albanian ecologically representative MCPA network is fully implemented able to provide coastal communities with sustained benefits from the marine and coastal environment.

Therefore, UNDP and MoTE are experiencing successful efforts in performing Marine Protected Areas gap analysis, which followed with the establishment of the first National Marine Park of Karaburun-Sazan (April 2010). In order to strengthen this experience, using such momentum of efforts and insights achieved into marine habitats and ecosystems assessments, the Albanian Government intends to expand the system of protected areas in Albania, by increasing it at 6 % of the coastal and marine areas coverage aiming the 10 % of Aichi target. However, indicated target and MPA approach, represent a proven methodology for the conservation of marine habitats and populations), ensuring better biogeographically representation, as well as higher management effectiveness, and diversification of revenue sources.

The project is providing support to the National Agency of Protected Areas to create a model of management for the Karaburun-Sazan MPA to be replicated in country level.

The project results and the way forward might play a valuable role for the development and implementation of actions addressing specific needs of the Karaburun-Sazan Marine Protected Area management.

The development of the MPA management capabilities to provide dedicated management services with project termination on one hand and mobilization of relevant authorities to keep pace and sustain and enhance these achievements are two areas that will contribute to strengthen the K-S MPA administration, create a model of practice and development of the MPA network.

Inter alia, the project focus is given to:

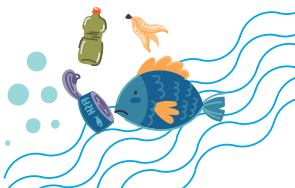
- *intensifying and strengthening management activities for Karaburun-Sazan MPA*, institutional support and ensuring that relevant authorities, administrations and stakeholder groups have the necessary capacities and tools to sustain the management and monitoring of the MPCAs network.
- *Support the tourism Eco labeling* /certification efforts and also sustainable approaches that contribute to such initiatives.

- *Considerations of environmental impacts* from the mismanaged waste streams generated from economic operators and other subjects along the Vlora Bay, revealing a very high risk for the marine ecosystem hosted in that site, as well as for the human lives and communities of this area.
- *Solid grounds are provided for further progress with the waste management standards*, specifically for used oil and plastics, their separation, collection, treatment and disposal, and costs to introduce such standards. The used cooking oil, collection and disposal is facilitated and supported along the coastline. Branding and awareness campaign are conducted among the targeted stakeholders and communities in respect to waste recycling activities.
- *Study for submarine tourism resources and shipwreck assessment*; Different underwater archaeological remains confirm the links between this area and other civilizations of the Greek and Roman periods. There are numerous shipwrecks, mainly on the western coast (including from the two World Wars), as well as amphoras close to cape Shën Nikolla on the eastern coast of Sazani island. The presence of prominent cultural and archaeological remains and shipwrecks constitute additional valuable assets for the tourism enhancement perspectives.

3. Project's contribution to intensifying and strengthening Karaburun-Sazan MPA management– a Model of replication

3.1. Karaburun-Sazan Marine Protected Area - the first MPA in Albania

Karaburun-Sazan Marine Protected Area is the first and the only Marine National Park in Albania, proclaimed in 2010, with the aim to ensure a pragmatic development approach through maintaining balance between sustainable economic development and conservation of natural resources, ensuring in parallel maintenance of ecosystem services to coastal communities and wider.



3.1.1. Site description: Vlora Bay ecosystems, national and international importance

There are three nationally protected areas within the Vlora Bay, chronologically nominated as follows: Llogara National Park (Category II IUCN, terrestrial protected area, Total surface 1769.2 ha[2], nominated since 1966 (DCM nr. 96, dt 21.11.1966); Karaburun Managed Nature Reserve [Category IV IUCN, Terrestrial protected area, Total surface 17,490.7 ha, nominated since 1977]; Karaburun-Sazan Marine National Park [National Marine Park (category II) IUCN, Marine Protected Area, Total surface 12,437.7 ha, Nominated since 2010 (DCM 289, dt 28.4.2010)] and several Natural monuments (Category III IUCN, approx. 15 natural monuments).

The Karaburun peninsula and Sazan Island constitute two important landmarks, which make Vlora bay area a top tourist attraction. The peninsula is located in the Western part of the Bay. It has a surface of 62 km^2 and separates the Adriatic Sea from the Ionian Sea. Sazani Island, separated by Karaburun peninsula through a narrow canal, is 4.8 km long and 2 km wide, with an area of 5.7 km^2. Serving as a military asset, this island finally opened to public visitors in 2015, only during summer season. Coastal and underwater caves and canyons, some of them not easily accessible, provide an ideal habitat for several species, including the Mediterranean monk seal. The inside of the caves offers great views due to the reflection of the clear waters and the stalactites.

From an international perspective, Vlora Bay ecosystems contain biodiversity elements of international concern, thus listing them as protected areas of international importance as follows:

SPAMI: Through the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol), the Contracting Parties to the Barcelona Convention established the List of Specially Protected Areas of Mediterranean Importance (SPAMI's List) in order to promote cooperation in the management and conservation of natural areas, as well as in the protection of threatened species and their habitats. Karaburun Sazan MPA was recognized as part of SPMAI list in 2015.

EMERALD: The updated list of officially nominated candidate Emerald Sites, published by the Council of Europe, in the framework of the Convention on the Conservation of Eurpean Wildlife and Natural Habitats (December 2021), includes the following nominated Candidate Emerald Sites: AL0000001:

2 The park surface was revised on January 2022

"Llogara" National Park, 1,010 ha and AL0000014: Karaburun-Orikum-Dukat National Park, 33,036 ha.

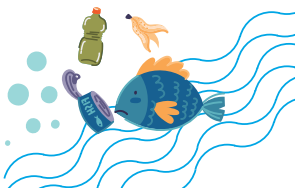
Sazani island is separated from the northern edge of the Karaburuni peninsula by a narrow strait. This island has been better preserved, due to having the status of a military area. The coasts are rocky and steep, although there are a few spots with gravel and stony beach.

The rocky cliffs are covered by scarce vegetation, due to exposure to winds and sun and may reach up to 1500 m above sea level. Numerous small dry river canyons fall into the sea almost vertically. Terrestrial caves are also present in the Karaburun peninsula. The area is characterized by a Mediterranean climate with mild winters and abundant precipitation and hot and dry summers.

Surface waters in Karaburun peninsula and Sazan island are scarce. However, there are groundwater springs discharging in the sea. The aquifer consists of limestone formations with a high permeability and secondary porosity, due to weathering and erosion, offering significant storage volume for groundwater.

According to the studies conducted during the preparation of the Management Plan for Karaburun-Sazan Marine National Park (*Rajkoviç and Kromidha, 2014*), both marine and terrestrial parts of Sazani island and Karaburuni peninsula have high values of biodiversity and natural habitats, where the following habitats can be distinguished:

- Mediterranean maquis on the rocky coasts, located in Western Karaburun and Sazan, with a dominance of xero-Mediterranean sclerophyll maquis, including some autochthonous species.
- Scarce forests damaged by fires with a few pines and cypresses shaped by the wind, on the Eastern side of Karaburun and Sazan islands.
- Coastal cliff vegetation is present on the Sazani island and the Karaburuni peninsula, where most of shores are rocky. Sandy or gravel shores occur in small areas only. Vertical cliffs of 200-300 m are present in some areas (Gryka e Xhenemit, Shpella e Haxhi Aliut, etc.).
- The lower belt (up to 5-6 m above sea level) is dominated by xero-halophytic *Crithmo-Limonietea* communities.
- The upper belt is inhabited by the association *Capparo-Putorion Lov*.



Eastern side of the Sazani island, which is more protected, is covered by evergreen forest of Cupressus sempervirens in association with *Quercus ilex, Quercus pubescens* and *Pinus spp.* Depending on the location, marine habitats, as outlined in the Management Plan for Sazan-Karaburun MPA, can be classified as Mediolittoral, Infralittoral and Circalittoral, in which coralline species and *Posidonia oceanica* (sea grass), as well as calcerous algae typical of Western Mediterrenean and Adriatic Sea have been identified.

The most typical plant species in terrestrial habitats worth mentioning are Valonia oak (*Quercus ithaburensis subsp. macrolepis*) and *other Quercus species, Euphorbia dendroides*, in association with Pistacia lentiscus.

A considerable number of terrestrial plant species, part of the Red List of the Albanian Flora, are also present in this area, such as: *Athamanta macedonica, Brassica oleracea subsp. oleracea, Brassica incana, Laurus nobilis, Origanum vulgare, Prunus webbii, Quercus ilex, Limonium anfractum,* etc.

As for fauna representatives, worth mentioning are the frequent visits by dolphins (*Delphinus delphis*), mediterranean monk seals (*Monachus monachus*). Other distinguishable fauna representatives found in the area are the loggerhead marine turtle, many sea birds, including vultures, eagles, etc..

At least 36 marine species, which are of international concern and belong to the lists of endangered and/or protected species of several conventions, are present in Karaburun-Sazan area. They include seagrasses, seaweeds, sponges, cnidarians, mollusks, crustaceans, echinoderms, fishes, reptiles, pinnipeds and cetaceans.

3.1.2. Key ecosystem services

Based on the study "*Assessment of current situation and developments on marine and coastal protected areas in Albania*" (IC Consulenten, 2019), prepared in the framework of UNDP project on improvement of coverage and management effectiveness of Albania's network of marine and coastal protected areas (MCPAs), the main ecosystem services that may benefit the Karaburun-Sazan MPA, as per its nature, fall within the following categories:

Direct use values: recreation, tourism, natural resource harvesting, hunting, gene pool services, education and research.

Indirect use values: comprised of the protected area's ecological functions such as watershed protection, breeding habitat for migratory species, climatic stabilization and carbon sequestration; MPAs and their network offer

nature-based solutions to support global efforts towards climate change adaptation and mitigation. They provide areas of reduced climate impacts and provide resilient ecosystems for marine organisms to adapt. MPAs, while not impervious to all climate change impacts, provide areas of reduced stress, improving the ability of marine organisms to adapt to climate change, increasing the species survival rates and allowing them to escape climate pressures. Addressing climate change impacts in a Marine Protected Area may consist of scientific studies, as well as taking concrete measures, such as mapping ecosystem changes, species population indicators, vulnerability assessments, but also implementing sustainable practices for industries and strategies to control overfishing which affects the capacity of vulnerable species to cope with climate change impacts.

Option values: potential future uses, such as genetic resources important to biodiversity, untested genes which may provide future inputs into agricultural, pharmaceutical, or cosmetic products

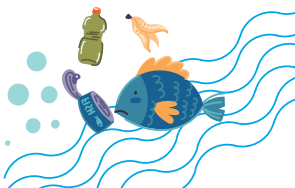
Bequest values: others benefit or will benefit from the protected area.

Existence values: acknowledgement that the protected area exists even though one is unlikely to visit it or use it in any other way.

4. Project's contribution to strengthening Karaburun-Sazan Marine Protected Area management: Institutional support and capacity building

Important and relevant planning tools were developed and endorsed in the course of programmatic support to marine ecosystems. Technical assistance, interventions and capacity building activities that have taken place range from strategic level planning to specific business plans.

National and international consultancies aimed at assessments and surveys, are engaged on a sound analysis of biophysical and socioeconomic data on the existing information, developing dedicated reference library with specific baseline data from key locations throughout the marine and coastal areas of Albania, incorporating all information in RAPA /NAPA database and delivering respective GIS thematic mapping.



The following are the main baseline studies, surveys and reports prepared throughout the project lifetime for strengthening and capacity building of institutions and organizations related to MPA management.

4.1. Protected area gap assessment, marine biodiversity, and legislation on marine protected areas

This is the first baseline study performed at the project initiation. This report, financed by the Marine Coastal Protected Areas (UNDP), paved the path towards the proclamation of Karaburun-Sazan, the first Marine Protected Area (*Kashta, et.al., 2010*). The assessment evidences the highlighted issues related to gap assessment of the PA system in Albania, describing the situation on marine biodiversity conservation and MPAs in Albania; the biodiversity, natural and cultural values of the proposed potential MPAs and illustrating the fulfillment of the relevant criteria for MPA proclamation; Evidencing the gaps of legislation related to marine conservation and highlights the proposals for improvement and approach to the relevant European legislation.

The study focuses on assessment of:

- Protected areas system
- Protected areas management
- Gaps in protected areas, including the need to apply new and innovative approaches for protected areas, linked to broader agendas, increased financial investment.

The study gives a thorough assessment of biodiversity of coastal habitats, flora and fauna, based on several on-site investigations by the experts. Upon the findings of the desk review and site visits, taking into consideration important conservation features as per the defined methodology, the following coastal areas are proposed as MPA's: (i) Cape of Rodoni - Lalzi Bay-Ishmi Forest, (ii) Cape of Lagji -Turra Castle, (iii) Karaburun peninsula – Sazan island, (iv) Canyon of Gjipe, (v) Porto Palermo, (vi) Kakomea Bay and Qefali Cape, (vii) Çuka Channel -Ksamili Bay and Islands, (viii) Pagane – Stillo Cape and Island.

The assessment proposes the Karaburun-Sazan as the first Marine Protected Areas to be proclaimed in Albania.

Based on the presence of different terrestrial protected areas in the region of Vlora, and in particular the Vjose-Narta Wetland Complex in the North,

Orikumi lagoon at the southern bottom of the bay of Vlores, the peninsula of Karaburuni on the western side of the same bay, Karaburun-Sazan proposed protected area will link these coastal sites by the creation of an overall marine protected area. The Karaburuni peninsula being the central element for nature conservation and the city of Vlora being the central element for development, it is proposed to designate the site as a Marine Protected Area.

The Marine Protected Area of Karaburun-Sazan is designed to attempt to provide a pragmatic approach aiming at establishing equilibrium between sustainable economic development and natural resource conservation, ensuring long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to support coastal communities' development.

The main objectives of its designation are:

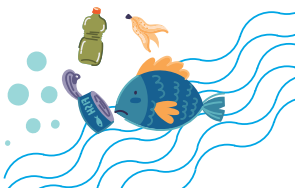
- *To protect and maintain the biological diversity and other natural values of the area in the long term.*
- *To promote sound management practices for sustainable production purposes.*
- *To protect the natural resources from being alienated for other land-use purposes that would be detrimental to the area's biological diversity.*
- *To contribute to the regional and national development.*

The report also provides a wide array of data on the environmental features of the proposed MPA, such as climate, geology, geomorphology, hydrology, biodiversity resources, cultural heritage, human activities and threats, maritime traffic and ships, solid waste management in the MPA and its contiguous zones, sewage water, oil spill risk, fisheries and fish farming, collection of marine invertebrates, Rare, endangered and threatened species, scientific research potentials.

4.2. Management planning

4.2.1. Strategic Plan for Marine and Coastal Protected Areas

The overall goal of the Strategic Plan of MCPA network as provided for in this document (INCA, 2013) is:"*To take an ecosystem-based management approach to the protection of biodiversity, natural, landscape, historic, cultural, and archaeological resources of the Albanian marine and coastal*



environment to ensure that the natural, economic and aesthetic values are conserved for now and future generations".

The Strategic Plan objectives are:

- *Establish a sound ecological network of MCPAs in Albania* which is representative and connected, and that will ensure appropriate and complementary conservation of biological diversity by bridging the existing gaps in the MCPA network in the country
- *Establish an effective, efficient and sustainable management structure* for each MCPA in the network
- *Develop a governance framework to support MCPAs*, which is integrated on a territorial level and with the other sectors, while promoting the sharing of environmental and socio-economic benefits
- *Increase the allocation of financial resources* to establish and maintain an ecological network of effectively managed MCPAs

The Strategic Plan for Marine and Coastal Protected Areas is structured into the following main chapters:

- Situation analysis with respect to the need for and the opportunities and constraints to developing and delivering the SPMCPAs.
- Review of criteria that might be used to identify areas to form part of an MCPAs network and an inventory of existing and proposed MCPAs against the criteria specified and justifies their inclusion in a network of MCPAs.
- Description of the actions required for the development and delivery of the SPMCPAs.

The situation analysis indicates that Albanian marine and coastal ecosystems contribute to sustaining human health, lifestyle, and the food production needed for the economic development and well-being of the coastal population.

However, Albanian marine and coastal ecosystems are under increasing pressure. The pressure primarily comes from a rapid increase in coastal urban development and the resulting increase in human use of coastal and marine ecosystems. The pressure will further increase if projected climate change takes place and air and sea temperature, sea-level, ocean acidification and the frequency and severity of storms and droughts rise.

Despite the significance of marine and coastal ecosystems to the social and economic development of Albania and the increasing pressures that

these marine and coastal ecosystems face, there is a lack of administrative capacity and availability of financial and in-kind resources with which to manage these pressures.

The Strategic Plan reviews the criteria for selecting habitats and species to be included. These criteria reflect Albanian national and also international requirements for sustaining marine and coastal biodiversity.

The criteria deemed of importance in selecting the habitats and species include requirements rising from the Aichi targets, habitats and species specified in relevant national legislation, habitats and species specified in European Union (EU) directives and implementing instruments such as Natura 2000, the Barcelona Convention and its protocol concerning Specially Protected Areas of Mediterranean Importance (SPAMI), and the IUCN Red list of threatened species. A final and significant criterion, considering the limited available information, is the precautionary principle/approach.

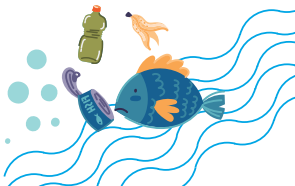
The strategy proposes following seven key outcomes and subordinate contributing actions:

Outcome 1: Key information gaps filled

Analysis shows clearly the huge gap in information and data related to the distribution and conservation status of important habitats and species of interest. There is also an information gap concerning the opportunities for sustainable financing for MCPA operations as well as best practices of management for MCPAs. Identified gaps include determination of the status of (i) reefs, (ii) sand dunes, (iii) important species of community interest, such as the Adriatic sturgeon, Mediterranean Monk Seal, Bottle-nosed Dolphin, Dalmatian Pelican, Pygmy Cormorant, (iv) extent and impact of invasive/exotic alien species, (v) socio-economic aspects influencing the management of marine and coastal natural resources, (vi) Financing opportunities assessment, (vii) Examples and best practices on MCPA management.

Outcome 2: Key enabling legislation delivered

Legislation closely related to the PA law to be revised in order to include provisions for MPAs, being a crucial tool for clarifications of concepts, but also for preparation of the management plans. The legislation should clearly indicate the responsibilities that are attributed to the administration of the PA and the management committee. Specific recommendations to address the identified gaps include preparation of a new law on protected areas and relevant by-laws including MPAs, amending of the fishing and aquaculture development regulations, and protected areas financing legislation.



Outcome 3: MCPA network coordination unit

In addition to the requirements for managing individual MCPAs within the MCPAs network there is also a need to provide administrative co-ordination of the network at the national level where particular expertise can cover more than one MCPA so providing economies of scale. Proposed activities for this outcome include financing secured for network operations, set up of MCPAs network co-ordination unit, training plan and operational plan for the coordinating unit.

Outcome 4: Network MCPAs gazetted

The following areas are proposed for gazetting to form the Albanian network of Marine and Coastal Protected areas: the Bay of Porto-Palermo; the area from Vjosa river mouth to Sazan and Karaburun (the entire Vlora Bay), the area from Cape Rodoni to Patoku lagoon, the coastal area from Buna river mouth to Viluni lagoon.

Outcome 5: Network MCPAs management plans

Management Plans should be developed for each of the proposed MCPAs making full use of the resources and economies of scale provided by MCPAs network co-ordination unit. The need to deliver resilience and adaptation to climate change should be addressed.

Outcome 6: Network species action plans

Species action plans should be developed and delivered for any key species that depend on a coherent network of MCPAs, and/or on corridors connecting these MCPAs and/or on other ecologically linked areas. Species subject to a species action plan can include exotic/alien species and resident and/or endemic species at risk. Proposed species to be developed respective action plans include: Adriatic Sturgeon (*Accipenser sturio*), Mediterranean Monk Seal (*Monachus monachus*), Bottle-nosed Dolphin (*Tursiops truncatus*), Pygmy Cormorant (*Phalacrocorax pygmeus*),

Outcome 7: SPMCPA approved

This outcome consists of approval and publication of the strategic document.

Outcome 8: Monitoring and evaluation

Long-term monitoring programs, using appropriate indicators, are necessary to determine whether management actions are being implemented as described in the management plan and outcomes (conservation results) are being achieved. Ecosystem and biodiversity health and the well-being of local

communities dependent on the MCPAs network should be monitored as well.

Examine, evaluate and determine the appropriate MCPAs management effectiveness monitoring and evaluation models to be applied at the MCPAs network level. Proposed actions include designing and planning the monitoring and evaluation program, developing an adaptive management model and communication plans

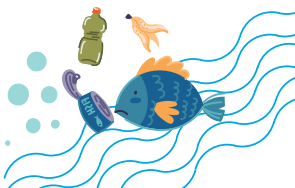
4.2.2. Management Plan for National Marine Park Karaburun-Sazan

The management plan for the Karaburun-Sazan Marine Protected Area (Rajkovic, Kromidha, 2014) was developed through a participatory approach, including several stakeholder workshops, meetings, questionnaires, etc. The process of preparation of this plan is an example of a integrative stakeholders approach, involving numerous consultations with stakeholders who actively participated and contributed to the process.

First part of the Management Plan deals with description of the National Marine Park (NMP), where all relevant data on location, legal status, policies and legislation are listed. This part also contains an analysis of stakeholders and description of PA natural system, of existing PA facilities and current visitor use, of socio-economic system, current and foreseen governance structure, cultural landscape and heritage, as well as studies and scientific research related to the marine protected area (MPA).

After the description, an evaluation of the protected area and assessment of institutional framework provide insight into the values, threats and current institutional framework. The following part dealing with management of protected area the vision of the MPA and then goes into Management Plan themes and then management zones of the NMP. As stated, the Plan is divided into a number of themes, each of which has a goal that the Plan aims to achieve. The goals have a series of objectives with indictors that can be monitored to determine whether objectives and goals are being achieved. Each objective has a list of prioritized activities that are to be implemented and these activities also have their indicators, monitoring of which shows if the Plan is being implemented. Zoning includes description of each zone, a zoning map and a table of activities in each zone, with regulation of activities.

For each activity an estimate of financial costs is given in the financial plan. After the financial plan, the monitoring and evaluation of management is described. At the end there is a list of references and annexes, which contain different lists of species, maps, etc.



The Management Plan is addressed to all stakeholders of the Karaburun-Sazan MPA and should be implemented by the Karaburun-Sazan Management Administration, which was represented at the time by the Regional Directory of forestry and actually by NAPA represented in regional level by RAPA Vlore. The Plan was developed taking into account opinions and needs of local communities, local and regional institutions, as well as central government, through a participatory process that took place throughout 2014.

The Management Plan defines and describes how a protected area is managed according to the best practices known at the time of its drafting. However, monitoring activities, new information and new impacts could require a revision of management activities. The Plan should therefore be flexible in order to adapt planned activities to any changes.

As the Management Plan vision is a long-term goal of the protected area, its lifespan is longer than the duration of the Plan. If there is no change in the protected area status, the vision remains the same, thus ensuring continuity in management. Similarly, if there are no significant changes, the objectives of the Plan should remain unchanged at least for the next ten-year period.

After five years, the Management Plan implementation and the results achieved are analyzed, and the Plan is revised accordingly. If needed, management actions are partially changed or completely revised. As for monitoring, an analysis should be made previously to explain what has been done and what not, the reasons why a specific action was not implemented, and the knowledge and experience used during the revision process.

Five management themes, each with a goal and a number of specific objectives under each theme. In total, 13 specific objectives were identified and 60 activities that are distributed among those objectives. Management themes, goals and objectives are listed below:

THEME: BIODIVERSITY CONSERVATION

GOAL: Maintain and protect valuable marine species and habitats by regulating activities at the sea and improving knowledge on importance of biodiversity.

OBJECTIVES:

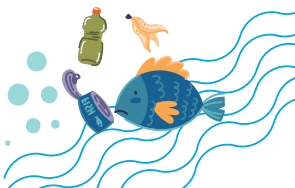
1. Reduce degradation and maintain the size and status of Posidonia meadows in front of beaches (western part) during management plan timeframe (10 years).
2. Stop degradation and maintain the status of coralligenous communities and other vulnerable marine habitats during management plan timeframe (10 years).
3. Preserve favorable status of endangered and protected marine species and ensure safe passage of charismatic species (marine turtles, monk seals, dolphins and whales) through corridor during management plan timeframe (10 years).

THEME: CULTURAL HERITAGE AND LANDSCAPE

GOAL: Maintain and preserve well-known cultural and historical features and outstanding geological formations by improving regulations and promoting good practices.

OBJECTIVES:

1. Preserve aesthetic value of the landscape during management plan timeframe (10 years).
2. Preserve geological formations by stopping degradation on cliffs and in caves (Haxhi Ali, Grama Bay, etc.) in the next 5 years.
3. Preserve actual state of underwater archaeological remains at archaeological sites during management plan timeframe (10 years).



THEME: SUPPORTING LOCAL COMMUNITIES AND SUSTAINABLE USE OF NATURAL RESOURCES

GOAL: Support local community development by promoting viable fishing and sustainable tourism practices that ensure wise use of natural resources.

OBJECTIVES:

1. Improve fish stocks through maintaining number of species and increasing fish population
2. abundance in the next 5 years.
3. Diversified and quality tourist offer & achieved sustainable level of tourism on beaches, caves and diving sites during management plan timeframe (10 years).
4. Quality tourist experience, including clean, not overcrowded and quiet natural beaches during management plan timeframe (10 years).

THEME: AWARENESS AND EDUCATION

GOAL: Raise awareness and improve knowledge on the importance of biodiversity conservation and sustainable use of natural resources and promote values and benefits of MPAs.

OBJECTIVES:

1. Raise awareness about MPA values among visitors and general public.
2. Educate stakeholders on issues related to their contribution to improved MPA management.

THEME: MANAGEMENT, ADMINISTRATION AND SUSTAINABILITY

GOAL: Ensure effective management of MPA by building capacities, providing necessary human and financial resources, and improving communication and cooperation with relevant stakeholders.

OBJECTIVES:

1. Establish a Management Administration, hire staff, raise their level of knowledge and skills and adequately equip them in relation to the existing state in 2014.
2. Improve communication and cooperation of the Management Administration with the local residents and authorities.

Zoning map of the National Marine Park Karaburun-Sazan

The Management Plan also outlines activities that are allowed, prohibited and regulated, as per the zoning. The following zones are outlined in the zoning plan:

1. ***Core zone (CZ)*** where the first level of protection is applied and only the following activities are allowed after a special permit issued by the PA administration: scientific research (special permit and limited numbers of scientists allowed), monitoring (special permit is needed), waste removal, visitation only by guided tours at specified routes under guidance of PA administration (strictly limited in numbers and sites), diving is allowed only for scientific research and monitoring purposes.
2. ***Effective management zone (EMZ),*** where the second level of protection is applied. The following activities can be performed after a special permit is issues by the PA administration: scientific research (special permit and limited numbers of scientists allowed) and monitoring (special permit is needed), waste removal, diving (diving sites should be specified and diving is allowed only at those specific sites, only guided tours, limited number of divers, monitoring by PA administration), boating excursions (limited and guided boat excursions, special permit for boats, time and access to the area should be defined by PA administration), sailing and mooring (some areas should be off limits – such are diving sites and areas designated for water sports; signs for boats should be put), kayaking, water sports (no use of jet skis and other motor water sports; clear division of water sport zones and swimming areas), visitation (guided tours, limited in numbers), wildlife watching (respecting code of conduct).
3. ***Recreation Zone (RZ)***, where the third level of protection is applied. Allowed activities include sailing (some areas should be off limits, such as diving sites; signs for boats should be put, no waste discharges, carrying capacity for the number of boats must be defined by the PA administration), swimming and snorkeling, anchoring, mooring, kayaking, water sports (but without jet skis), as these are not allowed in any zone), and visitation. Some other activities are allowed only upon approval by the PA administration.
4. ***Sustainable Development Zone (SDZ)***, where the third level of protection is applied. It is strictly not allowed to perform the following activities within the Sustainable Use Zone: maritime traffic, mineral extraction, and collection of plants, minerals, stones, paleontological findings, development of aquaculture and any

military activities. Other specific activities are regulated through the PA administration case by case.

The Management Plan and zoning for Karaburun-Sazan MPA was approved by Minister's order Nr. 750, 24.11.2015.

4.2.3. Preparation of "Procedure for enforcement mechanism for Karaburun-Sazan Marine Protected Area: Inspection"

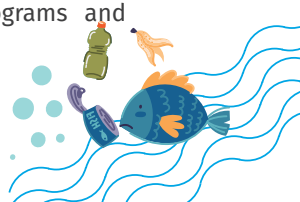
This document consists of a detailed procedure/manual that has been developed by the MCPA UNDP project, with the aim to help RAPA Vlore to detect and investigate violations as well as to respond to non-compliances in line with administrative or criminal procedures and applicable legislation regarding protected areas and management plan of MPA K-S.

The Standard Operating Procedure is designed to ensure that the RAPA, which is responsible for carrying out the control functions in the territory of MPA K-S, performs its duties in compliance with the relevant legislation in force. The procedure outlines the actions to be taken by the RAPA in order to prevent, detect, investigate, impose administrative penalties and filing criminal charges for violations contained in the Criminal Law as environmental crimes in the protected areas (MPA K-S).

This procedure is intended to contribute to improving the performance of the NAPA/RAPA. It builds on the mutual understanding between NAPA/RAPA and other relevant competent authorities and provides a basis for joint inspections and the regular exchange of information. At the same time, the Procedure aims to enhance cooperation and coordination among enforcement authorities: those responsible for specially protected areas (MPA K-S) and other relevant enforcement authorities and stakeholders.

Duties of the NAPA/RAPA in regards to the implementation of the K-S MPA management plan are as follows:

- Oversight of activities in protected areas and ensuring their compliance in accordance with the requirements of this law and other legal acts and regulations;
- Monitoring with precision the implementation of instruments for territorial development planning, adopted by central and local authorities in protected areas;
- Control activities that use natural resources inside the network of protected areas;
- Coordination of work for the development of programs and



the establishment of a network of biodiversity monitoring and network of protected areas together with structures of the Ministry responsible for the Environment;
- Control the implementation of regulations and criteria for sustainable use of natural resources in protected areas;
- Monitoring of legal requirements for carrying out economic activities that take place within the territory of protected areas;
- Notification of the competent state institutions in cases when are noticed administrative violation of the law, propose the relevant authorities to take measures against those responsible, according to the legislation in force.

The procedure also foresees actions as per the following cases:

- Temporary prohibition of approved administrative activities, when affecting the purpose for which the environmental protected area is designated.
- The economic evaluation of damage caused to the environmental protected areas, assessment, collection and administration modalities.

Given that the inspection procedure of RAPA is based on the law "On inspection in the Republic of Albania and the legislation in force", routine checks, uninformed control checks and infringement findings will undergo the following steps:

- Step 1 – Prevention; Planning the inspection; Inspection authorization
- Step 2 – Initiation of the inspection procedure
- Step 3 – Conducting of the inspection; Finalization of the inspection
- Step 4 – Appeal against the decision; Appeal Commission; Final decision
- Step 5 – Court proceedings

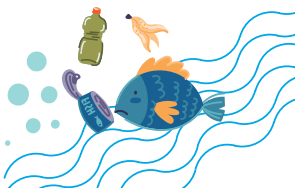
4.3. Capacity building for the protected areas staff

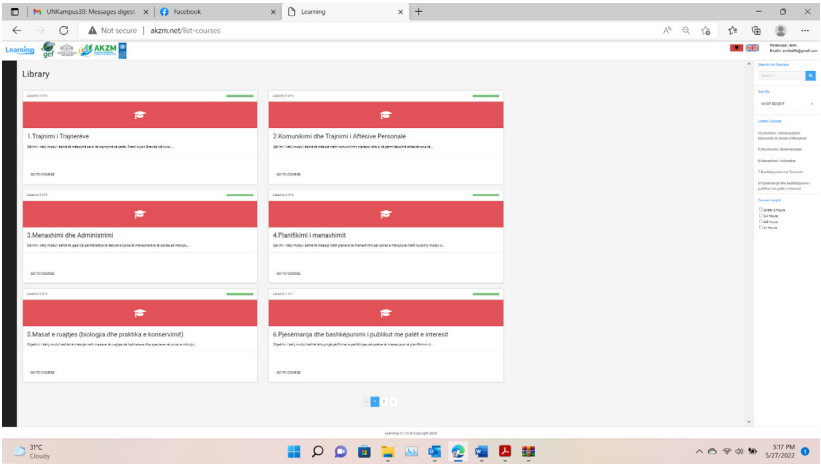
The continuously increasing pressure of activities on Protected Areas (PAs), brings a permanent and important need for continuous capacity building for Regional Administrations of Protected Areas (RAPAs) in order to achieve success in management. In this regard, the project synergized and combined joint activities with the GEF project on Financial Sustainability of Protected Areas in Albania, in cooperation with the National Agency of Protected Areas

(NAPA), to develop an online platform for self-taught training and learning, including in the platform, the performance assessment instruments namely METT and FSS (Management Effectiveness Tracking Tool and Financial Sustainability Scorecard).

This tool, which is part of much wider platform http://akzm.net/e-learning, hosting 10 well-tailored biodiversity conservation & PA management dedicated modules, is available to the RAPAs staff. At the end of each course/training, the participants are provided with an online certificate of completion of the relevant modules. Finally, the PAs' staff enhanced professional capacities through use of this e-learning platform https://akzm.net/list-courses to develop their skills on the management of PAs and contribute to fund generation.

The project is collaborating with the Department of Public Administration, for mutually sharing the e-learning tool and its endorsement as an official vocational qualification instrument for the personnel of NAPA, hosting it in the official e-domain website dedicated to public administration.





E-learning platform and learning sessions

Implementing the other webinar phase of biological and physic-chemical monitoring in the frame of scientific webinar cycles "CItA-U-MPAs (Connecting Italian & Albanian University and Marine Protected Areas)" for 2021. They were translated into Albanian and also present in a UNDP YouTube dedicated channel –focused on:

- Photogrammetry and VR underwater, reef Check Med - Dr. E. Turicchia https://youtu.be/SU1qW1OBdlY ,
- Posidonia oceanica - UNDP Webinars - dr. A. Rismondo. (SELC) https://youtu.be/QSGyIaveeHA ,
- Scientific Diver: human tool for MPAs underwater investigations. https://youtu.be/gu0xRcPPy2Q

5. Community involvement through active participation in K-S MPA

5.1. Visibility, branding, awareness and education means

The UNDP MCPA project has implemented the best possible scenario for stakeholder involvement in a protected area, from the appraisal phase, the preparation of the protected area management plan, the set up of the visitor center, engagement of local businesses such as fishermen and boating in project activities, ensuring transparency of information and engaging in constructive dialogue for decision-making purposes in regard to project activities.

Since the beginning of MCPA project phase 2, a thorough stakeholder analysis was performed (Anagnosti, S, 2018). The main stakeholders groups identified and analyzed include National Governmental Institutions, Regional/Local Governmental Institutions (including public entities/enterprises), Users Associations, CSOs, Research Institutions / Education Institutions, Media, as well as International organizations / Donors / Development Aid.

Thematic meetings with stakeholders during project implementation

Stakeholders were also categorized based on "Stakeholders Importance and Influence Assessment" and a Stakeholders' Engagement Matrix was prepared, which served during the later stages of project implementation.

In collaboration with the RAPA/NAPA and the Protected Area Management Committee, stakeholder involvement through conservationists and local communities has been also useful in including cost-effective management, conservation approaches, identifying appropriate management scenarios and business planning at the marine protected area of Karaburun-Sazan.

Through execution of the project activities, a very successful effort was completed in educating the local community and stakeholders on understanding what an MPA is, and how it has the ability to benefit the lives of those nearby. The various events and PR efforts utilizing traditional and newr forms of communication, such as social media, helped to raise awareness and interest in the concept of Marine Protected Areas (*Sea-Trek, 2020*).

5.1.1. Establishment of the Visitor Center as an "info-point" where touristic information is displayed and distributed

The Radhima Visitor Center has been upgraded to a mini-museum, which is interactive and is maintained and enriched with relevant touristic and environment information.

RAPA Vlore staff continuously update this visitor center with new information, while the Electronic Info points serve as good information sources for interested tourists regarding K-S MPA.

The visitor center operations are organized based on a Strategic plan and organized into three specific sections to improve functionality: (1) Management and Operations; (2) Environmental Education and Awareness; and (3) Financial Plan.

The upgraded Visitor Center helps to better manage recreational/sport activities within KS-MPA and provides a tool for effective communication and awareness efforts.

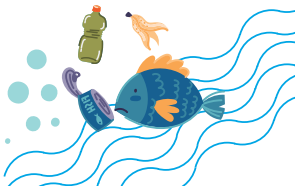
5.1.2. Engagement of juniors

The project established a mechanism and program for engaging junior experts to assist with KS-MPA management and Visitor Center duties. Juniors provided help to maintain the Visitor Center Register, organize field visits,

meetings and trainings, engaged with local stakeholders on education activities, particularly with students and young people, implemented awareness activities and campaigns, monitored and recorded tourism data, acted as tourist guides, assisted with the Sea Turtle Rehabilitation Center.

Junior consultants, besides of daily welcoming of tourists at Radhima Visitor Centre, provide them provided with information about the Marine Park of Karaburun-Sazan, together with the park administration. They have welcomed also students of Geo-environment, Geo-Informatics and Geological Engineering. During these educational activities, students were introduced to the values of the marine park, as well as addressed various topics such as biodiversity, values of flora and fauna, management challenges and problems, etc. About 100 students participated in these activities. Students from France, Germany, Holland, etc. visited the centre and some of them conducted practices in the area focusing in the MPA and sustainable tourism development.

Moreover, the junior experts together with RAPA Vlorë staff carried out clean-up activity on the beaches in Karaburun (*only in onea small beach, no more than 120m^2, 12 bags of garbage were collected*). The tourist season becomes a real threat to the park, as it is visited by a large number of tourists, some of whom do not respect nature and what the park offers.



Cleaning up the Karaburuni beach

5.1.3. The Sea Turtle Rehabilitation Center

The project established a Sea Turtle Rehabilitation Center in December 2017 in line with National Action Plan on Sea Turtle Conservation. Sea turtles continue to be one of the most valuable visitors to Karaburun-Sazan National Marine Park . The staff of the Regional Administration of Protected Areas of Vlora and the team of UNDP project juniors have collected data on sea turtle, conducted surveys; observed species include *Caretta caretta* and*Chelonia mydas*. Since its establishment in 2017, the turtle center in Radhima, has treated approximately 16 turtles and recorded a total number of 40 sea trutles mainly *Caretta caretta*.

It is worth stressing that the sea turtles have had a wide geographical presence along the coast of Durrësi, Lezha, Divjaka and Vlora. The increased number of cases of their presence further points out the need to create a protective and friendly environment for these species, although the first steps have been taken through the establishment of the Sea Turtle Rehabilitation Centre in Radhima, as well as raising awareness and stabilizing cooperative relationships with fishermen and other stakeholders.

The World Turtle Day, assigned on May 23, 2000, was established as an annual observance to help people celebrate and protect turtles and tortoises and their disappearing habitats around the world. On this day, the UNDP project junior experts and RAPA Vlorë organizein Radhima Visitors Centre educational activities with school and university students, introducing the specie, first aid techniques for turtles, monitoring protocols as well as the Sea Turtles First Aid Centre.

Sea turtle rehabilitation actions by local students and community

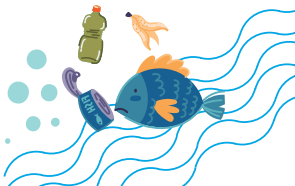
5.1.4. Publications, awareness raising activities and informative materials

The project has continuously conducted awareness raising activities, annual events, published and distributed leaflets, brochures, designed codes of conduct, set up information stands, etc., aimed at the public in general, as well as specific stakeholder groups.

The project also established the dedicated website for the park: http://www.karaburunsazanimpa.com/ which is being maintained by RAPA Vlore staff.

Several electronic newsletters have been prepared and issued widely to the partners and related stakeholders, interested groups of professionals and NGOs, providing simple and up-to-date information on the marine park and activities implemented by the project and RAPA Vlore.

Additional set of divulging files and materials is prepared focusing environment information, education and communication through the Rradhima Visitor Centre as a hub of data & statistics, in close coordination and cooperation with RAPA Vlore. Such assistance has been inclusive of and coordinated with other interventions in the site intending improvement of touristic facilities both in marine and terrestrial parts, feeding into a combined approach for maximizing touristic activities values such as tracking, information tables, signs, etc.



During the lifetime of the project, in cooperation with RAPA have been developed professional promotional video documentaries that documents the progress and promotes the biodiversity and attractions within KS-MPA. Videos created to date include:

- Presenting National Marine Park Karburun-Sazan, the first and unique marine park in Albania
- Biodiversity and underwater life in Karaburun-Sazani MPA
- Karaburun-Sazani MPA Visitor Center in Radhima and monitoring activities
- Marine litter activities and actions in Karaburun-Sazan MPA
- 360-degree video, a virtual visit at Karaburun-Sazani MPA
- Educational Video: https://youto.be/sEcad65k5gg+
- Educational Video: https://www.youtube.com/watch?v=q_21BilAMW0&t=23s
- Educational Video: https://albania-undp.medium.com/10-years-karaburun-sazan-national-marine-park-a-story-of-sustainable-tourism-development-and-6f19996e3f42

5.2. Business planning for sustainable development

5.2.1. Strategic Plan to Assist the visitor Center of Karaburun-Sazan MPA in Radhima, Vlora

The first Outcome in the MCPA Project consists in improving the functionality of the Visitor Center located in Radhima. This is identified as Output 1.2 in the MCPA Project, "Support the functionality of the Information Centre of Karaburun-Sazan MPA to raise the awareness and educate local communities and MPA user groups on the values and benefits of MCPAs and increase their engagement in the MPA management."

In addition to addressing these specific mandates within the project, this document also took into consideration related objectives contained in the National Marine Park Karaburun-Sazan, Albania, "Sustainable Tourism Management Plan", prepared in 2016.

Therefore, a Strategic Plan for the Information Centre of Karaburun-Sazan MPA, including an environmental education and awareness raising plan

and a financial plan were developed and made operative by implementing identified priority actions.

The report starts by conducting a baseline stakeholder assessment/mapping. It is then followed by an analysis of the current situation of Radhima Visitor Center, which is under the jurisdiction of RAPA/NAPA. Information is provided on: Site, building, staffing, financing.

The baseline is then followed by the proposal of:

- A Strategic Operational Plan
    - SWOT analysis
    - Vision
    - Mission
    - Values, directions
- Overall strategic goals
- Environmental education and awareness functions
- Orientation and enhancement function

However, the most important component of the study is the Financial Plan.

While in theory K-SMPA could survive without the Visitor Center, the Visitor Center could have a positive and lasting impact (financial and otherwise) on achieving the overall Goals established for K-S MPA. The utilization of marketing and promotional strategies via the Visitor Center to generate interest and concern for K-S MPA could ultimately lead to new revenues.

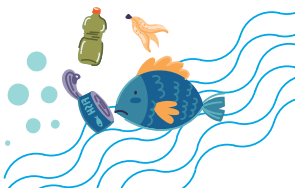
The greatest opportunity for generating funds for both K-SMPA and the Visitor Center, as stated in the Executive Summary, should be finding viable solutions to consistently and uniformly levy entrance/visitor fees on all those accessing K-SMPA (both by land and by sea).

Concrete actions for providing revenues within the K-S MPA include:

Private Donations and Grants - informational kiosks with a donation box, partnership with ferry boat operators to promote K-SMPA on their vessels and obtain donations, identify international philanthropic foundations with an interest in protecting marine environments and submit grant proposals.

Branded Commercial Merchandise Sale - Create/obtain K-S MPA branded merchandise to be sold.

Festivals and Events- Identify and attend existing community events at which Visitor Center staff or volunteers could seek funding, work with local fishermen and fish market owner to create a Vlora Bay Seafood Festival to benefit the Visitor Center.



Educational Programs in Primary Schools - Provide educational services / classes to local primary schools to generate revenue.

Adult Educational Classes - for tourists to generate revenue, for local individuals in the tourism industry to generate revenue.

Facility Rentals - Investigate potential for limited site/facility rentals of Visitor Center property.

Merchandise and Equipment - Obtain donations from local businesses and artists that could be used in fundraising efforts.

5.2.2. Economic evaluation of the Karaburun-Sazan Marine Protected Area

This study carries out an economic evaluation of the ecosystems of the Karaburun-Sazan MPA, in order to support the implementation of the MPA management. The study also provides, in connection with the economic valuation of the ecosystems, an analysis of mechanisms that could ensure the long-term financing of management activities.

For this purpose, an ecosystem services approach was used, allowing the connection between the ecological functions of the ecosystems and the human activities relying on them.

The first part of the study determines the economic value of goods and services provided by the marine ecosystems of the MPA, such as coralligenous formations, Posidonia oceanica meadows, reefs and open water. The ecosystem services identified within the perimeter of the MPA include:

Provisioning services: artisanal fisheries

Cultural services: boat excursions: visible wildlife, aesthetic scenery, accessible beaches, sea diving, pescatourism (onboard tourism operated by fishers)

Regulating services: sea water quality, carbon storage and climate mitigation, protection against natural hazards.

Supporting services: biodiversity, spawning grounds and nursery

The economic value of the KS MPA ecosystem services represents a total of 1,684 billion ALL per year. Regulating services represent the most important part of these services (95% of the total value) while the provisioning services and the cultural services represent respectively 2,5% of the total value. The

role of the Posidonia meadows is thus essential to the climate regulation thanks to its ecological function of carbon sequestration. The preservation of this ecosystem should constitute a priority for the management of the MPA.

Important areas of Posidonia meadows are moreover located outside the perimeter of the MPA; the awareness-rising measures the MPA will lead outside this perimeter could contribute to the preservation of this outstanding ecosystem. The active participation of local stakeholder to the management of the MPA could also guarantee a better preservation of marine ecosystems inside and outside the perimeter of the MPA

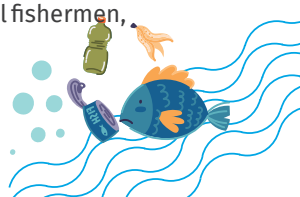
Assessment of benefits of the MPA management plan implementation

In order to value the potential economic benefits of the creation and optimal management of the Karaburun-Sazan MPA, two management scenarios by 2026 have been built. These scenarios take into account pressures and threats on natural ecosystems identified in the Bay of Vlora and within the perimeter of the MPA (aquaculture, urban and tourism development, over-exploitation of natural resources, etc.). Both scenarios correspond to the implementation of management activities.

The first one could be qualified as *a business-as-usual* scenario with the implementation of management actions as expected by the management plan. According to RAPA, there is no difference of priorities between the five main management objectives of the MPA but based on the practice administration, staff and financial capacities, the management staff is more focused on the biodiversity conservation and the management, administration and sustainability of the MPA. In this scenario only actions qualified as Priority 1 were considered, as specified in the management plan.

The second scenario could be qualified as the optimal management scenario. Like the first scenario, the protection of biodiversity holds a key position in the actions implemented but at the same time, since tourism activities (boating and diving) might grow very quickly in the area, their early control allows to limit damages on the environment and natural habitats of Karaburun-Sazan. In this optimal scenario, the four zones of the Karaburun –Sazan MPA are respected by the users: the core zone and the effective management zone are not allowed to any human activity. Impacts of human activities on the KS-MPA ecosystems will be the same as in the first scenario until 2020 and should be smaller then.

If both scenarios allow the preservation of marine ecosystems and the production of ecosystem services for many beneficiaries (artisanal fishermen,



tourists, tourism operators, etc.), the optimal management scenario brings more important benefits. The benefits of the implementation of the optimal scenario represent indeed 328 million ALL over 10 years, which represents more than 14 million ALL per year. Carbon sequestration ensured by *Posidonia oceanica* meadows is the most important contribution to these benefits. The preservation of this ecosystem is thus essential for this service but also for the provision of others services like artisanal fishing and cultural services. Posidonia oceanica ensures the regulation of the quality of sea water, which represents an important criterion for the attractiveness of the area. This ecosystem also plays a role in many marine species' lifecycles; its preservation brings benefits to fishing activities.

The direct-use values associated to cultural activities also represents 15% of the benefits of the implementation of the optimal management scenario. The protection of ecosystems and the preservation of biodiversity will also contribute to the attractiveness of the area in comparison with others destinations and will allow the development of sustainable tourism activities that will beneficiate to many stakeholders.

Potential for MPA long-term financing

The KS MPA can be viewed as a business operation providing "customers", or users, with a number of "products" taking the form of ecosystem services. Depending on the evaluation method, the economic value of these "products" can either be a first indication of the amount MPA users would be willing to pay to benefit from ecosystem services back up by the existing MPA, or an assessment of financial flows depending on goods and services provided by well-managed ecosystems. Based on the results of the ecosystem services valuation and the identification of goods provided to local stakeholders, 7 user-pays mechanisms have been identified as channels through which financial flows can be transferred from the ecosystem services' beneficiaries to the MPA management:

- Production fishing license/permits
- Tax on pescatourism
- Tax on boat excursions
- Concession fee
- Tax on diving
- Diving fees
- Payment for ecosystem services (carbon sequestration)

In line with a projection of potential revenues offered by those mechanisms over 10 years, the KS MPA business plan developed in 2015 was updated to highlight the financing gap that will have to be filled in by non-user-pay mechanisms (e.g. government's budget allocations, private capital donations, corporate long-term contributions, debt-for-nature swaps, trust funds, etc.). Taking minimum revenue assumed for each user-pay mechanism, it is estimated that identified user-pay mechanisms, if they are all implemented, would provide MPA managers with an income covering 30% of estimated optimal management costs.

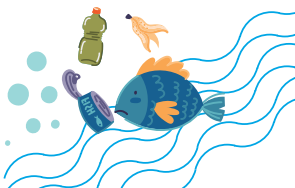
6. Environmental monitoring activities

6.1. Ecological monitoring of Karaburun-Sazan MPA

Understanding how the rise in water temperature affects the structure and functioning of marine ecosystems is also essential for supporting management and conservation policies and strategies. For these reasons, the main scope of this work has been to investigate and determine the level of impact or damage on the Marine Park Karaburun-Sazan and make suggestions in regard to the values and most appropriate interventions. Another important aspect is the effort to increase the capacity of the MPA administration on ecological monitoring.

More specifically, the team had worked in order to comply with following duties and responsibilities of this assignment:

1. Evaluate the chemical-physical, geomorphological indicators of the sea water of the site chosen for the positioning of the temperature monitoring stations;
2. Install miniaturized autonomous sensors for temperature detection (with a detection range of about -5°C to + 26°C) with link USB system and waterproof housing;
3. Investigate on two hot spots of Posidonia Oceanica (considering previous studies and researches, as well as current initiatives of the Regional Administration of Protected Areas in Vlora);
4. Perform an on-job training on ecological monitoring for the key staff of the MPA administration.



The study was conducted as per the following phases:

1) preparation-organization of the work and equipment, 2) Field work survey and implementation of data, and 3) reporting.

This first UNDP pilot project for the detection of seawater colon, temperature in the MPA of Karaburun-Sazan, was carried out in collaboration between UNDP Albania, AICS Tirana, NAPA, RAPA and ADF Albanian Diving Federation and IL BLU DEL MARE of dr. Modugno, therefore, proposes to develop a coastal network of monitoring stations for the impacts of climate change along the Karaburun coasts, but also in some points of the wetlands (Narta and Orikum) and Vlora and Sazan Island coast.

The sensor network provides for the development of fixed stations for recording temperatures in the sea at different depths (-25m, -12m and -5m).

The main objectives of the work were:

1. monitor, through the adoption of a standardized data collection protocol, the changes in temperature along the water column for continuous periods to evaluate the effects of global warming on coastal marine ecosystems, in order to collect useful data to develop adequate management and protection measures;
2. raise public awareness and raise awareness of the changes taking place, with the ultimate aim of stimulating the necessary interventions to address them;
3. lay the foundations for the development of a national Albanian network for monitoring the impacts of climate change on reef communities.

In particular, the scientific partners represented by RAPA, NAPA and MPA will be responsible for:

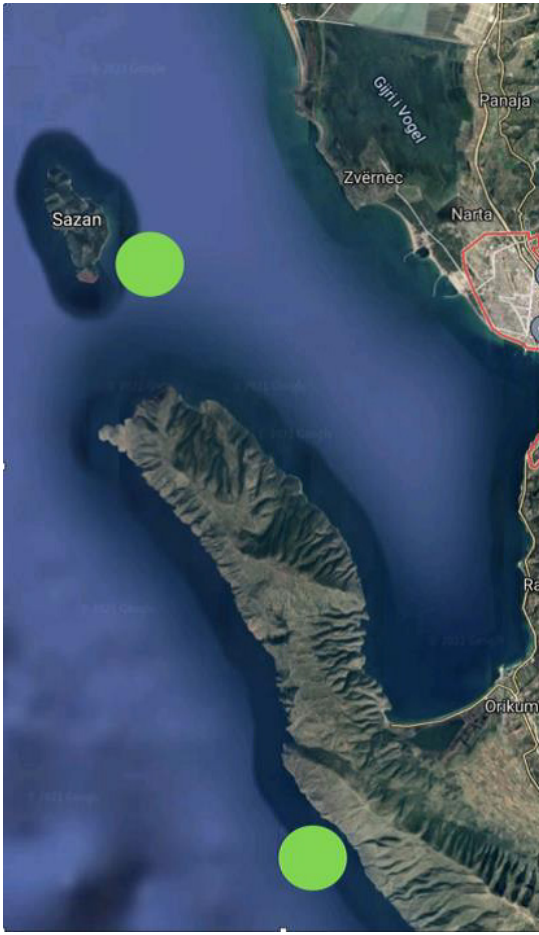
1) periodically analyze the temperature data recorded by the various measuring stations;

2) process and compare the data recorded by the various stations participating in the project;

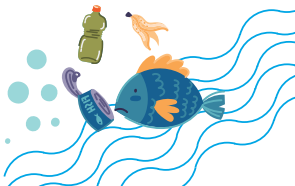
3) upload the data of the stations of the project on the platform created thanks to this second part of the project;

4) planning and conducting underwater diving monitoring campaigns of benthic marine biocenosis in the study areas, to correlate the state of ecosystems with variations in sea temperatures

Map of water quality sampling stations



Map of Posidonia oceanica monitoring stations

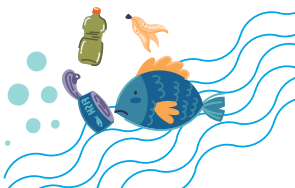


Parameters 2021	TAq	Tk1	Tk2	TS1	Tk3	Tk4
Temperature (C)	24,12	23,31	24,10	24,12	24,88	25,70
Turbidity (FNU)	0,30	0,00	0,00	0,30	0,00	0,10
Salinity (PSU)	30,40	36,18	36,10	30,40	30,62	35,89
Do conc. (mgL -1)	4,63	6,82	6,56	3,49	5,40	6,36
Do conc. (%)	49,62	98,10	96,30	48,30	74,60	95,70
pH	7,90	8,10	8,10	8,20	8,15	8,14
Parameters 2022	**TAq**	**Tk1**	**Tk2**	**TS1**	**Tk3**	**Tk4**
Temperature (° C)	14,60	14,43	14,90	15,13	14,61	15,14
Turbidity (FNU)	0,60	0,30	0,54	0,60	0,00	0,00
Salinity (PSU)	32,56	35,89	33,67	32,56	31,65	32,47
Do conc. (mgL -1)	7,02	7,30	8,35	7,02	8,20	8,10
Do conc. (%)	97,50	98,67	99,43	97,50	98,20	97,39
pH	8,05	8,45	8,25	8,40	8,20	8,24

Average values of the chemical-physical analyzes in all the stations obtained during both the July 2021 survey and the April 2022 survey

2021 - Tk1	surface	half column (~5/7mt)	bottom (~15/20mt)
NH_4 (mg/L)	0,05	0,05	0,05
NO_2 (mg/L)	0,025	0,025	0,025
NO_2 (mg/L)	0,025	0,025	0,025
PO_4 (mg/L)	0,02	0,02	0,02
2021 - Tk2	**surface**	**half column (~5/7mt)**	**bottom (~15/20mt)**
NH_4 (mg/L)	0,05	0,05	0,05
NO_2 (mg/L)	0,025	0,025	0,025
NO_2 (mg/L)	0,025	0,025	0,025
PO_4 (mg/L)	0,02	0,02	0,02
2021 - Tk3	**surface**	**half column (~5/7mt)**	**bottom (~15/20mt)**
NH_4 (mg/L)	0,05	0,05	0,05
NO_2 (mg/L)	0,025	0,025	0,025
NO_2 (mg/L)	0,025	0,025	0,025
PO_4 (mg/L)	0,02	0,02	0,02
2021 - Tk4	**surface**	**half column (~5/7mt)**	**bottom (~15/20mt)**
NH_4 (mg/L)	0,05	0,05	0,05
NO_2 (mg/L)	0,025	0,025	0,025
NO_2 (mg/L)	0,025	0,025	0,025
PO_4 (mg/L)	0,02	0,02	0,02
2021 - Ts1	**surface**	**half column (~5/7mt)**	**bottom (~15/20mt)**
NH_4 (mg/L)	0,05	0,05	0,05
NO_2 (mg/L)	0,5	0,5	0,5
NO_2 (mg/L)	0,025	0,025	0,025
PO_4 (mg/L)	0,02	0,02	0,02

Average values of the chemical-physical laboratory analyzes for the stations investigated obtained during the July 2021 survey



All the data collected show a good quality of the water column recorded high phenomena of overexploitation and an increase in mucilage (covering all the sea floor). The fish fauna detected was really scarce in the face of an enormous abundance of echinoderms with the result of making the rocky walls de-faunated and poorly colonized, even in the Karaburun area very far from anthropogenic impacts. All monitoring stations have been abundantly colonized by marine flora and fauna and have shown that in the future they can also be fixed stations for monitoring marine colonization.
A further study of the real biodiversity level of the Karaburun and Sazan coasts is really important, using oceanographic tools that allow to obtain more and more detailed data, in order to define a possible future of the area, and therefore a maintenance strategy and improvement.

6.2. Preparation of K-S MPA monitoring manual

This manual, developed for the RAPA through a consultancy enabled by the project (Modugno, S, 2020), provides a practical manual on what, how and where to monitor environmental parameters in the K-S MPA.

The manual is formatted for printing purposes and the information is organized in the way that serves better to the RAPA experts.

It covers the following monitoring areas:

- Monitoring Approach
- Marine Turtles Sightings & Care
- Sea Water Sampling
- Marine Benthos Census
- Photophilic Algae Evaluation
- Marine Phanerogams
- Fish Visual Census
- Monk Seal Sightings
- Dolphins & Whales Watch

The manual reflects much of the work done by the project through numerous studies over the years, putting them in practice.

6.3. MPA waste management to mitigate harmful effects in the ecosystem and reduce health risks

Municipal solid waste generation in Vlora region has been increasing and solid waste is largely generated from tourist and marine transport activities.

Concerning water pollution, the main source is the discharge of untreated or inadequately treated urban and/or industrial wastewater. Point sources are the main source of oxygen-consuming substances, hazardous chemicals, and nutrients. The main non-point source of water pollution is from agriculture, which is responsible for the release of fertilizers, herbicides, pesticides, and animal sludge.

The project provided assistance in respect to mitigation actions in the ecosystems, namely by addressing compliance with waste management and disposal standards, focusing used oil and plastics, their separation, collection, treatment and disposal; the report on UCO (used cooking oils) recycling (collection and disposal) along the coastline accompanied with branding and awareness among the targeted stakeholders and communities was developed.

6.3.1. Marine litter report

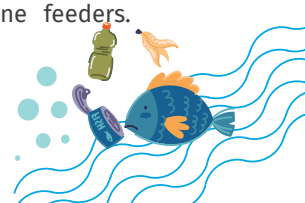
Having ratified the Barcelona Convention and its Protocols, Albania has adopted the Integrated Monitoring and Assessment Programme, based on several ecological objectives, including marine litter.

Marine litter includes processed and not processed waste that is dumped, abandoned, lost at sea or on the beach. It significantly damages tourism; natural ecosystems and it must be mentioned that the trend is for marine litter to keep increasing in the Adriatic.

According to UNEP/MAP, plastics account for between 95 to 100% of total floating litter, and more than 50% of seabed litter, while single-use plastics represent more than 60% of the total recorded marine litter on beaches. Concentrations of microplastics at sea surface exceed 64 million floating particles per square kilometer in certain locations.

Marine litter phenomena and issues related to its sources and impacts directly affect livelihoods of the people living in the coastal area, i.e. by the sea and from the sea. Moreover, it indirectly reflects not only regulatory and institutional bottle-necks to effectively foster concepts of integrated management of environmental resources and sustainable development on the local, national and regional level, but also general lack of understanding of the public's co-responsibility.

During the past decades, marine litter has also become an alarming issue of public health, when taken into the consideration the emerging concerns related to the ingestion of microplastic particles by marine feeders.



Microplastics (plastic particles of size < 5mm) represent considerable fraction of marine litter, which due to its extreme persistence, durability, lightweight, versatility and low-cost production has become another emerging threat, lately receiving even more attention than marine litter itself.

Marine litter assessment was performed within the scope of the project entitled "Improving Coverage and Management Effectiveness of Marine and Coastal Protected Areas – Phase II" and presented in the report (Fusco, M., 2018) aimed to serve as tailor-made scheme for better understanding of marine litter patterns in the target area, i.e. Karaburun - Sazan MPA in Vloaë region. Through the series of litter-reducing pilot actions and the methodology based on protocols, which have already been proved efficient for the Adriatic-Ionian Macro-Region, it aims to provide direct and concrete contribution to the implementation of the main legislative marine litter related frameworks in the region.

Marine litter is classified, as follows:

- Beach marine litter
- Seafloor marine litter and
- Floating marine litter

Certain indicators have been identified for the purpose of monitoring marine litter: (i) litter that is washed ashore and/or deposited on coastlines; (ii) litter in the water column including microplastics and on the seafloor; (iii) litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles.

Surveying beaches on Karaburuni peninsula

The total of 8 beach litter monitoring sites have been identified as the result of marine litter pre-survey on Karaburun peninsula. Among these beach litter monitoring sites, 3 have been identified as the potential "Hotspots"

NO.	NAME OF THE BEACH	COORDINATES	ESTIMATED QUANTITY OF WASTE	HOTSPOTS
1	Shën Jan (afër molit)	40 25 51 N 19 19 48 E	60 kg	HOTSPOT 1
2	Dhimëkushtë 1	40 25 28 N 19 21 08 E	20 kg	HOTSPOT 2 [55] Reference point - Dhimëkushtë 5
3	Dhimëkushtë 2	40 25 20 N 19 21 21 E	Recently cleaned	
4	Dhimëkushtë 3	40 24 59 N 19 21 13 E	20 kg	
5	Dhimëkushtë 4	40 24 50 N 19 21 54 E	8 kg	
6	Dhimëkushtë 5	40 24 39 N 19 22 25 E	40 kg	
7	Dhimëkushtë 6	40 24 25 N 19 22 25 E	40 kg	
8	Shën Vasil	40 24 04 N 19 22 50 E	30 kg	HOTSPOT 3

Beach litter monitoring sites and potential "Hotspots" identified during the marine pre-survey on Karaburun peninsula

For each of the selected hotspots during the pre-survey, exact data on types and amounts of waste has been collected.

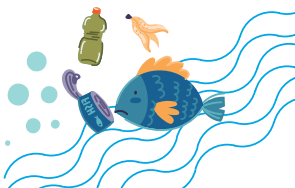
De-littering

Within the marine litter assessment in the Karaburun-Sazan MPA, de – littering pilot actions have been performed in the 2 following marine matrices:

1) Beaches on the eastern side of the Karaburuni peninsula, and

2) Seafloor (shallow coastal waters) pertaining to one of the most frequented beaches on the Karaburun peninsula.

One sea floor monitoring site (shallow waters < 5m on Shën Vasil beach) has been identified on one of the hotspots (HOTSPOT 3 – Shën Vasil beach).



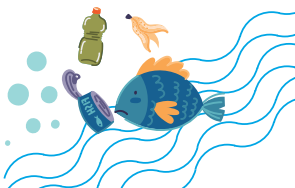
Field work during the marine litter project

Recommendations for the effective solid waste management in the Karaburuni - Sazan MPA

Certain key elements of the solid waste management scheme, with particular emphasis on waste collection, transport, handling and disposal, as well as the general recommendations and target actions for the improvement of the same will be present in this respective section.

1. Waste disposal trash bins (volume of app. 1.1 m^3 each) for the smaller beaches should be immediately introduced on all the beaches frequented by the tourists;
2. The number of the various trash (volume of app. 1.1 m^3) bins and containers (volume of app. 7m3) in the places where they are already present should be doubled, i.e., increased by 50 % at least in the target area;
3. The trash containers near the Karaburun/Sazan Visitor's Center and on the biggest (by size and visitor's frequency) beaches situated on the Karaburun peninsula (ex. Shën Vasil Beach), as well as near tourist attractions in the target area should be surrounded by the "green fence solution";

4. The smaller beaches situated at the Karaburun - Sazan MPA should be equipped with the trash containers which are easy to be used and removed in order to facilitate their proper handling by the team which will be in charge of collecting it;
5. The trash containers which will be used at the smaller beaches, besides being easy to handle, should have design which is in harmony with the environment in terms of color (for ex: green, beige, brown) and of material which promotes eco-friendly and eco-smart waste collection (wooden structures with the waste collection bag inside);
6. It is important to highlight that even metallic structures, even though not made from the naturally occurring material, can be evaluated as an option due to their robust features. The resistance of these materials for the purpose of waste collection on the beaches of the Karaburun peninsula could be crucial for the sustainability of the effective waste collection on the smaller beaches due to the fact that the investigated area might be prone to strong winds, especially in the winter time;
7. It is strongly recommended to involve the rangers in the process of adopting the proper concept for the solid waste collection at each selected spot. Due to their precious knowledge of terrain features, additional costs related to the eventual installation of the waste collection solutions which would not be practical, especially for the remote and small-size beaches on the Karaburun peninsula could be avoided;
8. The initiative of eco-friendly and eco-smart solutions should be strongly promoted through the installations of the tailor-made “recycling stations” for the Karaburun-Sazan MPA;
9. Eco-friendly and eco-smart solution, i.e. Karaburun - Sazan MPA small recycling stations should be firstly installed on the 3 selected waste collection spots, i.e. near the Karaburun/Sazan Visitor’s Center, near the Fish Market, and on the Shën Vasil beach.



Proposed graphic presentation of the waste station

In the frame of this work, a "Public information platform and awareness plan for Vlore RAPA" has been prepared, consisting of the following:

Slogan: "Vlora Bay – On the Path to Litter Free Coast and Sea!"

Pilot actions:

Pilot Action 1 – "Marine Litter Watch – Citizens Science Approach!"

Pilot Action 2 – "Healthier Sea with Re – Use instead of Single Use!"

Pilot Action 3 – "Smart Water Use – Plastic Free Solution for the Marine Pollution!"

Pilot Action 4 - "Marine Litter watch – Citizens Science Approach!"

6.3.2. Report on seabed cleaning – Albanian diving federation

A general waste management problem in the area and in Albania is the lack of waste separation. All types of waste are found in the landfills, including organic, hospital, plastic, inert, glass, metal, wood, paper, batteries, tires, electronics, etc.

Although there have been efforts and pilot projects on waste separation and recycling, necessary regulations, population and business incentives

are necessary in order to correctly implement waste recycling.

Sea-bed cleaning

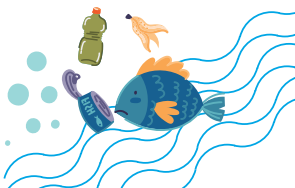
Based on a clean-up activity performed up to a maximum depth of approximately -20 m up to or 200 m from the shore, by professional divers (Albanian Diving Federation), for the cleanup of 3 areas in K-S MPA: Boat Bay / Southern dock; Haxhi Aliu cave and Grama Bay; Most of the waste accumulated is deposited in the sites during the summer months when the sites are visited by an increased number of visitors/tourists. The report attests that Vlora Bay, including Sazani island has a high incidence of WW2 ammunition. Regarding the ammunition issue, generally this material is safe unless not disturbed, but the opening of the area for nautical and subsurface activities such as scuba diving will create a potential hazard.

6.3.3. Support to the piloting of waste recycling activities focused on plastics and used cooking oil from restaurants

Used cooking oil further contributes to the waste issue. There are considerable amounts of used cooking oil in the area, which have been used for cooking or frying in the food processing industry, hotels, restaurants, catering, and at consumer level in households.

Disposal into the environment causes numerous negative impacts, such as blocking sewage infrastructure, polluting the underground water and the sea. It also hazardous to health if it enters the food chain. Negative visual effects are also considerable, especially in contrast to the deep blue waters of Karaburun and Sazan MPA.

The consultancy was performed by Green Recycling (Green Recycling 2019) and it aimed at mitigating the environmental impacts on the marine



ecosystem hosted in Karaburun-Sazan Marine Protected Area (i.e. the targeted area), and reduce the risks related to mismanagement of plastic waste and used cooking oil, introducing, supporting and improving local waste recycling system and their management.

The project focused on two waste streams:

A) vegetable oil used for cooking (e.g., sunflower, soybean, palm oil, olive oil), and;

B) plastic bottle waste.

The Project targeted the waste producers represented by restaurants, fast food, catering companies active in the marine area of Karaburun-Sazan. Waste collection was assigned to two different companies: GREEN RECYCLING Shpk was responsible for the collection and recovery of used cooking oil (UCO) while EMMAUS Valona was in charge for plastic waste.

The Project adopted a door-to-door system for the collection of used cooking oil and plastic waste. Door-to-door systems help to raise the awareness of citizens that become important actors of the collection system itself. Furthermore, door?to?door systems are comfortable for restaurants and hotels since the pick?up of the containers is made directly at their premises in specific days.

The collection of plastic bottles has been unsatisfactory. On the contrary, the collection of used cooking oil was particularly successful. During the project, a total of 4.200 kg of UCO were collected. A total of 42 businesses signed a contract for the collection of UCO as required by the relevant environmental legislation. Only 5 businesses never provided used cooking oil. All the others were active. This project has set the path to widening the UCO to households.

7. Sustainable tourism; Eco labeling / certification efforts

The tourism sector contributes up to 8.5% of the Gross domestic product (GDP), as stated in the National Tourism Strategy (Ministry of Tourism and Environment, 2019), without taking into account indirect benefits. Thus, tourism appears to be among the main contributors to economic development in the country. The Tourism Strategy foresees an increase in tourists over the next decade. Tourism season along the Albanian coastal towns, villages

and touristic facilities usually starts on May 15th and ends on September 15th. During this period, the Vlora Bay area undergoes continuous pressures on environment. Tourists produce more waste per head compared to the local resident population. Due to the seasonal fluctuation in tourist arrivals and length of stay, waste generation fluctuates as well. While ecotourism is being promoted, conventional tourism dominates, putting pressure on natural resources, including energy.

UNDP MCPA II project has given considerable attention to assessing sustainable tourism opportunities in Vlora Bay area.

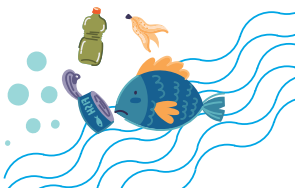
7.1. Assess the tourism certification process and recommendations for the most appropriate certification scheme to be applied to Vlora Bay, Albania

This study (Jensen, N.R., 2018) was based on on-site surveys and interviews, as well as desk work.

The overall approach when visiting the project site was to create an informal and constructive dialogue with all stakeholders. The aim was to listen and see how tourism stakeholders in this region performed in terms of all aspects of sustainability. This was done by informal talks with owners, management and staff and seeing the production facilities (e.g., kitchens) and naturally the rooms. The Consultant chose not to take any notes during these talks, ensuring the informal approach and for the discussions to not resemble a formal audit.

Based on the tasks of the assignment, which included:

- providing an overall review of the main hotels in the Vlora region and their compliance with environment standards, applicability of best international practice on sustainable tourism standards, comparable certification schemes /bodies (advantages and disadvantages in the given specific case), voluntary certification, destination awards and incentives scheme and evaluate their applicability to Vlora region and the level of market interest (basically focusing sustainable energy, water, waste consumptions ad management approaches, renewable resources as well as education and information means);
- Demonstrating and supporting market research exercises / examples among selected private sector operators incl. their



level of interest and willingness to pay for voluntary certification, procurement of local products and services (e.g., fish, locally run tours) and options for protected area concessions, licenses and entrance fees.

- Advising and providing guidance on economic incentives for tourism investors to integrate sustainable development and biodiversity conservation needs.
- Advising on sustainable tourism standards, and on certification and biodiversity offset schemes for tourism sector planning and operations, namely ecolabelling for tourist accommodation, as unique opportunities to satisfy customers 'expectations

The following findings were recommended and elaborated:

- Following a Systematic Planning Approach
- Management and certification criteria for the hotels
- Destination management and widening of the tourist offer

According to the assessment, the hotels do several actions that can be considered sustainable and will count highly should a hotel want to receive an international certification such a Travelife or Green Key.

However, there must be an overall approach in managing such actions and developing a Sustainable Management Plan could be the right way to go about this.

In order to be successful, the hotels must be aware of the following issues:

- 100% commitment is required from the owner/CEO/Director.
- It has to be a natural part of the business plan or quality assurance policies.
- There is the need to address economic, social and environmental impacts.
- The business can develop their own plan, or
- Follow an international certification system; e.g., Green Globe, Green Key or Travelife.

By working with sustainable development, several issues emerge leading to the following aims:

- To secure a return of investment.
- To optimize management procedures.
- To identify eco issues, such as water and electricity usage, and reducing waste, thus cutting costs.

- To empower and educate staff; 'happy employees make happy customers'.
- To engage in the local community.

The study recommend preparation of "Sustainable Management Plans" for hotels. Developing management plans requires a certain level of knowledge. To convince the tourism industry at the destination that planning pays, a demonstration project should be developed where the project selects three or four hotels and makes a sustainable management plan for each of them.

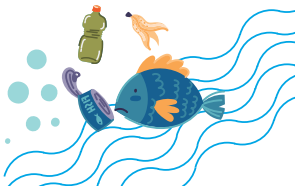
8. Specific studies contributing to improving management effectiveness of the Karaburun-Sazan MPA

8.1. On-Water Tourism, best practices and code of conduct

This assessment (*Turicchia Eva, 2020*) starts by identifying on-water stakeholders in K-S MPA. A qualitative method was used to collect information from stakeholders using semi-structured, face-to-face interviews and questionnaires, with the purpose to determine the stakeholders' opinions regarding their perceptions towards the opportunities, needs and the main critical issues for sustainable tourism development in Vlora Bay. This was followed by a workshop on sustainable tourism of water activities in Vlora bay.

The study conducted collected data on number and types of tour boats operating in the area, their capacities, routes and most frequent destinations. The study also gives insights on the existing gaps and the urgent necessity of of an organization and management of tour boat tourism. A simplification of the departure procedure by the Master Harbor is also recommended, due to more appropriate infrastructure for docking and ease of access.

Diving centers are also explored as a sustainable tourism opportunity, since they are becoming more popular recently. There are two structured diving centers and several diving guides who operate on their own. The main underwater attractions are wrecks, coralligenous outcrops and submerged caves (Turicchia E, 2020), with several shipwrecks to explore, as the study



conducted by the project points out (Miraku.T, 2019). The study also identifies the Orikum Marina as the best option for recreational tourism, due to its capacity and location. However, there are some gaps in regulation and safety, such as time and location restrictions.

Professional and artisanal fishermen at Orikum and Vlora were also contacted by the consultant. They see it as a challenge to compete with large-scale fishing boats, but agree that artisanal fishing is also a profitable business. Cod, sea bream, monk fish, shrimp, mullet, squid, sardines, red mullet and shell fish are the most preferred fish (*Turicchia, E., 2020*).

Aquaculture is also developed sustainably in the area.

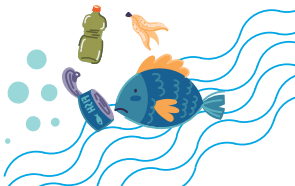
An overview of local authorities directly related to K-S MPA is also explained, outlining their respective responsibilities.

Tourist demand is growing and also an interest towards nature-based activities, in particular related to the sea, such as recreational fishing, boating, scuba diving, sailing and jet sky. Developing these kinds of activities could be an alternative to the beach tourism.

The nature-based activities chosen by tourists at Karaburun-Sazan Marine Protected Areas were exploring caves, travelling by boat, diving, and swimming. Albanian tourists preferred most exploring caves, while foreign tourists diving.

A SWOT analysis revealed the following: (Turicchia, E., 2020), as follows:

Strengths	Geographic position Beautiful landscape and wildlife Pristine environment Different habitats Charismatic animals Hospitality / Friendly people Passion Active participation from the community on local issues High degree of adaptation with other cultures Dynamic city Combination of natural, cultural and tourism values Safety on the beaches (turrets and lifeguards) Environmental education at sch<x>ls Tnfrastructure like the Radhima Visitor Centre and the Sea Turtle Recovery Centre Citizen science initiatives Virtuous examples of sustainable fishing and mariculture Language skills
Weakness	Short tourist season Little diversification of the on-water tourist offer The daily base bureaucracy for tour operators should be simplified Legislation and controls on waste to be implemented Marine litter Need to diversify the itineraries of tour boats Need for regulation for entry into sea caves Information point for tourists with limited opening hours Need to implement the infrastructures concerning the on the water tourism Illegal fishing / overfishing Lack of data on illegal fishing and sport fishing Need for greater controls and sanctions for the sale of protected species (e.g. Lithophaga lithophaga) Need for an ad hoc law for diving and recreational boaring Lack of a shipyard and a nautical shop Lack of a hyperbaric chamber Fish farms that do not adopt Euroean quality standards



Opportunities	Monitoring environmental programs Extension of the tourist season, interlinked all-year tourism Integration of environmental protection and tourism promotion Tourism's contribution to natural and cultural heritage Promotion of natural and cultural heritage Training course during the winter for tour operators Rating system for business Projects and initiatives to start up business Marine citizen science projects Diversification of business as economic opprtunity International collaborarion for tourism activities and initiatives Development of international and local marketing strategy for business Conservation situation is better than before, so it is easier to attract tourist Support from authorities Income from tourists
Threats	Risk of mass tourism No coordinarion in the tourism sector development Lack of tourism infrastructure Irresponsible and non professional behaviour from tour operators Uncontrolled urban and tourist development Poor public awareness and level of education on marine an<l coastal issues Overfishing / Illegal fishing / Dynamite Pursuit of short-term profit Disturbance and / or loss of marine habitats Increased use of natural resources Water pollution / marine litter / waste water

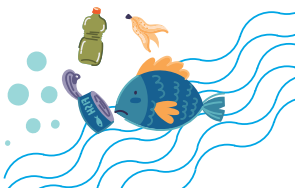
The study shortly concludes that:

Karaburun-Sazan MPA has the potential to develop on water sustainable tourism towards the development and application of best practices. The evaluation of the area has revealed six important elements in the development of the sustainable on-the - water activities in the Vlora region:

1. The K-S MPA have sea and landscape appeal, characterized by almost pristine habitat. Natural attractions include, but are not limited to, the caves, cliffs, bays, beaches, crystal water, but also the diversity of the marine benthic flora and fauna.
2. Accessibility to the location is good and convenient, especially for visitors which aim to gain experience and learn about the natural resources and cultural landscapes that they visit.
3. On-the-water tourism activities are poorly differentiated and without a definite long period business plan. There is a willingness on the part of entrepreneurs to adopt sustainable tourism practices, but at the moment, there is no clear vision of this and a multi-year plan in which stakeholders can meet and join. The administration should favor with suitable tools those who undertake investments towards sustainability;
4. Vlora local community welcome the development of tourism in the area. However, because of the social, economic and especially understanding of sustainable tourism that is still lacking, the development of sustainable tourism practices still has many challenges.
5. The market potential is promising, especially for the increasing number of tourists arriving in Albania and for the world's population trends in their use of leisure time. An increasing number of foreign tourists appreciate the adoption of sustainable practices and the care and protection towards the environment.
6. Management and services in relation to tourism could be improved. An entrance ticket to the K-S MPA would be desirable, the income of which would be managed directly by RAPA. An economic income of this type would allow the park to have the financial means to carry out more controls and monitors in the area, maintenance and improvement works of the park, as well as training for its employees and volunteers. Moreover, citizen science events could be coordinated by RAPA.

8.2. Submarine tourism resources and shipwreck assessment

As a very distinguished part of the cultural heritage and findings of interest, different underwater archaeological remains confirm the links between this area and other civilizations of the Greek and Roman periods. There are numerous shipwrecks, mainly on the western coast of the Vlora Bay. The

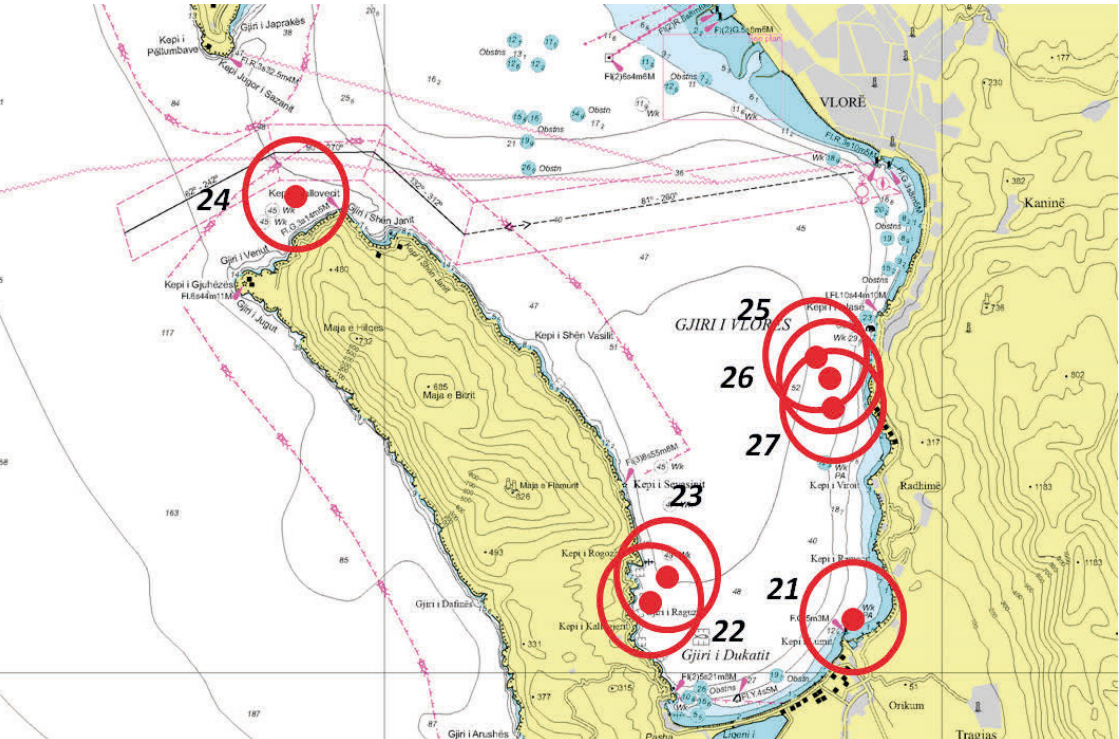


presence of prominent cultural and archaeological remains and shipwrecks constitute additional valuable assets, significant and valuable for the tourism enhancement perspectives. In addition, the site reveals unique historical and archaeological values, found in Orikumi lagoon, Grama Bay and in the Western coast of Karaburun peninsula. On the rocks of Grama bay there are abundant inscriptions in old Greek and Latin languages, dating more than 2000 years.

.The underwater of Karaburuni holds a considerable number of sunken ships and many archaeological objects, which confirm the links between this area and other civilizations of the Greek and Roman periods. The Castle of Gjon Boçari in Tragjas, the Tower of Dervish Aliu in Dukat, the Church of Marmiro in Orikum and the Cave of Haxhi Ali in Karaburuni are some of the other cultural heritage sites that attract visitors. The natural coralligenous crops, combined with shipwrecks, offer numerous possibilities for the development of the tourism sector, linked to scuba diving.

The report "Underwater naval history and cultural heritage in Vlora Bay" (*Meçollari, A., 2022*), assesses the shipwreck situation and relevance to submarine tourism development; This interesting report provides history, dates, technical details of 7 shipwrecks within Vlora Bay, even old pictures of the ships, which were of Albanian, Italian and British origin.

Identified spots of shipwrecks



8.3. Impact Assessment from Fishery Activities of the MPA Karaburun-Sazan

Karaburun-Sazan Marine Protected Area offers many fish and crustacean species of commercial interest. There is conventional fishing, small-scale fishing activities, as well as recreational fishing. The area is also important for fisheries. Artisanal fishermen use hooks, while other kinds of fishing methods consist of different types of nets.

The MCPA II project's consultant for the "Impact Assessment from Fishery Activities of the Marine Protected Area Karaburun-Sazan (MPA-KS)" (Miraku, T., 2019), has prepared a report focused on the fishing activities in the area and the actual status of the MPA based on the following aspects:

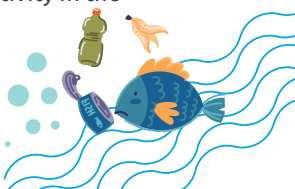
- Estimation of fishing activities and their impact in the MPA ecosystem and its surroundings;
- An analysis of the fishery capacity and effort in the Vlora bay and its impact on the marine environment;
- An overview of the organizational situation of the fishery sector in the Vlora region.

The report includes data coming from analysis of already existing statistics, studies and reports but also some data coming from field visits and meeting with the local stakeholders.

In order to have a better understanding of the situation, the report was not focus only in the area inside the MPA, but also in the surrounding area which has some connections with the MPA (including but not limited to Vlora Bay).

Also, the report tries to make an assessment of the overall fishing sector in the area excluding the one related to the inland and intermediate waters and the aquaculture sector.

As stated in the Karaburun-Sazan Marine Protected Area Management Plan, based on the laws and regulations on fisheries, fishing with trawl nets, dredges, purse seines, boat seines, shore seines or similar nets above sea grass beds of, in particular, *Posidonia oceanica* or other seagrasses is prohibited. Also, the use of towed gears is prohibited within 3 nautical miles off the coast or within the 50 m isobaths where that depth is reached at a shorter distance from the coast. Also based on regulations for application of the legislation on fishery and aquaculture, fishing is prohibited in and around the river mouths and in the sea-lagoon communication channels. The same regulation also prohibits every fishing & aquaculture activity in the



outer part of Karaburuni shore from Kepi i Gjuhezes until Rruget e Bardha (Palase) in the distance of 1 marine mile form the shoreline or up to 50 m isobath in the case when this depth is reached at a shorter distance.

It must also be mentioned that the population of a very sensitive species, the dusky grouper *Epinephelus marginatus*, distributed along all the Karaburuni peninsula and Sazani island coast shows strong declines because of overexploitation. In terms of both landings and revenue from fishing in the region and in particular Karaburun-Sazan area, recently the most economically important species have been shrimp, red mullet and codfish. The annual quantity for a vessel whose landings are normally up to 1800-2000 hours per year in Karaburun-Sazan area, per each species varies from 1500 to 3000 KV, meanwhile shrimp is top-caught species quantity and red mullet has the top-selling price. With regard to the sale of seafood, fishermen mainly sell directly to the distribution center and various buyers (Rajkoviç and Kromidha, 2014).

In addition, small fishing boats in Karaburun-Sazan are quite usual due to the necessity to reduce the fuel coast. The main species caught are: wild seam bream (*Sparus aurata*), sea bass, dentex (*Sparidae*). These fishermen sell their products directly to the public and/or restaurant at the coast area.

There are illegal fishing activities in the rocky areas of both sides of Karaburuni peninsula and sometimes in the western side of Sazani island. This illegal activity is mainly practiced for the collection of date mussel *Lithophaga lithophaga*, and lobsters (*Palinurus elephas, Homarus gammarus*) that are protected species in the Mediterranean. Diving and illegal fishing with lights and spear guns is also practiced, such as for fishing the dusky grouper *Epinephelus* sp.

Aquaculture is also practiced in the area, mainly through fish farming. The increasing tourist demand for marine fish in Vlora area has caused the recent increase in aquaculture production.

The report provides recommendation actions towards more sustainable fisheries management, as follows:

Illegal fishery Recommendations: Practices of illegal fishery should be lowered at a minimum in the surrounding MPA area and brought to zero inside the MPA area (the main illegal activities considered for the MPA area are: (i) using of dynamite, (ii) fishing for date shell; (iii) fishing without proper license; and (iv) fishing inside the MPA area.

Unreported fishery recommendations: Improvement of catch statistics on fishery activities in the area and increasing the knowledge for species important from the biodiversity point of view.

Unregulated fishery recommendations:

- Increasing the effort to enforce the fishery legislation related to allowed fishing gears;
- Increasing the effort to enforce the fishery legislation related to allowed fish dimensions; and
- Support the fishery inspectors with the tools required to enforce the fishery legislation.

Other recommendations include setting up participation system through a co-management approach, with the involvement of the fishers in the decisions making procedures of the MPA, having a fisheries representative on the MPA management board and see the possibilities for a fishery management plan in the MPA; and MPAs allowing and promoting sustainable fishing.

Enforcement of control by the MPA and increase of value of the product by eco-labelling and promotion of pesca-tourism.

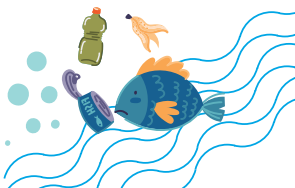
8.4. Pesca-tourism promotion

The study (AVCON, 2021) concentrates on promotion of pesca-tourism as a sustainable tourism activity. This activity consists one of the identified ecosystem services of K-S MPA. The work consisted in the following phases:

Preparatory Phase: An Analyses Workshop on the Situation of Marine Fishery at Vlora Bay; drafting of "Guide on Pesca-tourism development"; Protocols drawn up for the start-up of tourism businesses; Developing marketing materials

Pilot phase: Bringing boats up to safety standards for transporting tourists; The "Open Days" on Pesca-tourism;

Documents produced: Guide in Pesca-tourism; Protocols drawn up for the start-up of tourism businesses (Customer Service protocol, Social and Health protocol); Marketing materials (leaflets, TV spots); Workshop on Pesca-Tourism; Open Days on Pesca-tourism; Delivery of supply and upgrade materials.



8.5. Assessing ecological and socio-economic coherence on primary MCPAs, relying on Karaburun-Sazan sustainability model

This report (IC Consulenten, 2019) focuses on the following tasks:

- Analysis of the Situation of Marine Biodiversity
- Assess the Feasibility of Establishing Additional MPAs
- Propose priority areas for protection for the MCPA network
- Contribute in the preparation of habitat mapping & cartography of the MPA targeted areas

As a significant next step, it is considered the development of a National System of Marine Protected Areas. This system requires collaboration among all stakeholders (government, institutions, businesses, CSOs, etc.). Furthermore, the national system should be scientifically based, comprehensive, and represent the nation's diverse marine ecosystems and natural and cultural resources. However, prior expanding the MCPAs it is indispensable to strengthen further more the K-S MPA and focus towards its ecological and economical use of ecosystem sustainability.

Through these collaborative efforts among MPA programs and stakeholders, the national system can achieve the goal of enhancing the comprehensive conservation of the nation's natural and cultural marine heritage and the ecologically and economically sustainable use of the marine environment for present and future generations.

This assessment focuses on potential marine protected areas to be nominated, following the successful example of Karaburun-Sazan MPA, such as (i) Rodoni Cape-Lalzi bay, (ii) Cape of Lagji -Turra Castle, (iii) Canyon of Gjipe, (iv) Porto Palermo, (v) Kakomea Bay and Qefali Cape 8´, (vi) Pagane (vii) Stillo Cape and (ix) Ksamili Island.

The report also provides a thorough study on existing data and literature, policy frameworks and proposed methodologies for nomination of marine and coastal protected areas.

Recommended steps for establishment of the MCPA Network in Albania:

- PA capacity building and database targets
- Improve management effectiveness of existing coastal PAs
- Development of a coherent network of MCPAs in Albania

Specific actions include: new law on ICZM; Law on diving; Improve human resources and capacities; Public awareness and consultation; Ecosystem approach to economic development in the MPA; Nature tourism and financial mechanisms.

Main actors in the field of designation and management of Marine Protected Areas and their respective responsibilities in Albania and in the region are described in detail.

The study also describes the latest projects funded by national and international donors, as well as approved strategies and plans that could impact Marine Protected Areas and Karaburun-Sazan MPA specifically.

8.6. "Assessment and Integration of Gender Vulnerability; Standards and its Access to Management and Conservation Actions in the Protected Areas in Albania"

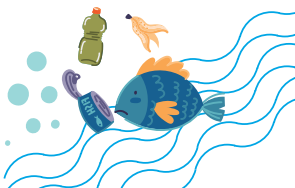
Gender and environment are considered largely as cross cutting issues. There is a wide gender gap when it comes to management of natural resources and specifically on the management of Protected Areas (Qirjo, M., 2020).

Women's multiple roles as producers, reproducers and consumers, have required women to develop and maintain their integrative abilities to deal with complex systems of household, community and landscape, and have often brought them into conflict with specialized sciences that focus on only one of these domains. The conflict revolves around the division of domains of knowledge, as well as the division of knowing and doing, and of formal and informal knowledge.

While women throughout the world under various political and economic systems are to some extent involved in commercial activities, they are often responsible for providing or managing the fundamental necessities of daily life (food, water, fuel and clothing) and are most often those charged with healthcare, cleaning and childcare in the home, and in community level.

The assessment is based on the following main pillars:

- Legal analyses of the gender equality obligations for protected areas management.
- Baseline on gender situation in three pilot protected areas with focus on Marine Protected Areas management.



- Gender Action Plan, which based on the suggestions in the following directions:
    - o Strengthen legislation and mobilize resources for management and administration of protected areas
    - o Facilitate access to nature resource and protected areas
    - o Promote access to nature resource and protected areas
    - o Develop capacity and encourage participation
    - o Protected areas administration
    - o Communities and Civil Society
    - o Donors and Developing Agencies/Programs

9. Historic milestones to establish and nominate the Karaburun-Sazan MPA

9.1. Management instruments

As per the Albanian Law on Protected Areas (Nr. 81/2017), categorization and definition of the status of a protected area based on the IUCN criteria. On the other side the international conventions such as Barcelona convention, Biodiversity convention, new EU Biodiversity Strategy for 2030 (May 2020), govern the main aspects of the conservation and sustainable use of the marine biodiversity and habitats and species thereof. Being a signatory to the United Nations Convention on Biodiversity, Albania has assigned a protection status to 20% of its territory, out of which 18.6% terrestrial and 2.84% marine protected areas, with Karaburun-Sazan MPA with a surface of 124 km^2, covering 0.4% of the whole territory. [3]

NAPA (National Agency for Protected Areas) in Albania is the central public authority that directs and administers the environmental protected areas conservation and management. The Regional Agencies of Protected Areas are the responsible authorities at regional level for conservation and management of environmental protected areas under their jurisdiction.

The Marine National Park Karaburun-Sazan has been proclaimed on 28

3 Currently, according to the DCM No. 59. date 26.01.2022 on National Parks and DCM No. 60, date 26.01.2022 on Nature Parks, the coverage is approx. 21% of the territory, 6137.42 km2

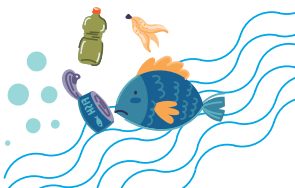
April 2010 by the Council of Ministers, upon the proposal of the Minister of Environment, Forestry and Water Administration. The Regional Agency for Protected Areas responsible at local level is the Vlora RAPA.

The Sazan-Karaburun Marine Protected Area is managed by NAPA/ RAPA Vlore, as well as Management Committee through the official approval of the Management Plan for (Minister's order Nr. 750, dt. 24.11.2015).

Through the DCM Nr. 593, dt. 9.10.2018, the composition and responsibilities of Protected Areas Management Committees were defined. The Management Committee has a supervisory non-managerial role, set up for each protected area, organized at District Level and is directed by the Prefect. It is recommended through this decision that the members of the committee to be representatives of the Ministry of Tourism and Environment, NAPA, Regional District, Municipality, RAPA, other local authorities and institutions closely related to the protected area.

In the case of Karaburun-Sazan MPA, due to its specific profile, representatives of the National Coastal Agency and Vlora Master Harbor are part of the committee. The RAPA acts as the Committee secretariat.

Below are presented schematically the most important historic milestones to the proclamation and follow-up management of Karaburun-Sazan Marine Protected Area:



1990

Accession of the Barcelona Convention and Protocols by Albania, 1990

- Protocol on SPA (Special Protected Areas and Biodiversity), ratified in July, 2001
- Other protocols: Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities; Hazardous Wastes Protocol; Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea; Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and its subsoil the Seabed and its Subsoil

1994

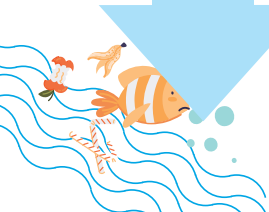
Accession of United Nations Convention on Biological Diversity, 1994

- 20 AICHI targets
- Aichi 11 target of the Biodiversity Convention, the National Objective for Albania was that by 2020, 17 % of terrestrial areas and 6% of marine and coastal areas to be designated as Protected Areas and to be managed in a sustainable integrated approach

2002

Law on Protected Areas (8906, 06.06.2002)

- Motivation to proclaim Marine Protected Areas to comply with AICHI targets AND the Barcelona Convention/UNEP/MAP Spatial Protected Areas



2010

UNDP project: Marine and Coastal Protected Areas, November 2010

→ Study on "Protected area gap assessment, marine biodiversity and legislation on marine protected areas", proposing several candidate MPA's

Decision of the Council of Ministers Nr. 289, dt. 28.04.2010 "Proclamation of the Karaburun Sazan a Marine National Park"

2014

UNDP project: Marine and Coastal Protected Areas, November 2010

→ Management Plan for National Marine Park Karaburun-Sazan

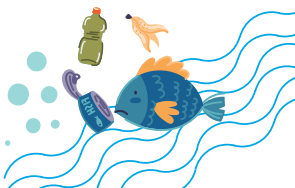
2015

Government of Albania/

Ministry of Environment

→ Approval of the Karaburun-Sazan Marine Protected Area Management Plan and zoning, by Minister's order Nr. 750, 24.11.2015

Schematic presentation of historic milestones for the proclamation of the K-S MPA



9.2. Main Bodies and Institutions Involved

The Ministry of Tourism and Environment (MoTE) is the main organization responsible for the protected area management and administration. However, this Ministry plays a policy-making and regulatory role and other agencies/institutions handle day-to-day issues concerning protected areas. Thus, the MoTE is responsible for the formulation of policies, strategies and action plans for the environmental protection, in order to achieve sustainable development and improve the quality of life, align actions with EU accession requirements.

As stated in the Law Nr. 81/2017 "On protected areas", the National Agency of Protected Areas (NAPA) is the responsible central agency that directs and manages the conservation and management of all protected areas in the Republic of Albania.

NAPA manages the national network of protected areas and also other international networks sites, like Natura2000, as per the approved management plans. NAPA monitors and inventories flora and fauna of protected areas, as well as generating incomes from their services, investing this income back into the protected areas.

The Regional Agencies of Protected Areas (one in each district) are the responsible bodies at local level for conservation and management of the protected area/s in the territory of the respective district. The Regional Agency of Protected Areas of Vlora is responsible for the Karaburun-Sazan Marine Protected Area.

The activity, workplan and yearly reports of the RAPA's are circulated and cleared by the Protected Area Management Committee, as defined in the DCM Nr. 593, dt. 9.10.2018 "On the composition, functions, duties and responsibilities of the Management Committees of Protected Areas". The committee plays a supervisory role in the protected area, which is directed by the Prefect. Typically, members of the Protected Area Management Committee consist of representatives of the municipality, NAPA, MoTE, local institutions representatives, agriculture, education and cultural directorates in case of cultural sites within protected areas.

The Prefect of the district is responsible for the organization of the process of nomination, set up and overseeing of the activity of the committee.

Below there is a schematic presentation of decision makers at central and local level, as well as main stakeholders currently related to Karaburun-Sazan MPA:

10. Exit strategy, lessons learned and future actions

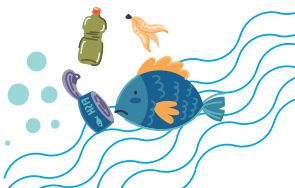
10.1. Main achievements

The project has recently prepared the "Exit strategy report" (*Sea Trek Consulting, 2021*). Apart from examining the extent to which the project objectives were met, identifying and documenting the differences that the project has made with regards to management of Karaburun-Sazan Marine Protected Area (K-S MPA) in Albania, the report also evaluates the sustainability of the project provide guidance on potential new projects for implementation going forward to capitalize on progress made by the Project and needs identified from its execution.

Overall, this Project has generated many tangible results and helped secure a sound foundation for future growth and refinement of both KS-MPA and other new MPAs in Albania

Significant investments of both time and money have been applied to increasing the educational capacity of dedicated staff which has resulted in a clear understanding of "what is required to successfully manage MPAs". Some important visible interventions are listed below:

- A new Patrol Boat was purchased and put into active duty
- 5 Mooring (anchoring) Buoys have been installed. This was replicated by the MoTE which installed buoys along the whole southern coastline.
- An Equipment Storage House has been built to store equipement and other maintenance needs.
- Organized diving courses, trained students and professors from Vlora University along with RAPA staff/personnel to be certified divers - certified through (Confédération Mondiale des Activités Subaquatiques).
- Developed "MPA Joint Monitoring and Patrolling Missions" which is used to provide monitoring logistics and qualified technical assistance to perform physical, chemical and biological monitoring on the MPA
- Established a Sea Turtle Rehabilitation Center in December 2017 in line with National Action Plan on Sea Turtle Conservation.



- Developed new capacity-building training tools for RAPA staff through the e-learning platform, incorporating 10 Biodiversity Conservation and Protected Area Management Modules Based on the National Protected Area Needs Assessment were developed.
- Conducted training sessions on Management Effectiveness and Financial Sustainability
- Drafted a Code of Conduct for Tourist Boats

10.2. Sustainability

The project has conducted a wide range of activities, which include: Investments in materials, capacities, baseline data, business plans. A path forward has been set to a successful management of the Marine Protected Area.

However, there are some risks that must be taken into account, especially in case of concrete investments:

- Arrangements must be clarified in order to ensure maintenance of the purchased materials and equipment. One example identified also during the Exit Strategy is the operation and maintenance of installed anchoring buoys.
- Sustainability issues.

Some of the greatest challenges that were encountered during the execution of this Project and that still remain as barriers to ultimate self-sustainability include:

- RAPA Vlore is understaffed to take over the considerable work and to continue the path set by the project.
- There must be sufficient dedicated funding from government and external partners. The greatest impediment to KS-MPA's long-term survival and success is a consistent and sustainable funding mechanism. Possibly the most significant achievement of the Project was the impetus it provided to establish the new laws which provide the framework for not only collecting fees from activities associated with the MPA, but a mechanism to return those fees to support management needs of the MPA. This will also facilitate funding for other MPAs.

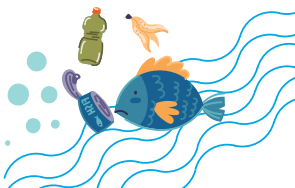
- The new regulatory framework to generate fees has to become operational. Protected areas use funds partially through the government budget and generate some incomes as traditionaly were implemented by the forestry services. However, with the approval of the new DCM Nr. 1156, dt. 24.12.2020, any income foreseen in the bylaw and the Protected Area Management Plan will be managed by the NAPA, through a yearly investment plan. The income may be used for capacity building and concrete investments areas per decision of NAPA following a consultancy process. With the approval of this new regulatory package, NAPA will gain independence, albeit the MoTE will need to approve the yearly investment plan.

10.3.Recommendations on future actions on the establishment of MPA in Albania

As a significant next step, it is considered the development of a draft National System of Marine Protected Areas, which should be scientifically based, comprehensive, and represent the nation's diverse marine ecosystems and natural and cultural resources.

However, prior to expanding the MCPAs, it is indispensable to strengthen furthermore the K-S MPA and focus towards its ecological and economical use of ecosystem sustainability.

Through these collaborative efforts among MPA programs and stakeholders, the national system can achieve the goal of enhancing the comprehensive conservation of the nation's natural and cultural marine heritage and the ecologically and economically sustainable use of the marine environment for present and future generations.



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